

ABSTRACT

HIGHLAND PARK, A COMMUNITY IN ROXBURY, WAS DEVELOPED DURING THE NINETEENTH CENTURY FOR SUBURBAN LIVING; IT IS A HISTORICALLY, PHYSICALLY AND SOCIALLY DIVERSE AREA SUFFERING FROM THE ILLS OF PHYSICAL DETERIORATION COMMON TO MANY INNER-CITY AREAS. DURING THE PAST TEN YEARS, THE ROXBURY ACTION PROGRAM (RAP) HAS BEEN ENGAGED IN THE CREATION AND IMPLEMENTATION OF STRATEGIES TO ARREST THE PHYSICAL DETERIORATION OF THE AREA AND TO STRENGTHEN THE ECONOMIC AND SOCIAL INFRASTRUCTURE OF THE COMMUNITY.

RAP HAS IDENTIFIED RESIDENTIAL DEVELOPMENT AND THE REVITALIZATION OF JOHN ELIOT SQUARE AS INTERDEPENDENT PRIORITIES FOR THE RESTORATION OF HIGHLAND PARK AS A VIABLE RESIDENTIAL COMMUNITY.

THIS STUDY FOCUSED ON DETERMINING A REASONABLE POPULATION INCREASE WHICH WOULD SUSTAIN COMMERCIAL DEVELOPMENT AND SERVICES WITHOUT PHYSICALLY DESTROYING THE EXISTING CHARACTER AND TEXTURE OF THE FIFTEEN ENVIRONMENTAL SUB AREAS IN THE COMMUNITY. THE STUDY IDENTIFIES A REASONABLE POPULATION INCREASE BASED ON A RESIDENTIAL DEVELOPMENT PROGRAM WHICH IS PHYSICALLY COMPATIBLE WITH EXISTING NEIGHBORHOODS, PROJECTS A PROBABLE ECONOMIC PROFILE FOR THE NEW RESIDENTS, EVALUATES THE IMPACT OF THE RESIDENTIAL DEVELOPMENT PROGRAM ON EXISTING PUBLIC FACILITIES AND OPEN SPACE AND THE ECONOMIC FUTURE OF JOHN ELIOT SQUARE.

THIS STUDY IS THE INITIAL STEP IN THE FORMULATION OF AN OVERALL COMMUNITY DEVELOPMENT PLAN IN HIGHLAND PARK AND IS A BASE FROM WHICH RAP CAN EVALUATE AND DEFINE SPECIFIC DEVELOPMENT OPTIONS, PLANS AND STRATEGIES FOR HIGHLAND PARK.

This study has been conducted for the Roxbury Action Program, Inc. and in order to fulfill the thesis requirement of the Department of Urban Studies and Planning, Massachusetts Institute of Technology.

May 1976
Copyright Pending

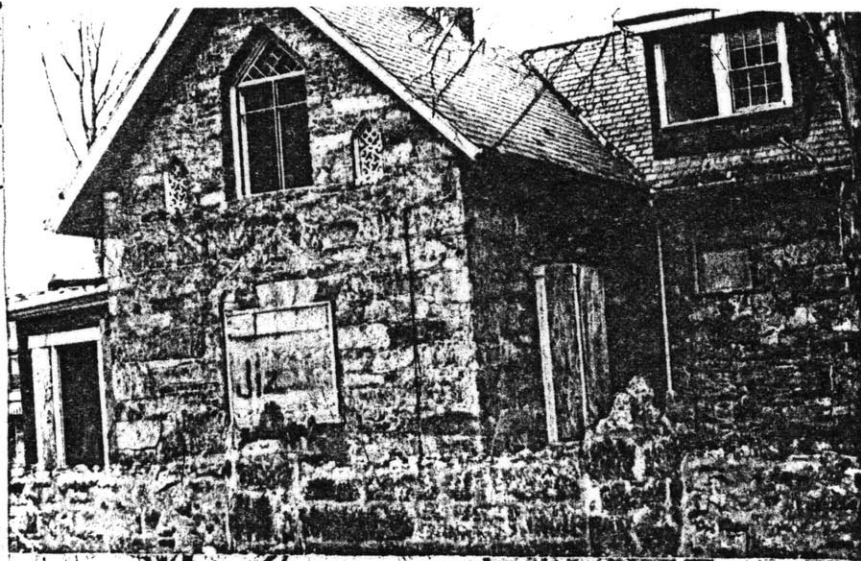
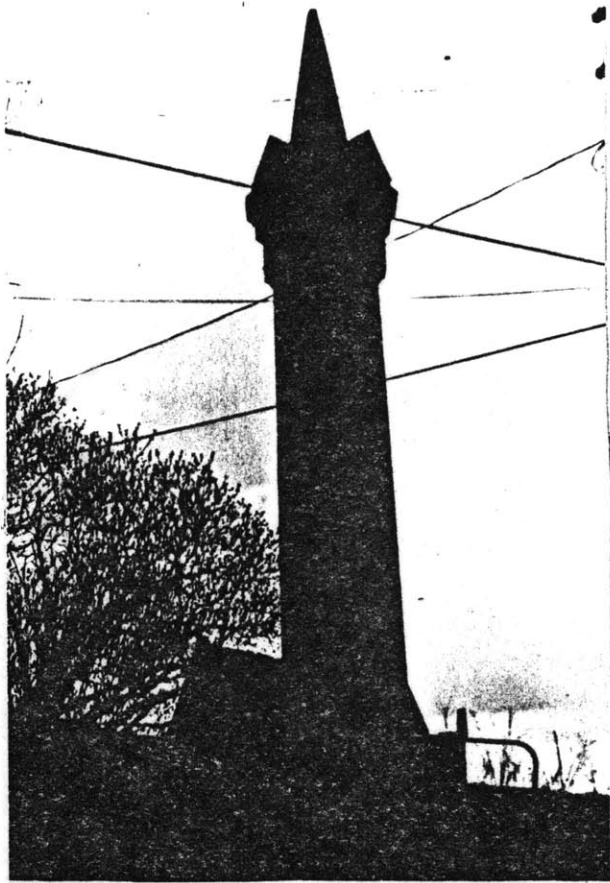
1. SUMMARY
 2. INTRODUCTION
 3. CONTEXT ANALYSIS
 - 3.1 History
 - 3.2 Environmental
 - 3.2.1 Physical Analysis
 - 3.2.2 Population Characteristics
 - 3.2.3 Transportation and Circulation
 - 3.2.4 External Impacts
 - 3.3 Roxbury Action Program
 - 3.4 Community Planning Process
 4. GENERAL STUDY
 5. SUB AREA ANALYSIS
 - 5.1 Sub Area Profiles
 - 5.2 Sub Area Summary
 6. DEVELOPMENT IMPLICATIONS
 - 6.1 Facilities and Services
 - 6.2 John Eliot Square
 7. NEXT STEPS
- APPENDIX
- FOOTNOTES

CONTENTS

MAPS AND TABLES

Architectural and Historic Sites.....	Page	20
Highland Park in the Boston Context.....		24
Existing Land Use.....		26
Building Deterioration.....		28
Existing Zoning.....		31
Population Density.....		35
Average Income.....		36
Existing Vehicular Patterns.....		38
Pedestrian Movement and Activity Network.....		40
External Impacts.....		43
Planning Framework.....		51
Development Opportunities.....		58
Sub Areas and Residential Pockets.....		63
Housing Types Criteria.....		65
Housing Types.....		66-67
Sub Area Analysis Summary.....		139
Economic Profiles of Residential Development.....		140-143
Existing and Planned Open Space and Public Facilities.....		148
Projected Disposable Incomes and Expenditure Patterns.....		160

SUMMARY



Highland Park, an area which was developed during the nineteenth century for suburban living, is a historically, physically and socially diverse community suffering the ills of physical deterioration common to many inner city areas.

The Roxbury Action Program has identified residential development and the revitalization of John Eliot Square as interdependent priorities for the restoration of Highland Park as a viable residential community.

This study has focused on determining a reasonable population increase which would sustain commercial development and services without physically destroying the existing character and texture of the fifteen environmental sub areas in the community. The study has identified a reasonable population increase based on residential development which is physically compatible with existing neighborhoods, projected a probable economic profile for the new residents, evaluated the impact of the residential development program on existing public facilities and open space and the economic future of commercial development in Eliot Square.

An analysis of development opportunities in Highland Park indicates that there exist 22 acres of buildable land, 10 acres of underutilized land and 100 structurally sound buildings which could be rehabilitated. The evaluation of these development opportunities in terms of the environmental qualities of the sub areas

in which they are located, indicates that such development could result in an additional 1260 housing units occupied by approximately 3600 new residents.

A profile of the probable socio-economic characteristics of these new residents indicates that 756 (25%) would have family incomes ranging from \$17,000 to \$19,500; 1196 (33%) would have family incomes ranging from \$12,000 to \$14,200; and 1589 (44%) would have family incomes ranging from \$7,000 to \$8,000. Based on a comparison with existing age group distribution and the projected unit size, approximately 1150 of these new residents would be 18 years old and younger.

Through the addition of open space related to residential development, new parks, new playgrounds and the rehabilitation of existing community facilities, the present ratio of open space to developed land (1:3) could be maintained with a new total community population of 8,000 residents.

RAP has tentatively designated approximately 73,000 square feet of space for commercial development in John Eliot Square; 17,000 square feet for retail space and 56,000 square feet for professional offices. A market study conducted for RAP in 1975 indicated that although Eliot Square could potentially be developed as a convenience-specialty shopping center, the present amount of disposable income in the primary market area is so marginal as to create substantial risks for the

success of Eliot Square as a commercial center. With an increased population of 3600 residents, two-thirds of whom would have family incomes of more than \$12,000, there would be an increase of disposable income in the primary market area from the present \$5,000,000 to \$14,400,000. This income would more than sustain RAP's present plans for retail activity in John Eliot Square. Even when the disposable income of the middle income families is not included, the projected disposable income for moderate and low income families in combination with existing residents is sufficient to sustain Eliot Square as a convenience-specialty shopping center.

Based on the results of this study, RAP should now address the policy and strategy issues regarding the desired type, amount and growth pattern of an increased population in Highland Park. Specifically, there is the general issue of whether and to what extent a residential development program which provides a substantial amount of housing for middle and moderate income families is consistent with the creation of 'a model Black community.' If such a development program is conceptually and politically compatible, then strategies must be devised and implemented to attract such residents to Highland Park. If such a development program and/or the implications are found to be incompatible, then RAP can selectively reduce the number of units and/or the income level distribution and create a different socio-economic profile which would maintain the scope and scale of Eliot Square as it is presently planned.

INTRODUCTION

- EXAMINE THE ROXBURY ACTION PROGRAM'S PLANNING GOALS AND DESIGN FRAMEWORK IN TERMS OF THE QUANTITY AND NATURE OF DEVELOPMENT OPPORTUNITIES WITHIN THE HIGHLAND PARK COMMUNITY
- IDENTIFY POPULATION MIX ALTERNATIVES IN TERMS OF THE TOTAL NUMBERS AND INCOME DISTRIBUTION RELATIVE TO THE IMPLICATIONS OF A POPULATION INCREASE FOR THE QUANTITY AND QUALITY OF COMMUNITY SERVICES AND FACILITIES
- EVALUATE THE ECONOMIC IMPLICATIONS OF A PROJECTED POPULATION INCREASE ON PLANS TO REVITALIZE JOHN ELIOT SQUARE AS A COMMERCIAL CENTER IN HIGHLAND PARK

Highland Park is a mile square residential community of hills, narrow streets, parks and historical places located approximately two and a half miles from downtown Boston. At the turn of the century, the area was a rich suburb of Boston complete with farms, summer homes and stately mansions; today Highland Park is a predominantly Black, physically deteriorated, politically dynamic section of Roxbury struggling to restore itself as one of the nicest residential areas of Boston.

Although Highland Park is similiar to many other inner city communities socially, physically and economically, the factors which make Highland Park dissimiliar are to a large extent reflective of the ten year community development efforts of the Roxbury Action Program (RAP). Recognizing the spatial, visual and historic attributes of Highland Park, RAP has been engaged in the creation and implementation of strategies to arrest the physical deterioration of the area and to strengthen the economic and social infrastructure of the community.

The RAP effort to restore Highland Park as a viable residential environment is not in itself new or unique -- other indigeneous and external organizations have attempted to achieve the same objective with varying degrees of success not only in Boston but in other cities across the nation. Rather it is both a tangible and intangible sense of purpose which motivates individuals and groups to recognize the challenge and support the RAP effort. One cannot help but admire and be

simultaneously inspired by RAP's perseverance, resourcefulness and creativity; as a planner, one is struck with an overwhelming sense of immediacy because not only do the objectives of RAP appear achievable, but in contrast to many other community development programs, they are realistic and specifically related to long range goals which are transferable to other communities. To the extent that physical preservation and complementary programs in social and economic development are effective and meaningful tools for neighborhood restoration, in light of state and federal legislative, fiscal and policy vacillations, Highland Park is a logical and critical community in which to test and apply these tools.

Although RAP has over the years engaged in the physical rehabilitation of property in Highland Park, the development of social service programs focused primarily on the elderly and youth and has coordinated the accumulation of data about the area, like other community development organizations the necessity of dealing with opportunities as they emerged has inhibited RAP's ability to define and articulate an overall development plan beyond the conceptual stage for Highland Park. While RAP has devised an acquisition strategy in order to facilitate a coherent response to property acquisition in the area, there has not evolved a comprehensive plan which would quantify and test the basic qualitative objectives which have been articulated thus far for Highland Park.

Thus, the general focus of this study is to test and to some extent expand the substance of and thereby clarify the necessarily sketchy planning criteria under which RAP has been operating by identifying and exploring the physical implications of varying housing types and population mixes in terms of other key economic objectives of RAP.

RAP's development activities to date —the rehabilitation of housing, the creation of RAP pharmacy and the convenience store -- and projected development activities -- the revitalization of John Eliot Square as a commercial center, additional housing rehabilitation and construction -- are based on the assumption that there is an optimum population, quantitatively and qualitatively which will support the proposed and existing economic ventures and strengthen, without violating, the physical environment of the area. This concept, while clearly central to RAP's planning, has not been further defined nor evaluated.*While RAP recognizes that the area is underpopulated, that a significant part of the area's attraction is the architectural, historic and pastoral nature and that in order to sustain adequate local services and facilities there is a need to increase the residential population, RAP must decide where within Highland Park the increase should occur, what physical form that growth should take, at what rate a population increase could or should occur and critically assess what socio-economic mix is necessary

and can be accomodated without jeopardizing the existing residential character and positive environmental quality which makes Highland Park unique.

The specific focus of this study is to determine within the general conceptual planning framework established by RAP, a reasonable density in Highland Park, the accompanying level of community services and commercial facilities which that increased overall Highland Park population could support.

The underlying assumption upon which RAP's objectives and this study are based is that the spatial/physical pattern and the social/economic pattern which exist in an urban environment must be recognized as interdependent in planning for community development.

This study has four basic parts: 1) a general environmental assessment and description of the area; 2) an overall analysis of development opportunities in Highland Park based on existing vacant land, underutilized land, deteriorated buildings, structures available for rehabilitation; 3) an evaluation of these development opportunities in specific residential subareas in the context of the neighborhood scale and character; and, 4) a general consideration of the implications of development and the resulting population increase on local services and projected commercial development -- particularly in John Eliot Square.

This study is not definitive nor is it static. The design testing of RAP's conceptual planning objectives and the results are merely a base from which RAP can evolve and define where necessary general and specific development plans and strategies for Highland Park.

● HISTORY

● ENVIRONMENTAL PROFILE

PHYSICAL ANALYSIS

POPULATION CHARACTERISTICS

TRANSPORTATION AND CIRCULATION

EXTERNAL IMPACTS

● ROXBURY ACTION PROGRAM (RAP)

● COMMUNITY PLANNING PROCESS

CONTEXT ANALYSIS

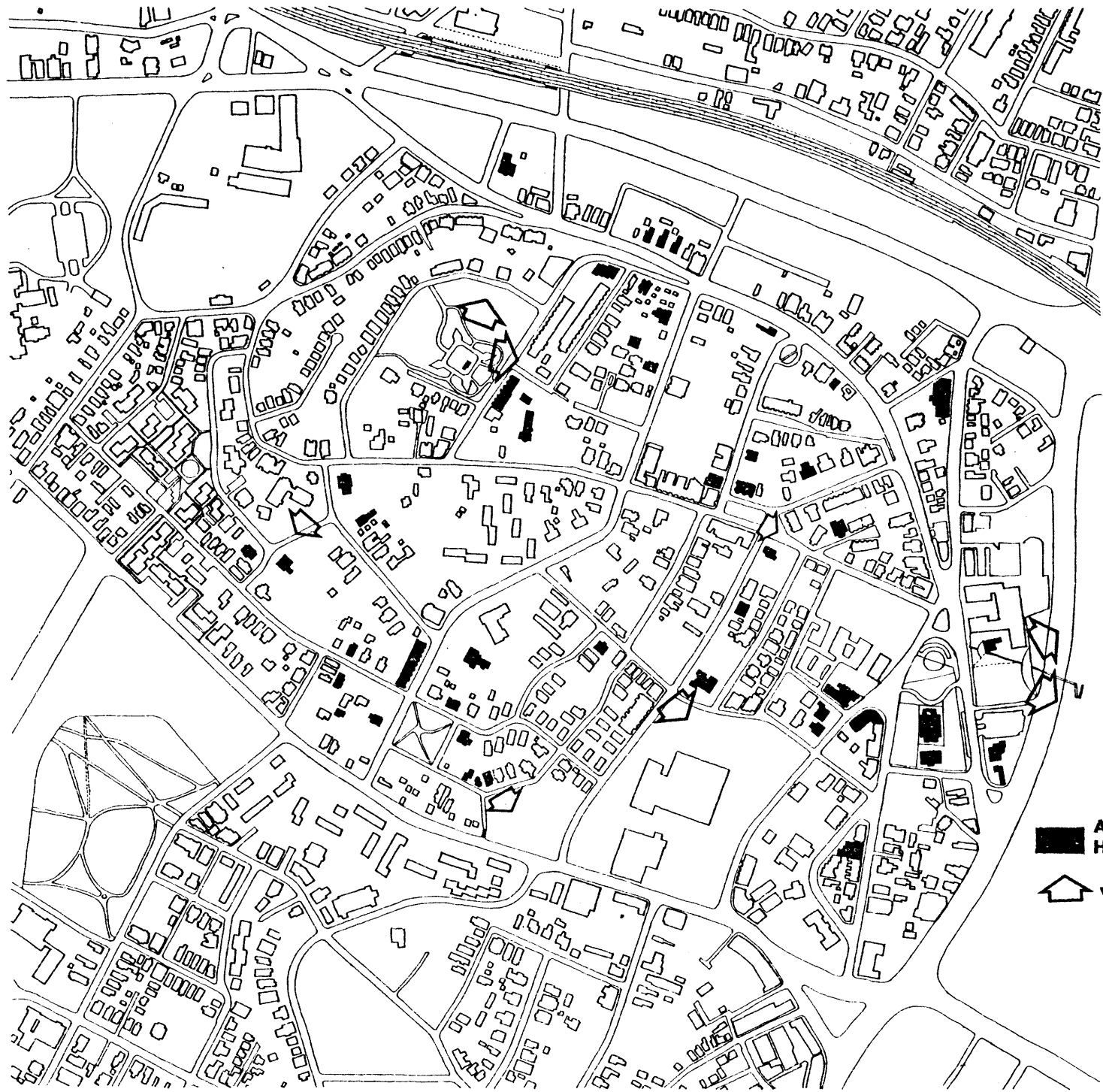
history

The history of Highland Park which is particularly relevant in a planning context began in the early 1800's when the area which had previously been covered with farms was gradually transformed into an area of suburban estates and country homes owned by wealthy Boston residents. Although this period lasted only to the mid 1800's when the large estates and lots were subdivided and single and two family homes constructed, it is a significant period in a physical and architectural sense since many of the structures which were built during this period remain and several are now designated historical sites. Moreover, the transition of Highland Park during the nineteenth century from a wealthy suburb into a upper-middle and middle class suburb was the initial phase of a settlement pattern which was repeated again and again — Highland Park as the residential rung on the ladder of upward social and economic mobility. However, as each new wave of residents replaced the former residents, the level and degree of wealth and economic status also diminished.

By the beginning of the twentieth century, there was an intensification of land and building development and during this period much of the housing which was constructed was multi-family row houses geared to the middle income family;

Simultaneously certain areas of Highland Park, notably the low lands, were developed for industrial use and lower middle and lower income residents. According to the Highlands Study, "...the most intense and most urban development occurred at the turn of the century when two estates on Kittredge Park were subdivided and built up with three story brick tenements."¹ With respect to present planning efforts, this is the area most acutely affected by the ills of tenement housing. While this change in residential character took place, some of the upper-middle class residents continued to co-exist with the newer forms of physical and social development. There are those who consider that the unique geographic features of Highland Park -- the topography, isolation and proximity to downtown Boston -- were primarily responsible for prolonging the suburban character and style of living in the area. In the same way that the original migrants to the area sought space, solitude and physical segregation from the city, so too did the subsequent residents; the primary difference, which is reflected in the physical form of Highland Park today, was the decline in the economic ability of newer migrants to express their status through the design and location of their homes although their actual relocation to Highland Park was in itself indicative of improved economic position.

From 1900 until the end of World War I, as older families moved from Highland Park,



ARCHITECTURAL & HISTORIC SITES

VIEWS & VISTAS



0 200 400 600

HIGHLAND PARK
NPS

their place was taken by families with different ethnic backgrounds but relatively similar social values. As development continued, construction took place on the remaining vacant land and by 1925 Highland Park was essentially fully developed. It was not until 1915 that Black people began to move to Highland Park; as with other ethnic groups which preceded them this settlement was initiated by those Black people with higher incomes. However, unlike previous periods of settlement, the available housing was, according to Sam Warner, "...inadequate even before the Blacks arrived in the Highlands, for the houses were already subdivided and -- except for an occasional old estate -- the subdivided buildings did not meet the modern standards of the day."².

The period from 1900 to 1970 is typically characterized as the change and decline of Highland Park. Significantly no major new construction took place in the area with the exception of a group of apartment buildings which were constructed in 1969. With the extension of public transportation networks and the availability of the automobile, Highland Park, an area which was developed very early for suburban living, was discarded for new suburban locations even more distant from the central city.

However, the years of successive structural transformation coupled with the lack of major residential construction have taken their toll on the physical condition of

Highland Park and have been exacerbated by the decline in city services which seemingly accompanies the transition of a community from predominantly non-Black to predominantly Black. The Highland Park Neighborhood Preservation Study indicates that while the former residents have relocated to other areas of the metropolis, ownership of property has remained in the original control. This pattern of absentee ownership has resulted in the type of disinvestment common to other inner city areas and results in considerable property deterioration and abandonment.

The transformation of Highland Park from a predominantly white to a predominantly Black residential area was essentially completed in the late 1960's.

environmental physical analysis

Perhaps the most outstanding physical feature of Highland Park is the topography of the area; located two and a half miles from downtown Boston, Highland Park is characterized by narrow streets, hills and picturesque views of the city. Rock outcroppings, plateaus and low lands are a consistent physical theme in the area; for the most part, buildings have been developed on land with a slope of 15% or less, although there are a few instances of severe grade changes in the back yards of some houses, and streets follow rather than cross the contours.

Highland Park is a distinct physical unit within Boston and within Roxbury; it is defined on three sides by major arterial streets: Columbus Avenue on the west, New Dudley Street on the north and Washington Street on the east. To a lesser physical degree, the area is defined on the south by Connolly Field and Marcella and Ritchie Streets. Each of the primary boundaries are further reinforced topographically: Washington Street and New Dudley Street have steep topographical edges at several points as does Columbus Avenue particularly along the southwestern edge of the area.

The Highlands Study describes the types of streets which exist in the area as: those with the uphill green side opposite (e.g. Centre Street); those built to the

HIGH LAND PARK IN BOSTON CONTEXT



- TRANSIT
- TRANSIT TO BE REMOVED
- 1 FOREST HILLS
- 2 DUDLEY STATION
- 3 JACKSON SQ.
- 4 ROXBURY CROSSING
- 5 EGLESTON
- 6 GROVE HALL

M.T.
bock log
or
Boston common

Atlantic Ave

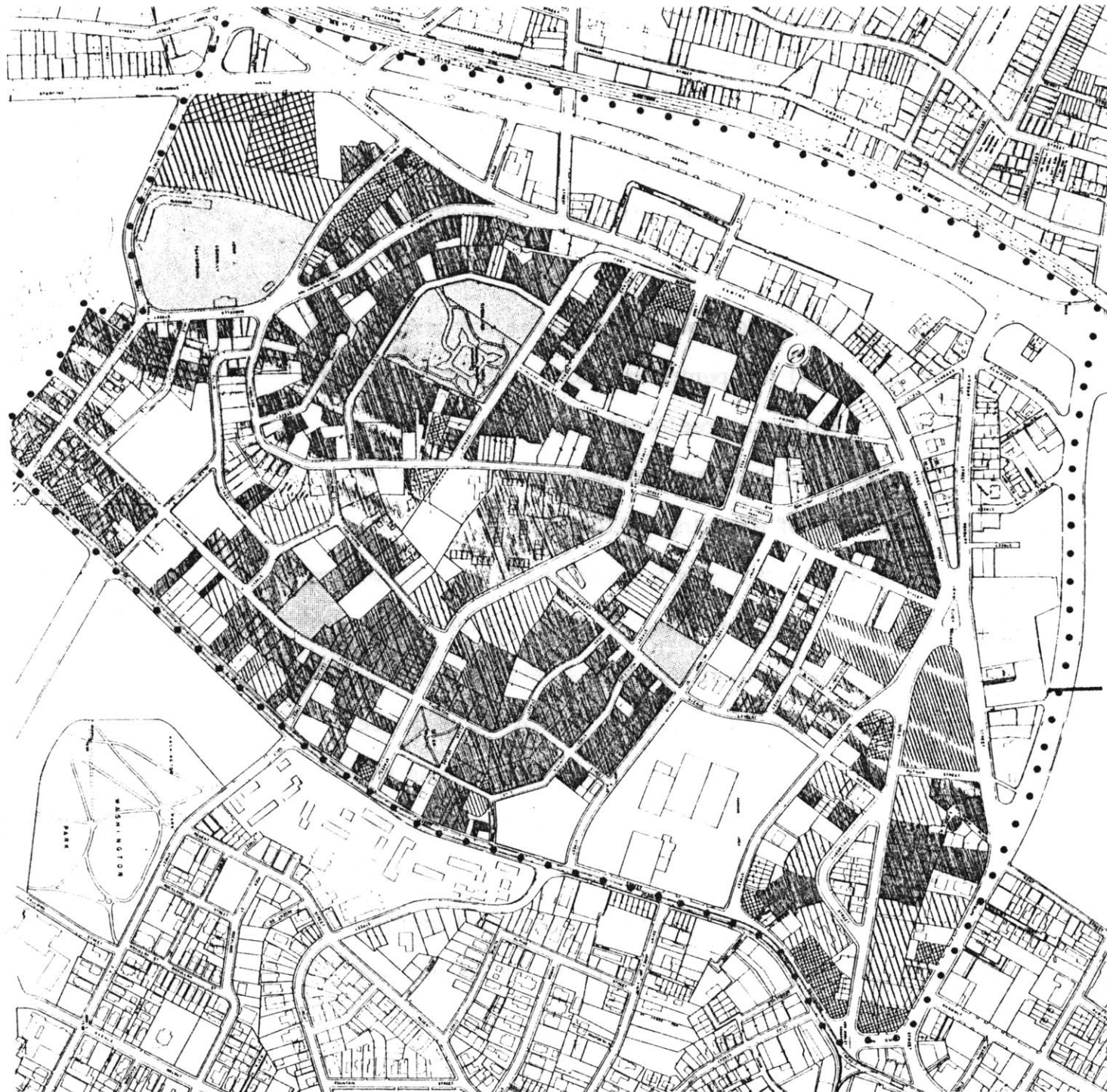


0 2400 9600








HIGHLAND PARK NPS


sidewalk but with an open green opposite (e.g. Fort Hill Avenue, Cedar Square); those following the direction of the slope of the hills; the lowlands and those with dense construction on the uphill side to the lot lines but with visibility of houses and higher ground above (e.g. Marcella Street with Beech Glen Street to the rear of the cliff).

The majority of the interior of the Highland Park community is zoned for residential use, with non-residential use occurring around the periphery along the major arterial streets. (Existing Zoning Map - pg.31). While the residential section of the community has a simplicity and coherence which has apparently been influenced by topography and the type and limited variety of existing building forms, the edges of the residential area are distinctly different, again a reflection of building form and topography. The residential section of Highland Park is characterized by three basic building forms which are described in the Highlands Study: attached row houses, triple deckers and conventional residences. The attached row houses are usually three to four stories, red brick or masonry with a flat roof, whereas the conventional residences are of wood construction with a pitched roof with a few exceptions which have been constructed of Roxbury pudding stone (a composite rock indigenous to the Roxbury Highlands area). The attached row houses and triple deckers are generally multiple occupancy ranging from three to six units and the



EXISTING LAND USE

-  **RESIDENTIAL**
-  **COMERCIAL**
-  **NEIGHBORHOOD SERVICES**
-  **PUBLIC FACILITIES**
-  **PUBLIC OPEN SPACE**
-  **INDUSTRIAL**
-  **VACANT or UNIMPROVED LAND**


 0 200 400 600
HIGHLAND PARK **NPS**

conventional residences appear to have been originally intended as single occupancy dwellings although many are now converted to multiple occupancy units.

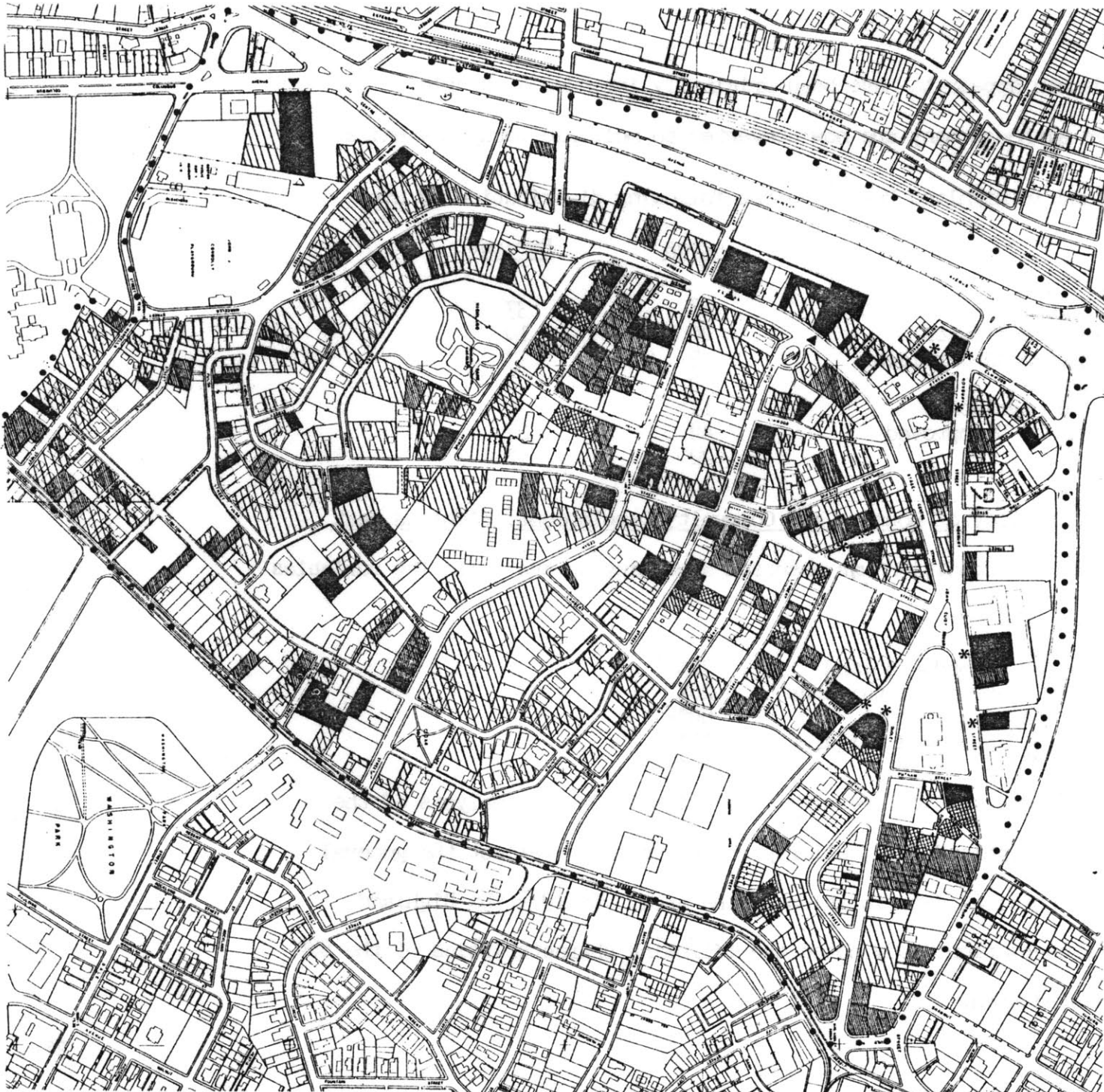
The 183 acres of land in Highland Park have the following distribution by use:

	<u>Acres</u>	<u>Percent</u>
Residential	68	37
Public Facilities	20	10
Neighborhood Services	5	3
Industrial	3	2
Public Open Space	11	6
Vacant or Unimproved	49	27
Streets	22	12

In a report entitled A Study of Housing and Community Development: Highland Park the general environmental condition was assessed according to the following variables based on 1419 parcels of land:

Vacant or unimproved land	31%
Parcels Lacking Maintenance	20%
Deteriorated Buildings	50%
Vacant or abandoned buildings	11%

While survey methods and statistical results vary slightly in the analysis of the general environment of Highland Park, all reports essentially reflect the general nature and extent of physical deterioration in the area. In 1974 the Highland Park Neighborhood Preservation Study noted the following characteristics of the 889 buildings which existed then.



**BUILDING
DETERIORATION**

- ABANDONED
- ▨ SUBSTANDARD
- ▧ MAJOR REPAIR
- ▩ MINOR REPAIR
- SOUND
- * REDEVELOPMENT
IN PROCESS
- ▲ NON-RESIDENTIAL
USE

0 200 400 600

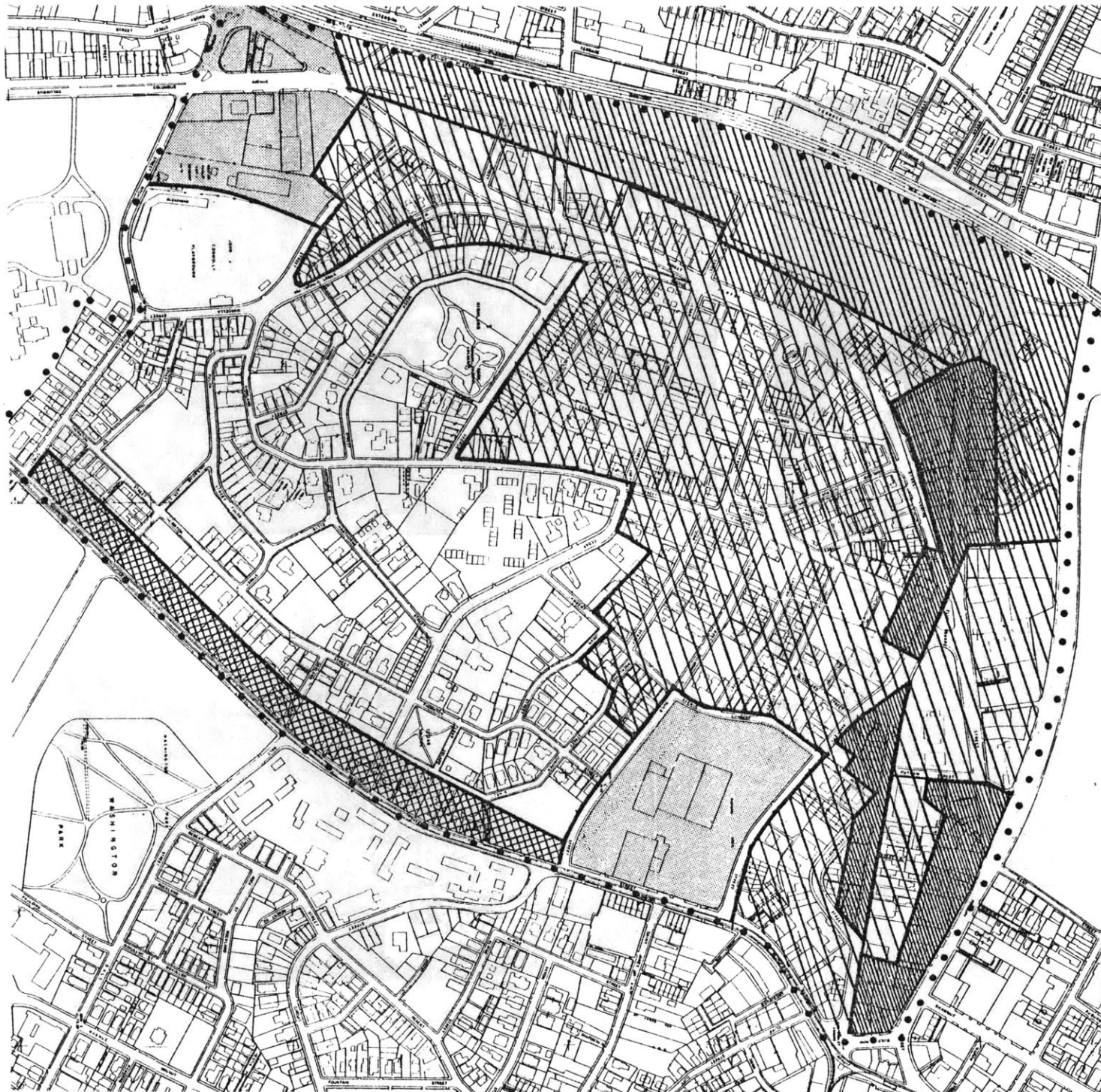
**HIGHLAND
PARK** **NPS**

Total Number of Buildings		889
Wood Construction	62%	
Masonry Construction	38%	
Sound Buildings		23%
Buildings Needing Minor Repair		39%
Buildings Needing Major Repair		27%
Substandard Buildings		11%
Total Number of Residential Buildings		781
One Family	33%	
Two Family	21%	
Three Family	35%	
Four Family	6%	
Five or More	5%	
Total Number of Dwelling Units		1764
Mean Net Population Density		64 Persons per acre
Mean Net Dwelling Unit Density		26 Persons per acre
Renter Occupancy		70%
Resident Owned Buildings		49%
Absentee Owned Buildings		42%







The preceding data in part provides a profile of the general environment in Highland Park. The most significant aspects of the environmental condition with respect to the attractiveness of the area as a residential community are the number of vacant or unimproved parcels, the incidence of poor maintenance (e.g. trash, abandoned cars, etc.) and the number of abandoned and/or deteriorated buildings.

Based on the research in the Highland Park Neighborhood Preservation Study, a correlation does exist between the deteriorated conditions which exist in the area and absentee ownership; it is the opinion of the authors of that study that the environmental and physical conditions related to ownership patterns present the primary challenge to the restoration of Highland Park. ³.

Although Highland Park has an image of spaciousness, upon closer examination, it is revealed that the percentage of land used for public open spaces is less than half the comparable percentage on a city wide basis. Currently 19.4% of the total land area within Highland Park is in use for community facilities and open space. Eighty percent (80%) of the public open space in the community is represented by two parks: the High Fort, which is relatively passive and somewhat remote, and the Connolly Field, an intensively used playground. However, Highland Park is well served by district wide recreational facilities particularly those located in Washington Park. In addition, due to the topography of the area, there are significant portions of land which are not available for construction and which, having been left in their natural state, provide at minimum a psychologically functional part of the open space network in Highland Park. Based on available research, it is probable that community residents are underserved in terms of neighborhood oriented facilities and open space.



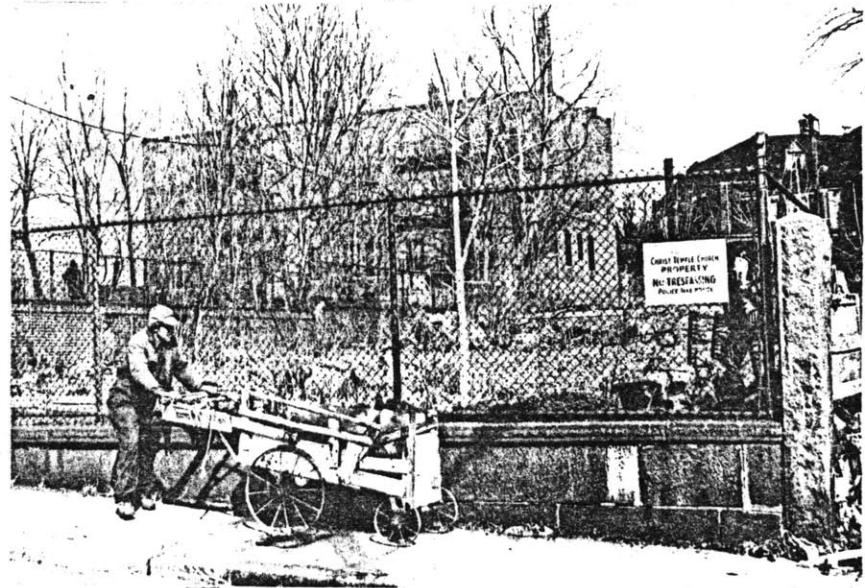
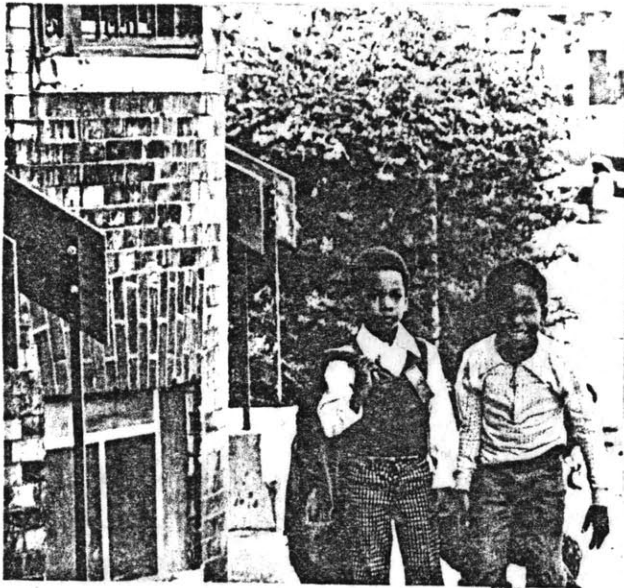
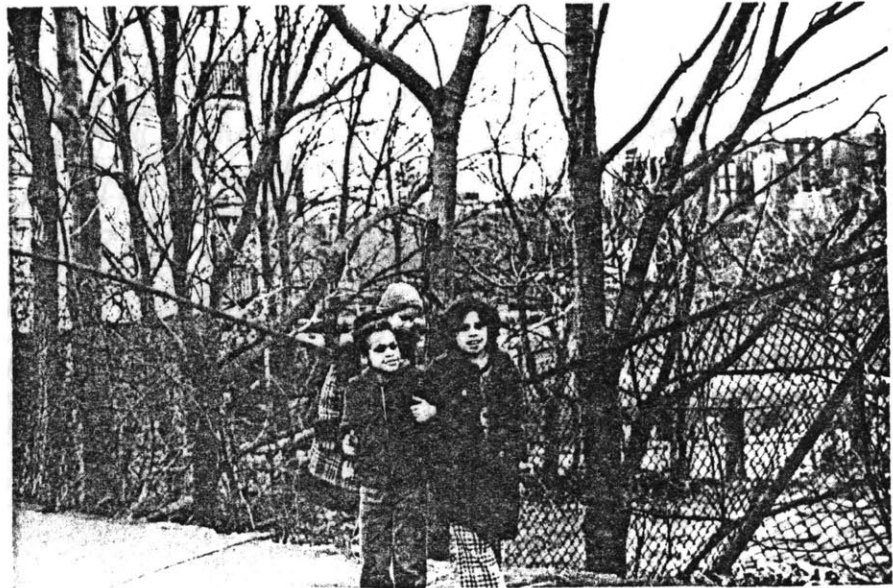
EXISTING ZONING

-  **H1 APARTMENT DWELLINGS**
-  **L1 LOCAL RETAIL & SERVICE STORES**
-  **L5 LOCAL RETAIL & SERVICE STORES**
-  **M1 LIGHT MFG.**
-  **M2 LIGHT MFG.**
-  **R8-2 & 3 FAMILY APTS.**



0 200 400 600

HIGHLAND PARK NPS



environmental population characteristics

Highland Park like many other parts of inner city areas has undergone a significant racial transformation; however, the area has a substantial non-Black population in comparison to Roxbury although it is predominantly Black in comparison to Boston. Although 64% of the residents in Highland Park are Black, 24% are white (in comparison to 10% white in Roxbury) and 9% are Spanish Speaking (in comparison to 4% Spanish Speaking in Roxbury). Fifty percent (50%) of the population in Highland Park is comprised on the elderly and the young, a figure similiar to both Boston and Roxbury.

In terms of those demographic factors which are significant indicators of neighborhood stability, Highland Park more closely approximates the features of the city than it does Roxbury. (See Appendix C - F).

- While the percentage of families in Highland Park with a female head of household is one-third higher than that for the city, it is lower than Roxbury; the number of husband-wife families in the area is close to the city percentage
- There is no significant difference in educational attainment in Highland Park and the city as a whole and the number of college educated residents in the area

tends to reflect that of the city and is more than twice the percentage for Roxbury.

- Nineteen percent (19%) of the families in Highland Park receive public assistance income which is 36% greater than the figure for the city but 36% less than the figure for Roxbury
- The composition of the labor force by sex is similiar for Highland Park and the city as a whole with no significant differential between Black and non-Black workers

The mean income for a family in Boston is \$3000 more per year than for a family in Highland Park. However, as with unemployment and employment classification, significant differences exist between Blacks and non-Blacks both for the city and Highland Park; although the non-Black population in Highland Park has a higher income level than Blacks in Highland Park.

The demographic information has been treated in comparative form in order to indicate the relative population characteristics of Highland Park residents in comparison with Roxbury and the city of Boston as a whole. The major demographic differences between Highland Park and the city appear to be more related to race than location. This information also indicates that while there are economically and educationally disadvantaged residents in Highland Park, the community presently has a heterogeneous base which can be strengthened and expanded.

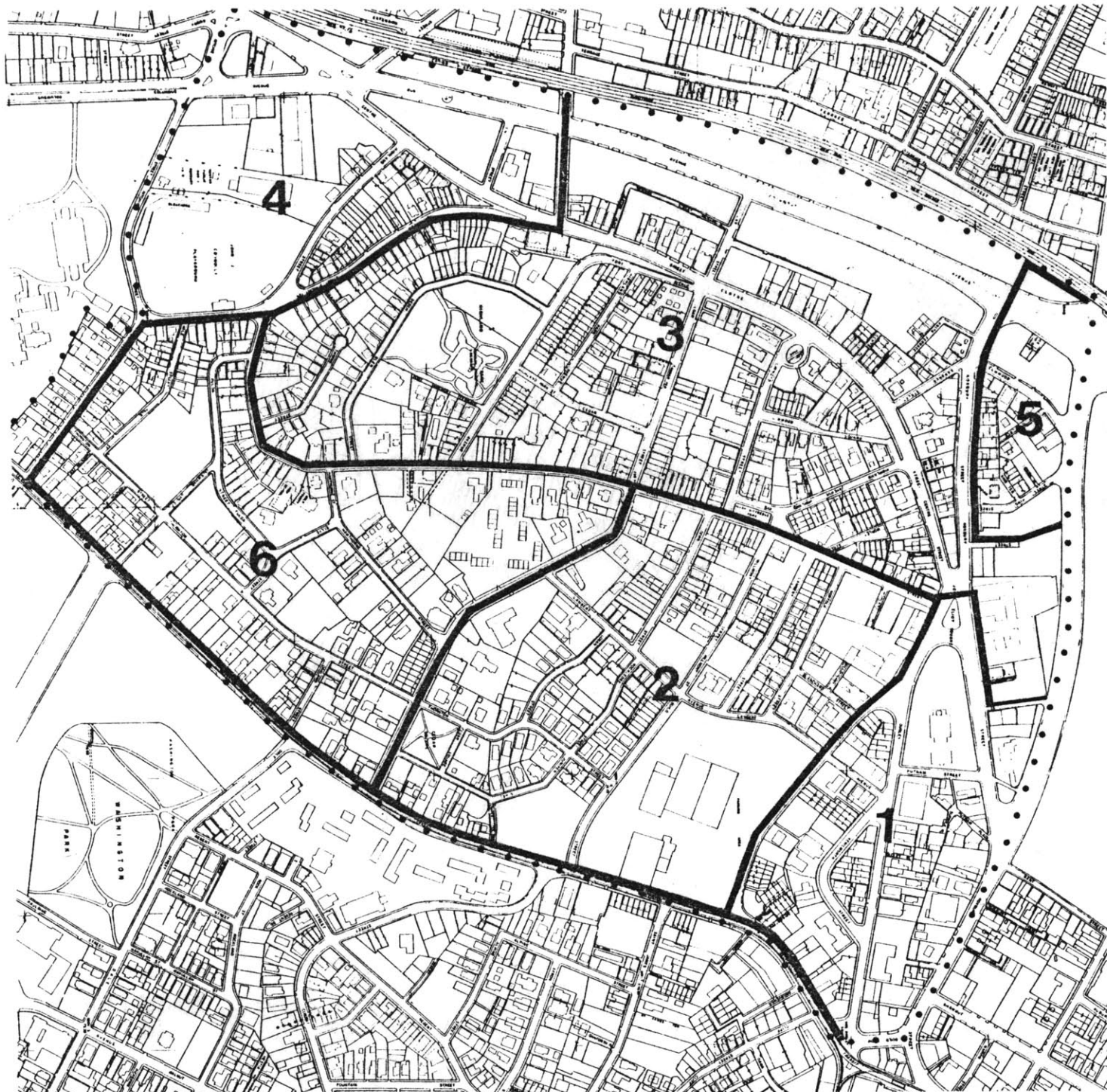


POPULATION DENSITY

NUMBER OF PERSON PER ACRE

	120+
	80 - 119
	40 - 79
	1 - 39

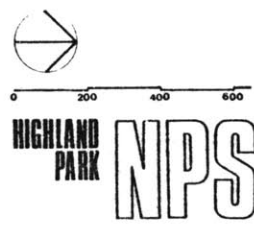
HIGHLAND PARK NPS



AVERAGE INCOME

SECTION

1	\$ 6,751
2	\$ 7,655
3	\$ 6,956
4	\$ 7,517
5	\$ 5,853
6	\$ 8,464

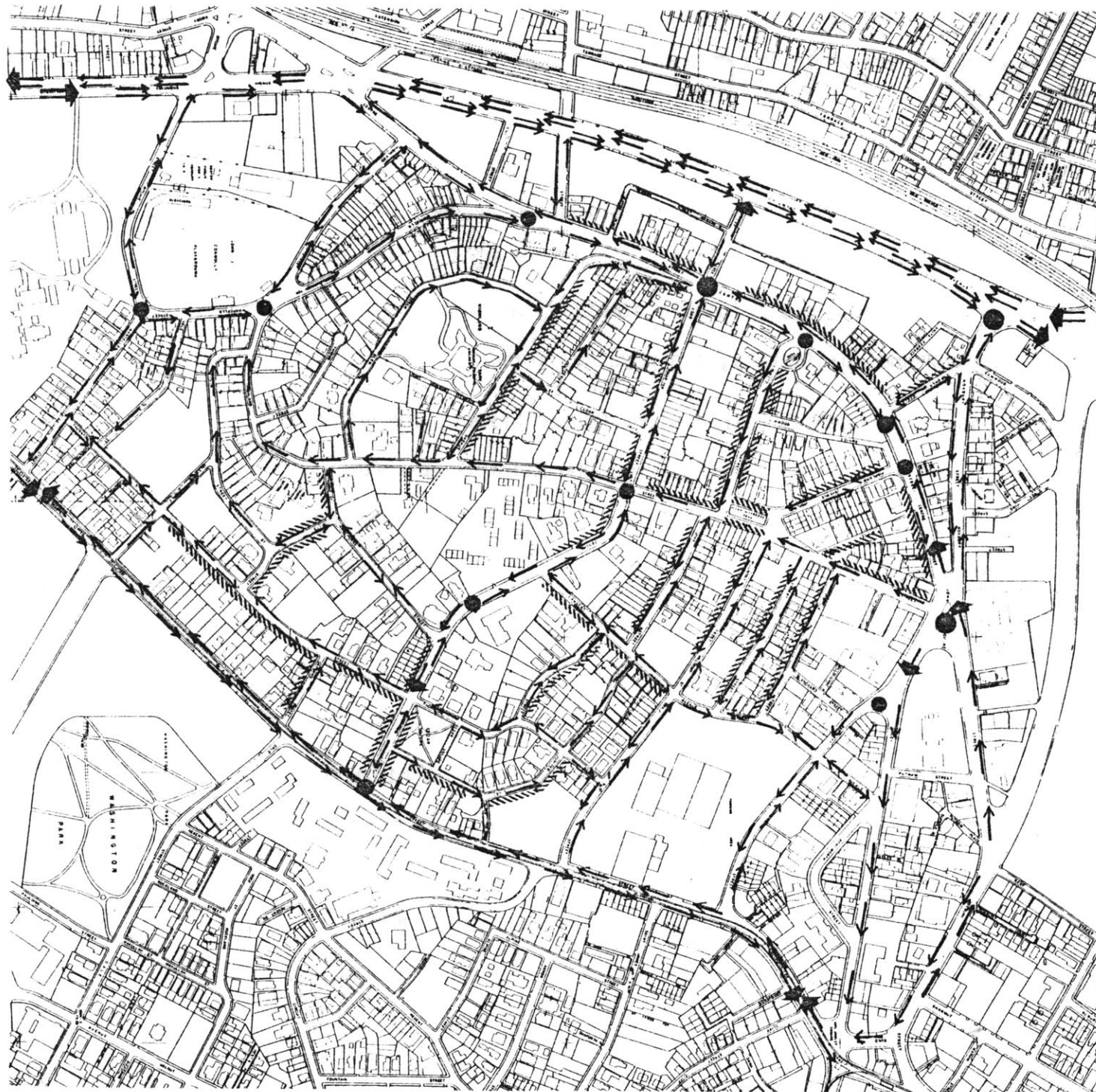


environmental transportation

The relationship of a community to transportation and distribution systems in large part determines the accessibility of the community within the region, its relationship to neighboring districts, its commercial/economic viability and potential amount of commercial development and, ultimately, its physical form.

Primary access to Highland Park is presently gained along Centre Street, the major cross carrier through the community, and secondarily from John Eliot Square via Highland Street. Washington Street, one of the three major arterials which define Highland Park, provides access to those blocks abutting it. Roxbury Street, and to a lesser extent, New Dudley Street, provide access to the community from John Eliot Square which is the key distribution point in the community.

The Highland Park community is accessible and convenient to public transportation. Several MBTA bus routes service the area along the arterial streets — Washington Street and Columbus Avenue — as well as along the collector streets — Centre Street and Roxbury Street. In addition, Dudley Station, located on the northeastern edge of the community, provides principal access to downtown Boston via rapid transit. Diagonally opposite the Dudley Station area at the southwestern edge of the community



EXISTING VEHICULAR PATTERN

● INADEQUATE TRAFFIC MANAGEMENT & PEDESTRIAN / VEHICLE CONFLICT

▨ CONGESTION DUE TO PARKING



0 200 400 600

HIGHLAND PARK NPS

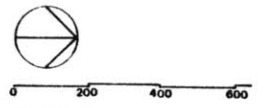
is Jackson Square; at a slightly further distance is the Egleston Station area in the southwestern direction from Highland Park.

The majority of streets in Highland Park are minor streets, servicing the residential sections of the community; they are narrow, many are curvilinear and almost all, like Boston streets in general, are in various stages of disrepair. There are a few streets which are minor streets by design but which through custom, convenience and the apparent lack of an alternate route, provide cross community access primarily from the Columbus Avenue area to Washington Street: Cedar Street, Bartlett Street (an extension of Centre Street), and Valentine Street which intersects with Marcella Street. At the present time access and distribution is very limited on the southern side of the area.

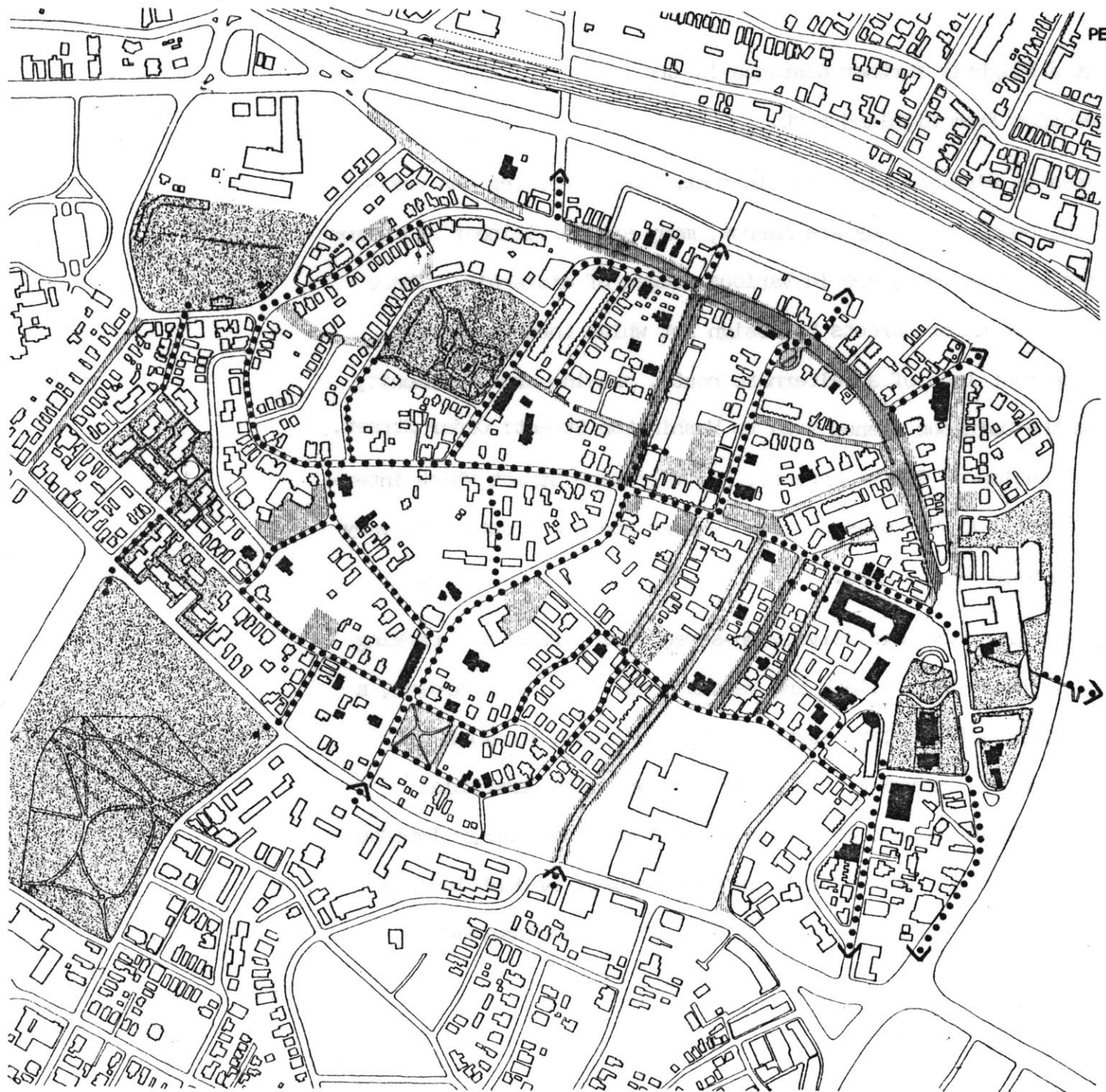
Parking in Highland Park is almost exclusively on-street with off-street parking occurring where there are driveways, alleys and vacant lots. Fort Hill Gardens, a relatively new garden apartment complex, is the only significant location of designed off-street residential parking. In those sections with commercial activity there is a significant amount of double parking which seriously impedes both vehicular and pedestrian movement — this is particularly evident in John Eliot Square and it is exacerbated by the illegibility of intended movement through the Square.

**PEDESTRIAN MOVEMENT
& ACTIVITY NETWORK**

- PEDESTRIAN ROUTES
- ▨ AREAS OF UNSATISFACTORY LAYOUT & ENVIRONMENT NEEDING IMPROVEMENT
- ▨ HARD URBAN SPACES
- ▨ SOFT URBAN SPACES
- BUILDINGS OF ARCHITECTURAL AND HISTORIC SIGNIFICANCE
- ▨ BUILDINGS OF HISTORIC IMPORTANCE



HIGHLAND PARK
NPS



environmental external impacts

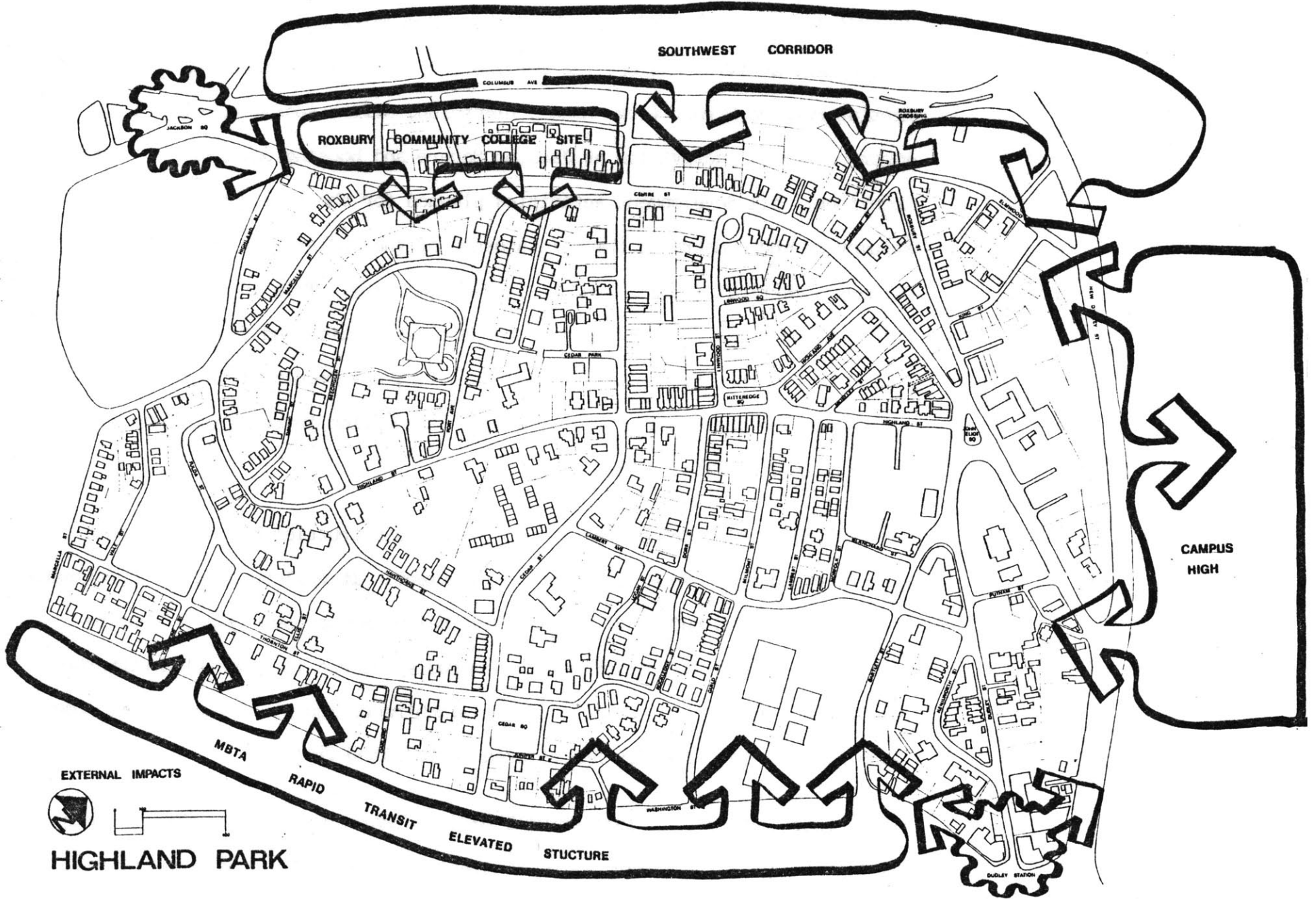
The major external developments in progress and in planning which affect the Highland Park community are transportation related, with the exception of the construction of the new Campus High School. For the most part, these transportation related development activities have evolved from the moratorium on highway construction in the inner city which occurred in 1970 and left a swath of cleared land intended for the construction of the I-95 inner belt, along Columbus Avenue from Jackson Square to Ruggles Street commonly referred to as 'the corridor.'

The related decision to relocate the Orange Line rapid transit service from its present location along Washington Street to the railroad embankment which runs parallel with the corridor along Columbus Avenue, will have a significant impact on Highland Park. The relocation will shift access to transit facilities from the east to the west of the Highland Park community, the removal of the elevated transit line from Washington Street will soften the boundary between Highland Park and Washington Park and will probably result in Washington Street being more attractive for residential development. The new Orange Line construction in the corridor is slated to begin in the spring of 1977 with related development

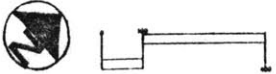
activities occurring during the next ten years. There are transit stops planned at Roxbury Crossing and Jackson Square and with the completion of the new Orange Line, the existing elevated structure along Washington Street will be removed. As an adjunct to the regional transit system, a mini-bus line is projected to serve Highland Park residents via a loop route which would provide connector service to Dudley and Jackson Square crossing through Eliot Square.

In addition, Centre Street, which presently provides a heavy flow of regional traffic through John Eliot Square, will become a local collector street when it is linked with the corridor street system at Jackson Square. The completion of the Martin Luther King Boulevard extension and its convenience as an alternative carrier to either Columbus Avenue or the corridor, will to a large degree determine the extent to which Centre Street becomes strictly a community carrier.

Related to the development activities along the corridor is the planned location of the Roxbury Community College on Columbus Avenue to the rear of Centre Street. At the present, the campus is planned to occupy the land from Penryth Street to Roxbury Crossing. This location effectively eliminates the land along Centre Street for future residential development and will probably impact the nature of commercial facilities in John Eliot Square based on the student population.



EXTERNAL IMPACTS



HIGHLAND PARK

MBTA
RAPID
TRANSIT
ELEVATED
STRUCTURE

CAMPUS
HIGH

In addition to the location of the Roxbury Community College, projected development activities along the corridor include major commercial development at Ruggles Street (e.g. hotel, nightclub, office space, restaurant), minor commercial activities at Jackson Square and housing development at various locations. All development activities planned for the corridor have as an assumption and constraint the maintainence of the Dudley Station area as the primary commerical facility in the larger community. This is an assumption which has been made by the Dudley Merchants Association and tentatively agreed to by other community planning agencies; one result of this study will be to test the continued viability of this assumption in terms of commercial activity in John Eliot Square.

The new Campus High School is presently under construction directly north of John Eliot Square down a steep (60') embankment. It will be used by approximately 5,000 students and 500 staff daily. Discussions are presently under way regarding the feasibility of narrowing New Dudley Street in connection with the construction of the high school; such a width reduction would impact development plans for the lower Roxbury Street area of Highland Park.

All of these external activities will have an impact not only on the economic development of Highland Park -- particularly in John Eliot Square -- but will serve to enhance the attractiveness of the area as a residential community.

roxbury action program

"The fundamental thing is that no community is capable of reviving itself and its surroundings unless it can put together a total physical and social fabric." 4.

During the several years since its inception, RAP has been able to achieve a significant impact within Highland Park and is beginning to build a momentum of social and physical renewal. A non-profit neighborhood development corporation controlled by community residents, RAP was established in 1967 when the Metropolitan Housing Program of the American Friends Service Committee transferred the operation of its Roxbury office to the newly organized group. The original concepts, objectives and organization of RAP were developed by George Morrison and Lyoyd King, former staff members of AFSC and presently Executive Director and Vice President of RAP.

RAP's main goal has been the revitalization and rehabilitation of Highland Park into a model Black community. In an article entitled "Toward a Model Black Community," the objectives supportive of this goal are described as follows.

- To organize the Black citizens of Highland Park area politically, economically



and culturally; to develop a wide use of cooperative and individual ownership of housing;

- To promote and support the economic self-development of groups and individuals in the community in cooperative efforts;
- To provide through education and training, the opportunity for participation in community development by those who have the most to gain in salvaging the neighborhood, the residents.

These objectives reflect RAP's intent and efforts to prevent Highland Park from becoming another neighborhood dominated by speculators during the course of development and to own or control the land in Highland Park.

The RAP staff includes experienced developers and financial planners as well as a consortium of architects, planners, bankers and developers called the Professional Planning Group (PPG) which meets weekly and is an integral part of the RAP planning process.

The implementation of RAP's community development program is evidenced by the following activities and accomplishments: (Appendix G).

- Has acquired and rehabilitated thirty buildings containing 115 low and moderate income apartments and 7500 square feet of commercial space at a cost of \$1,750,000

- Has started RAP pharmacy and convenience store now in their second year of operation and doing sales of \$250,000 annually
- Runs an alternative education program for teenagers; a year round employment program; has instituted a unique internship program training inner city youth in the governmental and financial intricacies of community development
- Has obtained a \$1,200,000 commitment from the city of Boston for the capital improvements in John Eliot Square including street lighting, plazas, a playground, parks and utility improvements.

RAP's planned housing developments are:

RAP - UP II A - consisting of the renovation of the Garvey House, 85 new units of elderly housing, 35 new units of family housing and 9,400 square feet of commercial space in John Eliot Square

RAP - UP III - consisting of 120 units of new family units representing an investment of approximately \$5,000,000.

In view of the fact that buildings are abandoned and burnt out on an almost weekly basis in Highland Park, it is difficult to assess the rate of rehabilitation of property versus the rate of loss to abandonment and demolition.

community planning process

Since 1969 there have been individual and collective efforts to undertake comprehensive planning in Highland Park; substantial data has been generated, but the necessity of dealing with emerging opportunities has often meant delaying the overall plan in order to take advantage of immediate issues.

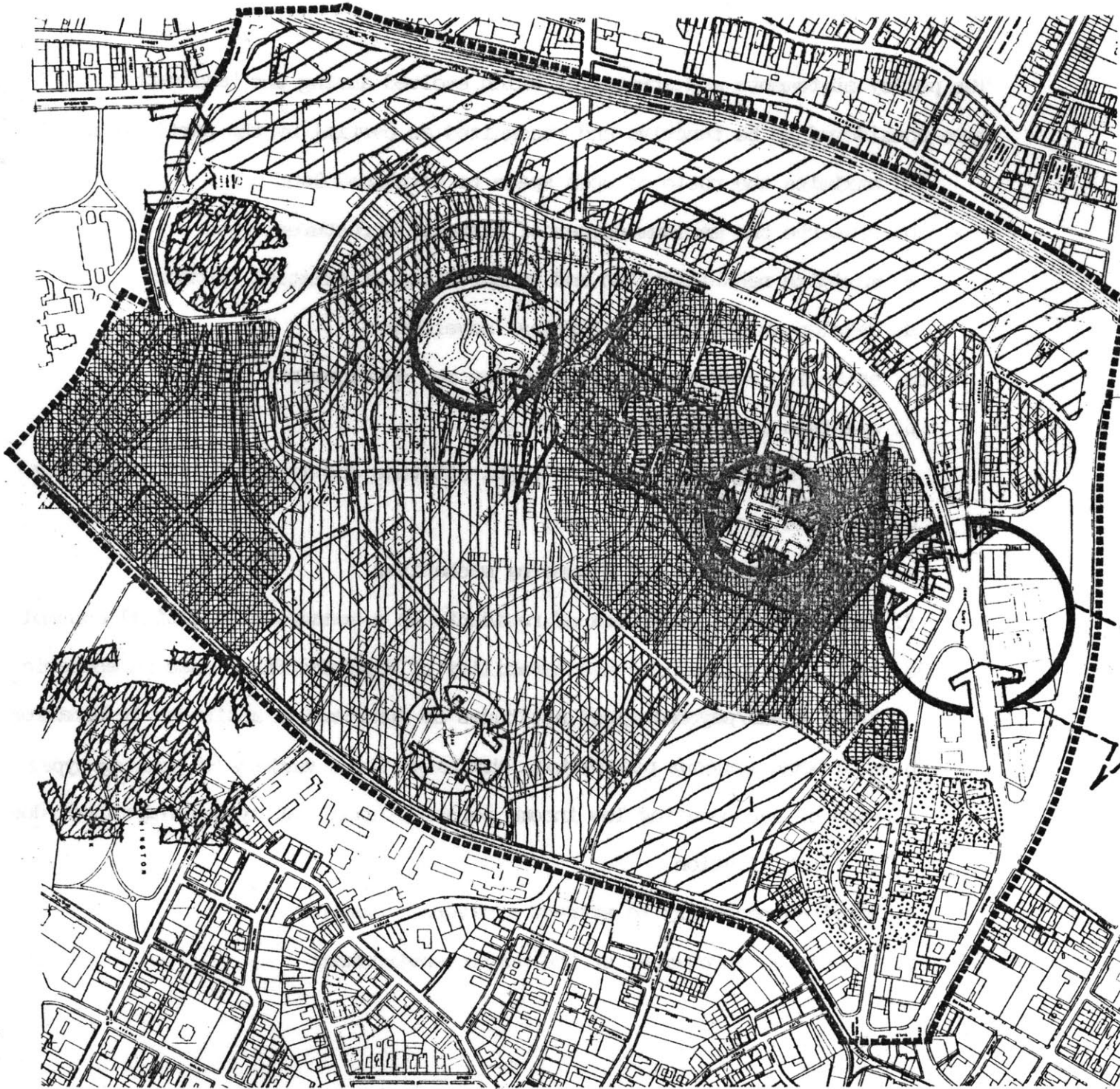
Out of a real need to bring a sense of order to the application of human and financial resources to community development in the area, RAP staff and community residents engaged in an intensive planning session in August 1975 and as a result of this 'charrette,' a planning framework was outlined which identified general development opportunities and proposed distribution of resources. (Following page)

Although the participants recognized that physical planning is the strongest aspect of RAP and that RAP has had to emphasize the physical improvements in order to strengthen the social environment, there was also a recognition that community development goes beyond just physical planning and that, in the long run, the form of community development is also determined by the community's ability to implement political and economic policy and strategy.






The community development framework which resulted from the 'charrette' is described by the following goals, policy statements and strategies which were articulated and agreed upon by the participants in the form presented here.

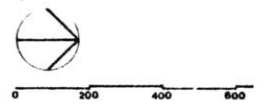
- maintain physical strengths and characteristics of Highland Park
- control of Highland Park turf by a representative majority of the population reflective of the present racial profile
- optimum open space based on what exists
- diverse and viable community in terms of income and ages
- develop and define optimum linkages between Highland Park and the rest of Roxbury, South End, Dorchester and Mattapan
- sell John Eliot Square as a major center of Roxbury
- reinforce Highland Park's image as a special, sub-community of Roxbury
- reemphasis of the role of residents in the Highland Park planning process selling the Highland Park process
- develop a flexible planning framework
- security

The generalized planning framework which evolved from these goals is shown on the opposite page.



**PLANNING
FRAMEWORK**

-  LOW DENSITY RESIDENTIAL CONSERVATION AND REHABILITATION
-  MULTI-FAMILY DEVELOPMENT, SELECTIVE DEMOLITION, MAXIMUM PHYSICAL REORGANIZATION
-  MODERATE TO HIGH INCOME REHAB AND NEW CONSTRUCTION
-  LARGE SCALE DEVELOPMENT, INSTITUTIONAL, LIGHT INDUSTRIAL, HOUSING, OPEN SPACE, RECREATION
-  ENVIRONMENTAL MAINTENANCE AND IMPROVED MUNICIPAL SERVICE DELIVERY
-  PRIMARY GATHERING PLACES
-  MAJOR PLAYFIELDS
-  LINEAR CONNECTOR
-  RAP PLANNING BOUNDARY



HIGHLAND PARK **NPS**

The policy statements and strategies which evolved during the 'charrette' were considered to be tentative and recognized as partial by the participants.

- 1a. maximize the ratio of open space to developed land
- b. preserve the maximum number of historic structures
- c. maximize rehabilitation and conservation of existing housing
- d. develop guidelines for physical development
- 2a. establish controls in preservation and development
 - b. maintain land banking as a policy
 - c. pursue bringing people with right attitude and mind set into community
 - d. create a mortgage pool model
 - e. explore and implement financing mechanisms
 - f. more pervasive awareness of residents as a measure of political control
- 3a. establish desirable containerability of Highland Park based on economic trade areas/psychological attitudes or fundamental attitudes in behavior
 - b. with heterogeneous population, should go for a variety of housing types
 - c. ways of accomodating low income persons forced out of housing market due to rehabilitation
 - d. services necessary to attract a diverse community
 - e. immediate improvement of the public environment

Based on the goals and objectives which were articulated during the RAP 'charrette' and described in the preceding section, this study has been undertaken as a logical next step in the RAP planning process and the initial step in the formulation of an overall development plan for Highland Park. The design of this study was arrived at in consultation with RAP staff and PPG members and is reflective of the approach which seemed most relevant to the planning needs and objectives of the agency. It should be noted that the methodology used in this study is just one of many possible methodologies available and further that the study as conceived and implemented provides a base of information from which RAP will proceed to develop more definitive and specific elements of a comprehensive development plan.

The original focus of this study was to determine the 'containerability' — that is the holding capacity — of Highland Park. This subject was considered to be a priority issue since the amount of population increase which the area can sustain is fundamentally related to all other RAP planning activities. However, although a purely quantitative assessment of the holding capacity of Highland Park would establish a population ceiling, it would have limited application and use in terms of the general planning framework since it would not necessarily be reflective of the other qualitative variables which were outlined during the 'charrette.'

GENERAL STUDY

Therefore, in order to address other aspects of the conceptual planning framework (e.g. maintenance of the physical characteristics of Highland Park, maximization of the open space/developed land ratio), the focus of the study was broadened and divided into three interrelated phases of analysis.

The first section, called the general study, is an analysis of all available developable sites in the community. The second section, the sub area analysis, is a comparative analysis of developable sites based on the particular characteristics of each of several environmental sub areas in Highland Park; this section addresses the composite neighborhood character of the larger community and deals with the development opportunities described in the first section in terms of the environmental style and integrity of each sub area. The synthesis of this material provides the basis from which projections have been made regarding an optimum population increase, the impact of such an increase on open space and community facilities, and a specific analysis of the probable implications of such a population increase on current plans for the economic revitalization of John Eliot Square.

The overall methodology can be summarized as follows: 1) inventory all vacant and abandoned sites and determine the buildability of each site based on slope conditions; 2) establish a desirable residential re-use for each site in terms of

the environmental sub area in which it is located; 3) using standard planning criteria project an amount and type of population likely to occupy the specific building type recommended for each site; 4) add up the new population and estimate its impact on community open space and facilities; and 5) evaluate the implications of the projected increased population in terms of the feasibility study prepared for RAP on the economic revitalization of John Eliot Square.

The limitations of this type of study are based on the nature of the elements of the process; while this study will determine a reasonable population increase for Highland Park, it will not necessarily determine an optimum population increase since the constraining factor is the maintenance of the physical texture of the community and the single variable is the maximization of population. In addition, this method does not specifically address the incremental effects of growth nor does it assume that there is at the outset a desired socio-economic profile for the projected population increase. In consultation with the RAP staff and members of PPG it was decided that these issues, while of critical importance, were in fact part of a series of policy decisions which would have to be made by RAP using the results of this initial study, market analyses and an assessment of the available financial mechanisms for development.

In order to obtain information for the general study, field surveys were conducted and supplemented with available information on ownership and/or probable disposition of vacant land and buildings. For the purposes of defining developable sites, four categories of priority have been used:

vacant land with less than a 15% slope

underutilized land - land which is not intensively used at the present time
(e.g. low ratio of structure or use to occupied site)

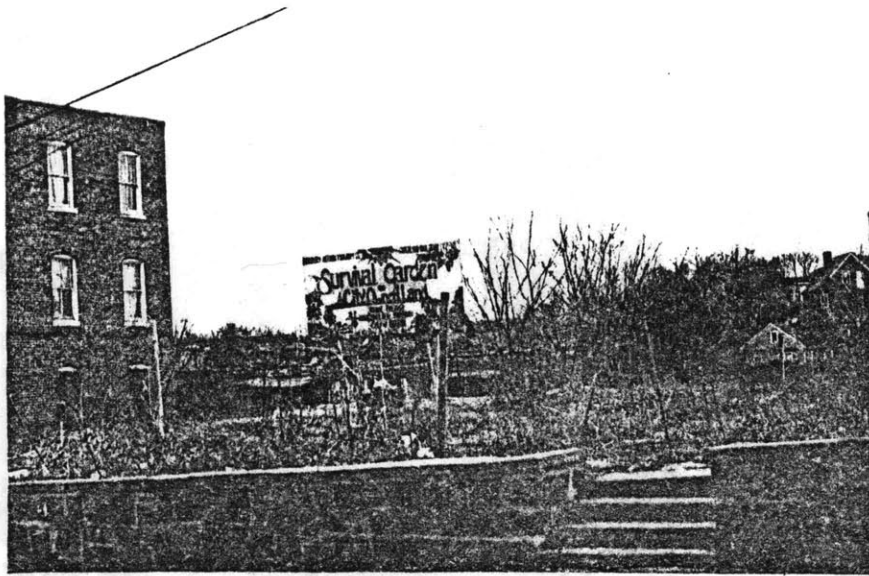
vacant buildings which are structurally sound for rehabilitation

vacant or substandard buildings which could be demolished

The field surveys focused on sites which individually or in combination with one or more of the above categories could provide reasonable development packages. It was assumed that all buildings which did not fall into one of the above categories were in good condition or, if substandard, would be brought up to code standards. Although the initial field surveys did not deal with individual vacant house lots, at the suggestion of the PPG, these sites were subsequently identified and included as potential components of a future 'infill' package. Further, some vacant lots which due to size, location or topography did not appear feasible for residential development were identified for alternate uses in the sub area analysis.



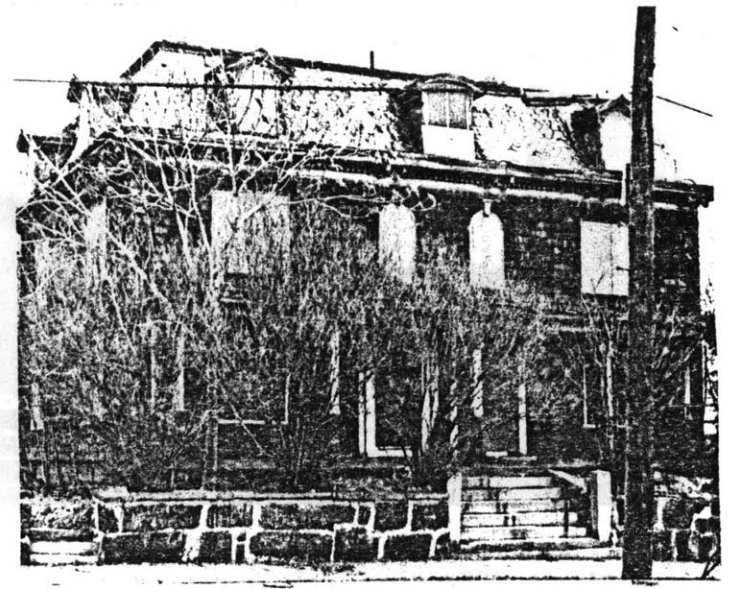
EXAMPLES: DETERIORATED BUILDINGS

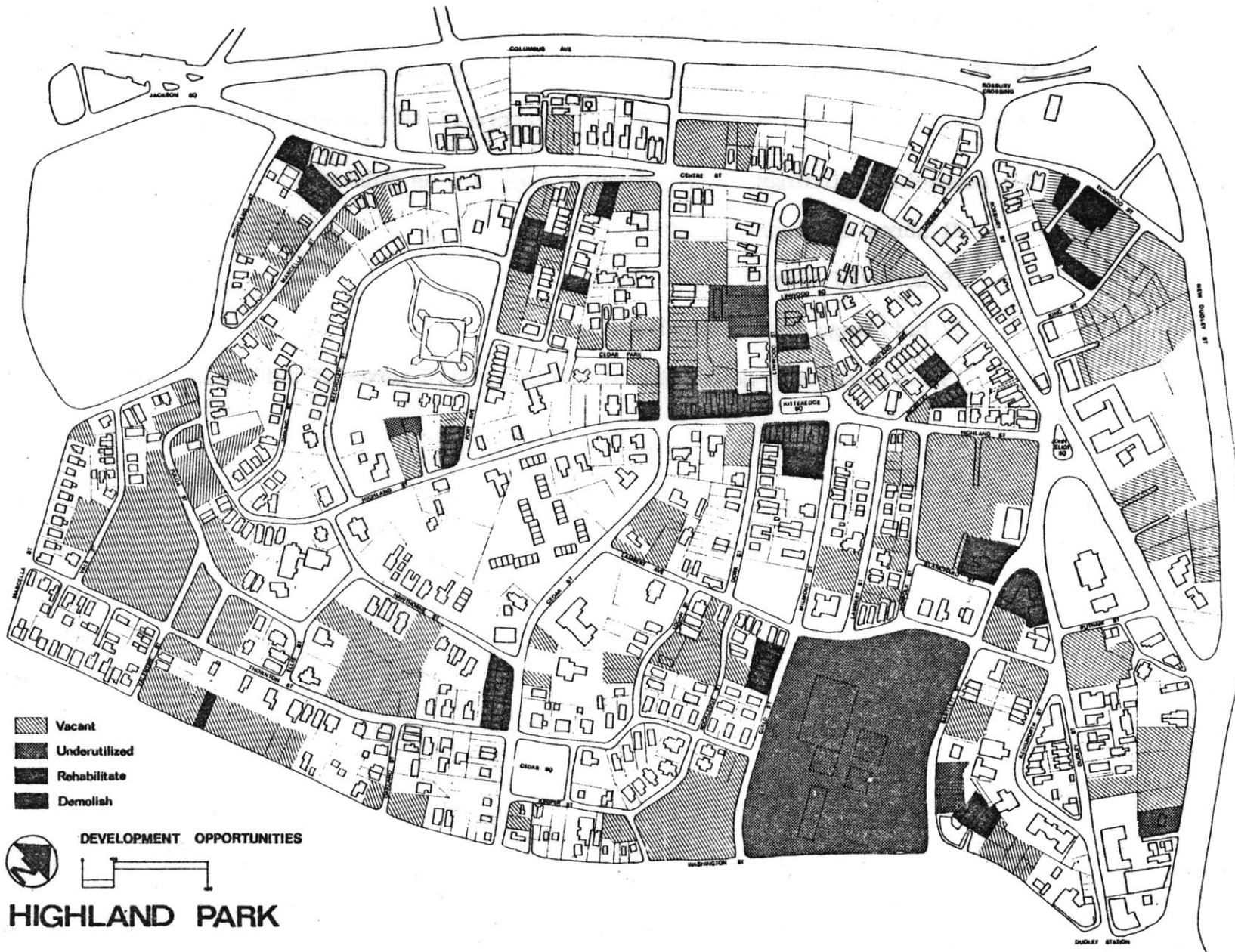


EXAMPLES: UNDERUTILIZED LAND



EXAMPLES: SOUND BUILDINGS AND
BUILDINGS FOR REHABILITATION





The general study assumed that RAP's present plans for housing development in the community would be implemented, that is, RAP II A in John Eliot Square and RAP III in the southern part of the community. The sites on which these developments will be constructed are indicated in the appropriate sub area analysis.

The summarized findings of the general study are as follows:

21 acres of vacant buildable land

10 acres of underutilized land

97 buildings for rehabilitation

19 buildings for demolition resulting in 1.5 acres of buildable land

In order to establish a reasonable density for Highland Park, that is, a population increase which in combination with existing residents would by location and socio-economic profile enhance the physical and political characteristics of the area, it has been necessary to explore the basic neighborhood structure of Highland Park.

Within Highland Park there are fifteen distinct environmental sub areas which can be readily identified by building type and placement, predominant land use and natural features. For example, Kittredge Square as a sub area is dominated by attached row houses which are built directly to the property line, whereas Beech-glen Street has conventional residences set back from the street and is strongly defined by the steep cliff which runs parallel to the street along the rear of the houses, and lower Highland Street consists of triple deckers which are built to the street which is narrow and curving.

These residential subareas have been identified based on similarities of scale and building type, topographical definition and the subjective sense of coherence which exists in each particular sub area. Each of the sub areas has been described in terms of the predominant land use, density, type and scale of structures, topography, special development constraints, landmarks, views, open space, obvious population types, accessibility and its relationship to the rest of Highland Park.

SUB AREA ANALYSIS

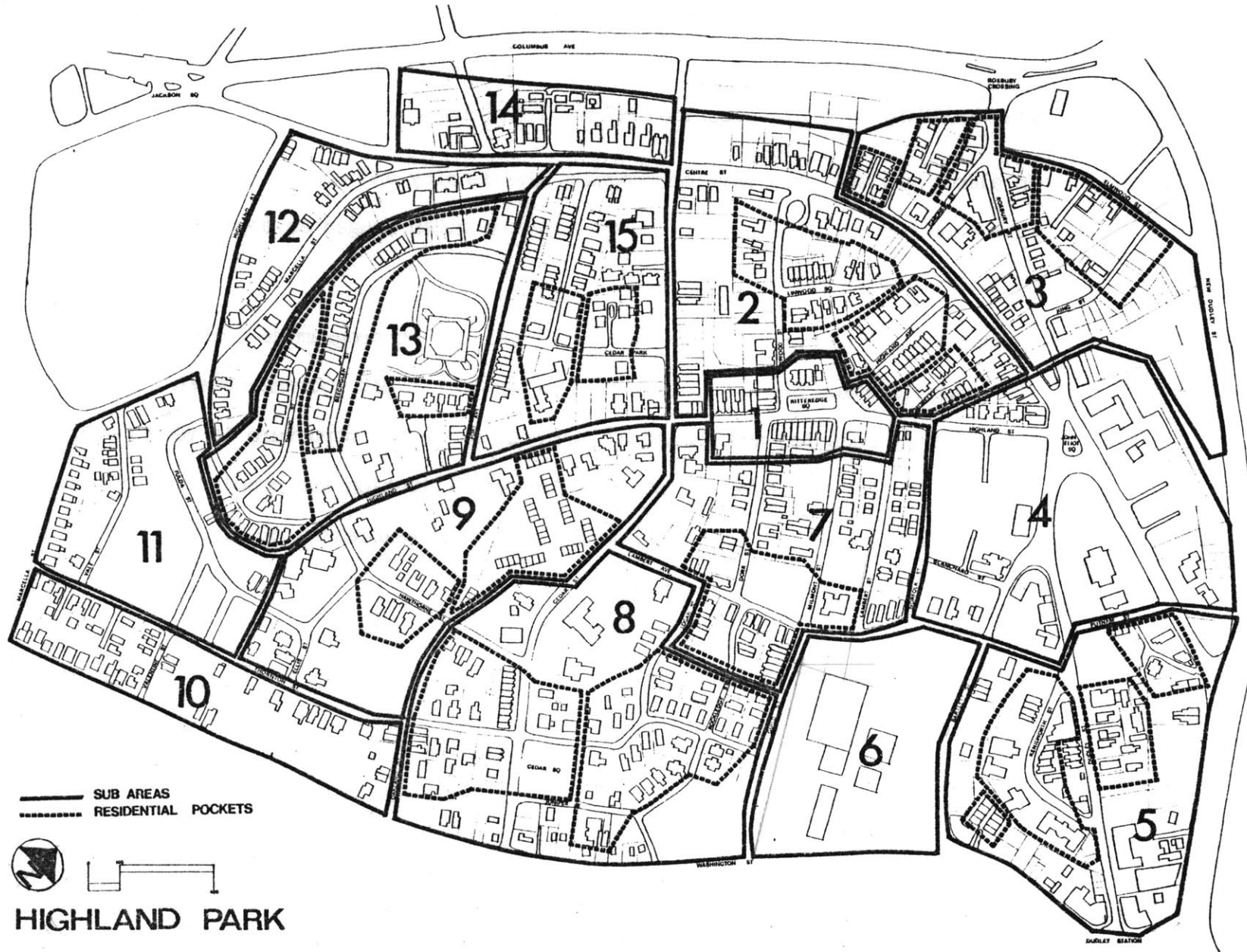
There are several sub areas which contain residential 'pockets;' these pockets are finer grained versions of the sub area itself, are relatively self-contained and represent a homogeneous environmental pattern.

Based on the information obtained from the analysis of the fifteen environmental sub areas, specific building types have been proposed as appropriate for the developable sites within the sub area. Using standard development criteria which describe the size, socio-economic characteristics and type of households which are likely to occupy specific types of housing, projections have been made for the number and type of residents likely to occupy such housing in each sub area.

Therefore, each developable site within a sub area has a recommended building type(s), unit type(s), number of units, population projection, population type and range of parking spaces required.

When there have been specific design considerations or development constraints for a site, these have been noted as well as any existing or probable deficiencies in open space, parking or transportation access.

*Source: Community Builders Handbook and Planning and Design Criteria



The development criteria which have been used to determine what building type is physically appropriate for each developable site within the sub areas, the number and size of the units, and the general characteristics associated with that building type are described on the following pages.

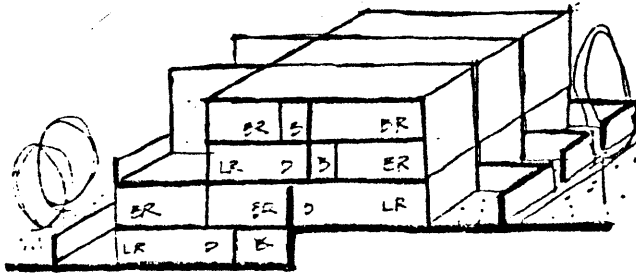
In almost all sub area develop programs the density and population projections have been based on the middle estimate of the given ranges as described in the housing types criteria.

In those sub areas where the residential development program describes structures for rehabilitation the population projection is the net increase where the structure is presently occupied and an actual increase where the structure is vacant. The majority of the structures identified for rehabilitation are completely or predominantly vacant and therefore there would be little relocation or displacement as a result of the development program.

housing types criteria

HOUSING TYPE	DENSITY (D.U./ACRE)	NO OF FLOORS	AVERAGE SITE COVERAGE (%)	AVG UNIT SIZE (NO OF BR)	AVG. UNIT SIZE (SQ. FT.)	AVG. UNIT CAPACITY (NO PEOPLE)	AVERAGE POPULATION PER ACRE	AVERAGE SQ. FT. / PERSON
ATRIUM HOUSE	10-15	1	30% - 45%	4 BR	1300#	6.0	60-90	215#
TOWN HOUSE	15-30	2-3	15% - 35%	3-4 BR	1200#	5.25	80-160	230#
MAISSONETTE	30-40	4	35% - 45%	2-3 BR	1000#	4.0	120-160	250#
GARDEN APARTMENT	30-45	3	25% - 35%	2-3 BR	1000#	4.0	120-180	250#
TERRACE HOUSE	30-45	4	40% - 60%	3 BR	1100#	4.5	125-200	245#
DECK HOUSE	40-50	5	40% - 50%	3 BR	1100#	4.5	180-225	245#
MEDIUM-RISE APT.	50-100	5-10		1-2 BR	750#	2.5	125-250	300#
HIGH-RISE APT.	50-150	10+	10% - 35%	1-2 BR	750#	2.5	125-375	300#

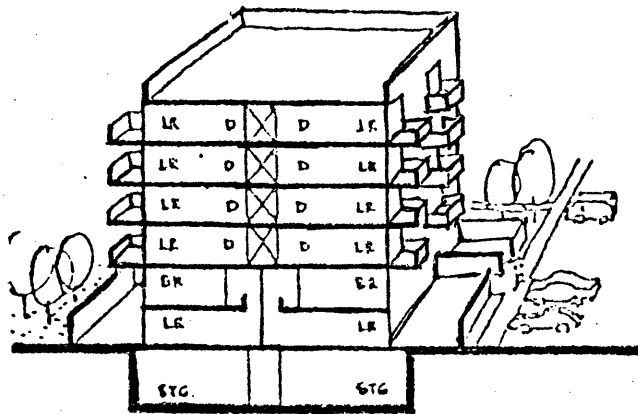
housing types



TERRACE HOUSE

2 - 3 Bedroom

All income levels; couples and families with children



MEDIUM RISE APARTMENTS

0, 1 and 2 Bedroom

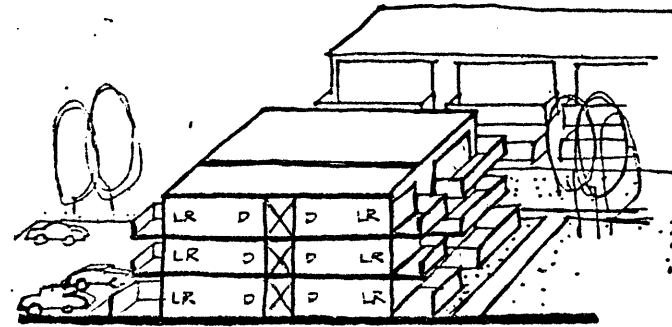
Low income elderly; low, moderate and middle income families; shared/married students. Predominantly childless households.

Variation: 0, 1 and 2 Bedroom

Middle and upper middle income predominantly childless families

1 - 3 Bedroom

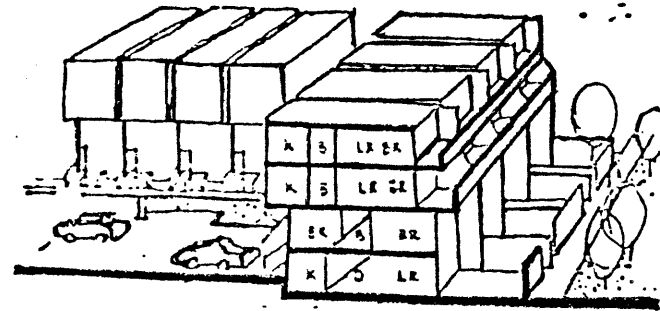
Low, moderate and middle income. Families with young children, couples, students; predominantly childless households.



GARDEN APARTMENTS

Efficiency 3 Bedroom

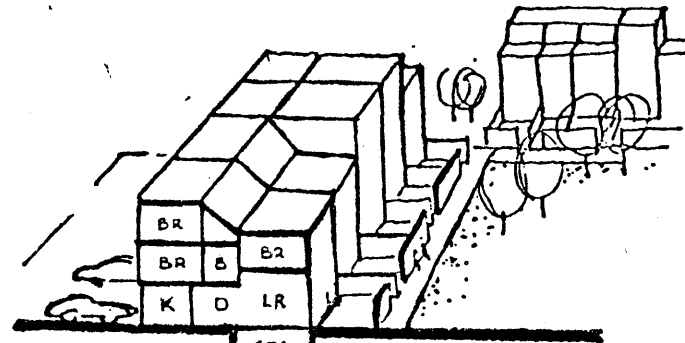
Low, moderate and middle income families. Ground floor can accommodate families with young children; upper floors for families with older children, older families, students and couples.



MAISSONETTE

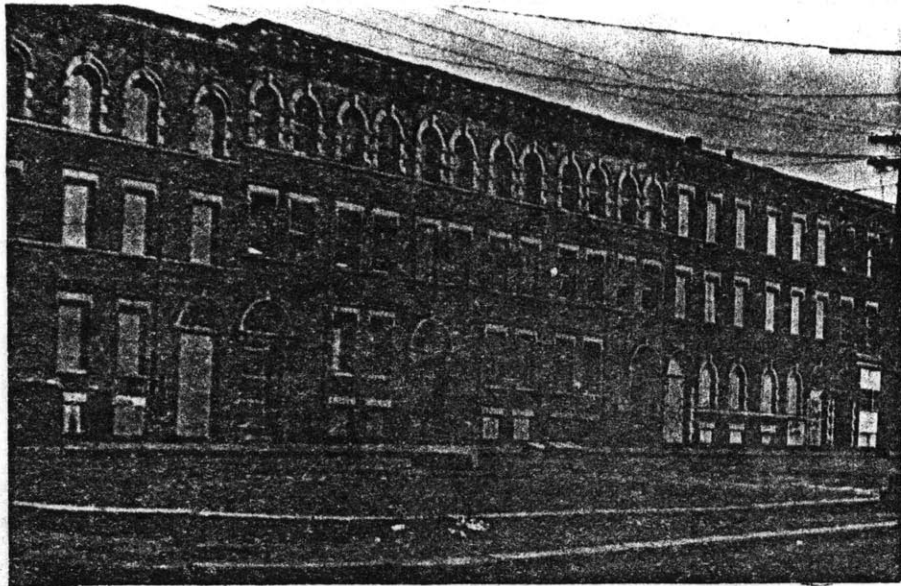
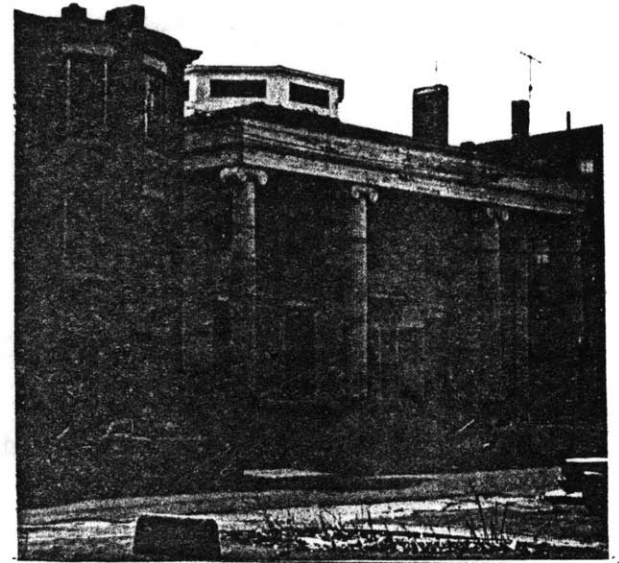
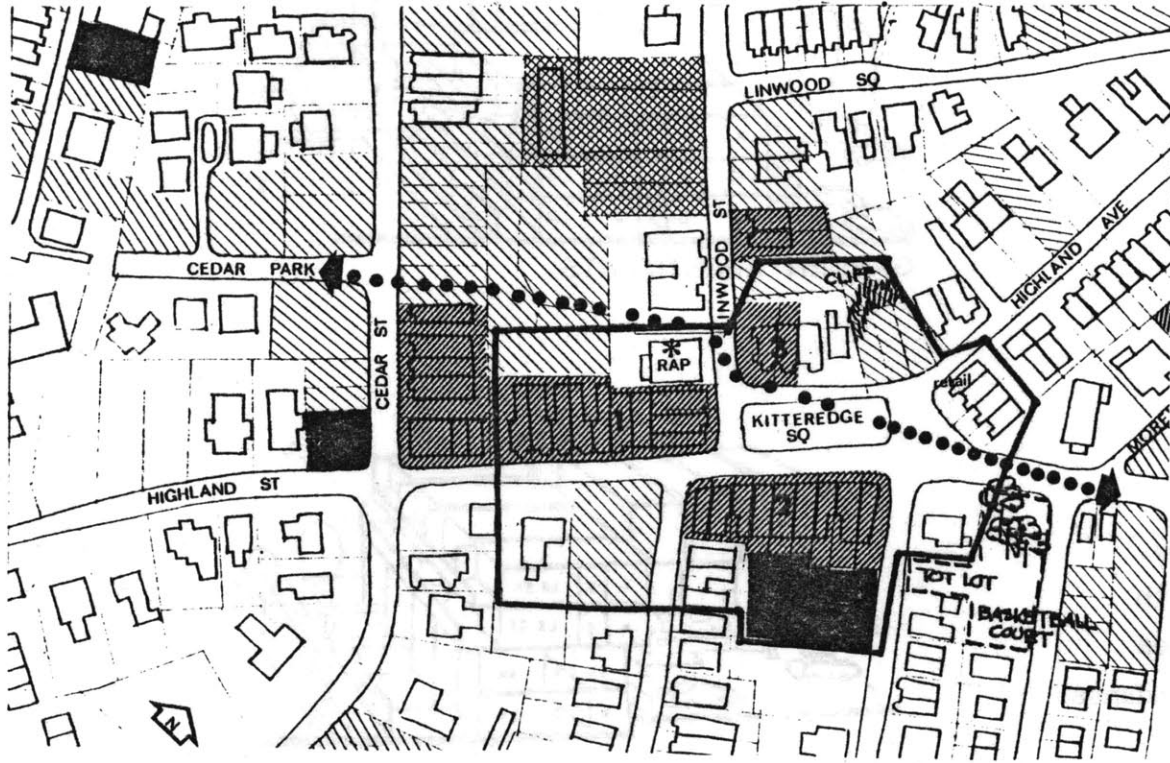
3 - 5 Bedroom

Low, moderate, middle and upper income families with children.



TOWN HOUSE

sub area 1



ENVIRONMENTAL CHARACTER

Kittredge Square is a sub area dominated by three story attached brick row houses almost all of which are partially vacant but structurally sound. The major exception to this building type is the Alvah Kittredge mansion on Linwood Street which is presently occupied by RAP. Kittredge Square itself is a 150' by 50' paved area between Linwood Street and Highland Avenue. Highland Street bisects the area and provides major access as well as a heavy volume of vehicular and pedestrian traffic. This sub area, even in its present state of underpopulation, is an activity center within the Highland Park community and a node in the natural open space/pedestrian system from the High Fort to John Eliot Square. There exists a 'stoop-sidewalk' activity pattern which could be strengthened by additional residents and physical improvement of the public spaces. Although open space in this sub area is restricted to the Square and stoop activities (which is a viable recreational pattern), there are plans for a new playground and tot lot on Milmont Street.

At the present time, there is only on-street parking in the sub area and this situation is seriously impacted by the patrons of the commercial establishments which exist at present in the Square and potential new retail establishments in the future.

RESIDENTIAL DEVELOPMENT POTENTIAL

Although the majority of land in this sub area is flat, the vacant land on Highland

Avenue is severely constrained for development due to the slope conditions at the rear of the parcel. The major development activities in this sub area exist in the rehabilitation of vacant residential structures. There are some considerations which must be given to such development in terms of off-street parking location, design and accessibility.

DEVELOPMENT PROGRAM

1. Highland Street - Rehabilitation: 11 buildings

Housing Type: attached 3 story masonry row

Unit Type: 0, 1, 2 and 3 Bedroom

Number of Units: 50

Population: Net increase of 170

Parking: 35 - 40 spaces

Design Considerations: rear interior courtyard to be developed
and shared with adjacent residential developments on Cedar
and Linwood Streets; ground floor local retail space.

2. Highland Street - Rehabilitation: 9 buildings

Housing Type: attached 3 story masonry row

Unit Type: 0, 1, 2 and 3 Bedroom

Number of Units: 30

Population: Net increase of 120

Population Type: Singles, Elderly, Couples, Families with children

Parking: 20 - 25 spaces

Design Considerations: demolition of building at the rear for parking;
ground floor local retail space.

3. Linwood Street - Rehabilitation: 3 buildings

Housing Type: attached 3 story brick row

Unit Type: 0, 1 and 2 Bedroom

Number of Units: 9

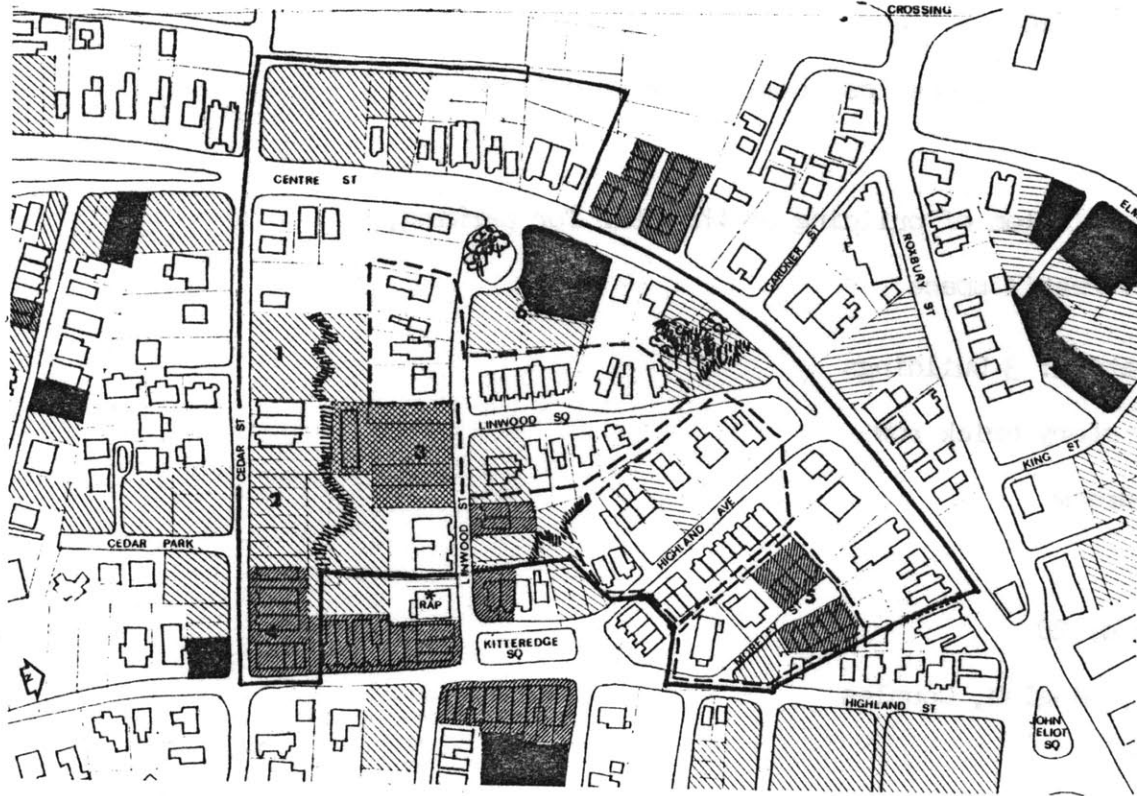
Population: Net increase of 20

Population Type: Elderly, Singles, Couples

Parking: 6 - 9 spaces

Design Considerations: development should include upgrading of the
vacant lot adjacent to the buildings on the Linwood Street
side for parking.

sub area 2



ENVIRONMENTAL CHARACTER

There are three residential pockets within this sub area: Linwood Square, Highland Avenue and Morley Street. (i) The Linwood Square pocket has two basic building types: three story attached brick row houses on the Square which are occupied and in need of repair and on the end of Linwood Street there are two and a half to three story wood frame conventional houses which are in good condition. (ii) Highland Avenue is characterized by the RAP II B rehabilitated five story attached row houses on the eastern side and three story very large wood frame buildings set back about 40' from the street on the western side. (iii) The Morley Street cul de sac consists of nine three story attached brick row houses, only two of which are occupied, all of which are structurally sound and in need of rehabilitation. In addition, the Edward Everett Hale House, a large two story wood frame structure, and a church are in this residential pocket.

The rest of this sub area is composed of two story and triple decker wood frame structures which range from fair to poor condition along Centre Street to Highland Avenue; several of these are burnt out, unoccupied and being demolished.

The northeastern edge of this sub area is somewhat influenced by the commercial activities located in John Eliot Square and the residential structures here are three story wood and brick multiple unit buildings including the RAP II B building. The extreme

southern portion of this sub area has six three story row houses near Highland Street all of which are vacant except two units; in the middle of Cedar Street there are three three story brick attached row houses in good condition; nearer to Centre Street there are several two and a half story wood frame conventional residences which are in good condition.

This sub area is accessible from Centre and Highland Streets and to a lesser degree from Linwood Street. The sub area surrounds the Kittredge Square area and is within walking distance to John Eliot Square. Except for a motor clinic on Centre Street, there is no commercial use in this sub area. While there are visual open spaces (Linwood Square especially), there are no recreational facilities in this sub area, a condition which is apparently not extremely critical due to the proximity of the sub area to other open space and recreational facilities.

RESIDENTIAL DEVELOPMENT POTENTIAL

Despite recurring topographical changes in this sub area and fairly severe slope conditions, the majority of the vacant land is buildable. One of the major development sites which is moderately affected by grade changes is the vacant lot on Linwood Street which is presently used for gardening and an Art Center.

DEVELOPMENT PROGRAM

1. Cedar Street - .51 Acre

Housing Type: Town House (2 stories)

Site Coverage: 35% (.18 acre)

Unit Type: 3 and 4 Bedroom

Number of Units: 8

Population: 35

Population Type: Families with children

Parking: 5 - 8 spaces

Design Considerations: interior play area

2. Cedar Street - .42 Acre

Housing Type: Garden Apartments (3 stories)

Site Coverage: 45% (.19 acre)

Unit Type; 2 and 3 Bedroom

Number of United: 12

Population: 50

Population Type: Couples, Families with children, Singles

Design Considerations: interior courtyard shared with residential
developments along Highland Street and Linwood Street

3. Linwood Street - .58 Acre

Housing Type: Garden Apartments (3 stories)

Unit Type: 1, 2 and 3 Bedroom

Number of Units: 15

Population: 55

Population Type: Couples, Singles, Families with young children

Parking: 10 - 12 spaces

Design Considerations: shared interior courtyard; site plan should allow for pedestrian path system which connects with John Eliot Square and the High Fort.

4. Highland/Cedar Street - Rehabilitation: 7 buildings

Housing Type: attached three story brick row

Unit Type: 1 and 2 Bedroom

Number of Units: 21

Population: Net Increase of 45

Population Type: Singles, Elderly, Childless Couples

Parking: 15 - 18 spaces

Design Considerations: maintain driveway off Highland Street; shared courtyard with adjacent residential developments.

5. Morley Street - Rehabilitation: 9 buildings

Housing Type: attached three story brick row

Unit Type: 1 and 2 Bedroom Duplexes

Number of Units: 16

Population: Net increase of 35

Population Type: Couples, Families with young children

Parking: On-street

Design Considerations: integration of vacant lot on the corner of Morley
and Highland Streets into the development as active or passive
open space.

6. Centre - Linwood Streets - .49 Acre

Housing Type: Garden Apartments (3 stories)

Site Coverage: 30% (.14 acre)

Unit Type: 2 and 3 Bedroom

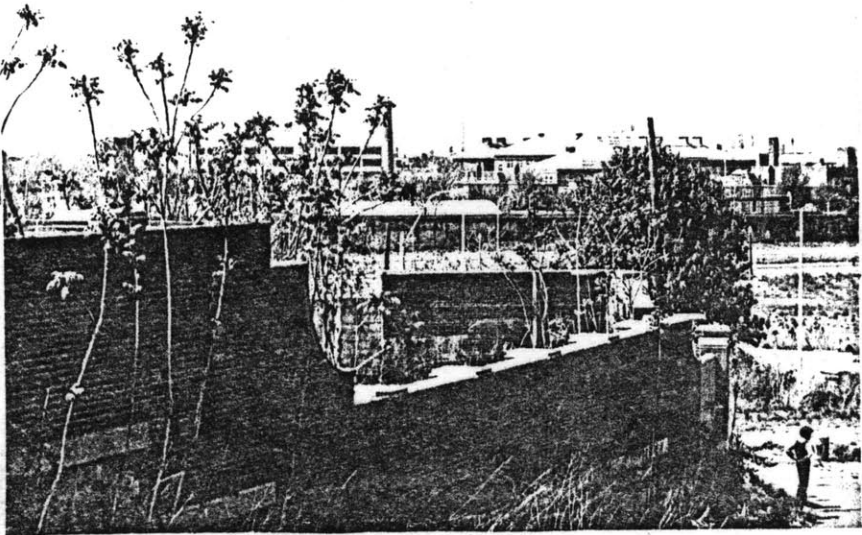
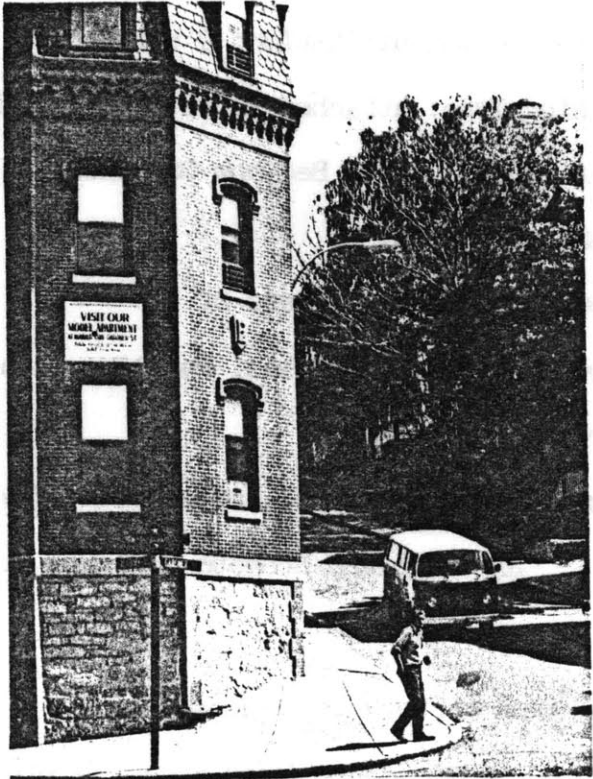
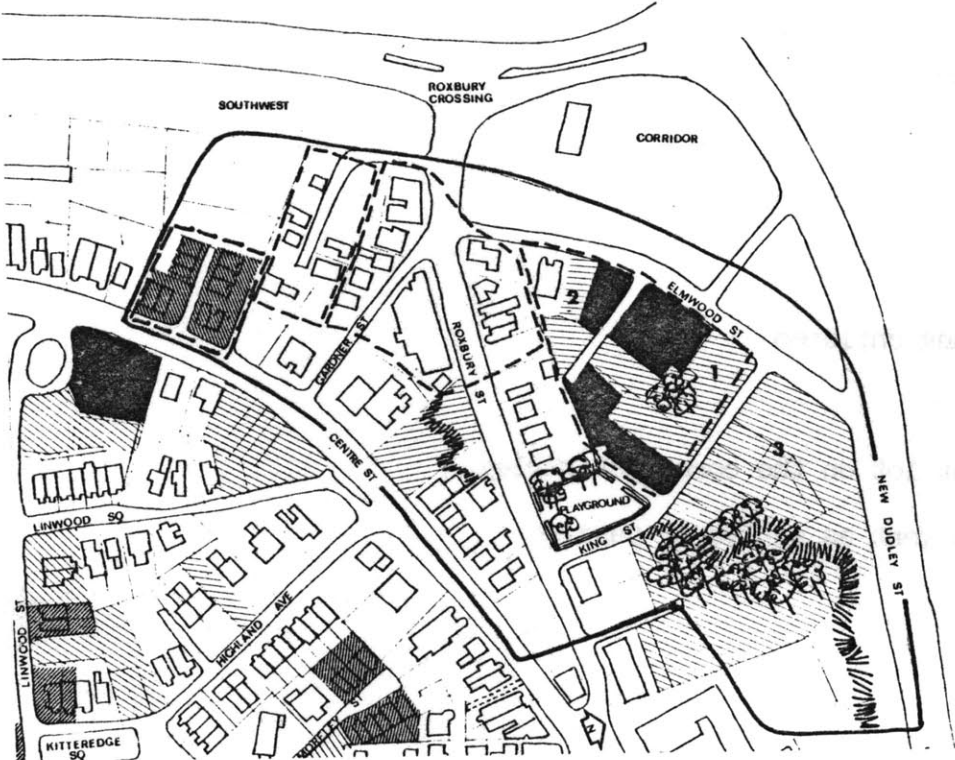
Number of Units: 15

Population: 55

Population Type: Couples, Students, Families with children

Parking: 10 - 12 spaces

sub area 3



ENVIRONMENTAL CHARACTER

Due to the topography and the impact of the Southwest corridor this sub area is somewhat self-contained. The sub area has mixed residential and commercial use and four residential pockets. (i) At the southwestern edge of the sub area there are ten three story brick structures located on a cul de sac off Centre Street. These buildings are occupied, structurally sound and in need of minor rehabilitation. (ii) On Anita Terrace, a cul de sac off Roxbury Street, there are several two and a half to three story wood frame conventional residences in good condition; two are in the process of being renovated by the owners. (iii) Along Gardner Street and the lower part of Roxbury Street, there are two story wood frame buildings in good condition as well as the four story brick Louis Prang building which, along with two other structures adjacent to it, is being rehabilitated. On the corner of Elmwood and Roxbury Streets there is a vacant commercial storefront. (iv) The two story wood frame structures along Elmwood Street and Elmwood Place constitute the fourth residential pocket in this sub area; these buildings are occupied but in fair to poor condition.

Other residential structures exist along Roxbury Street -- primarily two story wood frame -- in conjunction with a vacant commercial storefront and an occupied three

story brick professional office building which was recently rehabilitated. Along Centre Street from the eastern edge of the sub area to Gardner Street, there are several two and three story wood frame structures in good condition, an abandoned fire station and a nursing home. To the rear of these buildings on Roxbury Street, there is a steep wooded cliff and a vacant lot filled with abandoned cars, weeds and trash.

Access to this sub area is from Roxbury Street and Centre Street; the area is accessible to MBTA bus routes along Centre Street, Roxbury Street and Columbus Avenue. Although the sub area is within walking distance of John Eliot Square, with the exception of the extreme eastern edge there is little visual or physical relationship with the Square due to the western slope of the streets and traffic patterns.

The only recreational facility in the sub area is the King Street playground, a two level area enclosed by a brick wall; although the playground is potentially a viable recreational site, at the present time it is badly deteriorated and unused.

RESIDENTIAL DEVELOPMENT POTENTIAL

The major constraints to development in this sub area are the topography and the impact of the pending development along the Southwest corridor.

DEVELOPMENT PROGRAM

1.2.3. Kind-New Dudley-Elmwood Streets - 2.35 Acres*

Housing Type: Garden Apartments (3 stories)

Site Coverage: 30% (.75 acre)

Unit Type: 1,2 and 3 Bedroom

Number of Units: 65

Population: 230

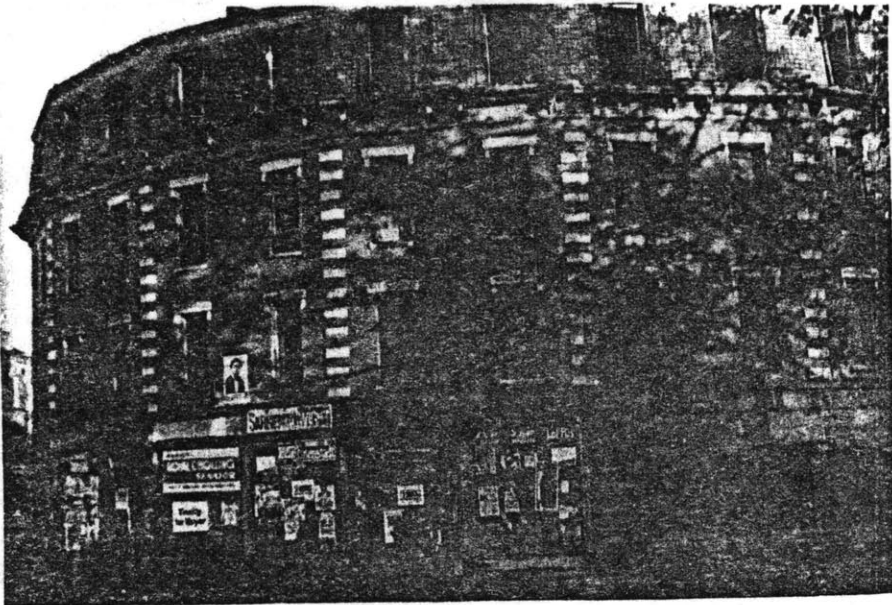
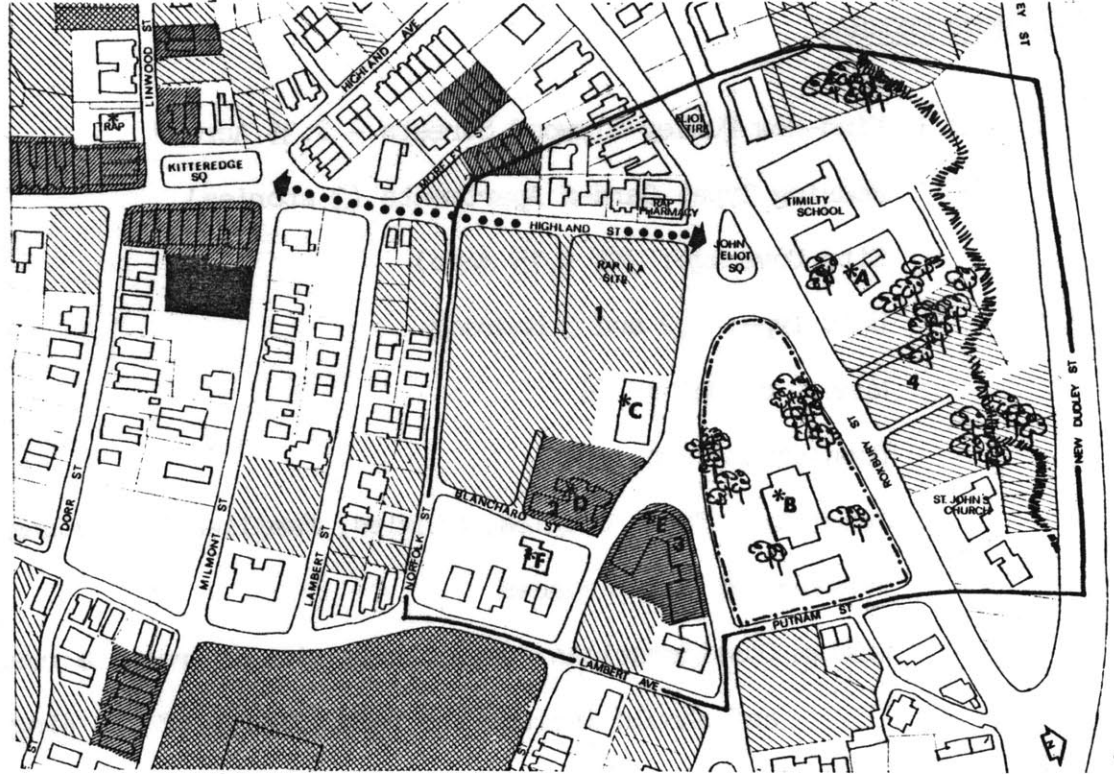
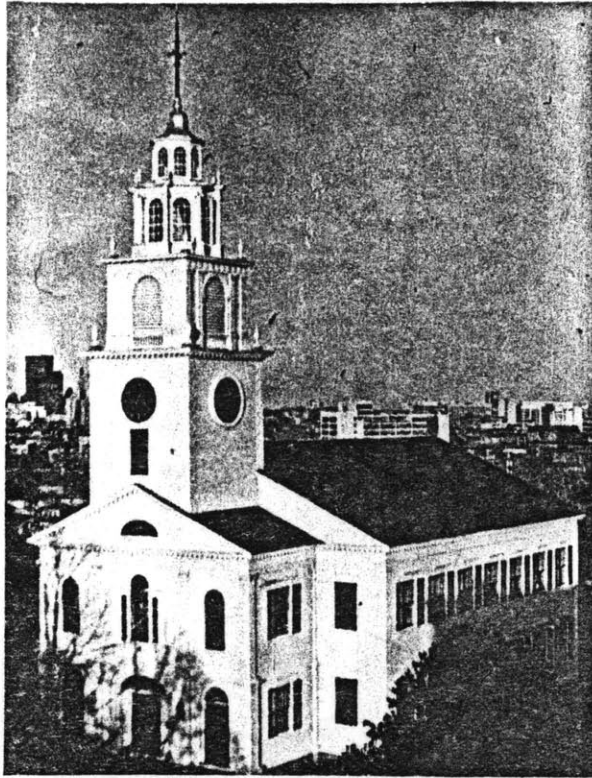
Population Type: Couples, Singles, Families with young children

Parking: 35 - 40 spaces

Design Considerations: development should create a residential unit and should include the refurbishing of the King Street playground with safe and legible access to the playground from the residential development.

* Includes land from the demolition of structures on Elmwood Street and Elmwood Place as well as King Street.

sub area 4



ENVIRONMENTAL CHARACTER

This sub area is defined physically by those structures located along Roxbury, Centre and Putnam Streets; it is defined visually by the topography which slopes to the east and west; at the epicenter of this sub area, is the junction of Roxbury, Centre, Highland, Bartlett and Dudley Streets. This sub area is considered to be the entrance to and center of the Highland Park community.

The John Eliot Square sub area is a mixed commercial, institutional and residential environment. Within this sub area there are several buildings of historic and community significance: (A) the Dillaway Thomas House — presently vacant and the future headquarters of the Afro-American Musuem; (B) the First Church of Roxbury and the Fellows Antheneum at the rear of the church yard; (C) the Marcus Garvey House — presently vacant and designated as the community social service and recreational facility; (D) the Eliot Hotel — presently vacant; (E) the Cox Building — also referred to as the 'hinge building' and which is also presently vacant; (F) the Spooner Lambert House.

In addition, the Timility Junior High School, St. John-St. James' church, the RAP pharmacy, the Eliot Tire company, Ron Williams' insurance agency and a storefront church as well as other retail establishments are located in the Square.

Although there is residential use on the periphery of the Square, the dominant uses are commercial and institutional; the commercial character of the Square is reinforced by the massing and scale of the major buildings located there.

In addition to the architectural, historic and cultural significance of the Square, there is a topographical importance since there are spectacular views of the Back Bay, Mission Hill and downtown Boston from several points within the Square due to its location on a plateau. The visual vantage points of the Square serve to strengthen its role as the focal point of the community. Apparently as a result of these factors, the Square has managed to retain its significance despite the marginal scope of commercial activity and the physically deteriorated condition of its major structures.

Open space in this sub area exists in the form of the church yard (semi private) which seems to function psychologically as the 'village green,' the asphalt play area and parking lot of the Timility School (semi-public) and the densely wooded vacant land next to the Afro-American Museum (public) which is located along a cliff which rises approximately 35' from New Dudley Street. Given this scarcity of designated or functional open space, most passive and some active recreational activity takes place on the streets and sidewalks and further enhances the image

of John Eliot Square as an activity center within the community.

Although the Square is in fact the junction of five major arterial and collector streets, there is no legible traffic pattern which would mitigate the congestion and confusion which results from the steady flow of vehicular traffic, double and triple parked cars belonging to the patrons of the retail establishments (there is no off-street parking in the Square) and pedestrian movement -- except the island rotary which tends to exacerbate rather than relieve the situation.

Although the Square has a psychological and economic significance to the Highland Park community, it lacks the physical and visual coherence and containment generally associated with this type of community center. Presently there are plans for major public improvements in the John Eliot Square sub area: street lighting, pavement treatment, planting, etc; some of this construction has begun and should serve to create the physical infrastructure necessary to support the Square as a viable center.

RESIDENTIAL DEVELOPMENT POTENTIAL

Development opportunities in this subarea exist in the form of new construction on the vacant land located on Highland, Centre, Norfolk and Blanchard Streets (the RAP II A development site) and in the form of rehabilitation of the Cox Building and the Eliot Hotel for mixed residential and commercial use. To a lesser extent, due to the topo-

graphical constraints, the vacant land next to the Afro-American Museum on Roxbury Street is also available for development. The primary consideration for all residential and commercial development in the Square is the availability and location of off-street parking.

DEVELOPMENT PROGRAM

1. RAP II A - 2.65 Acres

Housing Type: Medium Rise (10 stories) and Town Houses (2 stories)

Site Coverage: 30% (.95 acre)

Unit Type: 1, 2 and 3 Bedroom

Number of Units: 122

Population: 350

Population Type: Elderly, Singles, Families with children

Parking: 55 - 60*

Design Considerations: ground floor retail space facing

John Eliot Square

* due to the high number of units for the elderly - 85)

2. Eliot Hotel - Rehabilitation

Housing Type: 5 story brick structure

Unit Type: 0, 1 and 2 Bedroom

Number of Units: 35

Population: Elderly, Students, Singles and Couples

Population: 85

Parking: 25 - 30 spaces

3. Cox Building - Rehabilitation

Housing Type: 4 story brick structure

Unit Type: 1, 2 and 3 Bedroom

Number of Units: 35

Population: 80

Population Type: Students, Singles, Couples, Artists, Craftspeople

Parking: 20 - 25 spaces

Design Considerations: ground floor retail and gallery space; provision of studio/workshop space as integral part of residential environment; interior courtyard at the rear; use of vacant lot on Lambert Avenue for parking.

4. Roxbury Street - 1.10 Acres*

Housing Type: Terrace Apartments (4 stories)

Site Coverage: 50% (.55 acre)

Number of Units: 30

Unit Type: 1, 2 and 3 Bedroom

Population: 115

Population Type: Students, Couples, Families with young children

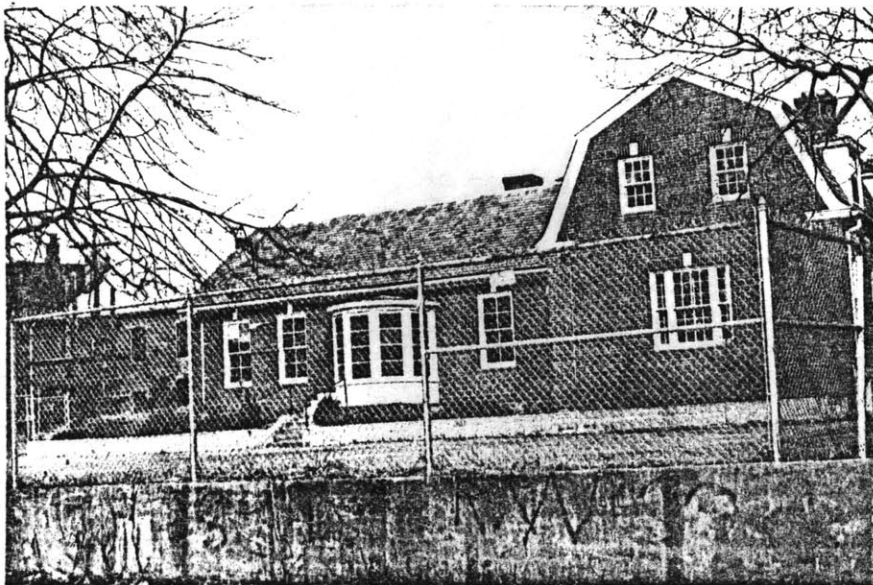
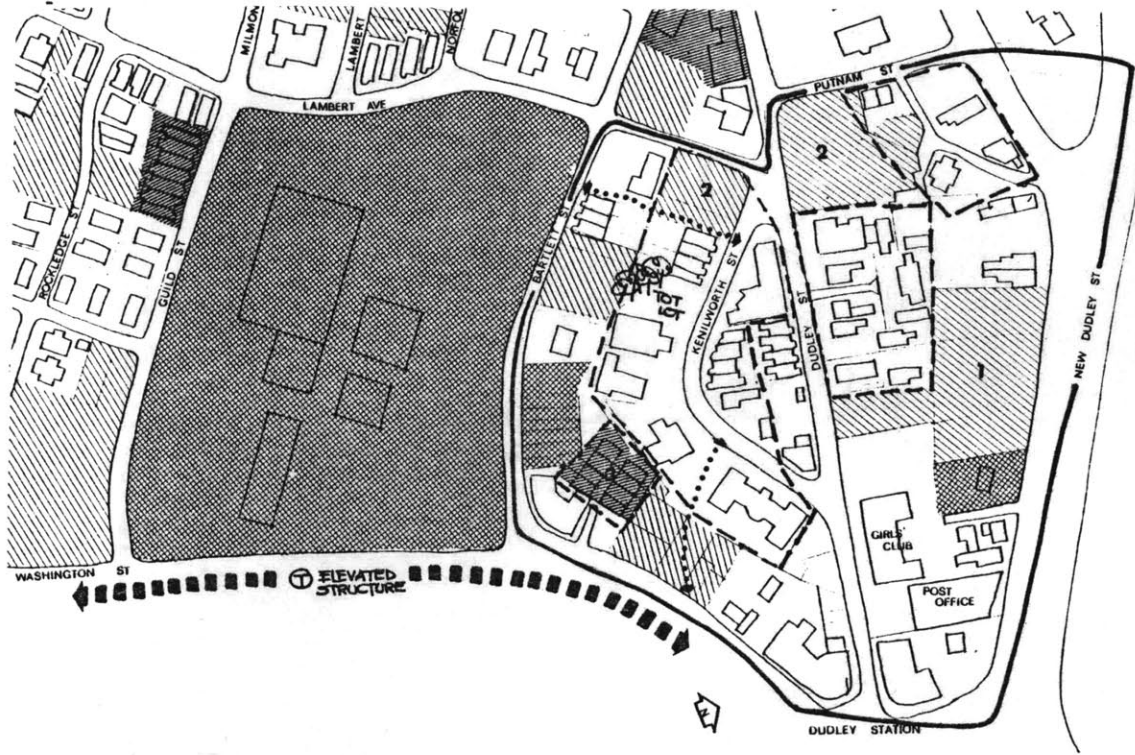
Parking: 20 - 25 spaces

Design Considerations: off-street parking as integral part of the residential structures; maintainence of natural wooded edges of the site and the views.

* Does not include land which is not feasible for development due to slope.



sub area 5



ENVIRONMENTAL CHARACTER

This sub area has three distinct environmental pockets within it. (i) The area north of New Dudley Street, due to the width of the street, the construction of Campus High School and the topography (there is a gradual slope to the east), lacks a specific orientation to the rest of the sub area and to Highland Park. Within this section there are two residential pockets around cul de sacs off of Roxbury and Dudley Streets. Houses on Putnam Place are wood frame, multiple units in marginal condition; houses on Dudley Place are wood frame, two and a half stories and in good condition with the exception of one vacant structure at the end of the cul de sac. In addition to the vacant land along New Dudley Street, there is a gas station, the building previously occupied by a family life center, the Roxbury Post Office and another gas station.

(ii) The central section of this sub area is around Kenilworth Street, a short, curving, mainly residential street. There is a mix of single family wood frame structures, three story brick row houses, a church, a masonic temple and the Dillaway School. In addition to a poorly maintained play area next to the Girls' Club on Dudley Street, there is the rear service area for the Post Office, a church and a few small retail storefronts approaching the Dudley Station area.

(iii) The southern section of the sub area lacks coherence and form. There is residential use (RAP I - three story brick row houses), institutional use (Healing and Salvation Church) and a junk yard and car storage lot on the Bartlett Street side. On the Washington Street side, there is a residential enclave on Archer Terrace — a footpath off the main street — a plumbing store and supply center and a professional office building.

The commercial uses on the eastern edge of the sub area are primarily oriented to the Dudley Station area. In general the central and western parts of the sub area are residential and the southern edge, with the exception of Archer Place, is commercial. The residential areas have a large number of young children, particularly in the multiple unit structures.

The sub area is essentially flat with a gradual downhill slope to the east; because of this slope and the street pattern, the sub area has a very tenuous relationship to Highland Park except at the western edge which is related to John Eliot Square. The tot lot on Kenilworth Street and basketball area on Bartlett Street are the only neighborhood oriented recreational facilities. The Girls' Club and the play area associated with it as well as the asphalt play area next to the school tend to attract users from a larger geographic area.

This entire sub area has direct and easy access to public transit at Dudley Station and the MBTA bus routes which cross John Eliot Square.

RESIDENTIAL DEVELOPMENT POTENTIAL

The major constraints to residential development in the sub area are the scattered location of vacant parcels, the heavy commercial influence of Dudley Station and the Campus High School development. However, the vacant land on New Dudley Street supplemented with the land presently used by the gas station and the vacant building, if it were developed for residential use could potentially physically define and limit the commercial activities in this sub area. The parcels located on Kenilworth and Lambert Avenue and the Dudley School site are the only other parcels in the sub area on which residential development could take place. Accompanying any residential development should be plans to upgrade existing neighborhood recreational facilities.

Development in this sub area should recognize and strengthen the pedestrian paths which have evolved — specifically from Bartlett Street to Kenilworth Street to the west of RAP I units and from Kenilworth Street through the Dillaway School yard across the vacant lot to Washington Street.

DEVELOPMENT PROGRAM

1. New Dudley Street - 1.12 Acres

Housing Type: Medium Rise (5 stories)

Site Coverage: 35% (.39 acre)

Unit Type: 0 , 1 and 2 Bedroom

Number of Units: 50

Population: 120

Population Type: Elderly, Singles, Couples with young children

Parking: 35 - 40 spaces

Design Considerations: orient development toward an internal
courtyard with passive open space.

2. Kenilworth - Putnam Street - .91 Acre

Housing Type: Town House (2 stories)

Site Coverage: 20% (.18 acre)

Unit Type: 3 and 4 Bedroom

Number of Units: 13

Population: 60

Population Type: Families with children

Parking: 13 spaces

3. Archer Place - (Rehabilitation 8 buildings

Housing Type: attached 3 story brick row

Unit Type: 1, 2 and 3 Bedroom

Number of Units: 24

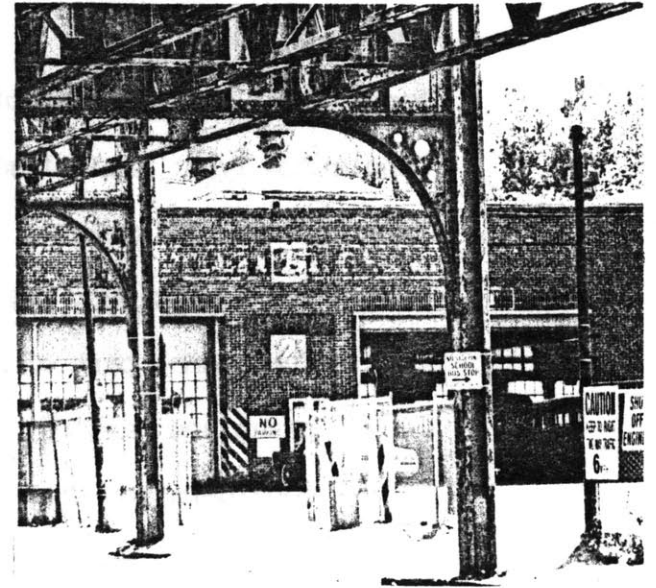
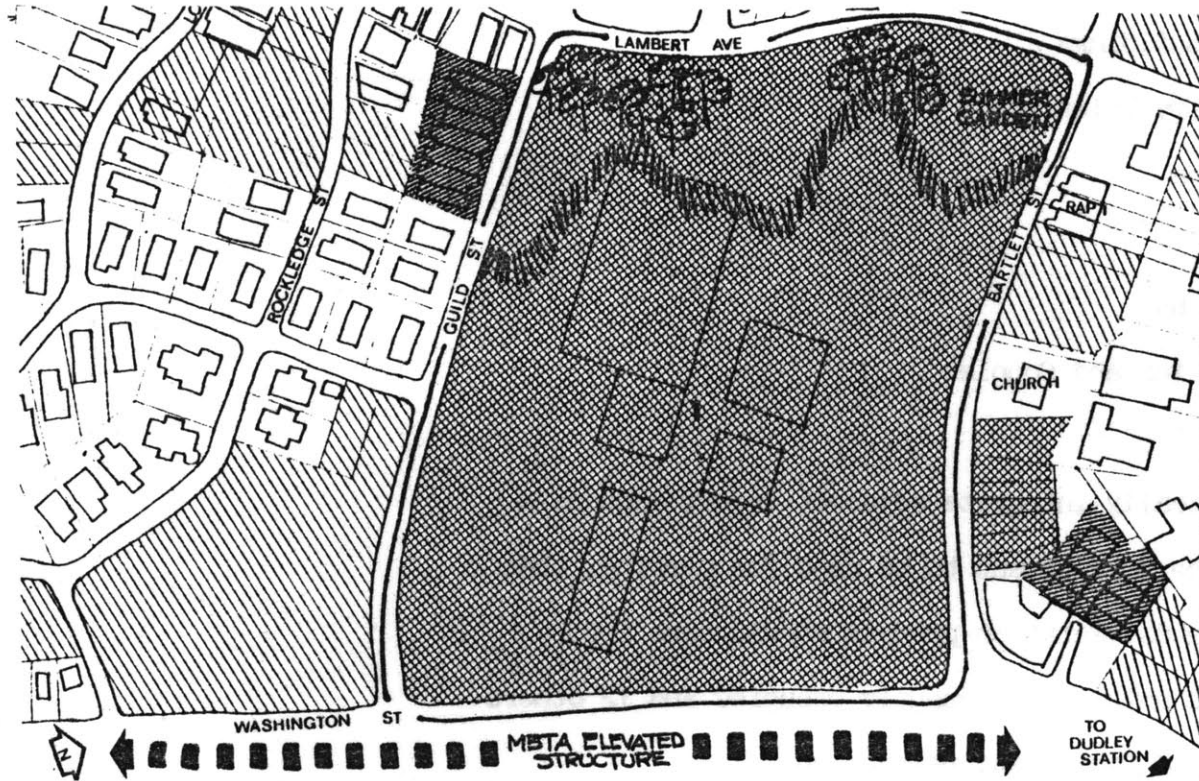
Population: Net increase of 65

Population Type: Small families and Couples

Parking: 15 - 20 spaces

Design Considerations: physically integrate adjacent vacant land as a functional part of the development to be used for parking, open space and parking; rehabilitation process should take into consideration that 12 units are presently occupied and 12 others are vacant which should facilitate relocation.

sub area 6



ENVIRONMENTAL CHARACTER

This sub area consists of the land formerly used and presently owned by the MBTA. The site is visually isolated from the residential use of Lambert Avenue and upper Guild Street due to the topographical edges and the large number of trees at the southwestern edge of the site. The Washington Street side faces the MBTA elevated rapid transit line — which is not a permanent condition. The Bartlett Street side is opposite a parking lot used by the Healing and Salvation Church, RAP I units and a lot used for storage and repair of antique cars. The general scale of the structures immediately around the site is three to four stories brick and wood multiple occupancy dwellings. The land use in the general area is predominantly residential to the south and west and mixed residential, commercial and institutional to the north and east.

The site is within walking distance of Dudley Station and John Eliot Square. With the exception of Washington Park — on half a mile away — and a small tot lot/ playground on Lambert Avenue, there are no recreational facilities or parks in the immediate vicinity.

RESIDENTIAL DEVELOPMENT POTENTIAL

The existing constraints for development are primarily topographical (approximately

two-thirds of the site is buildable) and to a lesser extent the noise, traffic and pollution related to Washington Street.

DEVELOPMENT PROGRAM

1. Bartlett Street - 8.95 Acres

Housing Type: Medium Rise (10 stories)

Site Coverage: 35% (3.13 acres)

Unit Type: 0, 1 and 2 Bedroom

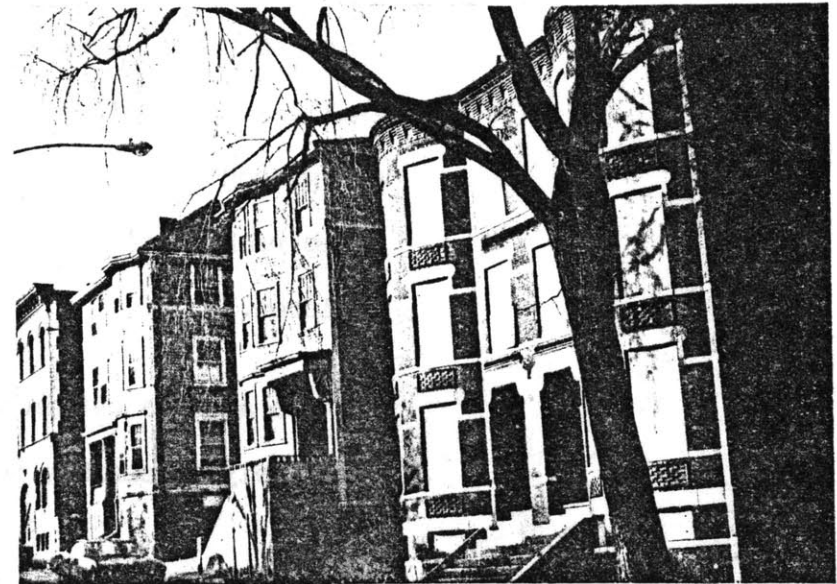
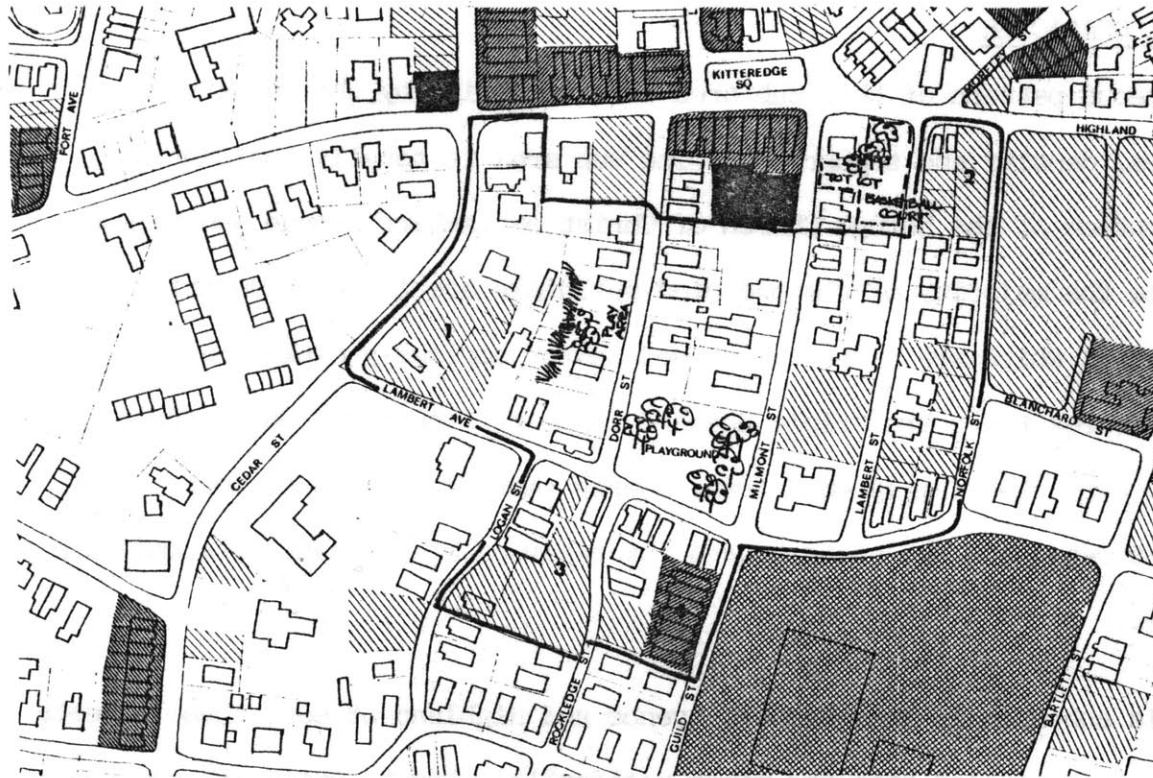
Number of Units: 300

Population: 750

Population Type: Elderly, Singles, Childless couples

Parking: 200 - 250 spaces

sub area 7



ENVIRONMENTAL CHARACTER

The heterogeneous pattern of this sub area is exemplified by the variety of building types, density and topography. The sub area is totally residential with the exception of the Refuge Church of Christ on Lambert Avenue and Milmont Street. While the majority of the occupied buildings are in good condition, there are several which are either abandoned and/or seriously deteriorated. Within this subarea there are triple deckers (Lambert Avenue and Guild Street), two story one and two family wood frame houses (Norfolk, Lambert, Dorr, Cedar and Milmont Streets) and two stone houses interspersed with vacant lots and burnt out structures.

Access to this sub area is from Lambert Avenue and Highland Street; these streets are more heavily travelled than the minor residential streets which run perpendicular to them. Despite the apparent under-population of the area, there are many families with children. The main recreational site in this sub area is the playground on Lambert Avenue and the vacant lot on Logan Street which due to a steep rock ledge is not buildable and is used as a play area by the neighborhood children.

The sub area is within walking distance of John Eliot Square and is therefore relatively accessible to MBTA bus routes.

RESIDENTIAL DEVELOPMENT POTENTIAL

Since the topography in this sub area is as variegated as the building type, most of the vacant land is not feasible for development due to cliffs, slope conditions and/or rock outcroppings -- this is particularly true on Rockledge, Logan and Milmont Streets. However, the rest of the sub area is essentially flat with a gradual slope along Lambert Avenue. In addition, there is potential for residential development on an individual market basis in terms of the number of vacant houses.

DEVELOPMENT PROGRAM

1. Cedar Street-Lambert Avenue - .36 Acre

Housing Type: Garden Apartments (3 stories)

Site Coverage: 30% (.15 acre)

Unit Type: 2 and 3 Bedroom

Number of Units: 10

Population: 40

Population Type: Couples, Families with children

Parking: 6 - 8 spaces

2. Highland-Norfolk Streets

(See Sub Area 4 - RAP II A)

3. Logan - Rockledge Streets - .54 Acre

Housing Type: Town House (2 stories)

Site Coverge: 20%

Unit Type: 2 and 3 Bedeoom

Number of Units: 12

Population: 50

Population Type: Couples, Familes with children

Parking: 8 - 10 spaces

Design Considerations: vacant land opposite the site on Logan Street should
be refurbished as a play area for the development

4. Guild Street - Rehabilitation 7 buildings

Housing Type: 3 story attached brick row

Unit Type: 2 and 3 Bedroom

Number of Units: 21

Population: Net increase of 10

Population Type: Couples, Families with children

Parking: 15 - 18 spaces

Design Considerations: vacant land to the rear of the site should be used
for parking

5. Milmont-Lambert Street - .39 Acre

Housing Type: Town House (2 stories)

Site Coverage: 20% (.10 acre)

Unit Type: 3 and 4 Bedroom

Number of Units: 5

Population: 25

Population Type; Families with children

Parking: 5 spaces

6. Norflok-Lambert Street - .40 Acre

Housing Type: Town House (2 stories)

Site Coverage: 20 % (.12 acre)

Unit Type: 3 and 4 Bedroom

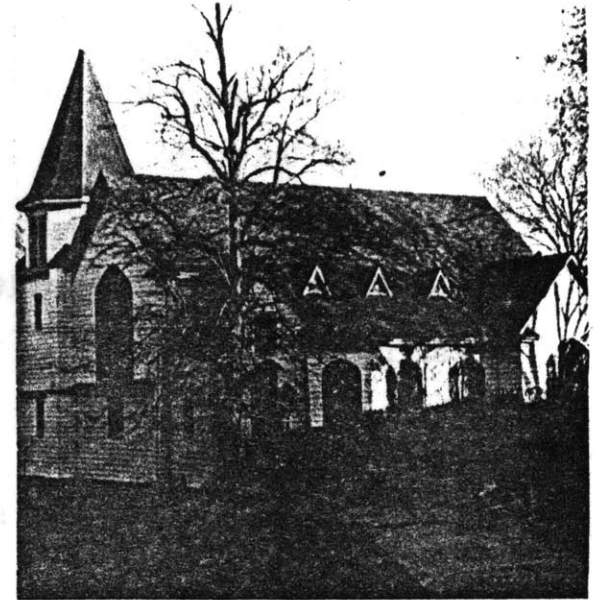
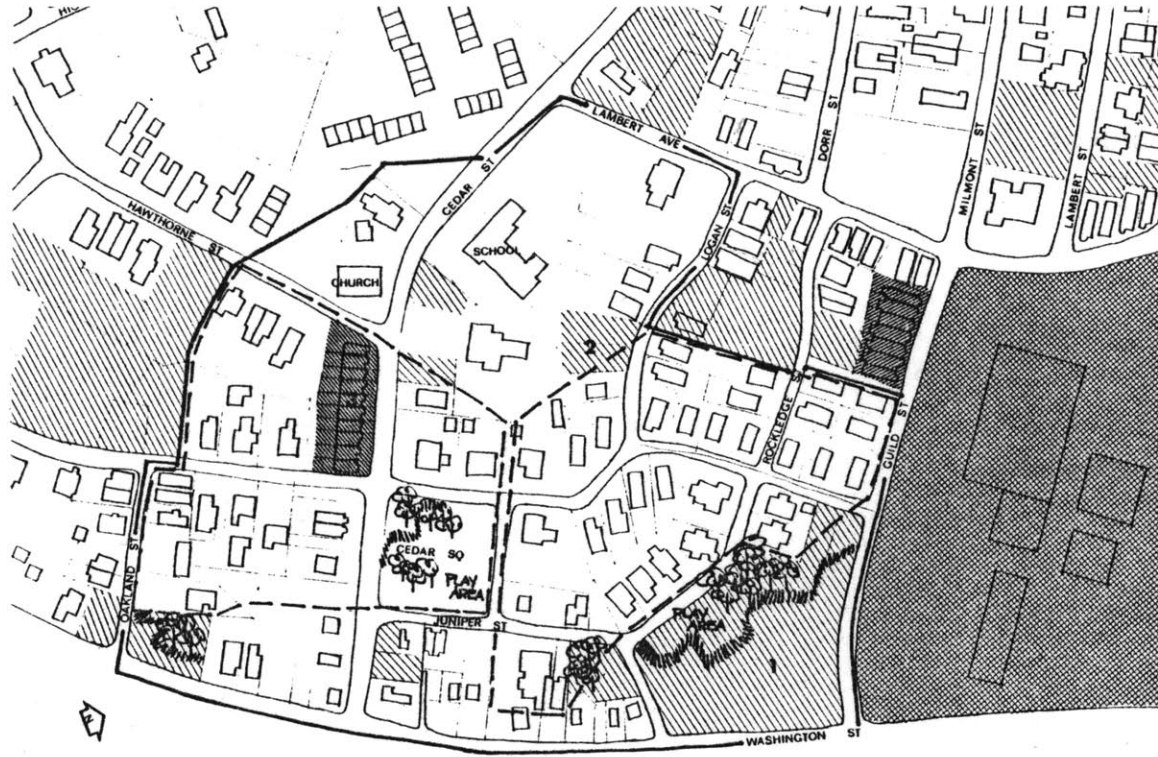
Number of Units: 6

Population: 30

Population Type: Families with children

Parking: 6 spaces

sub area 8



ENVIRONMENTAL CHARACTER

This sub area is almost suburban in nature; with the exception of a variety store on the corner of Washington and Cedar Streets, a school and church on Cedar and Hawthorne Streets, it is totally residential. The majority of the structures are wood frame, two to three story in good condition with single and multiple occupancy. There is an uncharacteristic block of three story marble attached row houses on Cedar Street between Hawthorne and Thornton Streets. The majority of the houses have yards which are well kept and many residences have garages.

The sub area population is family oriented with a large number of children; however, because of the physical and natural character of the sub area there is a peaceful atmosphere and lack of visual, spatial or psychological relationship to any other part of the Highland Park community; the sub area is not isolated but self-contained. The topography is varied within the sub area with the most dramatic changes occurring at the eastern edge where there is a major slope toward Washington Street; the north-eastern section around Juniper Street is situated approximately 20 feet above grade at Washington Street providing a spectacular view of the city.

The major open space in the sub area is Cedar Square which is a grassy area edged with trees with a fairly steep rock outcropping at the southwestern edge. There is also a

small park/play area directly opposite the Square on Cedar and Thornton Streets. Both areas are used by neighborhood children as in the large area of vacant land at the mid-point of Juniper Street. The sub area is within walking distance of Washington Park and is accessible to MBTA bus routes along Washington Street.

RESIDENTIAL DEVELOPMENT POTENTIAL

The topography of this sub area represents the major constraint to development. The vacant land which is bordered by Guild, Washington and Thornton Streets represents the major developable parcel in the sub area; approximately half of the site is not buildable due to the severe grade change which occurs on the Juniper-Thornton Street side of the site which was previously described as an informal recreation area for neighborhood children. The area along Guild and Washington Streets is relatively flat and could be developed in conjunction with the residential development in Sub Area 6. Development on other vacant parcels is precluded by slope conditions and/or parcel size and location; however, the row houses on Cedar Street represent a feasible rehabilitation project.

DEVELOPMENT PROGRAM

1. Guild-Washington Streets - 1.42 Acres

Housing Type: Terrace Apartments (4 stories)

Site Coverage: 50% (.75 acre)

Unit Type: 2 and 3 Bedroom

Number of Units: 30

Population: 85

Population Type: Singles, Couples, Families with young children

Parking: 20 - 30 spaces

Design Considerations: development should be oriented to and complementary with the development in Sub Area 6; development should not obstruct the view nor interfere with recreational activities on Juniper Street.

2. Logan Street - .15 Acre

Housing Type: Town House (2 stories) - as part of an infill package

Unit Type: 3 Bedroom

Number of Units: 4

Population: 17

Population Type: Families with children

Parking: On-street

3. Cedar Street - Rehabilitation 10 buildings

Housing Type: attached 3 story marble row

Unit Size: 1, 2 and 3 Bedroom

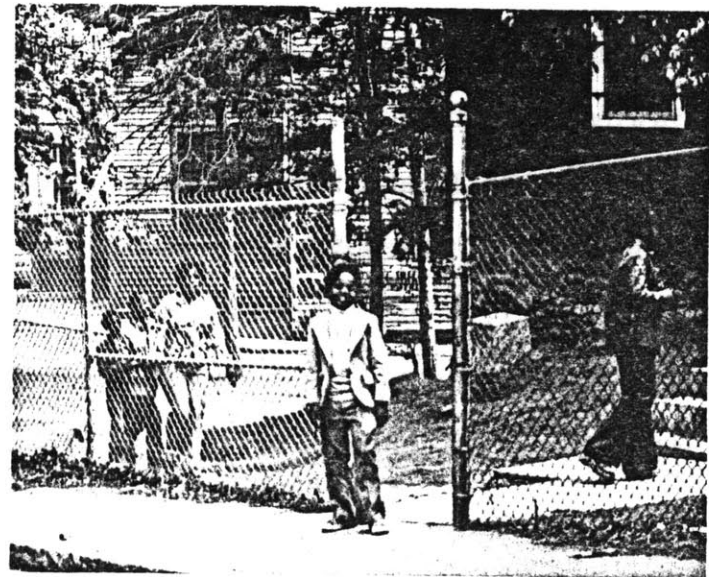
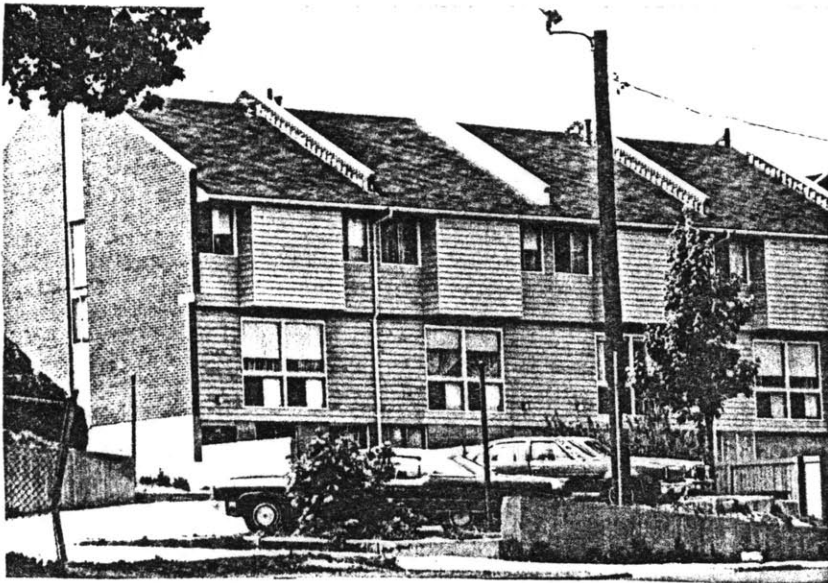
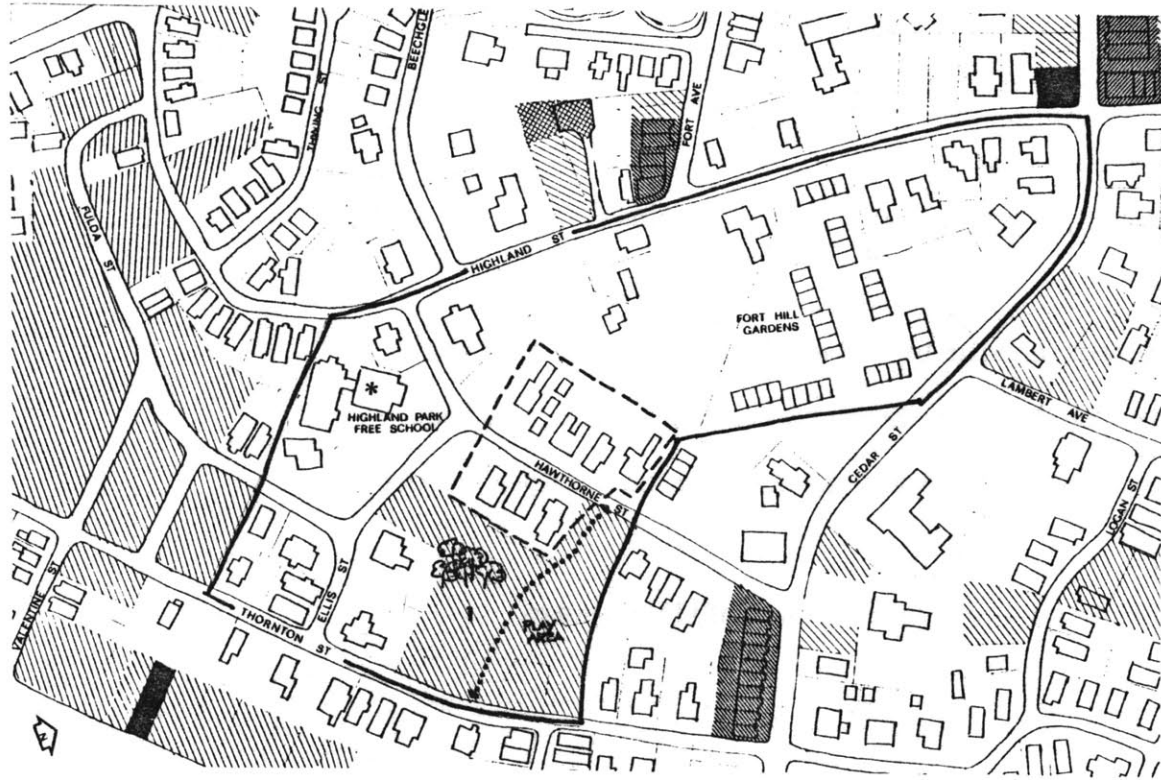
Number of Units: 30

Parking: 20 - 25 spaces

Population: net increase of 38

Population Type: Elderly, Couples

sub area 9



ENVIRONMENTAL CHARACTER

In scale, lifestyle and proximity, this sub area is closest to the Cedar Square Sub Area 8 and the Thwing-Beechglen Sub Area 13; the sub area is almost totally residential with no abandoned or unoccupied buildings. Primary access is from Highland and Cedar Streets; other streets are narrow, curving and used almost exclusively for residential traffic. The sub area is near but not readily accessible to MBTA bus routes or rapid transit. The majority of the structures in this sub area are two to three story wood frame conventional residences in good condition with fenced-in yards, trees and porches. There is an enclave of recently built (1969) two story town houses off Highland and Cedar Streets called Fort Hill Gardens. Although this development does represent a departure from the predominant building type in the sub area, it is not obtrusive nor offensive to the overall character of the sub area and maintains the existing scale and density.

The Highland Park Free School on Ellis and Thornton Streets represents one of two institutional uses in the sub area; in the middle of an asphalt play area and parking lot, the school is a rambling, wooden three story structure with vivid exterior graphics and murals. Although neighborhood children play in the school yard and in the vacant lot on Thornton Street, there is a lack of neighborhood

oriented recreational space. However, given the quantity and condition of residential related open space this does not appear to be a critical deficiency in this sub area. There is a pedestrian path from Hawthorne to Thornton Street across this vacant lot.

RESIDENTIAL DEVELOPMENT POTENTIAL

There are no major topographical or environmental constraints to the development of vacant land in this sub area. Residential development should maintain the existing pedestrian path and provide recreational space.

DEVELOPMENT PROGRAM

1. Thornton Street: 1.87 Acres

Housing Type: Garden Apartments (3 stories)

Site Coverage: 35% (.40 acre)

Unit Type: 2 and 3 Bedroom

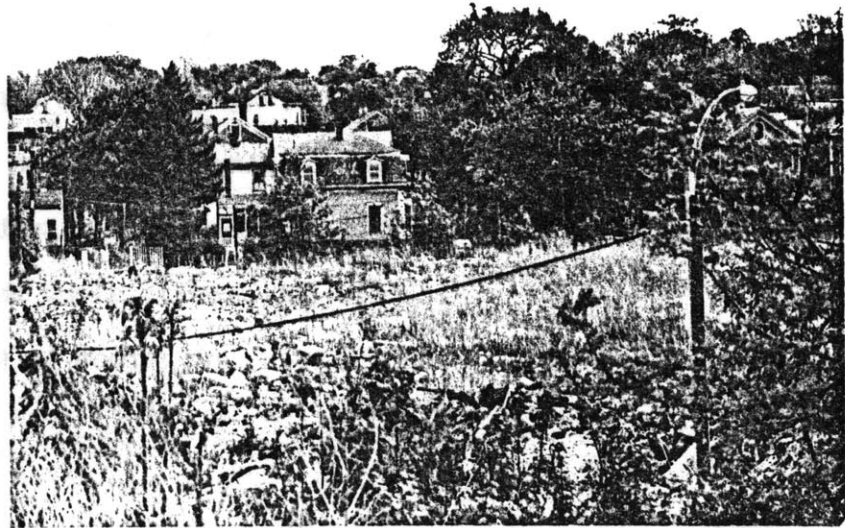
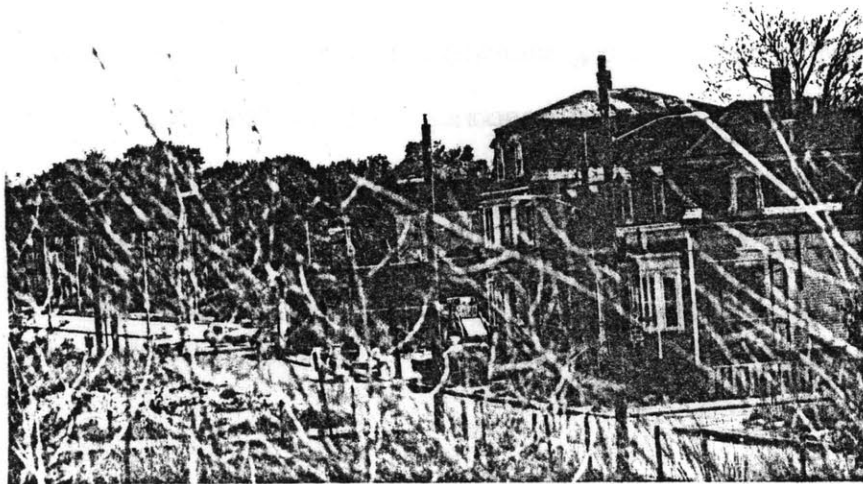
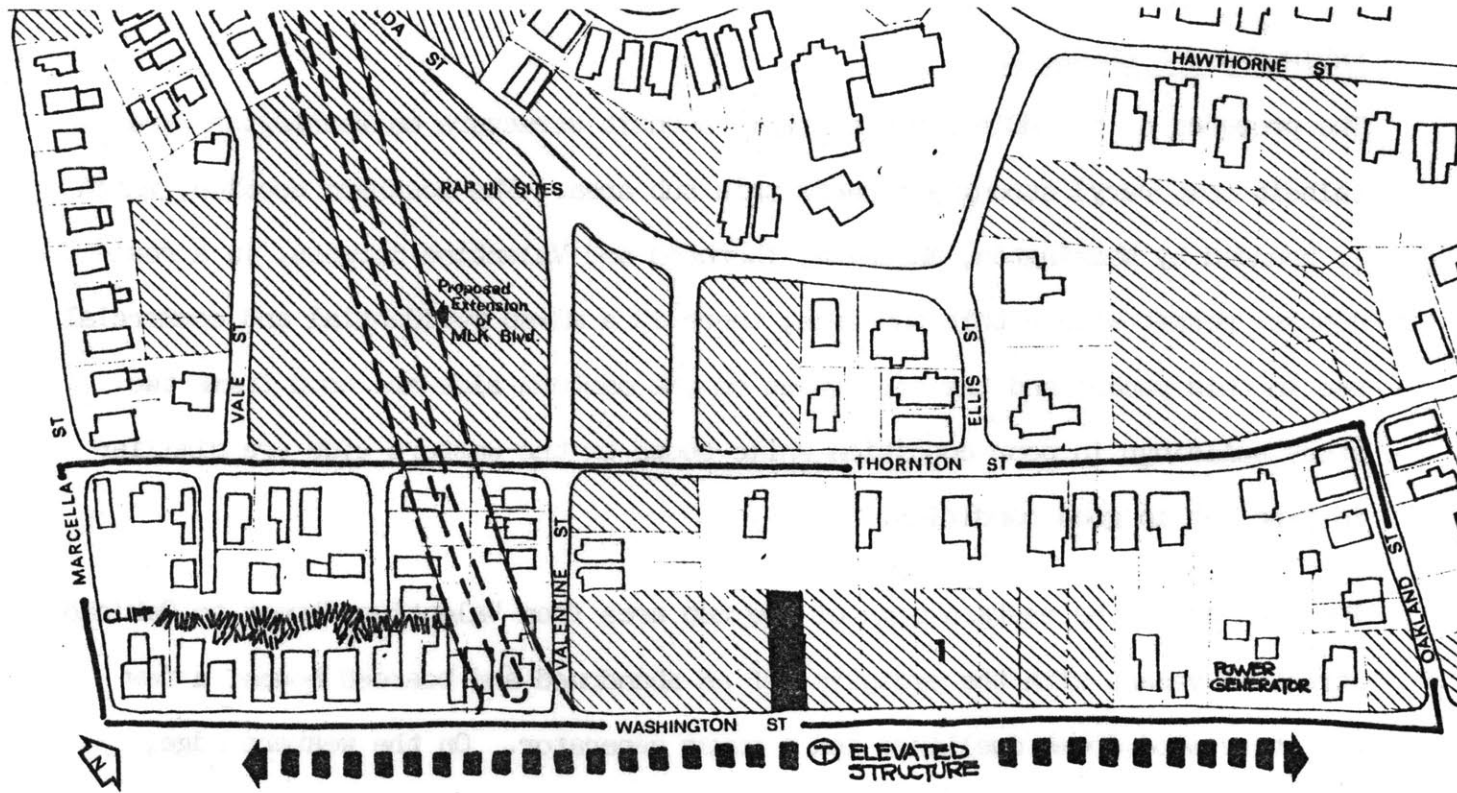
Number of Units: 30

Population: 100

Population Type: Families with children

Parking: 20 - 25 spaces

sub area 10



ENVIRONMENTAL CHARACTER

The presence of the MBTA elevated rapid transit structure on Washington Street (albeit temporary) strongly impacts this sub area. The southern section, which is bounded by Washington, Marcella, Thornton and Valentine Streets, is a residential pocket within this sub area; there is a mixed residential and commercial use in this pocket and the structures on the eastern side are wood frame two story buildings in poor condition while those on the western side are similar in type but in good condition.

The land along the eastern edge of the sub area from Valentine Street to Oakland Street is vacant with the exception of an abandoned and boarded house, a few two story wood frame dwellings and a power generator. On the western edge, there are several two story wood frame structures which are occupied and in good condition.

There is a topographical edge which occurs along Washington Street, particularly in the southwestern section of this sub area; in response to this feature, several buildings are situated approximately 10 feet above street level. Access to this sub area is along Washington Street -- which is in the worst physical condition of any street in the Highland Park community -- and the sub area is

within walking distance of Egleston Station and the MBTA rapid transit and bus routes which converge there.

This sub area has a very marginal relationship to the rest of Highland Park, especially along the Washington Street side. In part this is due to the geographic separation from the heart of the community and in part due to the proximity of the residential development in Washington Park. While there is no open space nor recreational facilities in this sub area, Washington Park is within walking distance.

RESIDENTIAL DEVELOPMENT POTENTIAL

The vacant land which is without a topographical edge along Washington Street represents the major development opportunity; the major constraint is the noise and traffic associated with Washington Street and the existence of the elevated structure.

DEVELOPMENT PROGRAM

1. Washington Street - 1.36 Acres

Housing Type: Garden Apartments (3 stories)

Site Coverage: 30% (.41 acre)

Unit Type: 2 and 3 Bedroom

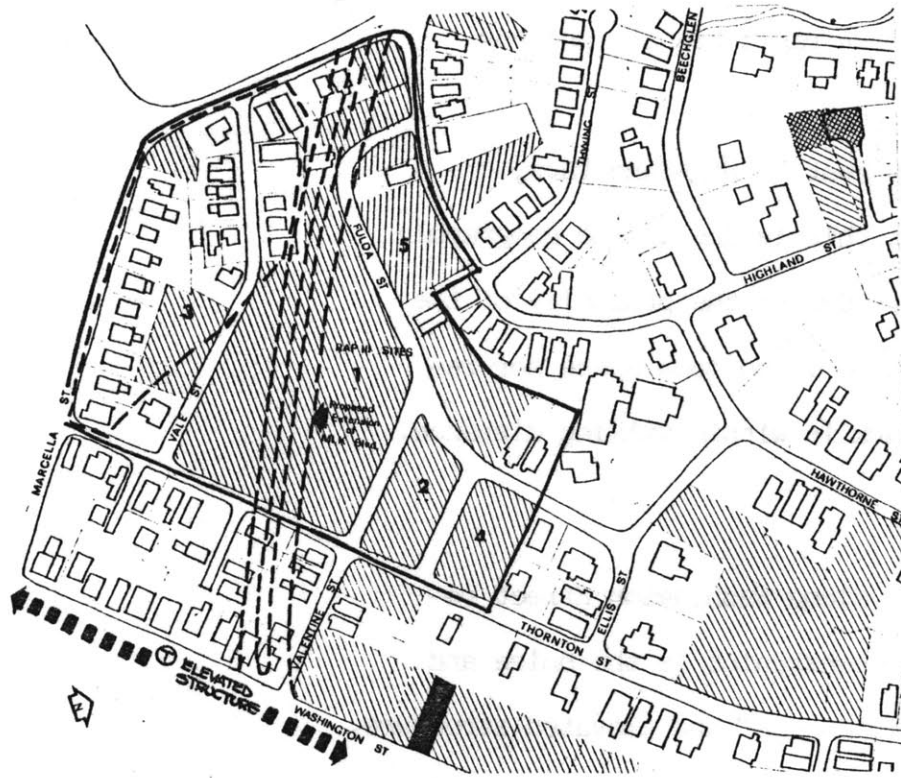
Number of Units: 37

Population: 130

Population Type: Couples and Families with children

Parking: 28 - 30 spaces

sub area 11



ENVIRONMENTAL CHARACTER

Located at the extreme southeastern edge of Highland Park, this sub area is geographically remote and isolated from the rest of the community. A substantial portion of the sub area is represented by vacant land - approximately two-thirds of the total amount of land in the sub area -- and that part which is primarily residential (the southern edge along Marcella Street) is oriented and related to the residential area which exists outside of Highland Park, Academy Homes and Washington Park. The vacant land within this sub area is designated as the site for RAP's third major residential development program -- RAP-UP III.

There is one residential pocket in this sub area located on Marcella and Vale Streets; structures within this section are two story wood frame buildings with mixed commercial use on the Marcella Street side approaching Washington Street. Although the majority of the buildings are in good condition on Marcella Street, those located on Vale Street are in need of repair and their general lack of maintainence may be due to the impact and influence of the debris filled vacant land which surrounds this side of the pocket.

Access to the sub area is from Marcella Street on the west and from Washington Street via Fulda Street on the east; due to the curvilinear pattern of Fulda Street

the majority of the street is used for residential traffic except where it crosses Valentine Street which is part of the informal cross community traffic route. In response to the limited access to and through this part of Highland Park, Valentine Street has a heavy volume of vehicular traffic since it is the major point of penetration of the community on the southern side. This sub area is accessible to the MBTA bus routes along Washington Street and is within walking distance of Elgelston Station and the rapid transit and bus connections located there.

Despite the large amount of vacant land in this sub area, there are a large number of children located there who apparently prefer street and sidewalk recreational activities rather than Washington Park and/or the Connolly Playground both of which are within walking distance of the sub area. There is no neighborhood oriented open space or recreational facility located in this sub area.

RESIDENTIAL DEVELOPMENT OPPORTUNITIES

Although there are no major grade changes in the topography of this area which would preclude development activities, the major constraints for development are the proposed extension of the Martin Luther King, Jr. Boulevard from Washington Street to Columbus Avenue and the existence of the MBTA elevated rapid transit

structure on Washington Street. The extension of the Boulevard has both short and long term impacts on development in the sub area since it is not definite when construction will occur and how much land will be required. The existence of the elevated structure is presumably a temporary negative impact since the structure is scheduled to be removed when the Orange Line is relocated to the Southwest corridor.

DEVELOPMENT PROGRAM

1. 2. 3. 4. 5. RAP III - 2.75 Acres*

Housing Type: Garden Apartments (3 stories)

Town Houses (2 stories)

Medium Rise (8 stories)

Unit Type: 1, 2, 3 and 4 Bedroom

Number of Units: 96

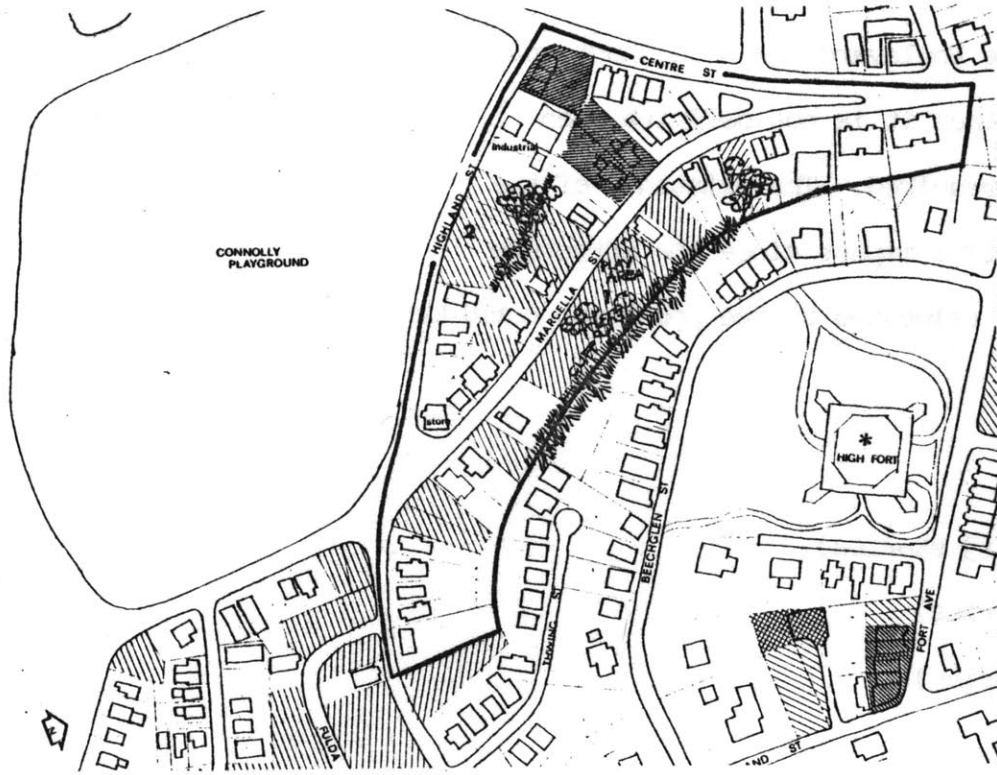
Population: 350

Population Type: Singles, Couples and Families with children

Parking: 75 - 80 spaces

* Acreage does not include the minimum amount of land which would be required for the extension of the Boulevard

sub area 12



ENVIRONMENTAL CHARACTER

This sub area is located at the extreme southwestern edge of the Highland Park community; its isolation from the rest of the community and the internal coherence of the sub area is reinforced by the topographical edge which occurs along the eastern side of the sub area — a 30 foot cliff running between Marcella and Beechglen Streets. The western side of Marcella Street rises gradually along Centre Street approximately 10 feet above street level.

The majority of the structures in this sub area are multi-family, masonry and brick construction, generally from three to four stories. Along Marcella Street the houses were built to the property line and before a substantial number were demolished on the eastern side of the street, this pattern in conjunction with the slope and width of the street physically enclosed the area. Along Highland Street there are a few houses at the corner of Centre Street which are vacant but structurally sound brick multiple unit structures. Approaching Marcella Street on Highland Street, there are single family wood frame buildings in fair to good condition. Between these sets of buildings on Highland Street, there is a large vacant lot presently being used for abandoned cars, car repair and parking. There is a plumbing supply office and related storage garages which represents the only industrial use in the sub area.

The buildings on Centre Street are triple deckers and double triple deckers in good condition.

The commercial activity in the sub area is limited to a variety store on the corner of Highland and Marcella Streets and a vacant variety store on Highland and Centre Streets. The sub area is within walking distance of the MBTA bus routes along Columbus Avenue and Centre Street and is approximately a half a mile from Jackson Square. Access to the sub area is from Highland Street and Marcella Street; because Marcella Street is the final link in an informal cross community traffic route from Washington Street to Centre Street, there is more vehicular traffic on the street than would be expected on a narrow residential street.

While there is no neighborhood oriented open space in this sub area, the Connolly Playground is within walking distance and is used intensively by the neighborhood children as is the rock ledge at the rear of the vacant land along Marcella Street.

RESIDENTIAL DEVELOPMENT POTENTIAL

There are two vacant parcels of land which are not affected by the topography which represent the major development opportunities in this sub area. In view of the traffic on Marcella, Centre and Highland Streets, consideration should be given to the provision of off-street parking as well as recreational space.

DEVELOPMENT PROGRAM

1. Marcella Street - .55 Acre*

Housing Type: Maissonette (4 stories)

Site Coverage: 45% (.25 acre)

Unit Type: 2 and 3 Bedroom

Number of Units: 16

Population: 60

Population Type: Families with children, students, couples

Parking: 12 - 14 spaces

Design Considerations: structures should be sited in a pattern which is consistent with the existing one as described; rock ledge at the rear of the eastern side of the site should be integrated into the development as recreational space.

* includes vacant land on both sides of Marcella Street with an allowance of .25 acre for recreational space

2. Highland Street - .62 Acre

Housing Type: Garden Apartments (3 stories)

Site Coverage: 35% (.25 acre)

Unit Type: 1 and 2 Bedroom

Number of Units: 15

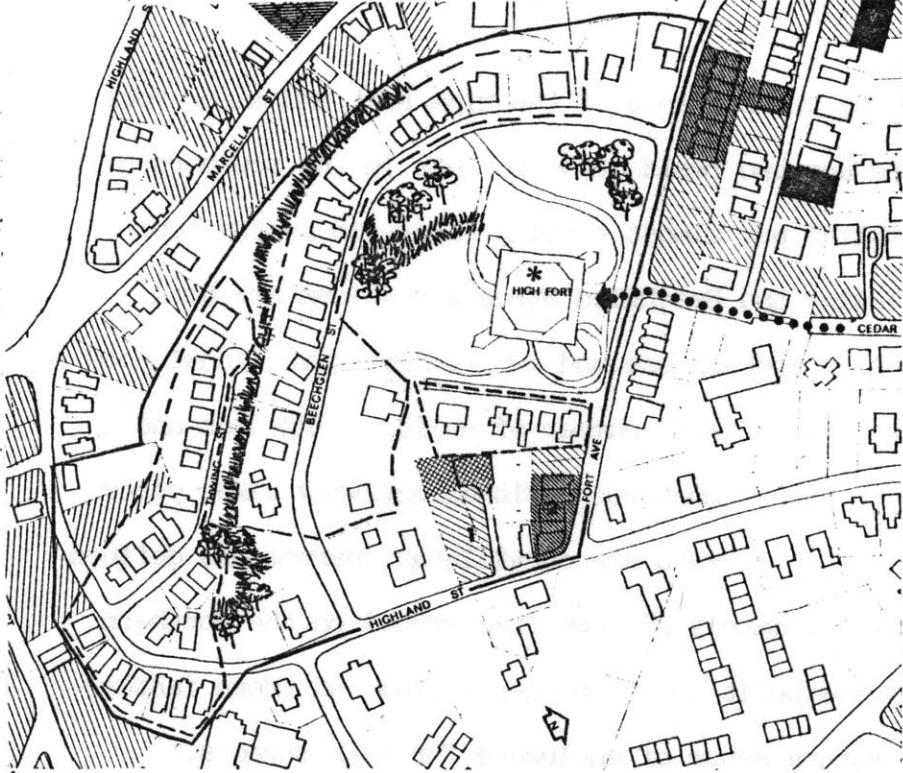
Population: 40

Population Type: Students, Couples, Singles, Elderly

Parking: 10 - 12 spaces

Design Considerations: although this residential development could occur with existing light industrial use adjacent to it, consideration should be given to the probable impact of the location of the Roxbury Community College and the potential for expanded residential development on the land now occupied by the plumbing supply company as well as the vacant structures on the corner of Centre and Highland Streets.

sub area 13



ENVIRONMENTAL CHARACTER

This sub area is characterized by the presence of the High Fort and major rock ledges and outcroppings. There are two residential pockets in the southern half of this sub area which are similiar but almost totally separated by the topography of the sub area. The Thwing and Beechglen Streets sections are both woodsy, residential sections which contain one and two family conventional wood frame dwellings. These streets have a large number of children and dogs and despite the number of homes with yards, most recreational activity takes place in the streets. The streets in both pockets are curvilinear, narrow and defined by major rock ledges (rising approximately 25 feet from grade) on the northern sides of the street; buildings are built to the property line and these factors in combination produce a very strong sense of enclosure for both streets.

The area along lower Highland Street is similiar in character but the structures are triple deckers and the street scale is therefore much more dense and urban.

The northern section of this sub area is the site of the High Fort; on grade and to the east of the fort along a gravel road is a small residential pocket of several two story wood frame single family houses; these buildings are occupied by members of a commune which is self-contained by location and isolated from

the rest of the Highland Park community by choice.

Along Fort Avenue near Highland Street are five three story brick buildings with vacant ground floor commercial space; these structures are almost completely vacant but physically sound and in need of rehabilitation. On Chickatawba Park, a dead end gravel road off Highland Street, there is vacant land, garages and sheds housing chickens, roosters and goats.

Vehicular access to this sub area is along Highland Street and Fort Avenue; the sub area is relatively inaccessible to public transportation.

Recreational facilities in this sub area exist in the form of the High Fort which is a passive area with a tremendous view of the city; because the High Fort is located approximately 35 feet above street level, it is not easily accessible to either pedestrian or vehicular traffic — although its presence physically dominates this sub area. In addition the High Fort is not now a neighborhood oriented facility and present plans depict it as a regional facility.

RESIDENTIAL DEVELOPMENT POTENTIAL

Due to the topography of this sub area there are major pieces of land which are not feasible for development — although they are used for recreational purposes by residents.

DEVELOPMENT PROGRAM

1. Chickatawba Park - .32 Acre

Housing Type: Town House (2 stories)

Site Coverage: 20% (.06 acre)

Unit Type: 3 Bedroom

Number of Units: 4

Population: 18

Population Type: Families with children

Parking; 4 spaces

2. Fort Avenue - Rehabilitation 5 buildings

Housing Type: attached 3 story brick

Unit Type: 1 and 2 Bedroom

Number of Units: 25

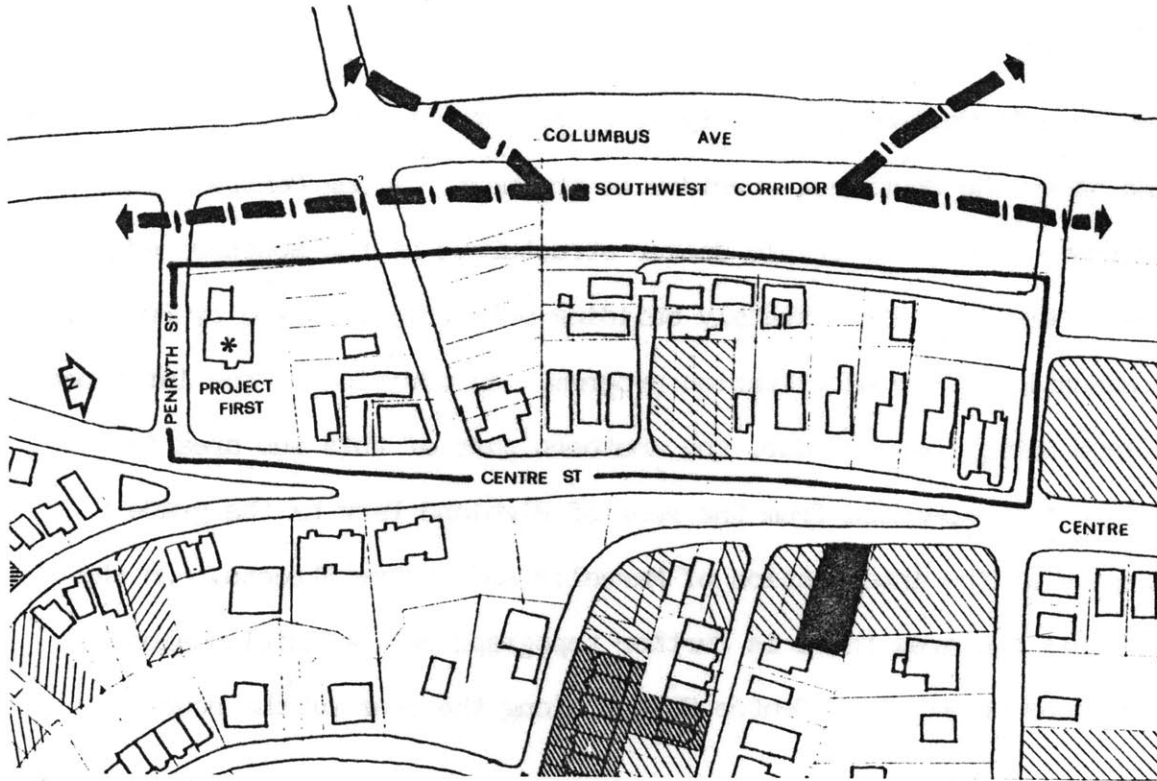
Population: Net increase of 20

Population Type: Couples, Students, Families with young children

Parking: 15 - 20 spaces

Design Considerations: use of the vacant land adjacent to the
site for parking; ground floor local retail space

sub area 14



ENVIRONMENTAL CHARACTER

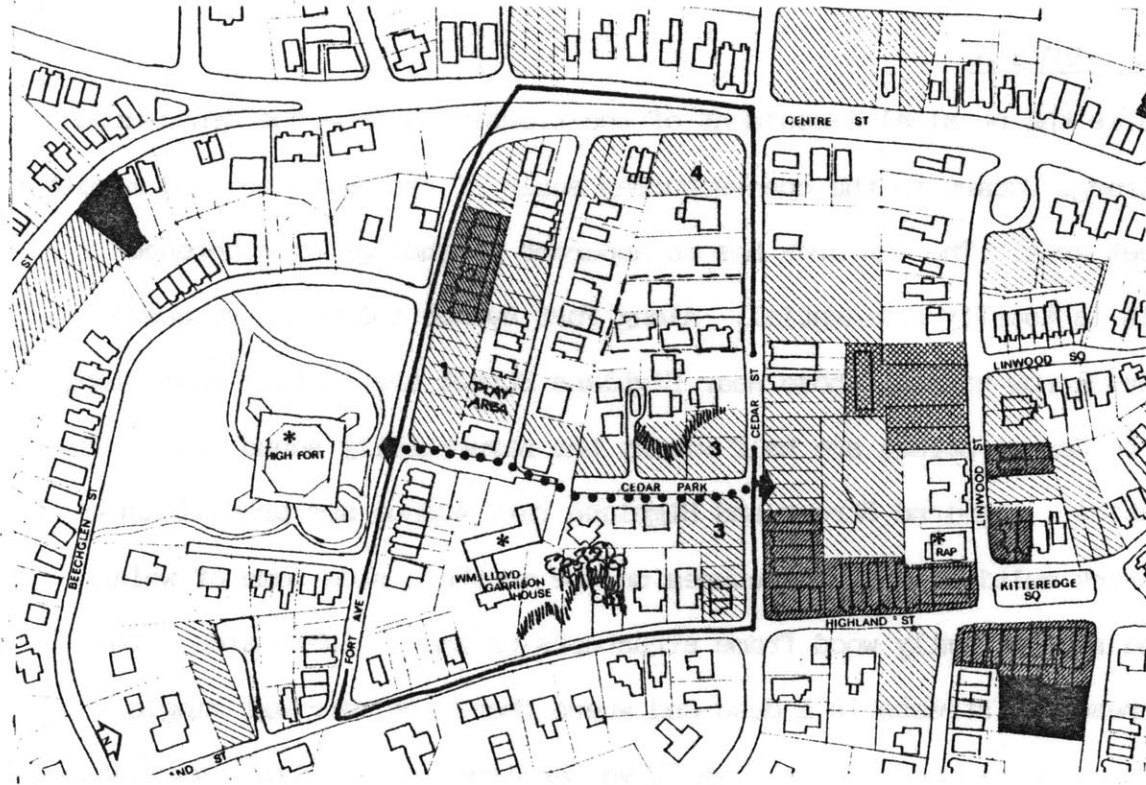
This linear sub area is defined physically by Centre Street on the east and the vacant land along the Southwest corridor to the west. Along Centre Street there are wood frame single and triple decker structures; at the southern edge of this sub area there is a large stately building presently occupied by Project First, a drug education and rehabilitation program. In addition to the influence of the barren land along the corridor, the southern part of this sub area is physically defined and separated from the rest of Highland Park by the grade change which begins at the intersection of Marcella and Centre Streets. On the western edge of this sub area there is further topographical definition along a steep edge which runs parallel to Centre Street along the rear of the houses.

This sub area is on the MBTA bus routes along Centre Street and is relatively accessible to other bus routes along Columbus Avenue. Access to the sub area is from Centre Street and while parking is not an apparent problem, the speed and volume of traffic along Centre Street is a problem given the number of children.

RESIDENTIAL DEVELOPMENT POTENTIAL

At the present time this entire sub area is being considered as the future site of the Roxbury Community College.

sub area 15



ENVIRONMENTAL CHARACTER

This sub area is the physical embodiment of the transition from the dense-urban scale of Kittredge Square to the open-suburban scale of the High Fort and middle Highland Street area. The sub area has no apparent morphology or coherence except that it is totally residential. Along Fort Avenue there are attached three story brick row houses; those near Highland Street are in fair condition, those nearer to Centre Street are half vacant but structurally sound and in need of rehabilitation. Highland Street and Highland Park Avenue are predominantly three story brick multiple unit structures on the southern side some of which are vacant and single family wood frame structures on the northern side. The junction of these two streets is a dead end where there are marginal single family wood frame houses and the William Lloyd Garrison house which is occupied by St. Monica's nursing home. The Cedar Street edge of this sub area is predominantly vacant land with a burnt out building, a two story wood frame house which is in good condition and a junk yard on the corner of Centre Street. Ronan Terrace is a cul de sac off of Cedar Street on which there are two story and triple decker structures in good condition. On another cul de sac off Cedar Street, Cedar Park, there are several two story and triple decker structures in marginal condition. This enclave on Cedar Park is inaccessible primarily due to the design and physical

condition of the street; from this section there is a pedestrian pathway along Highland Park Street leading to the High Fort which is a final segment of the path system from John Eliot Square through Kittredge Square.

On Highland Street there are three story wood frame structures which are in good condition; midway along Highland Street there is a major rock outcropping which is densely wooded and although it is visually relieving, it is relatively inaccessible for recreational purposes. There are no specific recreational facilities in this sub area; however, the major concentrations of children occur along Highland Park Avenue and Cedar Park, both of which have, but apparently do not use, easy access to the High Fort.

This sub area is accessible from Highland and Centre Streets as well as Cedar Street (which is a secondary cross community carrier in Highland Park); at the southern edge of this sub area there is access from Fort Avenue. There is limited access to public transportation except at the western edge which is close to MBTA bus routes on Centre Street; there is little off street parking but many of vacant lots are used for parking.

RESIDENTIAL DEVELOPMENT POTENTIAL

There are several development opportunities in this sub area in terms of vacant land and buildings for rehabilitation some of which should be joint development with parcels described in Sub Area 2.

DEVELOPMENT PROGRAM

1. Fort Avenue - .32 Acre

Housing Type: Garden Apartments (3 stories)

Site Coverage: 35% (.15 acre)

Unit Type: 2 and 3 Bedroom

Number of Units: 8

Population: 32

Population Type: Couples and Families with young children

Parking: 6 - 8 spaces

Design Considerations: integrate the vacant lot on Highland Park

Avenue into development as a shared play area

2. Fort Avenue - Rehabilitation 8 buildings

Housing Type: attached 3 story brick row

Unit Type: 0, 1 and 2 Bedroom

Number of Units: 24

Population: Net increase of 45

Population: Students, Singles, Couples

Parking: 15 - 20 spaces

Design Considerations: use of vacant lot on western side for parking

3. Cedar Park - .64 Acre (both sides and southern parcel)

Housing Type: Town House (2 stories)

Site Coverage: 20% (.20 acre)

Unit Type: 3 and 4 Bedroom

Number of Units: 35

Population: 120

Population Type: Families with children

Parking: 20 - 25 spaces

Design Considerations: maintain and articulate pedestrian path to the
High Fort; siting should strengthen existing residential enclave
and create shared recreational space

4. Centre Street-Highland Park Avenue - .34 Acre

Housing Type: Garden Apartment (3 stories)

Site Coverage: 35% (.15 acre)

Unit Type: 1 and 2 Bedroom

Number of Units: 12

Population: 40

Population Type: Students, Singles, Couples

Parking: 8 - 10 spaces

sub area summary

The analysis of development opportunities in Highland Park based on the physical characteristics of the fifteen environmental sub areas indicates that the population could be almost doubled without violating the quality and texture of the area. As indicated on page 139, 1259 new residential units could be developed increasing the present population by 3668 residents.

In order of magnitude, the major residential development opportunities are the RAP II B, RAP III and MBTA sites -- total 494 units; the rehabilitation of vacant and structurally sound buildings -- 324 units; potential scattered site new construction projects -- 300 units.

The sub areas which represent the largest residential development opportunities in terms of projected population increase are:

- Sub Area 6, the 8.95 acre MBTA site: 300 units or + 750 new occupants
- Sub Area 4, the John Eliot Square area: 222 units or + 650 new occupants
- Sub Area 11, the RAP III site: 96 units or + 365 new occupants
- Sub Area 1, the Kittredge Square area: 89 units or + 310 new occupants

The development program as described in the sub area analysis does not presume any specific sequencing or strategy for residential development in Highland Park but merely indicates that existing development opportunities can be exploited in order to achieve a reasonable population increase and still maintain the environmental qualities which make the area unique and attractive. There are several potential development strategies and options which RAP should evaluate in terms of the long range qualitative aspects of community development in Highland Park. Some of these issues are related to the amount, location and effect of concentrated residential development in the general vicinity of John Eliot Square; the relationship of residential development activities on the stability and/or instability of existing neighborhoods (e.g. Cedar Square, Highland Park Avenue); the potential catalytic effect of concentrated development activities in self-contained but highly visible sections of the community (e.g. Kittredge Square, Morley Street, Cedar Park, Marcella Street); and, the physical and/or economic benefits which would accrue to residential development in those sections of the community most likely to be impacted by external development activities (e.g. Centre Street-Highland Park Avenue and the location of the Roxbury Community College, Elmwood and King Streets and the Southwest Corridor plans, the MBTA site and the relocation of the elevated rapid transit structure from Washington Street to the Corridor).

The direction, character and timing of residential development in Highland Park is as significant as the variety and potential of the development opportunities themselves.

In order to assess the impact of the projected population increase on public facilities, open space and the current plans to revitalize John Eliot Square, a probable economic profile of the new residents has been established. The process for establishing a probable economic profile was based on the aggregated results of the sub area development programs.

Assumptions

- it has been assumed that the majority of future residential development in Highland Park would require financial assistance such as FHA or MHFA construction financing in combination with state and federal rent subsidies
- information on the cost, size, tenant composition and rent levels for various building types (including rehabilitation and new construction) in selected FHA and MHFA* residential developments in Boston has been used as the basis for extrapolating projections for Highland Park

*FHA and MHFA developments which were completed during 1973-76 or had rent schedules which were revised during 1975-76

Methodology

The material used to determine the projected economic profile has been based on three categories of residential development: (1) new construction/medium rise structures (5 to 10 stories); (2) new construction/low rise structures (garden apartments, town houses, terrace apartments, maissonettes); (3) rehabilitated structures. The MHFA and FHA developments which were used to derive the projections are in Appendix H. These developments were selected based on their location in an area adjacent to or characteristically similar (population, general social or economic similarities) to Highland Park. The developments were constructed between 1973 to 1976 or, in the case of two developments, have rent schedules which have been revised effective in 1975 or 1976.

Using the most recent rent schedules and occupancy data available (MHFA projects: March 1976; FHA projects: January 1976), the following figures were tabulated:

- Total number of units in each development
- Unit distribution and percentage by bedroom size in each development
- Unit distribution and percentage by income category (i.e. market, moderate or subsidized rent) in each development
- Rent level and/or range by unit size and income category in each development
- Income projection for each development by income category assuming that rent represents 25% of gross income

Based on these figures, the following average were then tabulated by building-development type (medium rise, low rise, rehabilitated):

Average number of units

Typical unit distribution and percentage by unit size

Average unit distribution and percentage by income category

Average rent level by unit size and income category

Average income projection

This information was then applied to the total number of projected residential units in Highland Park by building type. From this application an average income for each building type and unit size was calculated, an average rent determined for each income category and unit size and income projections made.

The summarized data is listed on the following pages.

The figures represent number of units based on the residential development program/projected number of new residents.

SUB AREA	MEDIUM RISE	TOWN HOUSE	MAISSONETTE	GARDEN APARTMENT	TERRACE	REHAB	TOTAL
1						89/310	89/310
2		8/35		27/105		37/80	72/220
3				65/230			65/230
4	94/235	28/140			30/115	70/160	222/650
5	50/120	13/60				24/30	87/210
6	300/750						300/750
7		23/105		10/40		21/10	54/155
8		4/17			30/90	30/38	64/145
9				30/120			30/120
10				37/130			37/130
11	50/150	23/115		23/100			96/365
12			16/60	15/40			31/100
13		4/18				25/20	29/38
14							--
15		35/120		20/72		28/53	83/245
TOTAL	494/1255	138/610	16/60	227/837	60/205	324/701	1259/3668

ECONOMIC PROFILE FOR RESIDENTIAL DEVELOPMENT PROGRAM

Medium Rise: 494 Units

Distribution by Income Category and Unit Size:

			<u>Market</u>	<u>Moderate</u>	<u>Low</u>
0 BDR	24 Units	(5%)	--	12	12
1 BDR	240 Units	(49%)	84	86	70
2 BDR	230 Units	(47%)	<u>115</u>	<u>89</u>	<u>26</u>
			199	187	108

Average Rents by Income Category and Unit Size:

	<u>Market</u>	<u>Moderate</u>
0 BDR	---	\$165.00
1 BDR	\$350.00	217.00
2 BDR	420.00	295.00

Note: Low income tenants pay 25% of their income; projections for the low income economic profile have been made from public housing subsidy program income limitations and federal rent subsidy program income limitations (See Appendix H).

Average Family Income:

Market: \$19,500

Moderate: \$14,200

Low: \$8,000

Low Rise: 441 Units

Distribution by Income Category and Unit Size:

			<u>Market</u>	<u>Moderate</u>	<u>Low</u>
1 BDR	74 Units	(17%)	40	20	14
2 BDR	159 Units	(36%)	60	60	39
3 BDR	120 Units	(28%)	--	20	100
4+BDR	88 Units	(20%)	<u>--</u>	<u>--</u>	<u>88</u>
			100	100	241

Average Rents by Income Category and Unit Size:

	<u>Market</u>	<u>Moderate</u>
1 BDR	\$250.00	\$165.00
2 BDR	325.00	220.00
3 BDR	380.00	280.00
4+BDR	450.00	350.00

Note: Low Income -- See Appendix H .

Average Family Income:

Market: \$17,500

Moderate: \$13,500

Low: \$7,000

Rehabilitated: 324 Units

Distribution by Income Category and Unit Size:

			<u>Market</u>	<u>Moderate</u>	<u>Low</u>
0 BDR	30 Units	(9%)	--	25	5
1 BDR	120 Units	(37%)	10	75	35
2 BDR	89 Units	(28%)	10	55	24
3 BDR	65 Units	(20%)	--	35	30
4+BDR	20 Units	(6%)	<u>--</u>	<u>5</u>	<u>15</u>
			20	195	109

Average Rents by Income Category and Unit Size:

	<u>Market</u>	<u>Moderate</u>
0 BDR	\$223.00	\$146.00
1 BDR	286.00	187.00
2 BDR	348.00	219.00
3 BDR	429.00	288.00
4+BDR	504.00	370.00

Note: Low Income - See Appendix H .

Average Family Income:

Market: \$17,100

Moderate: \$12,000

Low: \$7,500

GENERAL ECONOMIC PROFILE FOR RESIDENTIAL DEVELOPMENT

	MARKET	MODERATE	LOW
TOTAL NUMBER OF UNITS:	319 (25%)	482 (38%)	458 (36%)
PROJECTED NUMBER OF RESIDENTS:	756 (21%)	1196 (34%)	1589 (45%)
AVERAGE FAMILY INCOME:	\$19,500-17,100	\$14,200-12,000	\$8,000-7,000

DEVELOPMENTS IMPLICATIONS

facilities and open space

The impact of new residential development on public facilities and open space in a community is dependent upon several factors: (1) the quantity, unit type and phasing of development, (2) the quantity and quality of existing public facilities and open space immediately accessible to residents, and (3) external plans for recreational or public facilities reasonably accessible to community residents.

The impact of 1260 new residential units in the Highland Park community will vary in intensity and significance based on unit type distribution and the resultant family composition.

In 1974, the Neighborhood Preservation Study indicated that 37% of the land in Highland Park was devoted to residential use and that there was a 1.9:1 ratio of residential land use to community facilities and open space compared to a national urban pattern of 2.2:1. (See Appendix A + B)

The residential development program described in this study would result in approximately 30 additional acres of residential land use making a total of

97.71 acres or 53% of the land in Highland Park. While this represents a 17% increase in residential land use, however, the ratio of residential land use to commercial facilities and open space remains relatively static at 2.0:1 reflecting the addition of 3.65 acres of open space in the form of play areas developed in conjunction with residential development, the construction of the Milmont-Dorr Street playground and the rehabilitation of the existing playground on King Street.

If public facilities and open space are considered as a function of the total population served, according to the Neighborhood Preservation Study Highland Park presently has 15.7 acres/1000 persons for residential use, 5.7 acres/1000 persons for public and semi public use, and 2.6 acres/1000 persons for parks and playgrounds. Based on the development program described in this study, there would be a relationship of 12.7 acres/1000 persons of residential land use which represents an intensification of land development primarily reflective of the rehabilitation of existing vacant structures and the introduction of medium rise residential structures. The new relationship between population and parks and playgrounds would be 3.3 acres/1000 persons and 1.8 acres/1000 persons for public and semi-public use.

In assessing the relationship and impact of residential development in Highland Park to public facilities and open space the following factors must be considered:

- the location and the facilities of the Washington Park recreational complex which is within walking distance of Sub Areas 10, 11, 8 and 9 (Washington Park is a nine acre park with a skating rink, swimming pool, baseball fields, basketball courts, tot lot and playground)
- the location of the Connolly Playground which is within walking distance of Sub Areas 12, 11 and part of 13.
- the location and outreach programs of the Roxbury YMCA, Roxbury Boys Club and Roxbury Girls Club
- the planned location and recreational facilities of the Roxbury Community College
- the planned rehabilitation of the Marcus Garvey House for recreational and social service programs specifically oriented to the Highland Park community and the construction of Jeep Jones Park in John Eliot Square
- the Campus High School location and facilities which include approximately 10 acres of outdoor playfields and indoor recreational facilities

Assuming that the present percentage of Highland Park residents under 18 years old remains constant, the residential development program described in this study would result in an increase of 1155 residents under 18 years old. However, the majority of the recreational facilities immediately accessible to the community are specifically oriented to this age group which tends to be more mobile and therefore less dependent upon neighborhood oriented activities.

The majority of the residential programs in the sub area analysis have designated open space as a functional part of the development; this open space would be semi public in nature and oriented to children under 10 years old and the passive activities of adults.

Although new residential development in Highland Park would create a demand for some additional built public facilities (e.g. to address such increased needs as day care programs, indoor adult recreational activities); the needs of the total community for open space can be adequately accomodated through existing and planned parks, playgrounds and facilities.

john eliot square

RAP has identified the economic revitalization of John Eliot Square as a functional and symbolic focal point in Highland Park and a priority issue in the overall community development program. The particular commercial image which John Eliot Square will assume upon completion is still uncertain; whether it will be a convenience shopping center, a specialty center or some combination of the two will be influenced by economic and financial factors and most importantly by the nature of the interested businesses.

RAP has established three basic premises for the John Eliot Square revitalization:

- historic - the Square physically represents the generic values --place, people, activities -- which are the basis for future development
- social - the Square provides a foundation and symbol for RAP's efforts to restore Highland Park as a viable residential community
- economic - the Square can induce market forces and mechanisms to move the land toward 'higher and best' uses related to the social purposes and needs of Highland Park residents

Several studies have been conducted for RAP regarding the scope and feasibility of the revitalization of John Eliot Square as a commercial center. The most recent study conducted by the Harvard Graduate School of Design during the fall of 1975 was a market study which focused on the general feasibility of developing commercial facilities in the Square and the factors influencing the existing and future demand for commercial facilities in Highland Park. (see Appendix I).

The Harvard Study supported RAP's concept of John Eliot Square as a unique, attractive, physical location in which a convenience-specialty shopping district would be appropriate. However, the Harvard Study also indicated that although the demographic characteristics may indicate that Highland Park is ripe for commercial development, the income characteristics reveal insufficient community purchasing power to sustain an economically viable commercial center at the present time. Since the attraction of a commercial center is generally limited by factors of distance, travel time and the availability of alternative facilities; and since convenience shopping is based primarily upon distance and travel time, the primary trade area for Eliot Square was defined as existing solely within the topographical boundaries of Highland Park and within a distance of one half mile (approximately 10 - 15 minute walk) from the center of the Square. The restriction of the trade area by the Harvard Study was further influenced by the existence of other

convenience centers in neighborhoods near Highland Park and the low level of car ownership (about 30%) in the community itself. This trade area was divided into two sections as depicted in Appendix J. Area A, the convenience primary trade area is within 1/4 mile of the Square and lies on the northern side of the High Fort; Area B, the convenience general market, is bordered by Washington Street and Marcella Street and represents the outlying areas of Highland Park on the southern side of the High Fort.

The Harvard Study acknowledged that the trade area for specialty shopping centers is more difficult to determine since specialized commercial development attracts various social and economic groups from different areas rather than the residents of a single community. In addition, the Study assumed that the image of Eliot Square and the types of specialty stores located there would appeal primarily to the Black population of Boston which does not have a quality shopping center and resides mainly in Roxbury and Dorchester. This larger community is considered the secondary market for commercial establishments in John Eliot Square.

This section of this study focuses on the implications of the residential development program described in the sub area analysis on the data and conclusions of the Harvard market study for John Eliot Square.

Using the 1970 census data, the Harvard Study identified the demographic and income characteristics of both the primary trade area (A + B) and the secondary (specialty) trade areas.

A significant factor in determining the feasibility of commercial development in the Square is the pattern of expenditures in the trade areas. In view of the problems inherent in determining the actual percentage of income spent for goods and services by any income and demographic group, and the scarcity of reliable data regarding the particular expenditure patterns of various ethnic, racial and age groups, the Harvard Study projected a probable relationship between expenditures for goods and services and racial/ethnic consumer consumption based on comparisons with a similar urban area and national consumer expenditure patterns from 1960 - 1973. (See Appendix L). Using standards described by the Urban Land Institute in Dollars and Cents of Shopping Centers and standards developed by the Bureau of Labor Statistics and the National Association of Convenience Stores, the Harvard Study established a probable percentage of disposable income and the categories on which it would be spent by residents of the primary trade areas.

The critical element affecting the feasibility of John Eliot Square as a conven-

ience and specialty shopping center is the amount of disposable income in the primary market areas (A + B). Although the study identifies three important external factors affecting commercial development in the Square -- (1) the rehabilitation and construction of housing in Highland Park, (2) the relocation of the Orange Line, and (3) the construction of Campus High School -- the first factor is the most significant in terms of potential direct and positive impact on the amount of disposable income in the trade areas.

The Harvard Study recognized that while RAP has only indirect influence and control over the relocation of the Orange Line and the construction of the Campus High School, as a community development organization with demonstrated abilities, RAP has direct influence and substantial control over residential rehabilitation and construction in Highland Park. Although the Harvard Study cautioned that an increase in population does not necessarily mean higher per capita incomes and that figures for an increased population based on residential development might reflect a certain number of present residents who would relocate from within Highland Park into better quality housing, there is, in fact, a relationship between the location and character of major residential development and an attendant increase in consumer spending within the community.

The focus of this section of the development implications analysis determines a reasonable impact of sub area residential development programs on the amount of disposable income in Highland Park using the same standards and expenditure patterns described and used in the Harvard Study. The issue is the extent to which an increased population can decrease the amount of dependency on the primary market in terms of percentage of capture of disposable income by the businesses and therefore correspondingly decrease the necessity of penetrating the secondary market in order for commercial establishments in the Square to be viable. Although there are other tangible and intangible factors influencing the individual and collective viability of commercial activity in the Square, certainly the most significant variable is the amount of disposable income in the primary market areas.

The projected amount of disposable income and expenditure patterns for new residents in the primary trade areas (A + B) is shown on page 160 .

The present income in the primary trade areas is \$8,400,000; the present disposable income in this area is \$5,000,000; in order for retail establishments located in the Square to generate sales of \$1,700,000 * they would have to capture 34% of

*Based on average sales for new neighborhood shopping centers of \$99.02/square foot
Source: Dollars and Cents of Shopping Centers, Urban Land Institute

of the present disposable income in the primary trade areas (A + B) or 58% of the disposable income in the primary convenience trade area (A).

The projected economic profile for new residents indicates a total income of \$15,669,724 in the primary trade areas and a disposable income of \$9,395,834 which would increase the present disposable income in the primary trade areas from \$5,000,000 to \$14,395,834. Within the primary convenience market area (A), the total present disposable income of \$2,814,085 would be increased by \$7,319,474 to a new total of \$10,133,559.

The effective result of the increase in disposable income on the necessary percentage of capture of the primary market would be the following: to generate sales of \$1,683,340 would require 12% capture of the disposable income in the trade areas (A + B) and 17% capture of the disposable income in the primary convenience trade area (A).

The present allocation of 17,000 square feet of retail commercial space in John Eliot Square represents 4.0 square feet per person based on a population of 4,300 present residents. The Community Builders Handbook suggests a minimum allocation of 4.9 square feet per person for a neighborhood shopping center servicing 10,000 residents. If RAP were to maintain the present ratio (4.1:1) as more reflective of

the new total population of 8,000 then the potential exists for an additional allocation of 14,800 square feet of retail space in Highland Park. If this additional allocation of retail space were to be made in John Eliot Square -- bringing the total amount of retail space in the Square to 32,000 square feet -- in order to approach the average sales for new neighborhood shopping centers (\$99.02/square feet) would require sales of \$3,168,640. This level of sales would require capturing 34% of the disposable income in the primary trade areas or 43% of the disposable income in the primary convenience trade area. Clearly this level of sales and required capture of disposable income is quite risky and more dependent upon the level of competition in neighboring shopping centers, the nature of the lead tenant and the individual viability of businesses than is the present concept of the Square as a convenience-specialty center; in addition, it suggests that the scope and scale of the commercial activities in the Square would expand beyond RAP's present plans.

The significant point is that based on a reasonable projection of the expenditure patterns for an increased population as described in this study, there would be more than the minimum amount of disposable income in the primary trade areas to support John Eliot Square as a convenience-specialty shopping center.

The combination of the projected disposable income for new residents and the existing disposable income of residents in the primary trade areas represents an opportunity to:

- expand and/or alter the scope, scale or character of commercial activities in John Eliot Square
- maintain the current plans for John Eliot Square and investigate the feasibility of a small neighborhood retail center in section B of the primary trade area (the southern side of Highland Park from Cedar Street to Marcella Street to Washington Street)
- maintain the current plans for John Eliot Square and reduce or defer through staging the amount and/or intensity of the residential development as described in this study

The residential development program generated from the sub area analysis would create a development distribution pattern in which 953 (75%) of the total 1259 units would be located within a 1/4 mile of John Eliot Square -- the primary convenience trade area. Moreover, 248 of these units have been projected for market rent tenants, representing 79% of all projected market rent units in the development program. Although the commercial development of John Eliot Square and the nature of residential development in the John Eliot Square area may be

PROJECTED DISPOSABLE INCOMES AND EXPENDITURE PATTERNS

TOTAL INCOME PROJECTIONS

	<u>Market</u>	<u>Moderate</u>	<u>Low</u>	<u>Total</u>
Section A	\$4,681,800	\$5,068,824	\$2,448,500	\$12,199,124
Section B	<u>1,209,300</u>	<u>1,245,300</u>	<u>1,006,000</u>	<u>3,460,600</u>
Total (A + B)	\$5,891,100	\$6,314,124	\$3,454,500	\$15,659,724

DISPOSABLE INCOME*

Primary Convenience Trade Area (A): \$7,319,474
 (B): 2,076,360
 Primary Trade Areas (A + B): \$9,385,834

EXPENDITURE PATTERNS

<u>Retail Categories</u>	<u>% of Total Income</u>	<u>A</u>	<u>B</u>	<u>A + B</u>
Food	20.0	\$2,439,824	\$692,120	\$3,131,944
Eating & Drinking	5.0	609,956	173,030	782,986
Pharmaceuticals	2.5	304,978	86,515	391,493
Furniture & Appliances	3.0	365,973	103,818	469,791
Auto Sales	7.5	914,934	259,545	1,174,479
Auto Services	3.5	426,969	121,121	548,090
Shoes & Apparel	6.0	731,947	207,636	939,583
Hardware	2.5	304,978	86,515	391,493
General	10.0	1,219,912	346,060	1,565,972
Disposable Income	60.0	\$7,319,471	\$2,076,360	\$9,395,831

*Based on Bureau of Labor Statistics Data

complementary and to some extent mutually supportive, the inability to attract and rent/sell the majority of the market units would have an immediate and direct effect on the Square as a commercial center as well as the viability of the development project itself. In addition, although the disposable income represented by the market rent units in the primary convenience trade area is 38% of the total disposable income in that trade area, it is reasonable to assume that a certain percentage of disposable income related to market rent tenants will not be spent in John Eliot Square based on the tendency of residents with higher incomes to be more mobile and therefore less dependent upon convenience stores; however, this is not necessarily true for disposable income spent by market rent tenants in specialty stores.

The economic significance of the middle income (those occupying market rent units) and moderate income residents relative to commercial development in the Square is illustrated by the following point:

- The total income of middle income families in the primary trade area would be \$5,891,100; their disposable income of \$3,534,660 would represent 37% of the total disposable income in the Highland Park community.
- The total income of moderate income families in the primary trade area

area would be \$6,314,124; their disposable income of \$3,788,474 would represent 40% of the total disposable income in the Highland Park community.

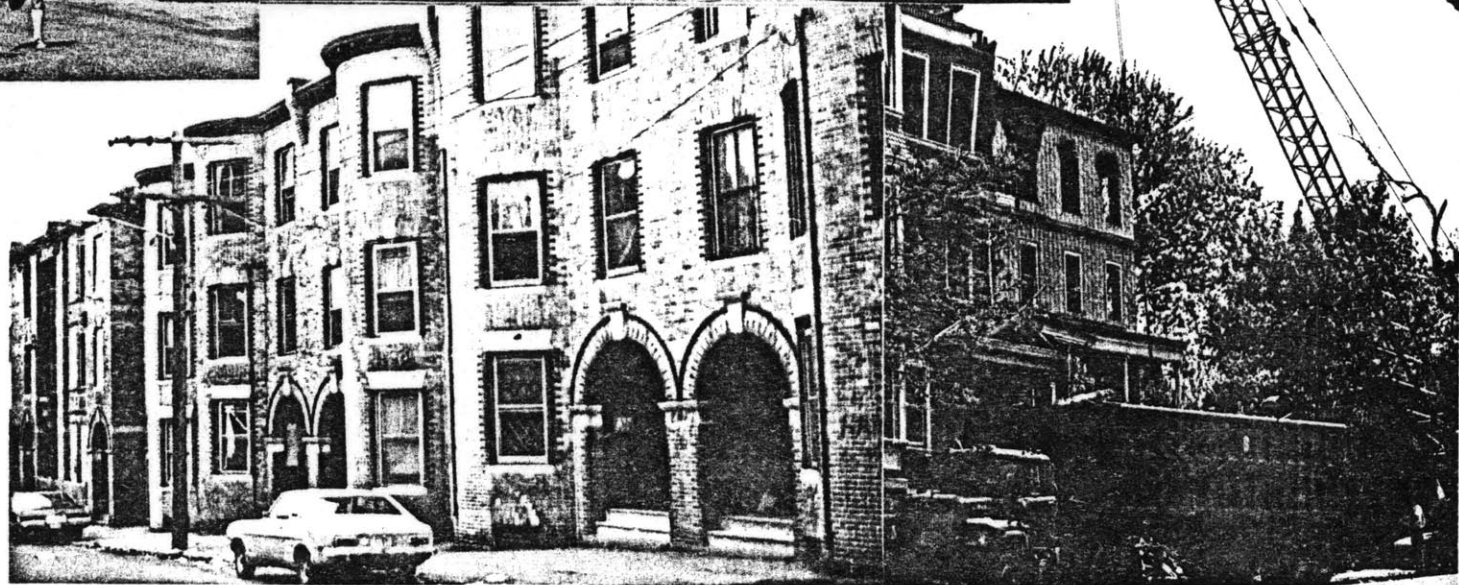
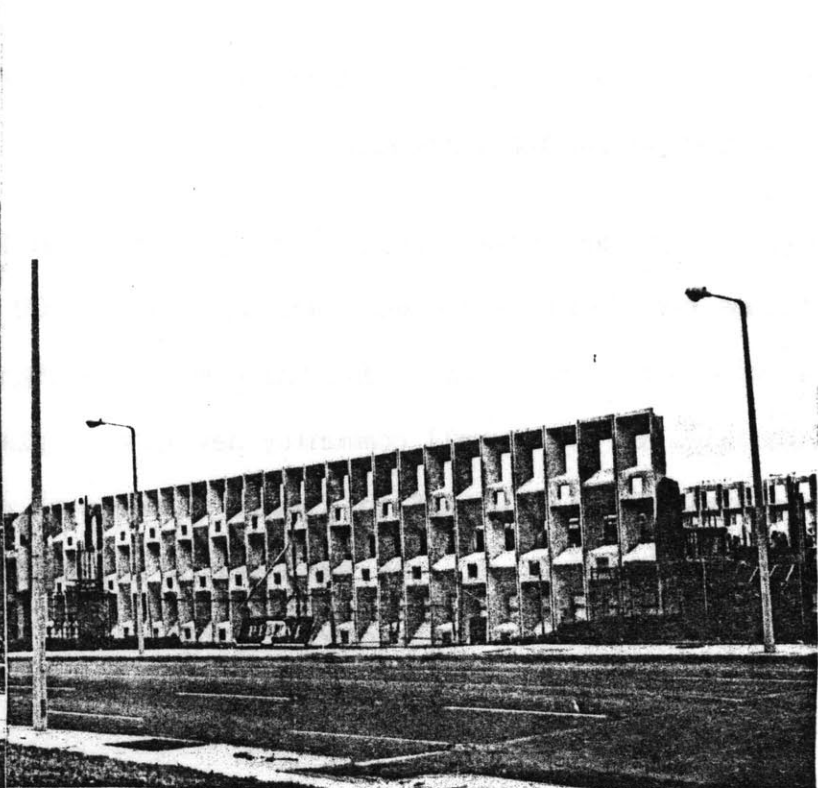
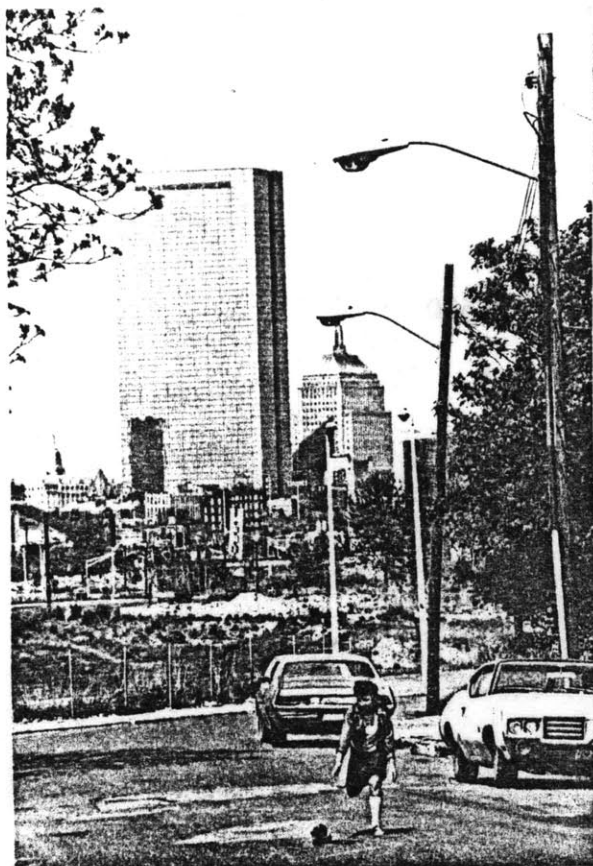
However, as the following points indicate, John Eliot Square can be sustained as a convenience-specialty shopping center based on the projected disposable incomes for moderate and low income families combined with the existing disposable income.

- The total income for moderate and low income families in the primary trade areas would be \$9,768,624; their combined disposable income of \$5,825,417 would represent 63% of the total disposable income in Highland Park.
- The combined projected disposable income for moderate and low income families plus the existing disposable income in the primary trade areas (A + B) would equal \$10,825,417 and \$7,324,479 in the primary convenience trade area (A).
- To achieve sales of \$1,683,340 in John Eliot Square would require capture of 16% of this combined disposable income in the primary trade areas or 23% of this combined disposable income in the primary convenience trade area.

Based on these calculations, it is clear that the significant income group in terms of the economic impact of an increased population on the viability of the Square would be the moderate income families with incomes ranging from \$12,000 to \$14,200;

these families constitute 36% of the units in the development program of this study and 34% of the projected population increase.

In as much as RAP may experience ideological and/or strategic problems in attracting 350 middle income families with incomes ranging from \$17,000 to \$19,500 to Highland Park, it is important to note that while there may be a significant role for middle income families in the overall community development plan for Highland Park, the economic viability of John Eliot Square in terms of residential development is not necessarily dependent upon the existence of any minimum number of middle income residents as described by this economic profile.



NEXT NEXT STEPS

As the initial step in the formulation of an overall development plan for the Highland Park community, this study describes a general residential development program compatible with the environmental characteristics of the area, which, if realized, would increase the present population by 3600 residents and which, combined with the existing and projected population, could support at least the amount of commercial activity proposed in RAP's revitalization plans for John Eliot Square.

Now that RAP knows how many additional residents Highland Park can 'hold' without violating the environmental quality of the community and that based on such an increase, John Eliot Square can become a viable convenience-specialty shopping center, the next step in the formulation of a finite development plan should address the specific issues raised as a result of this study in the context of the existing and probable realities related to inner-city residential development.

Clearly the scope of the residential program outlined in this study must be considered in terms of a waning federal commitment to housing development. The lack of a meaningful housing policy on the national level coupled with fiscal constraints on both a national and state level severely limit the nature and scope of all residential development efforts on the local level.

Whether the Massachusetts Housing Finance Agency (MHFA) has the fiscal capacity to deal with a major portion of such a development program is less relevant than the political reality that MHFA is unlikely to support residential development in one community — Highland Park — on a level which would substantially preclude MHFA financed developments in any other section of Boston. To put this in perspective, from 1970 - 1976 MHFA has provided \$84,947,000 in construction loans for residential development in Boston representing 1752 units. Of this amount, \$48,420,000 has provided 991 units in Roxbury; this represents an average annual commitment of \$14,158,000 for units in Boston and \$807,000 for units in Roxbury. In order to develop 625 units in Highland Park during the next five years — one half of the projected development plan not including RAP IIA — MHFA would have to commit a minimum of \$14,912,500 to Highland Park or \$300,000 a year representing 40% of Boston past average annual MHFA commitment for residential development. Such speculation does not take into account that MHFA has been operating on a marginal basis for the past eighteen months nor do the figures make allowances for the impact of inflation.

Recognizing the political and financial limitations of MHFA to support a broad development plan in Highland Park and the virtual non-existence of federal housing programs and related appropriations, it is even more critical to determine where, within the community, residential development could create the greatest physical, economic and

community impact in terms of immediate community development objectives as well as longer range economic goals such as the revitalization of John Eliot Square.

Given the actual and symbolic significance of developing John Eliot Square, whatever residential development is initiated within Highland Park should occur in such a way as to positively impact the present and future viability of the Square as a convenience-specialty shopping area.

Although there are sites within John Eliot Square itself for residential development, the Square is not physically nor conceptually a residential neighborhood; nor can commercial development with the Square exist based primarily on the residential capacity of the Square. Given the existing and projected character of the Square, compatible — e.g. middle income tenants, craftspeople, condominium owners — residential development which has been planned may require the design and implementation of an extensive marketing strategy.

The primary convenience trade area (A) is the most logical place to initiate a residential development program within Highland Park. By building up the primary trade area through housing development, RAP could create a broader economic base to support the initial phases of commercial revitalization in John Eliot Square. Within this area, the Kittredge Square sub area is the most feasible focus for such development. Not only is Kittredge Square physically close to John Eliot Square

(within a 5 minute walk), but its size and physical definition are manageable and visually cohesive. In addition, Kittredge Square is potentially the densest residential area in Highland Park based on building type and location; Kittredge Square also represents a critical mass: 89 new units and 310 projected residents (based on the residential program in this study) with an estimated \$515,000 in disposable income.

Since the commercial revitalization of John Eliot Square is a priority objective all potential residential development activities must be evaluated in terms of projected economic impact on the Square. This would suggest that RAP must identify the most expeditious and effective methods of implementing at least the amount of residential development necessary to bridge the gap between present disposable income in the community and the minimum disposable income necessary to make John Eliot Square economically viable.

For example, the location of Roxbury Community College within Highland Park should be evaluated not only in terms of the possible market for housing units in those sub areas adjacent to the College, but also in terms of the probable impact of the College on the nature of commercial activities in John Eliot Square. Perhaps consideration should be given to locating several administrative components of the

College in John Eliot Square which could reinforce commercial development and act as a magnet to draw students into the Square itself.

(Note: The expenditure patterns and figures for disposable income in this study and the Harvard Study do not include projections for Roxbury Community College students, faculty nor staff.)

In addition to the College and the prioritization of residential development sites in the community, the relationship and effect of commercial development activities in the Southwest Corridor must be evaluated in terms of future plans for John Eliot Square. Specifically, the present plans to allocate 50,000 square feet of office space on Parcel 18 in the Corridor as well as specialty shops may dramatically affect the market for commercial activity in John Eliot Square.

In order to deal with the priorities of a development program, a market study should be conducted to determine the specific feasibility and appropriate methodology for residential development in Highland Park. Such a study should address, in addition to issues already mentioned, the actual rate of abandonment (loss of units) versus the impact of new construction and the actual amount of residential development necessary to maintain and/or increase the population in the community within a given time frame. In addition, the market study should determine effective strategies for attracting middle and moderate income residents to Highland Park who

would buy and rehabilitate existing vacant structures and the financial incentives and mechanisms which are available to facilitate such a strategy.

However, prior to a market study, there are some issues related to community development policy and strategy in Highland Park which RAP should clarify. Just as the timing and location of residential development is critical to the future of John Eliot Square, equally significant is the focus of that development. That is, when RAP determines the desired socio-economic profile for Highland Park and if RAP determines and clarifies the role of middle income residents in 'a model Black community,' then it is important that the initial focus of residential development activity does not preclude attracting any specific income group. For example, if 100 public housing units were to be developed first and located in one sub area this conceivably may connote a negative image and have a subsequent impact on the desirability of that sub area for other middle or upper income groups; moreover, it may increase the efforts necessary to maintain adequate city services and continued public capital investments.

RAP should also be prepared to effectively deal with the negative impacts of the housing market on existing residents. Although the residential program described in this study requires no substantial relocation or displacement of present residents since the majority of the buildings identified for rehabilitation are vacant, there

is the reality that many residents may not be able to afford the rent in rehabilitated units without deep federal and state subsidies. In addition, there is the Georgetown/Capitol Hill/South End syndrome which displaces both tenants and owners who may not be able to equal and/or resist the economic pressures of new middle and upper-middle income residents. This syndrome can also be reinforced when students move as a group into housing units and pay more rent than families could afford. Issues such as these are an important aspect of an overall community development plan which addresses not only the scope of residential development but also the type, location and rate of growth.

The residential analysis in this study has identified several areas for potential scattered site or 'infill' units. In the past, 'infill' programs have had the most impact and success where the neighborhood in general and the adjacent structures in particular were physically sound. That is, 'infill' rarely creates stability although it can be moderately successful as a program in supporting an essentially stable environment. Too often 'infill' units are painstakingly designed to fit a house lot between two marginal structures which are either abandoned or demolished before or shortly after the 'infill' unit is completed. Therefore, with the exception of those sub areas which are physically and environmentally sound, 'infill' should be considered as a secondary or tertiary phase of the residential development program.

The next steps as generally defined and described in this section are some elements of a broader issue of the type and scale of residential and commercial development which will create and sustain the image of Highland Park which RAP wants to project.

APPENDIX

LAND USE DISTRIBUTION

LAND USE	PERCENTAGE OF GROSS ACREAGE							
	HIGHLAND PARK (1974)	BOSTON (1960)	BARTHOLOMEW SURVEYS OF 53 AMERICAN CITIES (1950's)	40 U.S. CITIES SURVEYED BY CLAWSON (c. 1966)	BOSTON INNER SUBURBS: LEXINGTON, WALTHAM, DEDHAM, ETC.	BOSTON GENERAL PLAN 1965 - 1975	RESTON, VA.	COLUMBIA, MD.
RESIDENTIAL	37	46.5	39.6	32.7	60.9	48	60	52.5
COMMERCIAL	3	4.4	3.3	4.4	3.3	5.6	3 ¹	combined with industry
PUBLIC & SEMI PUBLIC SPACE	13.4	6.3	10.9	10.5	15	9.1	note (2)	note (2)
OPEN SPACE	6.1	15.4	6.7	5.3	16.7	18.8	23.6	26.2
INDUSTRIAL	1.6	12.4	11.3	7.8	4.1	13.5	13.2	21.3
VACANT (unimproved)	27	10.2	-	12.5	-	0	-	-
STREETS	12	(18.5) ⁴	28.2	18.3	-	(18.5)	-	-
OTHER	-	4.8 ³	-	-	-	4.8	-	-

1. Research facilities and offices are combined with industrial.

2. This category combines parks and public uses.

3. Airport

4. Streets have been prorated across all land uses but they represent 18.5% of gross.

Source: Neighborhood Preservation Study

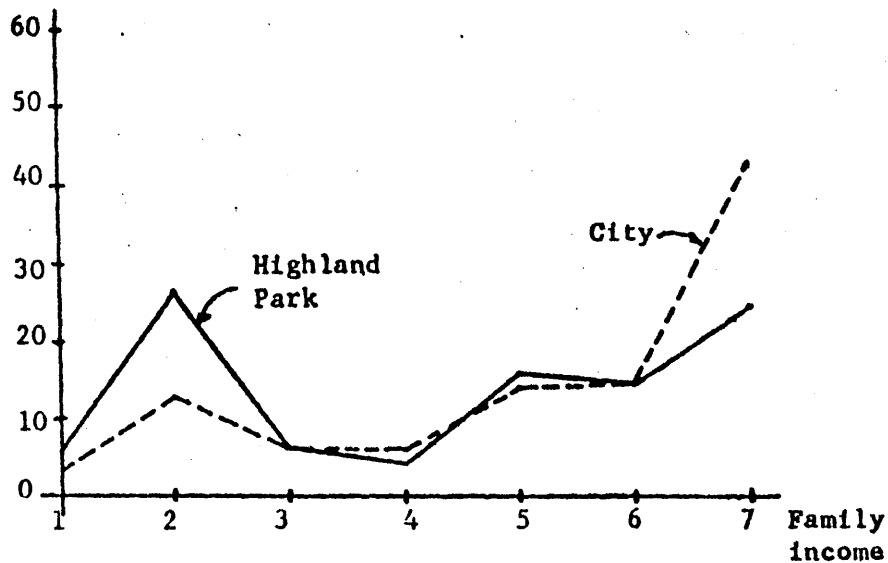
LAND USE AND POPULATION

	HIGHLAND PARK	CITY OF BOSTON (1960)	NATIONAL LAND USE SURVEYS- BARTHOLOMEW (c. 1952)	NATIONAL LAND USE SURVEYS - CLAWSON (c. 1965)
LAND USE	ACRES/1000 PERSONS			
RESIDENTIAL	15.7	21.0	27.3	37.4
PUBLIC & SEMI-PUBLIC	5.7	2.8	7.5	8.9
PARKS & PLAYGROUNDS	2.6	7.0	4.6	4.6
COMMERCIAL	1.3	2.0	2.3	4.6
INDUSTRIAL	0.7	5.6	7.8	8.0

The Highland Park population figure is derived from 1970 census data.

Source: Neighborhood Preservation Study

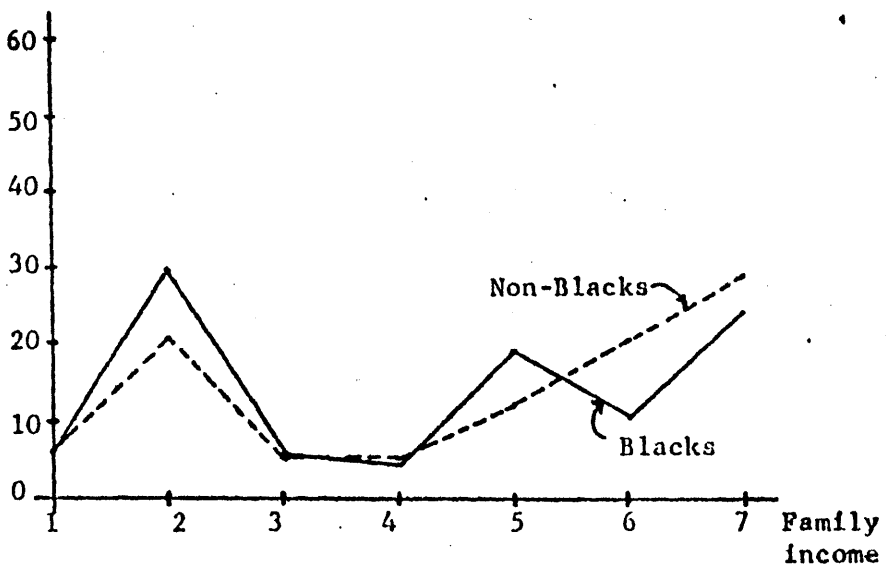
Percentage of Families



HIGHLAND PARK-CITY

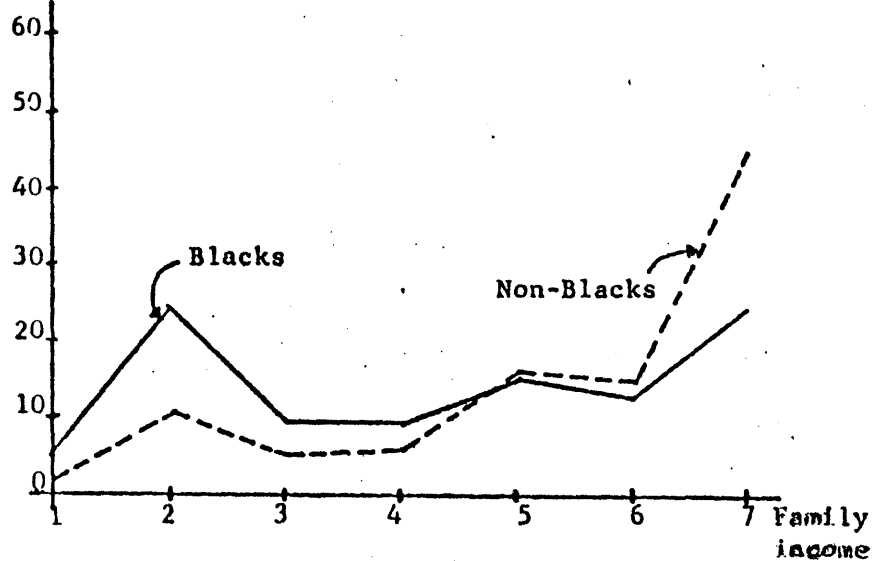
1. Less than \$1,000
2. \$1,999 to \$3,999
3. \$4,000 to \$4,999
4. \$5,000 to \$5,999
5. \$6,000 to \$7,999
6. \$8,000 to \$9,999
7. \$10,000 or more

Percentage of families



HIGHLAND PARK

Percentage Of Families



CITY-WIDE

LAND USE SUMMARY

CATEGORY	ACRES	SQUARE FEET	PERCENTAGE
Residential	68	2,960,595	42
Commercial	5.43	236,861	3
Public	19.8	863,237	12
Neighborhood Service	4.73	206,294	2
Unimproved or Vacant	49.19	2,143,085	31
Public Open Space	2.85	124,287	3
TOTAL ACRES	161		
TOTAL SQUARE FOOTAGE	7,025,929		

Source: Neighborhood Preservation Study

Comparative Demographic Characteristics

APPENDIX D

	HIGHLAND PARK	ROXBURY	CITY OF BOSTON
<u>Population</u>			
Total Population	4,433	38,490	641,071
<u>Racial Composition</u>			
Black %	64	84	16
Non-Black %	24	10	80
Puerto Rican %	3	2	1
Spanish Speaking %	9	4	3
<u>Age Composition</u>			
Persons under age 18 years %	34	36	28
Persons age 62 and over %	13	13	16
Dependency Ratio	87/100	96/100	80/100
<u>Household and Family Composition</u>			
Number of households	1,461	12,544	217,622
One person households %	29	27	29
Number of unrelated individuals	309	4,806	127,201
Number of families	873	8,838	142,019
Husband-wife families %	67	56	72
With female family head %	33	38	22
Average household size	3.3	3.1	2.9
Average family size	4.2	3.9	3.6
<u>Education</u>			
With 8 years education or less %	29	32	26
College, 4 years or more %	9	4	10
Median school years completed	11.5	10.9	12.1
<u>Social Welfare</u>			
Families with Public Assistance income %	19	30	14
Families with Social Security income %	14	16	23

Source:

Jim Hall and Emanuel Kelly, "A Study of Community Development: The Revitalization of John Eliot Square," p. 8.

Comparative Employment Characteristics

APPENDIX E

	HIGHLAND PARK			CITY OF BOSTON		
	Black (%)	Non- Black (%)	Total (%)	Black (%)	Non- Black (%)	Total (%)
<u>Labor Force Composition</u>						
Total labor force	61	39		13	87	
Male	51	52	51	54	54	54
Female	49	48	49	46	46	46
Married women in labor force, husband present	13	13	13	18	14	15
<u>Unemployment</u>						
Total labor force	6	6	6	7	4	4
Labor force, male	8	3	6	12	4	5
Labor force, female	4	11	6	6	3	4
<u>Nature of Employment, Male and Female</u>						
Professional, technical, etc.	9	25	15	10	18	17
Managers and Administrators	6	3	5	3	6	6
Sales Workers	1	2	2	3	6	6
Clerical and kindred workers	20	18	19	22	27	27
Craftsmen, foremen, etc.	8	14	10	10	10	10
Operatives	18	14	16	18	9	10
Transport operatives	8	-	5	4	3	3
Laborers, blue-collar workers	8	4	7	5	4	4
Farm workers	1	-	1	-	-	-
Service workers	16	20	17	21	15	16
Household workers	5	-	3	4	2	1

Source:

Jim Hall and Emanuel Kelly, "A Study of Community Development: The Revitalization of John Eliot Square," p. 9.

Comparative Income Characteristics

APPENDIX F

	HIGHLAND PARK			CITY OF BOSTON		
	Black (%)	Non- Black (%)	Total (%)	Black (%)	Non- Black (%)	Total (%)
<u>Family Income</u>						
Less than \$1,000	7	7	7	5	2	3
\$1,000 to \$3,999	30	21	27	24	11	13
\$4,000 to \$4,999	6	5	6	9	5	6
\$5,000 to \$5,999	4	5	4	9	6	6
\$6,000 to \$7,999	18	12	16	15	16	14
\$8,000 to \$9,999	11	21	15	13	15	15
\$10,000 or more	24	29	25	25	45	43
<u>Families With Income Below Poverty Level</u>						
Percent of all fami- lies	24	24	24	25	9	12
With female family head	52	47	51	73	47	57
Receiving public assistance	25	53	34	61	37	46
<u>Mean Family Income</u>			\$7,382			\$10,272
<u>Median Family Income</u>	\$6,312		\$6,639	\$6,346		\$ 9,133

Source:

Jim Hall and Emanuel Kelly, "A Study of Community Develop-
ment: The Revitalization of John Eliot Square." p. 10.

RAP Development Projects

APPENDIX G

<u>Name</u>	<u>Purpose</u>	<u>Sq. Ft.; # Units</u>	<u>Financing</u>
RAP UP I (complete)	<ul style="list-style-type: none"> ● provide housing for both low and moderate income groups 	<ul style="list-style-type: none"> ● 33 units of rehabilitated housing on scattered sites 	<ul style="list-style-type: none"> ● initially by MHFA ● subsequently by HUD 236 ● limited partnership, with RAP as general partner and outside investors as limited partners
RAP UP II A (in planning stage)	<ul style="list-style-type: none"> ● provide housing for elderly and families ● provide commercial space to service housing 	<ul style="list-style-type: none"> ● 60 units of elderly housing ● 80 units of family housing ● renovation of the Garvey House ● 10,000 sq. ft. of commercial space 	unknown at present time
RAP UP II B (complete)	<ul style="list-style-type: none"> ● provide housing ● complement RAP UP II A in the revitalization of John Eliot Square 	<ul style="list-style-type: none"> ● 50 units of rehabilitated housing ● rehabilitation of 2 commercial spaces 	<ul style="list-style-type: none"> ● HUD 236 ● limited partnership with RAP as general partner and outside investors as limited partners
RAP UP III (in planning stage)	<ul style="list-style-type: none"> ● provide housing for low and moderate income groups 	<ul style="list-style-type: none"> ● 96 housing units of new construction in 57 buildings ● 2,000 sq. ft. new commercial space ● 2,000 sq. ft. community space 	unknown at present time

RAP Development Projects

<u>Name</u>	<u>Investment</u>	<u>Comments</u>
RAP UP I (complete)	<ul style="list-style-type: none"> ● \$500,000 ● \$60,000 from outside investors as front end money 	<ul style="list-style-type: none"> ● initially intended as home ownership cooperative ● initial tenants, however, have indicated no desire for such status
RAP UP II A (in planning stage)	\$4,000,000 (expected future investment)	although construction was expected to commence during the spring of 1974, construction has not yet begun
RAP UP II B (complete)	<ul style="list-style-type: none"> ● \$1,000,000 ● \$191,000 from outside investors as front end money 	<ul style="list-style-type: none"> ● Roxbury Action Pharmacy, started by RAP, is located in one of the commercial spaces
RAP UP III (in planning stage)	\$3,600,000 (expected future investment)	<ul style="list-style-type: none"> ● in planning stage ● although the project was expected to commence in 1974, construction has not yet begun ● subject of a new planning venture amongst RAP, Model Cities, Community Assistance Corporation of MIT, and the BRA ● \$200,000 grant from Model Cities to provide for planning and land acquisition costs ● \$92,000 from MIT for pre-planning

MHFA PROJECTS
REHABILITATION

PROJECT NAME LOCATION COMPLETION DATE* NUMBER OF UNITS	UNIT DISTRIBUTION					RENT SCHEDULE					AVERAGE INCOME	
	0 BD	1 BD	2 BD	3 BD	4+ BD	0 BD	1 BD	2 BD	3 BD	4+ BD	MARKET	MODERATE
Prang Building Gardner Street Roxbury 1976 49 Units						MARKET.....	20,892	12,720
		24	17	7	1							
		49%	35%	15%	1%	.....	.....	MODERATE.....	.....	.....
							205	235	295	325		
TDC I & II South End Boston scattered site 1975 - 76 * 284 Units	41	102	98	23	8	MARKET.....	15,888	11,673
						223	259	307	408	458		
	14%	36%	35%	8%	7%	.....	.....	MODERATE.....	.....	.....
						146	170	203	281	416		
Piano Craft Bldg. South End Boston 1974 174 Units						MARKET.....	16,608	9,632
							342	350				
		67%	30%	3%		.....	.....	MODERATE.....	.....	.....
							180	198	224			
New Castle/ Saranac South End Boston 1974 97 Units						MARKET.....	12,240	9,420
						187	231	282	320			
	8%	30%	56%	6%		.....	.....	MODERATE.....	.....	.....
						138	172	209	266			

MHFA
NEW CONSTRUCTION MEDIUM RISE

PROJECT NAME LOCATION COMPLETION DATE* NUMBER OF UNITS	UNIT DISTRIBUTION					RENT SCHEDULE					AVERAGE INCOME	
	0 BD	1 BD	2 BD	3 BD	4+ BD	0 BD	1 BD	2 BD	3 BD	4+ BD	MARKET	MODERATE
Church Park Boston 1973 508 Units						MARKET.....	19,320	8,520
	22	416	70				327	478				
	4%	82%	14%			.....	.....	MODERATE.....	.....	.....
						165	190					
Concord Homes South End Boston 1976 94 Units						MARKET.....	20,376	19,30
		64	20	8	2		399	450				
		68%	21%	9%	2%	.....	.....	MODERATE.....	.....	.....
							235	295	515	565		
						MARKET.....		
						.....	.....	MODERATE.....	.....	.....
						MARKET.....		
						.....	.....	MODERATE.....	.....	.....

FEDERAL GOVERNMENT SECTION 8
MAXIMUM INCOME FOR LOW INCOME SUBSIDIDY ELIGIBILITY

	<u>MODERATE</u>	<u>LOW</u>
1 Person	\$7750	\$5000
2 Persons	9400	5400
3 "	11050	5700
4 "	"	6000
5 "	12750	6300
6 "	"	6600
7 "	14400	6900
8 "	"	7100
9 "	—	7300
10 "	—	7400

HARVARD STUDY
EXECUTIVE SUMMARY

APPENDIX I

The demographic characteristics of Highland Park indicate that the community is ripe for rehabilitation and revitalization. Social indicators of neighborhood stability, such as household and family composition, level of education attained, and social welfare and unemployment, more nearly approximate those found in Boston than Roxbury. Highland Park is composed of a much more highly educated and racially diverse population than other predominately black neighborhoods.

The Roxbury Action Program has between 73,000 and 76,000 square feet of space available for development in John Eliot Square. Almost 17,000 square feet have been tentatively set aside for retail commercial leaving 56,000 square feet for professional and social service offices.

Preliminary plans were focused primarily on the development of convenience shopping facilities, with a convenience food store as the prime tenant. But this convenience shopping concept has been merged with the idea of creating a unique image for John Eliot Square through introduction of a specialty shopping component, to include a restaurant as keystone.

The six most critical areas of risk identified as a result of analyzing the feasibility of the convenience and specialty concept are summarized below.

(1) Approximately 80% of the income from development of John Eliot Square will come from rental of office space. The market for these spaces has not been adequately evaluated, nor have potential tenants been identified. Failure to rent up the 56,000 square feet available for such use assures the financial failure of the project.

(2) The disposable income in the primary convenience market area, (within 1/2 mile radius of John Eliot Square), is only \$8,400,000. Approximately 20% of this income would have to be spent in John Eliot Square if the 17,000 square feet of commercial space are going to generate sales approaching the average for new neighborhood shopping centers. If the secondary market area (with \$117,000,000 of disposable income) can be penetrated, only 1.4% of the total disposable income would have to be captured to generate this level of sales. Furthermore the 2,400 square feet convenience food store proposed as a lead tenant is not viable if dependant solely on the primary market area.

(3) Success of the specialty store component of the Eliot Square development depends on three factors that cannot be quantified in a preliminary market study: securing a lead tenant whose image provides the focal point for penetrating the secondary market and attracting other solid tenants; achieving sufficient variety, quality and number of stores to create an image; and using sophisticated advertising and marketing techniques to solidify this image and penetrate the secondary market.

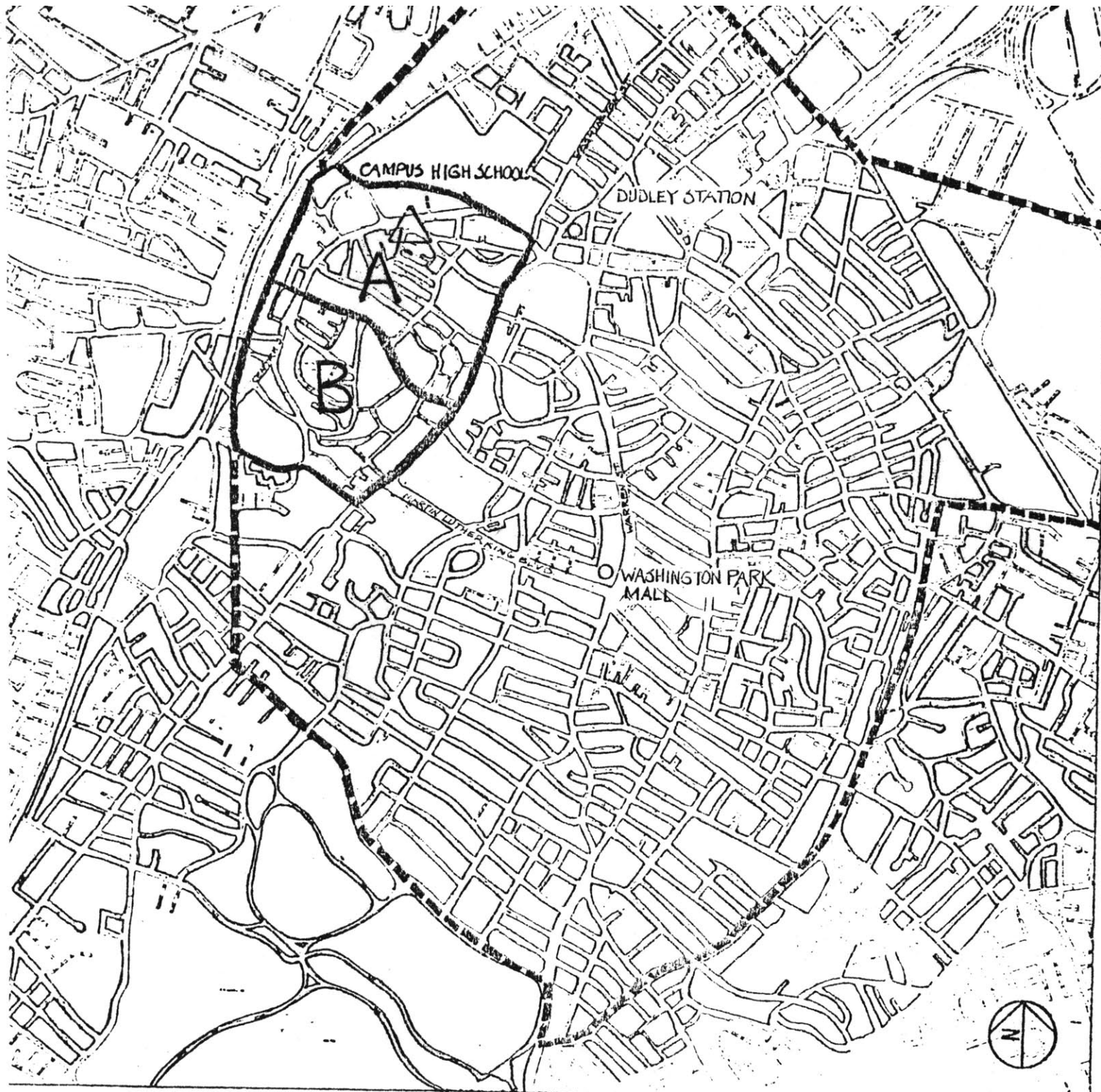
(4) Since John Eliot Square is not a primary public transportation node, access will be primarily by auto. Therefore the amount, convenience and security of parking is a critical element.

(5) Related to the above areas of risk is the question of phasing the development. For example, convenience stores will provide a needed service to the residents of Highland Park. Introducing convenience first, however, delays the process of creating a unique image for the Square, reducing its ability to penetrate the secondary market.

(6) Finally, the complexity of this undertaking and the necessity for a strategy relating leasing, financing, construction, development sequence, tenant selection and service, and marketing technique

requires a sophisticated business development staff which RAP is not yet organized to provide.

While the risks outlined above are substantial, Eliot Square has a uniquely attractive physical location in which such a development is appropriate. Boston lacks a quality black shopping district and Highland Park needs convenient neighborhood stores. Therefore the question is not whether to develop the square, but whether the risks are low enough to warrant RAP's committing their scarce equity capital in the immediate future. Until a business developer has aggressively pursued marketing the office space and identified potential entrepreneurs, a definitive answer is not possible, but our market analysis would indicate development is premature.



KEY

- primary area boundary
- secondary area boundary
- john eliot square

APPENDIX J

ELIOT SQUARE TRADE AREA



PATTERNS OF CONSUMER EXPENDITURES

	<u>For Urban Families⁵</u>	
	<u>U.S. 1960-61</u>	<u>Chicago 1960-61</u>
Total Consumption Expenditure	80.56% ²	80.67% ²
Food, Beverages, Tobacco	22.36	22.52
Food for Home Consumption	(27.76) ³	(27.92)
Purchased Meals, Beverages		
Food (excluding alcoholic beverages)		
Alcoholic Beverages		
Tobacco		
Clothing, Accessories, Jewelry	8.34	8.40
Women's, Children's Clothing	(10.35)	(10.40)
Men's, Boy's Clothing		
Jewelry, Watches		
Shoes, Other Footwear		
Clothing Services		
Housing	23.73	23.89
Household Operations & Furnishings	(29.45)	(29.61)
Personal Care	2.32	2.32
Toilet Articles	(2.90)	(4.04)
Personal Care Services		
Recreation	3.24	3.26
Radio, TV	(4.02)	(4.04)
Toys, Sporting Goods		
Books, Magazines, Newspapers		
Paid Admissions		
Medical Care	5.31	5.13
Drugs, Supplies, Equipment	(6.60)	(6.36)
Medical Care Services		

For Urban Families

	<u>U.S. 1960-61</u>	<u>Chicago 1960-61</u>
Personal Business	--	--
Transportation	11.85 (14.70)	11.86 (14.70)
Private Education, Research	--	--
Religious, Welfare Activity	--	--
Foreign Travel, Other	1.78 (2.21)	1.49 (1.85)

1. Percentage figures for total U.S. are based on Total Consumption Expenditures as 100%
2. Percentage figures for urban families are based on Total Incomes as 100%. Therefore total Consumption expenditures are only 80%, since taxes and savings are omitted.
3. Figures in parentheses adjust the percentages so they are comparable to those for the total U.S.
4. Source: Department of Commerce
5. Source: Bureau of Labor Statistics

SOURCE: The Harvard Study of John Eliot Square

PATTERNS OF CONSUMER EXPENDITURES

APPENDIX L

	<u>For Total U.S. Population</u> ⁴		
	<u>1973</u>	<u>1970</u>	<u>1960</u>
Total Consumption Expenditures	100% ¹	100	100
Food, Beverages, Tobacco	22.2	22.8	26.9
Food for Home Consumption	15.5		
Purchased meals, Beverages	4.6		
Food (excluding alcoholic beverages)	17.8		
Alcoholic Beverages	2.7		
Tobacco	1.7		
Clothing, Accessories, Jewelry	10.1	10.2	10.1
Women's, Childrens Clothing	4.8		
Men's, Boys' Clothing	2.6		
Jewelry, Watches	0.6		
Shoes, Other Footwear	1.3		
Clothing Services	0.3		
Housing	14.5	14.1	14.2
Household Operations & Furnishings	<u>14.6</u>	<u>14.1</u>	<u>14.4</u>
	29.1	28.2	28.6
Personal Care	1.5	1.7	1.6
Toilet Articles	1.0		
Personal Care Services	.6		
Recreation	6.5	6.6	5.6
Radio, TV	1.6		
Toys, Sporting Goods	1.8		
Books, Magazines, Newspapers	1.1		
Paid Admissions	0.4		
Medical Care	7.8	7.7	5.9
Drugs, Supplies, Equipment	1.3		
Medical Care Services	6.5		

For Total U.S. Population⁴

	<u>1973</u>	<u>1970</u>	<u>1960</u>
Personal Business	3.6	5.7	4.6
Transportation	13.6	12.6	13.2
Private Education, Research	1.6	1.7	1.1
Religious, Welfare Activity	1.3	1.4	1.4
Foreign Travel, Other	0.7	0.8	0.7

1. Percentage figures for total U.S. are based on Total Consumption Expenditures as 100%
2. Percentage figures for urban families are based on Total Income as 100%. Therefore total Consumption expenditures are only 80%, since taxes and savings are omitted.
3. Figures in parentheses adjust the percentages so they are comparable to those for the total U.S.
4. Source: Department of Commerce
5. Source: Bureau of Labor Statistics

SOURCE: The Harvard Study of John Eliot Square

Expenditure Patterns in John Eliot Square Trade Areas

Retail Category	Percentage of Total Income	Disposable Income			
		Convenience A	Convenience B	Convenience A + B	Secondary or Specialty
Food	20.0	\$ 938,028	\$ 670,722	\$1,608,750	\$25,164,000
Eating & Drinking	5.0	\$ 234,508	\$ 167,680	\$ 402,188	\$ 6,291,000
Pharmaceuticals	2.5	\$ 117,254	\$ 83,840	\$ 201,094	\$ 3,145,500
Furniture & Appliances	3.0	\$ 140,705	\$ 100,608	\$ 241,313	\$ 3,774,600
Automobile Sales	7.5	\$ 351,761	\$ 251,520	\$ 603,281	\$ 9,436,500
Automobile Services	3.5	\$ 164,155	\$ 117,376	\$ 281,531	\$ 4,403,700
Shoes & Apparel	6.0	\$ 281,409	\$ 201,216	\$ 482,625	\$ 8,807,400
Hardware & Building Materials	2.5	\$ 117,254	\$ 83,840	\$ 201,094	\$ 3,145,500
General Merchandise	<u>10.0</u>	<u>\$ 449,014</u>	<u>\$ 335,361</u>	<u>\$ 804,375</u>	<u>\$12,582,000</u>
Disposable Income	60.0	\$2,814,085	\$2,012,166	\$4,826,251	\$75,537,600

SOURCE: The Harvard Study of John Eliot Square

Demographic and Income Characteristics of the Convenience and Specialty Trade Areas

<u>Trade Area</u>	<u>Popu- lation</u>	<u>Number of Fami- lies</u>	<u>Mean Income: Fami- lies</u>	<u>Total Income: Families</u>	<u>Number of Indi- viduals</u>	<u>Mean Income: Indi- viduals</u>	<u>Total Income: Indi- viduals</u>	<u>Total Income: Families & Individuals</u>
Convenience "A"								
1970	2,076	497	\$7,129	\$3,543,133	208	\$3,441	\$ 715,728	\$ 4,258,861
+ 5% inflation for income			\$7,485	\$3,720,268		\$3,613	\$ 751,514	\$ 4,471,782
RAP-UP II	180	47	\$7,485	\$ 341,795	22	\$3,613	\$ 79,486	\$ 431,281
Convenience "B"								
1970	1,678	377	\$7,410	\$2,793,570	156	\$3,590	\$ 560,040	\$ 3,353,610
+ 5% inflation for income			\$7,780	\$2,933,248		\$3,769	\$ 588,042	\$ 3,521,290
Total Convenience (1970)	3,934	921	\$7,251	\$6,678,498	386	\$3,511	\$1,355,254	\$ 8,043,752
Specialty	89,969	18,875						\$125,820,000

SOURCE: The Harvard Study of John Eliot Square

COMMERCIAL RETAIL CENTERS CRITERIA

Appendix M

CLASSIFICATION		POPULATION SERVED	RETAIL FLOOR AREA (SQ. FT.)	CUSTOMER PARKING AREA (2:1 RATIO)	CIRCULATION, SERVICE & PLANTING (25%)	TOTAL SQ. FT. REQUIRED	TOTAL ACREAGE	RETAIL SQ. FT. / PERSON	NO. OF STORES & SHOPS	AVERAGE SERVICE RADIUS	PRINCIPAL TENANT(S)
QUICK-STOP CONVENIENCE CENTER	MINIMUM	2,500	16,000#	32,000	12,000	60,000#	1.4 ACRES	6.4	5	1/4 MILE	FOOD MARKET & DRUG STORE
	MAXIMUM	5,000	28,000#	57,600	21,000	108,000#	2.5 ACRES	5.6	10	1/2 MILE	
NEIGHBORHOOD CENTER	MINIMUM	10,000	46,700#	93,300	35,000	175,000#	4.0 ACRES	4.9	10	1 MILE	SUPER MARKET & DRUG STORE
	MAXIMUM	35,000	93,300#	186,700	70,000	350,000#	8.0 ACRES	2.6	20	2 MILES	
COMMUNITY CENTER	MINIMUM	40,000	100,000#	200,000	75,000	375,000#	8.6 ACRES	2.5	20	2 MILES	JR. DEPT. STORE
	MAXIMUM	100,000	200,000#	400,000	150,000	750,000#	17.2 ACRES	2.0	40	4 MILES	
REGIONAL CENTER	MINIMUM	100,000	200,000#	400,000	150,000	750,000#	17.2 ACRES	2.0	40	4 MILES	2 DEPARTMENT STORES
	MAXIMUM	250,000	500,000#	1,000,000	375,000	1,875,000#	43.0 ACRES	2.0	80	10 MILES	

SOURCE: Community Builder's Handbook

1. Optional Citation
The Highlands Study, Boston Architectural Center
2. Optional Citation
Streetcar Suburbs, Sam Warner
3. pg.16,
Neighborhood Preservation Study, Emmanuel Kelly
4. Minutes of RAP Planning Charrette
quote: Don Stull

FOOTNOTES

BIBLIOGRAPHY

Planning the Neighborhood, American Public Health Association; Chicago, 1960

Urban Planning and Design Criteria, Joseph DeChiara and Lee Koppelman; New York, 1975

The Highlands Study, Boston Architectural Center; Boston, 1971

A Study of Community Development: The Revitalization of John Eliot Square,
Jim Hall and Emmanuel Kelly; Boston, 1974

A Commercial Feasibility Study of John Eliot Square, Harvard Graduate School of Design;
Cambridge, 1975

Highland Park Neighborhood Preservation Study, Roxbury Action Program and Stull Associates;
Boston, 1974

"A Rose Patch in an Onion Grove," and article in The Boston Globe, Jane Holtz Kay;
December 16, 1974

Closed Project Summary, Massachusetts Housing Finance Agency; Boston, 1976

"External Impacts of Housing Developments," and article in the Urban Land Institute Journal,
Daryl Hellman; October 1974

"The Numbers Game: Forecasting Household Size," an article in the Urban Land Institute
Journal, George Sternlieb and Robert W. Burchell; October 1974

Community Builders Handbook