DEINSTITUTIONALIZATION OF PUBLIC HOUSING:

A PROPOSAL FOR

NEW TOWNE COURT/WASHINGTON ELMS IN CAMBRIDGE

ΒY

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DEINSTITUTIONALIZATION OF PUBLIC HOUSING:

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by

Ben Joseph Friedman

Submitted to the Department of Architecture and the Department of Urban Studies and Planning of the Massachusetts Institute of Technology in June, 1980 for the Degrees of Master of City Planning and Master of Architecture in Advanced Studies.

ABSTRACT

A demonstration project is proposed for "deinstitutionalization" of low-income residents at two public housing projects in Cambridge. The primary mechanism for this is creation of a local Rent Subsidy Fund by leveraging land and/ or buildings at the projects with existing State and federal programs. In three proposed options, greater numbers of lowincome households are served than now reside at both housing projects. Nearly 100 more low-income households are served without a continuing contribution from the U. S. Department of Housing and Urban Development (HUD) than now are served with HUD contributions. Almost 300 more low-income households are served if HUD contributions, at present levels, are carried over to the new Rent Subsidy Fund.

Broad flexibility currently within Cambridge's public housing system is first used for relocation of project residents who now remain. Resources available for low-income families in Cambridge are increased. Effects of low-income concentration and spill-over effects on neighborhood schools and property values are avoided. An underutilized area of the City is revitalized; new commercial development is reinforced; jobs are created; and land is returned to the City's tax base.

Necessary for this process to succeed is the participation of an expanded set of actors. These include: tenants at both housing projects, representatives of low-income families on Cambridge Housing Authority (CHA) waiting lists, neighborhood residents, private developers, CHA program administrators, the Cambridge Community Development Department, the Cambridge City Council, Massachusetts Office of Communities and Development, Massachusetts Housing Finance Agency, Massachusetts Industrial Finance Agency and the U. S. Department of Housing and Urban Development.

Thesis Supervisor: Langley C. Keyes, Jr.

Title: Chairman, M.C.P. Committee Professor of City and Regional Planning To My Parents

Celia and David Friedman

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The thesis was also made possible by support and cooperation of James G. Stockard, Chairman of the Board of the Cambridge Housing Authority and by assistance from the Cambridge Housing Authority staff. These included: Daniel Wuenschel, Executive Director; Elspeth Taylor, Director of Fiscal Affairs; George Hughes, Director of Tenant Selection; Frederic Putnam, Director of Planning and Development and Mathew Thall, Assistant to the Director of Planning and Development. David Vickery, Assistant City Manager for Cambridge Community Development; Roger Boothe, Head of Urban Design; Donald Balcomb, Cambridge Zoning Administrator; and Betty Derosier, Associate Planner -- all of the Cambridge Community Development Department -- were extremely helpful. Joseph Tulimeri, Deputy Executive Director of the Cambridge Redevelopment Authority, and Kenneth English, Site Development Officer, further added their assistance. Rudolph Russo, Chairman of the Cambridge Board of Assessors, also contributed his help. Mark Waltch, developer (Mark Waltch Associates), and Carl Sapers, professor and attorney, were especially helpful in my formulation of the development proposal itself.

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INTRODUCTION

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The thesis begins with economic "boom" in the region focused on Massachusetts and the Greater Boston metropolitan area. Expansion is attributable both to a burgeoning hightechnology sector and to continued transformation of Boston into a service capital of New England. Proximity to M.I.T. and pressure on office space in downtown Boston foster emergence of an East Cambridge office market at Kendall Square. An upturn in population and change in demography create other pressures on Cambridge housing stock.

Main Street in Cambridge is seen as a major link between the regional resource of M.I.T. and the financial and cultural resources of downtown Boston. Historically the commercial center of Cambridgeport, Main Street suffered a major decline in the mid-1800's after introduction of the Boston and Albany railroad. Today, presence of M.I.T. has spurred the revitalization of Main Street into a high-technology/office center. Although frontage on Main Street is owned by relatively few entities, no attempt has been made to coordinate new development or to create a "special sense of place." Instead, both public and private efforts avoid Main Street and its public housing projects of New Towne Court/Washington Elms. Main Street therefore is an underutilized resource.

The issue of concentration of low-income families at New Towne Court/Washington Elms is discussed along with other major issues, including unacceptability of "project-

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type" assistance to a large segment of low-income households, spill-over effects on neighborhood schools and local property values, physical design and maintenance inadequacies, and incongruity with surrounding development. The projects themselves, over forty years old with bonds almost entirely paid off, are now over one-third vacant.

Combination of a large number of vacancies in other Cambridge public housing, new small-scale public housing development and a large number of new federal rent subsidies create flexibility in the system for relocation of families currently remaining at New Towne Court/Washington Elms. Once relocation is completed, both land and buildings of New Towne Court/Washington Elms are leveraged for creation of a local Rent Subsidy Fund.

Three options for the Cambridge Housing Authority are presented in the development proposal, including varying benefits and degrees of risk. While the Cambridge Housing Authority has put other proposals forward, <u>this proposal</u> <u>is the only one which significantly addresses problems of</u> <u>low-income concentration without reducing resources available</u> for low-income assistance.

To realize this proposal, traditional problems of "deinstitutionalization" must be faced along with expansion of the problem-solving arena to include larger numbers of actors and institutional constraints. In any solution, however, major input from the U. S. Department of Housing and Urban Development (H.U.D.) will be required.

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CHAPTER I: ECONOMIC BOOM

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The Regional Economic Outlook

Trained in caution and pessimism by more than four decades of economic decline in which business after business fled the region looking for cheaper labor, lower energy costs and more hospitable governments, New England is allowing itself only the barest whisper of excitement these days over the news that seems writ large in every indicator: boom.

The change is so pervasive that economists here are even predicting what would have been foolishness even a few years ago -- that the muchheralded recession, if and when it comes, will not hurt New England much. The bolder ones are even hinting that the six states northeast of New York may lead the country out of the recession.

If the experience of last year is any gauge, New England's problems in the 1980's will not be the typcial ones of declining industries, decaying cities and a desolated work force. Instead, the outlook is for a severe labor shortage and revitalized cities, as housing and population growth struggle to keep up with a new and snowballing demand for workers in the region's 26 cities.

This startling picture, which emerges from interviews with business leaders and economists and is presented daily in the reports of factory expansions and business growth, appears to be the result of the final cruel bottoming-out of the region's long economic decline, a cleansing shake-out of more than five decades duration that began when the textile mills of Lawrence and Lowell, Mass., and Nashua and Manchester, N. H., moved south in the 1920's. The process having been completed, the logic goes, New England has nowhere to go but up and is heading there with considerable speed.

Traditional industries such as textiles, apparel, paper, lumber and leather goods no longer dominate the region's economy and now represent only 20 percent of the manufacturing output. Today, the heart of the region's booming economy and the bright spot on which all the optimistic predictions center is the high-technology industry, whose companies make computers and microprocessors, test equipment, instantpicture cameras, optical and medical devices, hand-held calculators, electronic games and a host of other products. This sector now employs 200,000 people in the Boston area alone.

The expansion of these companies has been so rapid -- with typical yearly growth of 35 to 50 percent -- that it masks the continuing decline of some other sectors of the economy. For years, New England has ranked eighth among the nation's nine regions in manufacturing growth. Now it ranks second.

And that growth appears unlikely to be affected by the coming recession, according to Dr. James Howell, chief economist and first vice president for the First National Bank of Boston.

'Many of the high technology companies already have orders in hand for 35 and 40 percent more business than they did last year,' Dr. Howell said. 'They are going to come out of this very strong,' he said.

Unemployment, the region's traditional scourge for decades, was 11.2 percent at the depths of the 1975 recession when the nationwide rate was 8.2 percent. But now the rate stands at 4.5 percent, more than a full point lower than the national average.

> "National Economic Survey," <u>New York Times</u>, January 6, 1980.

The Federal Reserve Bank of Boston (January, 1980 Report on Economic Indicators) further notes that nonagricultural employment in New England, during November 1979, reached a record total of 5,403,300 jobs (seasonally adjusted). Over the year a total of 113,700 jobs were added to New England's payrolls since January, 1979. Both manufacturing employment in durable goods (i.e., machinery, instruments, etc.) and non-manufacturing employment (i.e., construction, trade services, government, transportation, public utilities, finance, insurance and real estate), on a percentage basis, exceeded that of the rest of the country as a whole.

Massachusetts and Greater Boston as Major Areas for New Investment

Within the New England region, Massachusetts -- with over half of the region's 12 million people -- and Greater Boston, in particular, are major areas for new investment. Research and academic institutions with strong track records in technological innovation are located in the Commonwealth, MIT alone having spawned over 400 technology-based start-ups. Massachusetts is headquarters to 70 percent of the world's minicomputer companies. Twenty-five of the top 100 emerging high-technology growth companies (followed by Adams, Harkness & Hill, Boston stockbrokers) are located in the State. The Harvard Graduate School of Business Administration, MIT's Sloan School of Management, a large pool of consulting talent, and substantial amounts of venture capital from major insurance companies are additional assets of the area.

In 1978, with the election of Governor King, Massachusetts began a series of tax reductions aimed at improving the climate for business. Taxes on home-based life insurance companies, capital gains taxes, employment security and meals

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taxes all were lowered. Property taxes, in most Massachusetts cities and towns, also were reduced.

High Technology's Promise of New Jobs

In return for a more favorable business climate, the Massachusetts High-Technology Council promised that it could deliver an additional 60,000 primary jobs and 90,000 new secondary jobs by 1983. A recent report by Technical Marketing Associates, Inc. (TMA) for the Massachusetts Executive Office of Economic Affairs (10/79) has substantiated these claims.

The TMA report points to a 98 percent growth rate in high technology in Massachusetts for the twenty-year period 1958-1978. Also during that period, manufacturing employment related to computers grew by 1,484 percent, photography by 392 percent, instruments by 153 percent, missiles by 54 percent, electrical components by 37 percent, and communications equipment by 21 percent. (This is in contrast to a decline of 44 percent in employment related to textiles, apparel and leather manufacturing and a decline of 5 percent in employment for all other types of manufacturing in Massachusetts.)

A disproportionately large share of employment in the U. S. high-technology sector already is located in Massachusetts. Over the next five years, the value of U. S. computer industry shipments alone is expected to grow in real

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terms at an average rate of 14 percent/year. If local companies continue to outperform industry averages, as in the past, local employment growth in high technology could reach 20 percent/year (D & S; U. S. Department of Commerce). TMA, using conservative estimates of 9 percent and 12 percent, (for low and high employment projections, respectively) estimated that between 64,000 and 122,000 new jobs would be created in the high-technology sector. Seventy to 75 percent of those new jobs would be at technical, clerical and production levels. Again using conservative estimates, 96,000 and 183,000 new secondary jobs would be created in Massachusetts (by 1983) as a result of expansion in hightechnology industries.

Critical concerns of industry during this expansion period are: taxes and the shortage of senior engineers, the shortage of junior and entry-level engineers, shortage of technicians, availability of production workers and shortage of factory sites. Development of semiconductor technology also is a long-range concern.

Proximity to MIT, A Major Economic Asset

Of all factors in locational decisions, human resources -- their availability, skills, productivity, education and trainability -- are now most important. Despite recent increases in engineering enrollments, the supply of junior and "entry-level" engineers will be unable to keep pace with demand in the next five years. Thus, MIT and Northeastern

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University are critical assets for Massachusetts-based electronics firms. Proximity to these institutions is of major importance to employees at lower levels seeking advanced degrees. Companies in Massachusetts have approached MIT for development of a closed circuit TV system between factory and classroom -- similar to that used at Stanford University in California. Although MIT has declined that offer, factory and office development near to MIT are still possibilities. Factory sites with good roads for access to air transport are available in Cambridge's Kendall Square. MIT also has decided to build a \$5 million semiconductor research facility on its Cambridge campus.

Transformation of Boston into a Service Capital of New England

In the past twenty years, total employment in the United States has shifted from the goods-producing sector of the economy to service and government sectors. Between 1958 and 1978, employment in service-related industries increased by 136 percent and in State and local governments by 129 percent. During the same period, increases in wholesale and retail trade employment were 79 percent and in manufacturing, 23 percent. Employment in the finance, insurance and real estate sector increased 88 percent; in contract construction 47 percent; and in transportation and public utilities 20 percent (Employment and Earnings, Bureau of Labor Statistics, October 1978). Expansion of these sectors, during the '60's and '70's, has fueled the develop-

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ment, and transformation, of downtown Boston and of the Greater Boston metropolitan area.

The largest percentage of downtown Boston's workers, 29 percent, are employed in finance, insurance and real estate firms. Twenty-seven percent are employed in professional service firms (i.e., engineering, accounting, law, printing). Sixteen percent are employed in transportation, communications and public utility firms. Finance, insurance and real estate firms, business and professional firms -increasing 180 percent between 1966 and 1978 -- have been downtown Boston's fastest growing industries. Surveys of the Boston Redevelopment Authority report that, during the 1980's, leading growth firms in competitive downtown office space will be professional service firms. Through 1983, employment levels in professional service firms are expected to increase 20 percent over 1978 levels (approximately 1,200 jobs/year). In finance, insurance and real estate, employment levels are expected to increase 8 percent (500-600 jobs/year). There also will be small gains in the printing and publishing trades.

The Emerging Office Market in Cambridge

Between 1978 and 1982, the expansion of downtown Boston firms will have absorbed approximately 600,000 gross square feet of office space/year. 700,000 square feet of office space were leased in calendar year 1979 alone. Vacancy

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rates for all of eastern Massachusetts and for Boston, in 1979, were 1.7 percent and .4 percent, respectively. One Post Office Square with 770,000 square feet (120,000 of which are already pre-leased) is the only new office building currently under construction in downtown Boston. For the first time in Boston's history, the asking price for office space is over \$20.00 per square foot. Twenty-one percent of all newly announced construction in the Greater Boston area has already been spoken for.

Cambridge, with lower real estate taxes, greater government assistance in doing business, vacant land in Kendall Square, 5 minutes from Boston's Government Center, 8 minutes from Boston's financial district, and 12 minutes from Logan Airport -- is experiencing the hottest concentration of new activity. 792,000 square feet of new construction on Main Street, announced for Phase I of Cambridge Center and for Riverfront Office Park, represents almost 50 percent of the existing Cambridge market. Thirty-two percent of Cambridge's newly announced construction has already been pre-leased.

Cambridge Population Change and Pressures on the Housing Stock

Cambridge, for the first time in two decades, is also showing an increase in population, up 1.7 percent in 1975 from 100,000 to 102,000 people. The age group between 25 and 34 years old recorded the largest increase, up 44 percent

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since 1970. This group now constitutes the fastest growing age group in the city. The fastest growing income group in Cambridge is families with incomes over \$15,000. In 1975, almost 12 percent of Cambridge families had incomes over \$25,000.

Despite recent increases in Cambridge's housing stock (by 8.2 percent from 1970 to 1975), there is currently a .5 percent vacancy rate. Many new units which have been built are either subsidized, for low-income families, or condominiums for wealthier households. In 1979, a "converted condominium" in Cambridge cost as much as \$90,000 (171-175 Hancock Street). A new condominium in Cambridge cost as much as \$105,000 (337 Harvard Street).

Economic recovery of the region, increased inmigration of young people (entering higher education and seeking jobs), a trend towards smaller household size and the boom in household formations have all had profound effects on both Cambridge's population and housing supply. A recent survey of new condominium owners by the Cambridge Community Development Department showed that almost two-thirds of Cambridge condominium owners are between the ages of 18 and 44 years old. Ninty-seven percent have attented college or college and graduate school. Seventy percent are professionals. Seventy-two percent are single persons or married couples with no children.

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Boston/Cambridge Momentum of Development

Following a "Decade of Development" with \$12 billion in new capital investment from 1968-1978, Boston, itself, anticipates another \$10 billion in new investment during the 1980's. More than eight million square feet of new office space will be built. As many as 1,000 new hotel rooms per year will be added. Substantial investments will continue to be made in public transit, roads, bridges, port and airport facilities. Medical institutions and higher education facilities will expand. Boston Marine and Industrial Parks will continue to grow. Cultural facilities are also under development and some 25,000 new dwelling units will be built (BRA, "A Decade of Development in Boston", May 1979).

Like Boston, Cambridge over the next ten years also forsees several billion dollars in new development. Kendall Square will provide 1,200,000 square feet of office space, 75,000-100,000 square feet of retail facilities, 200-250 hotel rooms and 100 apartments. Riverfront Office Park will contribute another 600,000 square feet of office space. MIT will complete development of the Whittaker College of Health Sciences, Technology and Management and its new health facility, a Visual Arts Complex, a semiconductor research facility, expansion of the Sloan School of Management, a new sports building, MIT College and a 1200-car parking garage.

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Main Street in Cambridge is the major link between Boston's growing business, financial and cultural resources and the regional asset of high technology at MIT. The focusing of new growth pressures onto certain areas of Main Street can serve both as a benefit to the City and an opportunity for low-income families in the area. It is to these ends that the remainder of this report addresses itself. CHAPTER II: MAIN STREET AS AN UNDERUTILIZED RESOURCE

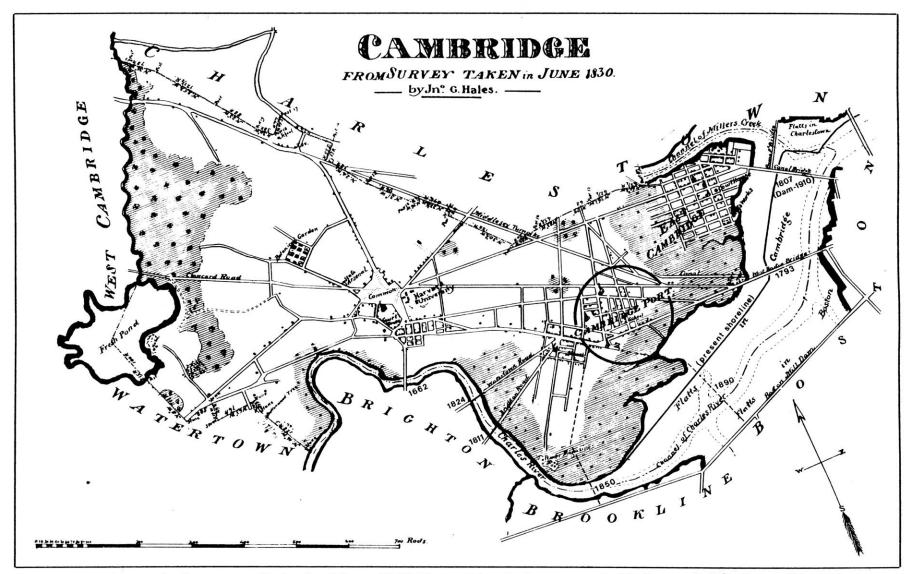


FIGURE 1. Hale's Map of Cambridge (1830). Circled area at Main and Windsor Streets indicates early development of Cambridgeport's commercial district.

	SUMMARY AND DESCRIPTION OF PROPOS ELOPMENTS ALONG MAIN STREET	SED NEW
Development	Development Description	Scheduled Completion
MIT East Campus Expansion	Phase I: Whittaker College of Health Sciences, Technology and Management; MIT Health Service Facility; Visual Arts Complex	1981
	Phase II: Sloan School Expansion Animal Care, Psychology and related academic facilities; 120 car parking garage	
	Phase III: MIT College; public events, commercial and general academic space	1988
	Phase IV: Arts Complex completion building linkages	on; 1990
	(Total new construction: 690,000 square feet)	
Cambridge Center (Boston Proper- ties, developer)	Phase I: 250,000 square feet of office space	1981
cies, developer,	Subsequent Phases: 950,000 squar feet of additional office space; 75,000 - 100,000 square feet of retail space; 200-250-room hotel 100 apartment units	;
Riverfront Office Park (Macomber Development Cor- poration, develop	space	1982
Kendall Square Station	MBTA extension and modernization of existing station	n 1982

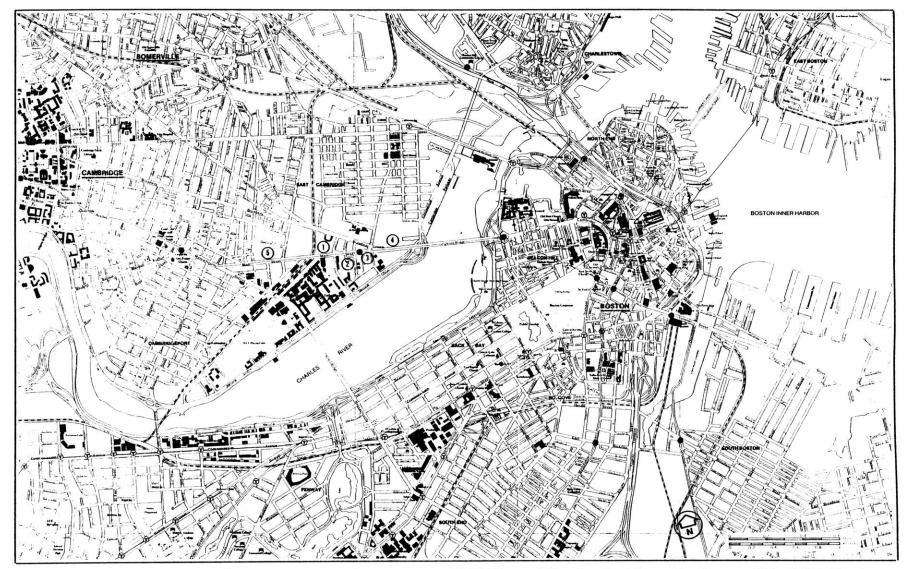


FIGURE 2: New Development on Main Street (1980). (1) Cambridge Center, (2) MIT East Campus Expansion, (3) MBTA Modernization of Kendall Square Station, (4) Riverfront Office Park. Number (5) is New Towne Court/Washington Elms.

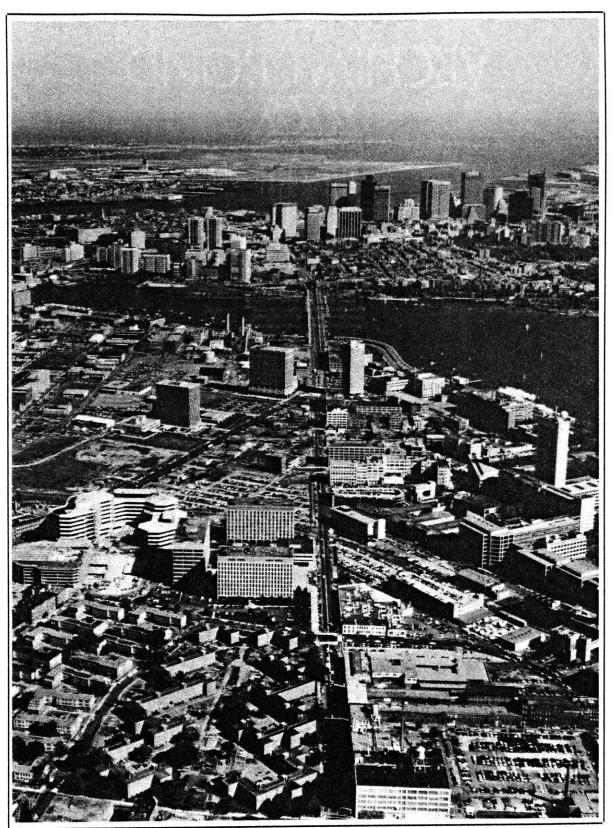


FIGURE 3: Aerial View of Main Street (1980). New Towne Court/Washington Elms, Cambridge Center site, Badger Building and Riverfront Office Park are on left. MIT is at right. Downtown Boston and Logan Airport are in the background.

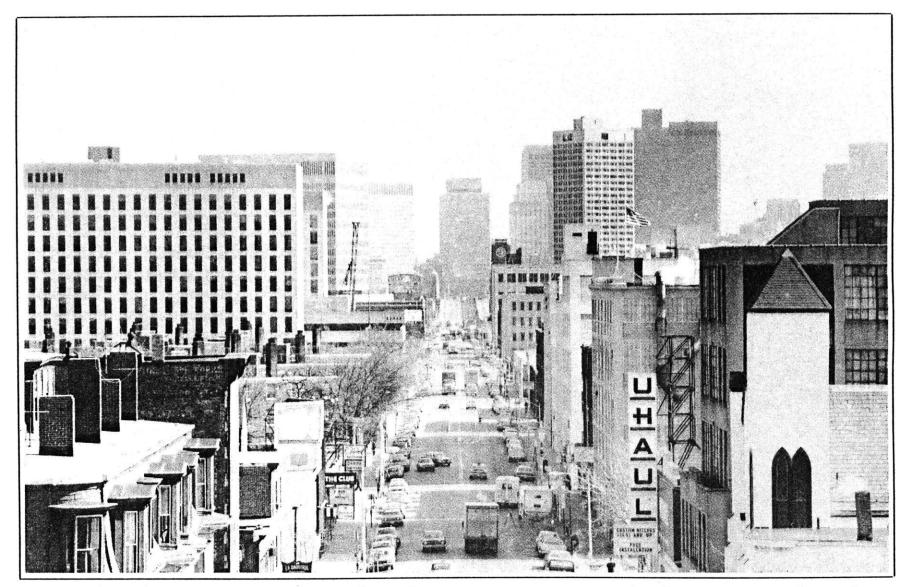


FIGURE 4: Main Street as an Extension of Downtown Boston. Technology Square, the Badger Building and MIT's Eastgate Tower focus on Longfellow Bridge and downtown Boston. The crane at left indicates construction of Cambridge Center, Phase I.

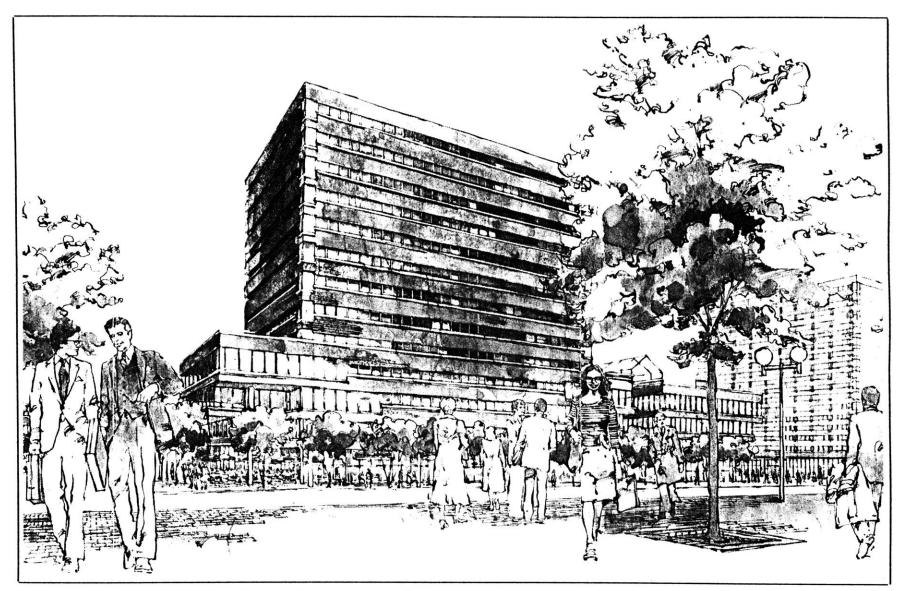


FIGURE 5: Phase I of Cambridge Center (1981). Artist's rendering.



FIGURE 6: Riverfront Office Park (1982). Artist's rendering.

General Description

Approximately one mile long and six lanes wide," Main Street via the Longfellow Bridge is the primary connection of Cambridge's Central Business District to downtown Boston. Traffic from Harvard and Central Squares (to Boston) enters Main Street at Lafayette Square. Below grade, trains on the MBTA Red Line carry passengers between the two cities. At the intersection of Main Street and Broadway, Kendall Square serves both as a Red Line station and major depot for bus transportation. East Cambridge is connected to Main Street via Third and Sixth Streets, as is North Cambridgeport by Portland, Windsor and Columbia Streets. Tracks of the Boston and Albany Railroad cross Main Street, between Albany and Vassar Streets, alongside of Technology Square (Figure 2, p. 34).

Historically, Main Street was the center of the area's commercial development and only in more recent times, after introduction of the Boston and Albany Railroad, did the area develop industrially. Today, the presence of MIT has resulted in Main Street emerging as a high-technology/office center. There has been no attempt as yet to link new developments or to create a "special sense of place". The presence of New Towne Court/Washington Elms, with 600 units of low-

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^{*} Main Street has two traffic lanes in each direction and one parking lane on either side.

income housing concentrated on Main Street, possibly has been a deterrent to this. However, unless new development <u>is</u> coordinated, the impact will be substantially weakened, projects which the City desires will go unfunded, and an increased tax burden will be required to fulfill municipal needs. Low-income households in Cambridge especially can benefit from this new development, as it may provide an opportunity for deconcentration of families currently living at New Towne Court/Washington Elms. (Figures 1-6, pp. 32 to 38). (Table 1, p. 33).

Main Street: An Historic Commercial District

Main Street, "the Highway to Pelham's Island" in 1630, was among the first streets in Cambridge. In 1793, with the opening of the West Boston Bridge, Main Street became the main route to Boston. Horse-drawn carriages made one and then two trips daily between the cities. In 1805, President Thomas Jefferson declared the area a United States port of delivery, ergo the name "Cambridgeport". Cambridgeport then began to develop as a major commercial center. Businessmen Rufus Davenport and Royal Makepeace incorporated the Cambridgeport Proprietors, proceeded to dig a network of canals and to establish a canal-oriented street pattern. Development was eventually halted, however, when the Embargo of 1807-1809 began.

Cambridgeport, its economy heavily dependent on traffic over West Boston Bridge, then developed as a Boston-

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oriented suburb. Commuting was so easy, in fact, that large numbers of Cambridgeport residents held jobs in Boston. In 1819, half-hourly carriage service was established across the Bridge. By 1948, 26 percent of Cambridgeport's population worked in Boston.

Inns, taverns and commercial structures developed along Main Street. With the conversion of the market center and haymarket at Central Square, the area changed into a business strip. In 1849, 83 out of 100 Cambridgeport retail shops were located on "the strip" and commercial hegemony of Main Street and Massachusetts Avenue were established. One such business, the Davenport Car Manufactory, was nationally known for its manufacture of stages and carriages. Later, it also became known for manufacture of railroad cars and engines.

Although at present areas around Main Street possess a high concentration of minority residents, historically residents were almost entirely of New England Yankee stock. Living close to workplaces, their houses were generally clustered along Main Street and commercial routes to the north. Higher land areas, near Main and Windsor Streets, were areas of greatest residential concentration.

The Change from a Commercial to an Industrial Center

In the mid-1800's, after emplacement of what now are the Boston and Albany railroad tracks, Cambridgeport changed

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from a commercial to an industrial center. Location of the railroad bed (between Vassar and Albany Streets) blocked Cambridgeport's commercial development from expansion to the waterfront. It also created vast amounts of inexpensive land for industrial use. Large numbers of immigrants followed introduction of the railroad. First there were the Irish, then Canadians, British, Germans, Swedes, and Portugese. Immigrants from Eastern Europe came to the area after 1900.

In 1854, the West Boston Bridge was replaced by a second bridge. At the turn of the century (1900-1906), that bridge was replaced by the Cambridge Bridge, designed by architect Edmund M. Wheelwright and engineer William Jackson. Later, the Cambridge Bridge was renamed Longfellow Bridge. Then, in 1912, the Massachusetts Institute of Technology located its campus on filled mud flats of the Charles River Basin.

Slum clearance and urban renewal at Main and Windsor Streets, during the period 1937-1941, brought the public housing projects of New Towne Court and Washington Elms. In 1955, the Cambridge Redevelopment Authority and MIT collaborated to build Technology Square. In 1964, the National Aeronautics and Space Administration decided to build an electronics research center. Twenty-nine acres in Kendall Square, with an additional 14 acres, were set aside for private development. In 1969, construction of the Badger Building at Kendall Square was begun. In 1970, after numerous

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buildings had already been torn down, the Nixon Administration stopped construction of the NASA Center. Structures used by the Department of Transportation, and vacant land, now are all that remain of the project.

MIT and Development of Main Street as a High-Technology/ Office Center

Presence of the Massachusetts Institute of Technology has been, and continues to be, a major force in Cambridgeport's economic development. Technology Square, developed in cooperation with the Cambridge Redevelopment Authority, is home of the Polaroid Corporation, Draper Laboratories, Computer Corporation of America, and Honeywell Information Systems Incorporated. U. S. Department of Transportation is located at the former NASA site and Badger Company, New England Bank Association, Index Systems Inc. and TMI Corporation are located at One Broadway. Bioran Medical Laboratory, Kentron International Inc. and General Latex and Chemical Corporation are among other businesses also located in the area (Appendix B, p.129).

Almost two-thirds of all Main Street frontage (north and south) is controlled by six entities: MIT; the Cambridge Redevelopment Authority; Cambridge Electric Light Company; Darvel Realty Trust; Cabot, Cabot and Forbes; and the Badger Company. Seventy-five percent of all Main Street frontage is controlled by seven entities, if property owned by the

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Cambridge Housing Authority is included. MIT now owns 38 percent of south Main Street frontage and, after planned acquisitions, will own 63.4 percent. Almost 19 percent of north Main Street frontage is accounted for by Technology Square and the Badger Building. Cambridge Center and Riverfront Office Park (when developed) will represent another 47.1 percent of north frontage (Tables II, and III, pp. 46 and 48).

Both Technology Square and the Badger Building are already developed as "Class A" office space. MIT has begun construction of its East Campus health facility and Visual Arts Center. The Cambridge Redevelopment Authority (with Boston Properties, Inc.) has begun construction of Phase I of Cambridge Center. Cambridge Electric Light Company and Darvel Realty Trust are also now marketing Riverfront Office Park.

Main Street As An Underutilized Resource

All new development is located at the eastern end of Main Street, near Longfellow Bridge and away from the public housing projects of New Towne Court/Washington Elms. Despite the fact that Main Street is of relatively short length (with frontage controlled by comparatively few entities), no attempt has been made to link these developments or to focus growth along the entire street. There has been no effort to revitalize the area as an historic commercial

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district through either coordinated design review or an Urban Development Action Grant (UDAG). The Central Square Commercial Area Revitalization District (CARD) focuses away from Main Street onto Massachusetts Avenue. Cambridge's present UDAG grant for \$6.8 million, likewise, focuses towards the Cambridge waterfront. Failure to capitalize on the potential for Main Street to create a unified business district thus weakens all new development. It jeopardizes both greater benefits to the City of Cambridge and possibilities for assisting low-income families in the area.

TABLE II: STREET FRONTAGE OWNERSHIP AND/OR MAJOR DEVELOPMENTS ON MAIN STREET

Property Owner or Major Develop- ment	Street Frontage in Feet (and Street Side)	Street	Current Status	Future Announced Development
MIT Current Ownership	1757 (south)	19.0	Sloan School of Management; East- gate Apartments; Kendall Square Building, other	East Campus Expansion
MIT Planned Acquisitions	ll75 (south)	12.7	Carr Fasteners; Fire Station; Polaroid; F & T Diner; Cambridge Press; Renaldi Fil Company; Electroni Corporation of America; A. D. Lit Company	CS
MIT (Total Current Ownership and Planned Acqui- sitions	2932 (south)	31.8	as above	East Campus Expansion
Cambridge Center (Boston Properties, developer)	1269 (north)	13.8	Vacant land owned by the Cambridge Redevelopment Authority; subway and bus terminal owned by the MBTA	1,200,000 square feet of office space; 75,000 - 100,000 square feet of retail space; 200 - 250- room hotel; 100 apartment units
Riverfront Office Park (Macomber Development Cor- poration, developer	900 (north))	9.8	Vacant land owned by Cambridge Elec- tric Light Company and Darvel Realty Trust	600,000 square feet of office space
Cambridge Housing Authority	800	8.7	New Towne Court, public housing project	

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Property Owner or Major Develop- ment	Street Frontage in Feet (and Street Side)	Street	Current Status	Future Announced Development
Technology Square (Cabot, Cabot and Forbes Company)	713 (north)	7.7	550,000 square feet of office space	Built 1960-66
Main Street Garage Incorporated	375 (south)	4.1	Polaroid Corpora- tion	
S & M Realty	238 (south)	2.6	Polaroid Corpora- tion	
Nabisco Company	225 (south)	2.4	Candy factory	
Polaroid Corporation	n 200 (south)	2.2	Polaroid Corpora- tion	
General Latex and Chemical Corporation	175 (south)	1.9	Chemical plant	
The Badger Company	150 (north)	1.6	220,000 square feet of office space	Built 1969
Others (U-Haul, Kaplan-Baer Trust, etc.)	1250 (north and south)	13.5	Commercial establishments	
Total	9227 (north and south)	100.0		

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STREET FRONTAGE OWNERSHIP AND/OR MAJOR DEVELOPMENTS ON MAIN STREET, continued

Property Owner or Major Development	Street Frontage Owned (in feet)	Percent of <u>North</u> Main Street Frontage
Cambridge Redevelopment Authority	888	19.3
МВТА	381	8.3
Cambridge Center (total)	1269	27.6
Cambridge Electric	700	15.2
Darvel Realty Trust	200	4.3
Riverfront Office Park (to	otal) 900	19.5
Cambridge Housing Authori	ty 800	17.4
Technology Square	713	15.5
The Badger Company	150	3.3
Others	769	16.7
Total	4601	100.0
Property Owner or Major Development	Street Frontage Owned (in feet)	Percent of <u>South</u> Main Street Frontage
MIT (Eastgate and Sloan)	463	10.0
MIT (other)	1294	28.0

MIT Total (currently owned) 1757

38.0

TABLE III: STREET FRONTAGE OWNERSHIP AND/OR MAJOR DEVELOPMENTS ON MAIN STREET BY SIDE OF STREET

Property Owner or Major Development	Street Frontage Owned (in feet)	
MIT Planned Acquisitions for East Campus Developmen	1175 nt	25.4
MIT Total (currently owned and planned acquisitions)	d 2932	63.4
Main Street Garage	375	8.1
S & M Realty	238	5.1
Nabisco Company	225	4.9
Polariod Corporation	200	4.3
General Latex & Chemical Corporation	175	3.8
U-Haul	150	3.2
Others	331	7.2
Total	4626	100.0

STREET FRONTAGE OWNERSHIP AND/OR MAJOR DEVELOPMENTS ON MAIN STREET BY SIDE OF STREET, continued

CHAPTER III: THE PUBLIC HOUSING PROJECTS OF NEW TOWNE COURT AND WASHINGTON ELMS

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DEVELOPMENT SUMMARY SHEET: NEW TOWNE COURT

Cambridge Housing Authority Ownership: Cambridge Housing Authority Management: CHA Identification Mass. 3-5 Number: Federally-Aided Family Development Development Type: Year Built: 1937 Adjacent to Technology Square; bordered General Location: by Portland, Washington, Windsor and Main Streets 376,537 sq. ft. (8.6 acres) Land: C-1 Residential District (i.e., multi-Present Zoning: family, apartments, hotels, dormitories) Floor Area Ratio: .75 Maximum height: 35 feet Dwelling units/acre: 36 Existing Structures: 6 residential buildings, 3-story masonry, walk-up: 80 one-bedroom units 106 two-bedroom units 92 three-bedroom units 4 six-bedroom units 282 total units gymnasium and administration building, 1-story masonry boiler room and garage, 1-story masonry Masonry good. Bathrooms modernized and Condition of Existwindow sash replaced (1972). New hot ing Residential water feeder lines (1977). New under-Structures: ground steam and electrical distribution lines, hallways renovated, and kitchens modernized (1978). All six buildings must be reroofed. Domestic hot water tanks and 20% of all radiators need replacement. Security measures needed: security lights, window guards, new hallway and apartment door

DEVELOPMENT SUMMARY SHEET: NEW TOWNE COURT, continued

locks. Vandalized mailboxes need to be replaced. Courtyards need extensive renovation. 225 units occupied; 57 units vacant. Development Occupancy: Original Bonds repaid. Mortgage: Outstanding Modernization \$2,284,284 (due 10/10/80). Notes: Annual HUD Contribution \$334,702. (4/79-3/80):

Source of Information: Cambridge Housing Authority

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DEVELOPMENT SUMMARY SHEET: WASHINGTON ELMS

Cambridge Housing Authority Ownership: Cambridge Housing Authority Management: CHA Identification Mass. 3-1 Number: Federally-Aided Family Development Development Type: 1941 Year Built: Adjacent to Draper Laboratories and General Location: Technology Square; bordered by Portland, Harvard, Windsor and Washington Streets 322,853 sq. ft. (7.4 acres) Land: C-1 Residential District (i.e., multi-Present Zoning: family, apartments, hotels, dormitories) Floor Area Ratio: .75 Maximum height: 35 feet Dwelling units/acre: 36 Existing Structures: 18 residential buildings, 3-story masonry, walk-up 89 one-bedroom units 105 two-bedroom units 89 three-bedroom units 34 four-bedroom units 1 five-bedroom unit 1 six-bedroom unit 1 seven-bedroom unit 320 total units No other structures Condition of Exist-Masonry fair. Electrical meter boards ing Structures: and electrical distribution within each unit upgraded (1972). All buildings reroofed, kitchens and bathrooms modernized (1975). Hallways renovated and exterior security lighting installed (1977). Hot water supply lines and apartment windows replaced, also some plumbing repair and limited work on exterior grounds (1978).

DEVELOPMENT	SUMMARY	SHEET:	WASHINGTON	ELMS,	continued
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Roofs again need to be repaired. Underground steam distribution lines and coils in central hot water system need replacement. Security measures needed: additional security lighting, window guards, hallway and apartment door locks replaced. Vandalized mailboxes also need replacement. Courtyards need an entire redesign and renovation. 170 units occupied; 150 units vacant.

Original Mortgage Outstanding:

Development Occupancy:

\$235,000 (due 4/1/82).

Outstanding Modernization Notes:

Annual HUD Contribution (4/79-3/80): \$1,055,782 (due 10/10/80).

\$368,855.

Source of Information: Cambridge Housing Authority.

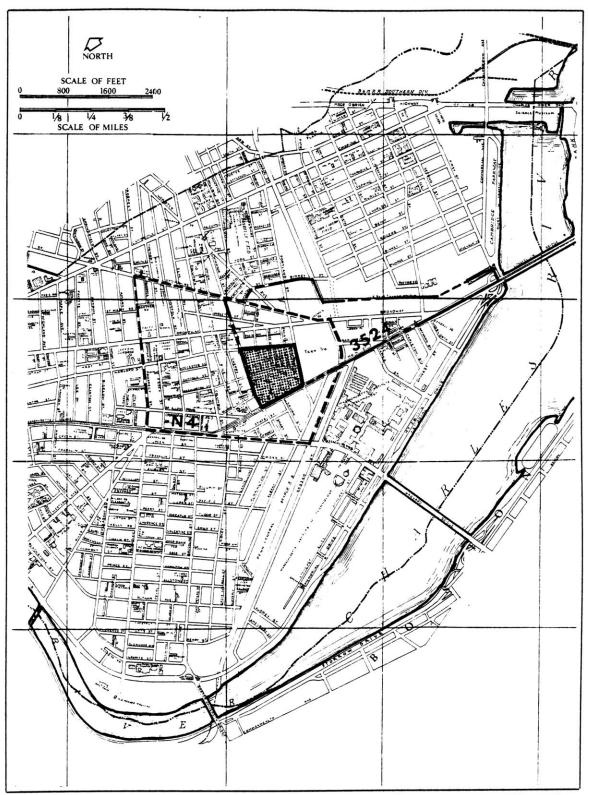


FIGURE 7: New Towne Court/Washington Elms, Census Tract 3524, Cambridge Neighborhood 4. Orientation map.

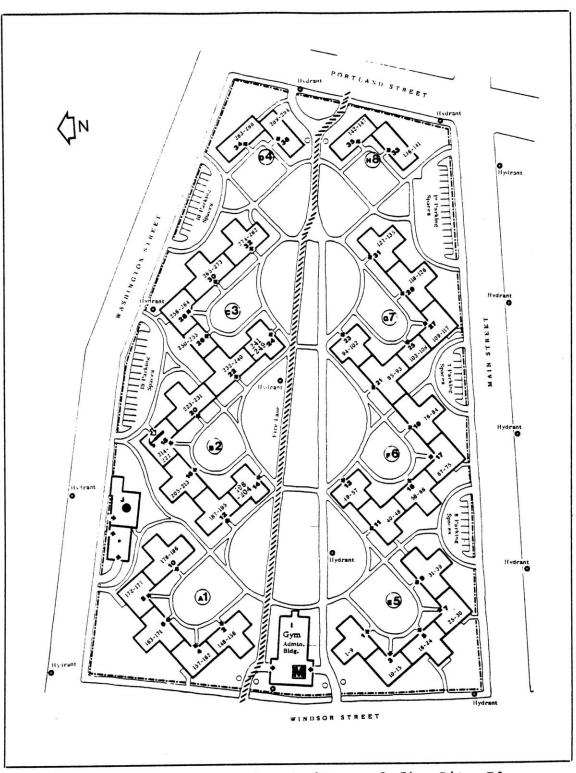


FIGURE 8: New Towne Court (Mass. 3-5), Site Plan. (Source: Cambridge Housing Authority.)

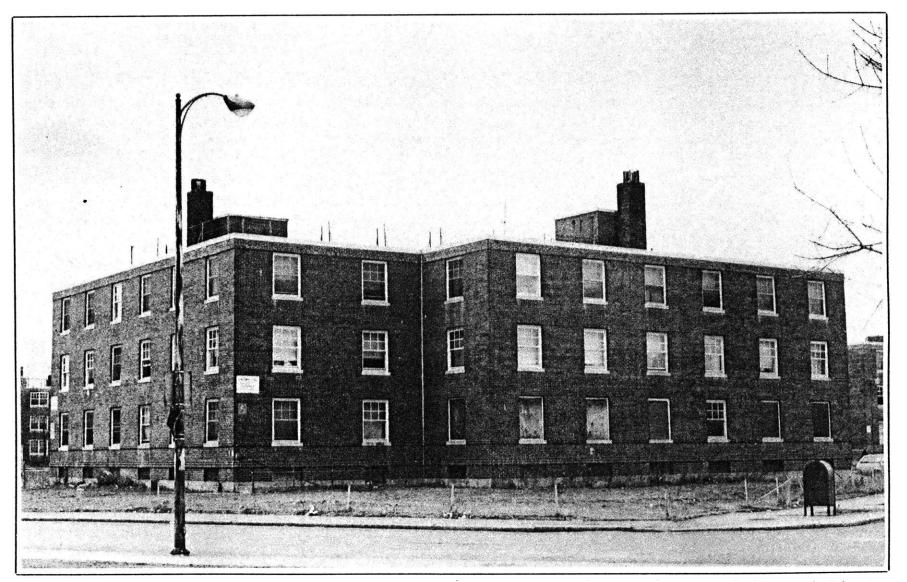


FIGURE 9: New Towne Court, Typical Building. Boarded up windows on ground floor indicate vacant units.

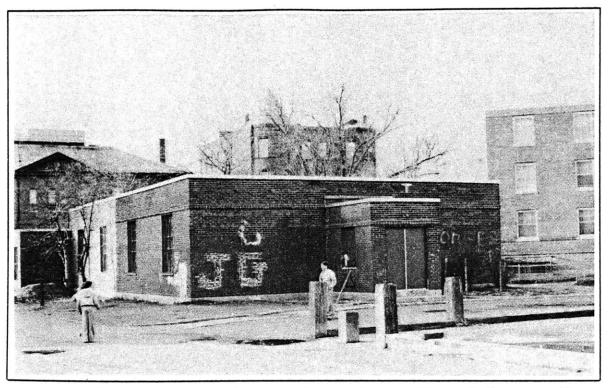


FIGURE 10: New Towne Court, Gymnasium. Closed for nearly ten years, the building shows signs of abuse and neglect.

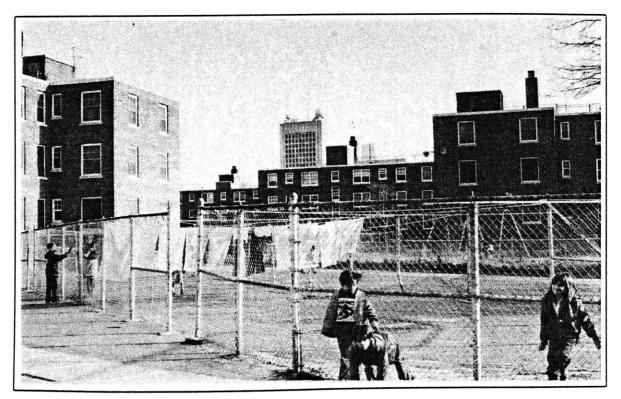


FIGURE 11: New Towne Court, Courtyard. Open space used for clothes-drying is also a playground for project children.

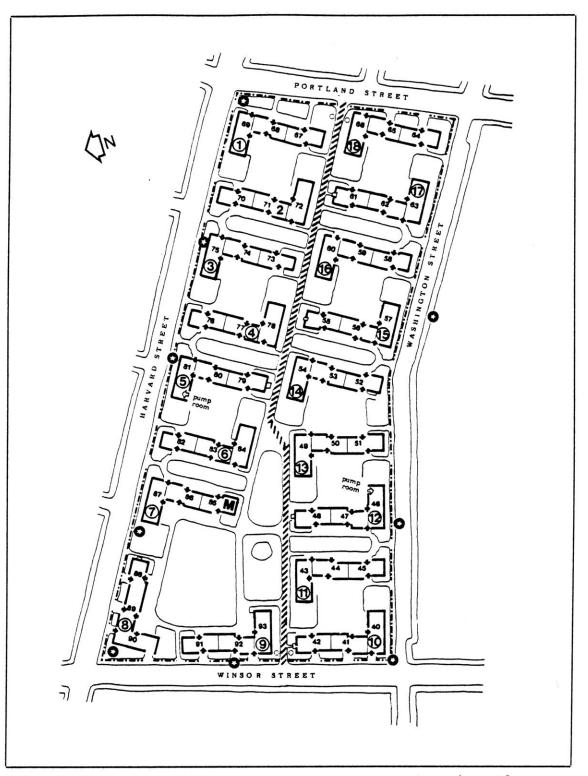


FIGURE 12: Washington Elms (Mass. 3-1), Site Plan. (Source: Cambridge Housing Authority.)

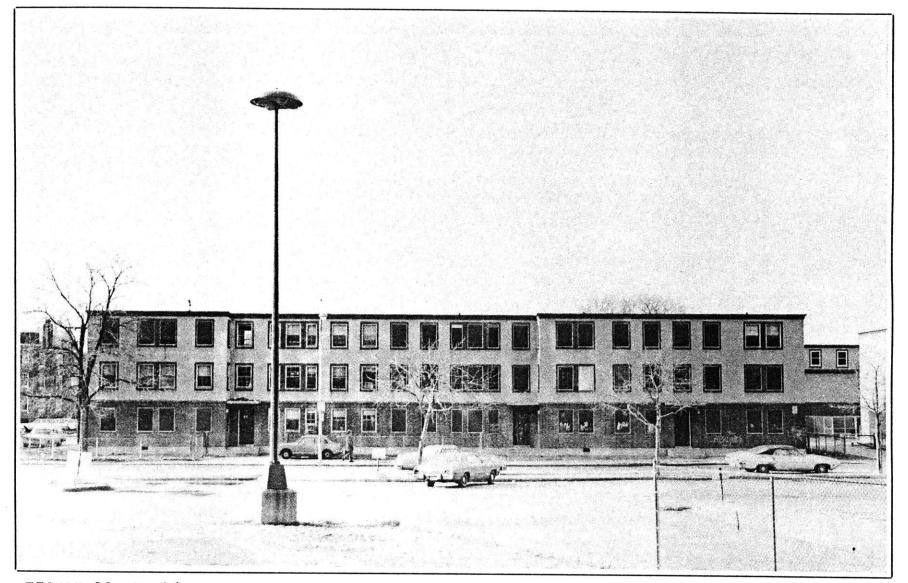


FIGURE 13: Washington Elms, Typical Building. Barracks-like design, boarded windows and graffiti add to desolation of the project environment.

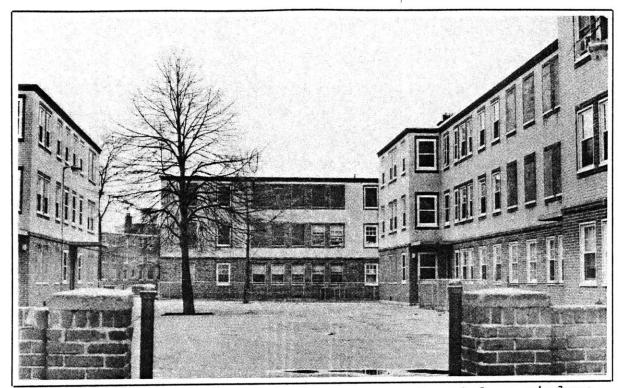


FIGURE 14: Washington Elms, Entrance. Boarded-up windows indicate large numbers of vacancies.

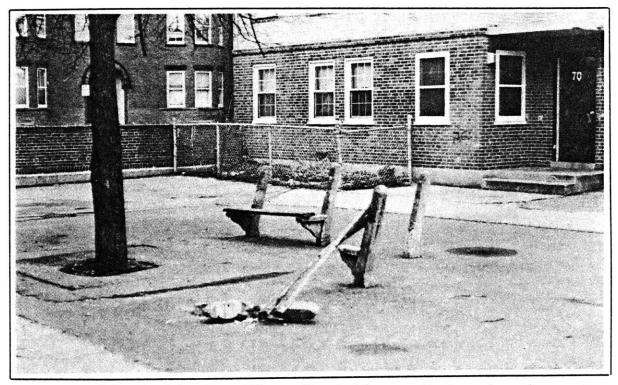


FIGURE 15: Washington Elms, Vandalism. Broken benches are symbolic of the abuse and neglect of exterior grounds.

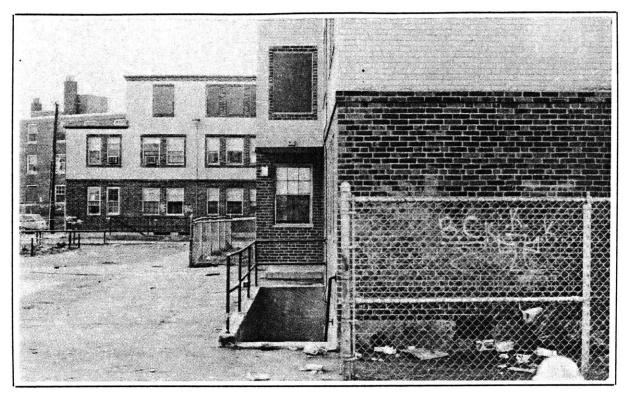


FIGURE 16: Washington Elms, Exterior Areas. Graffiti and accumulated rubbish indicate a lack of maintenance.

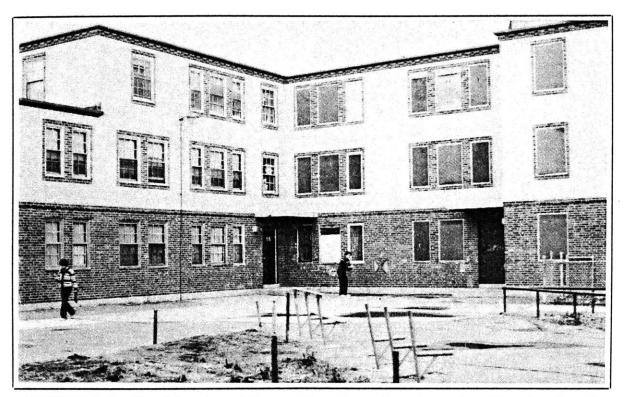


FIGURE 17: Washington Elms, Courtyard. Due to the lack of adequate playing fields, children play ball in courtyards.

Project and Area History

Constructed in 1937 under the U. S. Public Works Administration, New Towne Court (Mass. 3-5) is the oldest and second-largest public housing project in Cambridge. In 1941 Washington Elms (Mass. 3-1), the City's largest and second-oldest public housing project, was constructed adjacent to New Towne Court. These projects, representing a combined total of 618 low-income units, replaced nearly two hundred small buildings, obliterated eight streets and combined fourteen small blocks in what at the time had become one of the worst slum areas in the City: Census Tract 3524, Cambridge Neighborhood 4 (Figures 7 through 17, pp. 55 to 62).

Thirty years later, in 1970, Census Tract 3524 and Neighborhood 4 again were among the worst areas in the City. Compared to other Cambridge census tracts, Census Tract 3524 (two-thirds of whose households are located in New Towne Court/Washington Elms) had:

- the largest percentage of people below poverty level (more than twice the citywide rate);
- the largest percentage of households below poverty level;
- the lowest median family income;
- the highest percentage of civilian labor force unemployed;
- the largest number of Four-Agency caseloads;
- the largest number of families receiving Aid to Families with Dependent Children;

- the largest average family size;

- the largest percentage of female-headed families; and
- the largest percentage of children in female-headed households.

Neighborhood 4, one-fifth of whose households are located in New Towne Court / Washington Elms, additionally had:

- the largest number of juveniles as a percentage of household population and the largest juvenile delinquency rate;
- the largest number of Crime Prevention Bureau cases; and
- the largest percentage of Blacks (18.9%, almost three times the citywide rate and four times the Boston SMSA rate).

In 1975, the general image of the projects was one of helplessness. Indicative of that image was the use of vacant Washington Elms building 8 for drug dealing, gambling and prostitution. Symbolizing tenant anger and alienation was the withholding of \$72,900 in rent.

Recent History

During the period from December, 1975 to January, 1977, seventy-six percent of all low-income families who were offered apartments at Washington Elms rejected placement. At the same time, rejection rates at New Towne Court were approximately forty-two percent. Generally, those families who did accept placement came with a large number of social problems. In March, 1977, fearful that Washington Elms would become heavily racially imbalanced and that control would be lost, Cambridge Housing Authority ceased offering

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units at Mass. 3-1. (Figures 18 through 22, pp. 72 to 76).

Between January, 1977 and May, 1978, substantial changes occurred in CHA commissioners and staff. Subsequently, the Authority brought suit for eviction against one hundred thirty-two families (i.e., one-third of the families at New Towne Court/Washington Elms) for both cause and non-payment of rent. Ultimately, twenty-nine families were evicted or voluntarily chose to leave. One hundred three families settled with the Authority.

Recently, revised lease, grievance and tenant delinquency procedures and an employee evaluation plan have been intitiated. Rent collection and tenant histories have been computerized and a system of hallway captains, responsible for building security, has been implemented. Overall effectiveness of these programs, however, is still uncertain.

While the Authority has established a Resident Hiring Program and Youth Employment Training Project, and tenants have contributed \$12,000 from their Contingency Fund, there remain a wide variety of services which presently are required. Included in these are: a security coordinator, project direction coordinator, youth counselor, professional back-up for the youth counselor, mediation assistance, recreational programming assistance, outreach programs and programs for the elderly. The prospects for getting these services, and their staying power, nevertheless are questionable. In its 1976 application for the

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Target Projects Program, the Authority noted:

Washington Elms and New Towne Court are broadly perceived in Cambridge as being among the most troubled public housing projects in the city. As a result, social agencies in the city have frequently attempted to offer social service programs to the residents. However, the staying power of these agencies and programs has often been short. This is demonstrated by the fact that there are only 10 resident services being offered at Washington Elms/New Towne Court or tailored for those residents. The Social Services Survey indicated that only about 20% of the youth under the age of 18 were being served by any program oriented to their needs. The service % was not calculated for adult needs.

Social and Economic Characteristics of New Towne Court/ Washington Elms

Although two hundred seven units are now vacant, three hundred ninty-five families (or single individuals) currently reside at New Towne Court/Washington Elms. The vast majority of these households are below poverty level, are female-headed, Black or Hispanic, and derive their incomes from A.F.D.C. or Social Security. Minors comprise over half the total population. There are also a small number of elderly. Two-thirds of the projects' population have lived at New Towne Court or Washington Elms for less than ten years (Table IV, p. 77).

New Towne Court/Washington Elms represents the largest concentration of low-income family units in CHA housing projects and the largest concentration of Black and Hispanic households in CHA developments. Combined with all other Neighborhood 4 low-income housing, New Towne Court and Washington Elms are part of the highest concentration of all CHA low-income housing in the City and of the highest concentration of CHA, MHFA and HUD low-income units combined. Neighborhood 4 also has the second-highest concentration of CHA leased housing (see Appendix C, pp. 137 to 171).

Physical Characteristics of New Towne Court/Washington Elms

While apartment units at New Towne Court are generally larger than those at Washington Elms, both projects compare unfavorably to current HUD Minimum Property Standards and MHFA recommended areas. Compared to HUD's 1979 Minimum Property Standards, kitchen and dining areas in both developments are seriously undersized. This is especially true of all room and total areas at Washington Elms. Compared to 1980 MHFA recommended areas, apartments and individual rooms at both projects are substantially inadequate (Tables VII and VIII, pp. 80 and 81). Another design deficiency at both projects is the large number of one-bedroom apartments which, when vacated, become difficult to rent. Unrestricted roof access, inadequate parking and recreation space are further deficiencies at both projects. Additionally, there is a lack of maintenance, job-training and community activity space at Washington Elms.

In terms of capital improvements and repair, some monies have already been spent on bathroom and kitchen modernization, window replacement, plumbing and electrical repairs. Further major capital expenditures are required,

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however, for replacement of steam and hot water components and conversion of incinerators to non-polluting forms of waste disposal. Security hardware such as window guards, door locks and exterior lighting is needed as is major work on all grounds and project courtyards. Misuse of these areas over the last ten years has left them littered with broken asphalt, vandalized benches and neglected shrubbery. (See also Development Summary Sheets, pp. 51 and 53, and Figures 8 through 17, pp. 56 to 62.)

The Issue of Whether Families at New Towne Court/Washington Elms are Adequately Served as Judged by Newer Government Policies on Concentration

Invasion of privacy by identification of low-income families by place of residence, absence of choice, and effects of ghettoization which have been addressed in current State and federal policies still remain at New Towne Court and Washington Elms. Executive Order Number 74 of former Massachusetts Governor Michael Dukakis (1975) has called for "the prevention and elimination of racial, ethnic and religious segregation...in all decisions involving the selection of new publicly assisted housing sites, the development and execution of urban renewal plans and *the management and placement of tenants in public housing* (emphasis added)." The U. S. Housing and Community Development Act of 1974, Section 101(c) (6) has directed "a reduction of the isolation of income

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groups within communities and geographical areas and the promotion of an increase in the diversity and vitality of neighborhoods through spatial deconcentration of housing opportunities for persons of lower income." The U. S. Department of Housing and Urban Development Site and Neighborhood Standards (1977) further prevents the "location of additional assisted housing in an area which already houses a disproportionate share of the locality's minority residents." None of these goals is now being served at New Towne Court/Washington Elms without a reduction in resources for low-income families, i.e., the creation of 207 vacancies.

The Issue of a Resource for Low-Income Families Unacceptable to a Major Segment of the Client Population

A large percentage of non-minority (i.e., non-Black or Hispanic) families who are eligible to live in public housing projects do not apply. While, statistically, 82 percent of all Cambridge families eligible for public housing should be non-minority, only 60 percent of all tenants in CHA family developments are non-minority, as are only 32 percent of all families on CHA waiting lists [84] . This is further substantiated by higher rejection rates among non-Black or Hispanic families offered placement at New Towne Court/Washington Elms. (See also Figures 18 and 19, pp. 72 and 73.)

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The Issue of Spill-Over Effects on Neighborhood Schools and Property Values

Concentration of low-income and minority households at New Towne Court/Washington Elms and in Cambridge Neighborhood 4 also have had serious spill-over effects on the area's schools and on local property values. The Roberts and Fletcher schools (pupiled predominantly from Neighborhood 4) are the most racially imbalanced schools in the system. Despite 207 vacancies at New Towne Court and Washington Elms, they have almost twice the city-wide percentage of minority students (Table IX, p. 82). Parents and school officials now are involved in a heated discussion over redistricting, school pairing and/or busing (this with the spectre of a federal takeover of public schools in the adjoining City of Boston).

Additionally, average sales prices for 1-4 family homes in Cambridge Neighborhood 4 were lowest among all City neighborhoods during calendar year 1979 (Table X , p. 83) and have been consistently among the lowest for the past twenty years.

The Issue of Physical Design and Maintenance Inadequacies and of Incongruity with Surrounding Development

Earlier in this chapter design and maintenance inadequacies of New Towne Court and Washington Elms were discussed. With respect to the surrounding area, however, the projects also are overshadowed by unrestricted heights and larger building volumes of nearby offices and factories. As residential developments they are out of character with the predominantly commercial and industrial land uses along Main Street.

Conclusion

The issues of low-income concentration, an unacceptable form of public assistance, spill-over effects on neighborhood schools and property values, and incongruence with surrounding development combined with an opportunity to focus new growth towards the solution of these problems suggest that major new alternatives be considered for New Towne Court/ Washington Elms. Before such alternatives can be discussed, however, options for the "deinstitutionalization" of project families and for their relocation must be considered.

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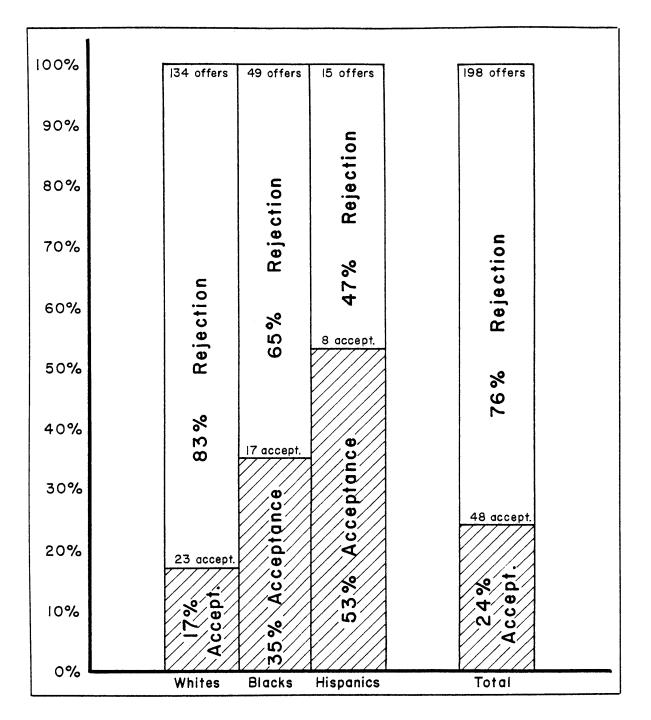


FIGURE 18: Acceptance-Rejection Rate by Race (12/75 - 1/77), Washington Elms. (Source of data: Cambridge Housing Authority.)

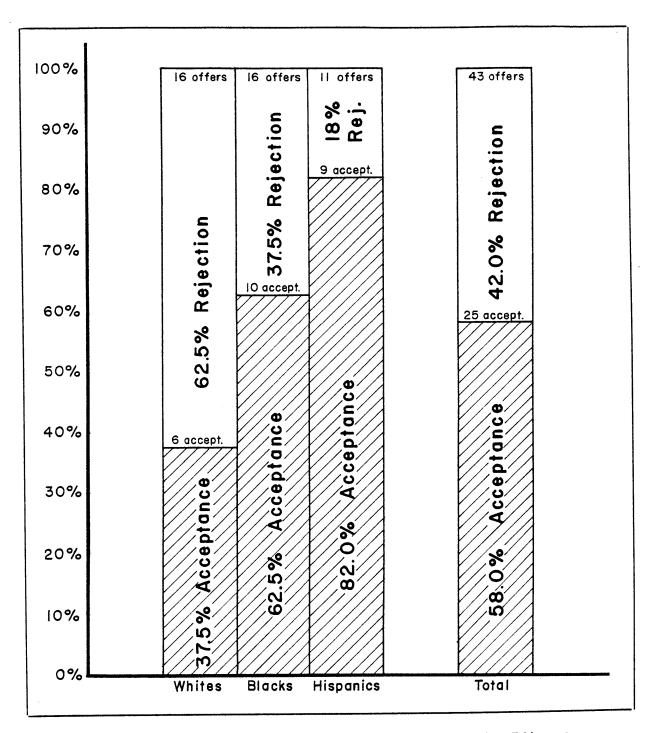


FIGURE 19: Acceptance-Rejection Rate by Race (1978), New Towne Court. (Source of data: Cambridge Housing Authority.)

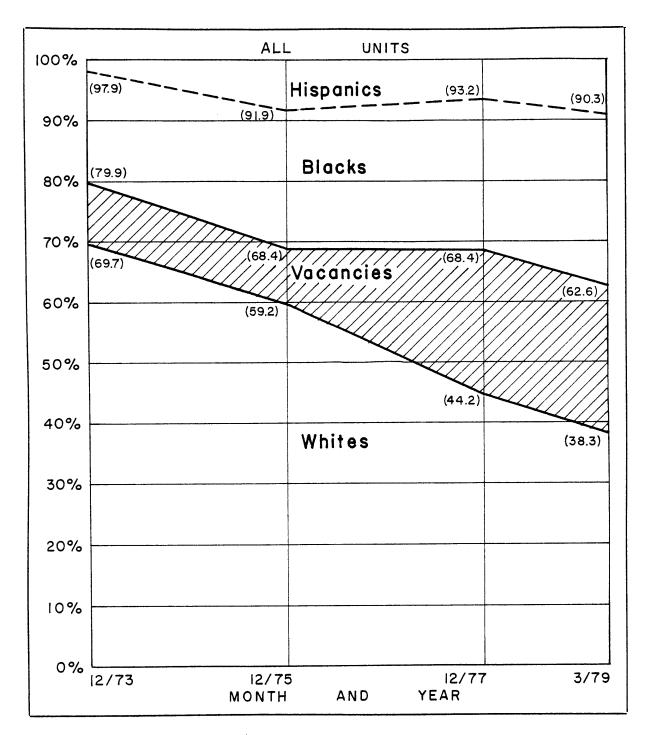


FIGURE 20: Occupancy by Race and Vacancies (12/73 to 3/79), New Towne Court. (Source of data: Cambridge Housing Authority.)

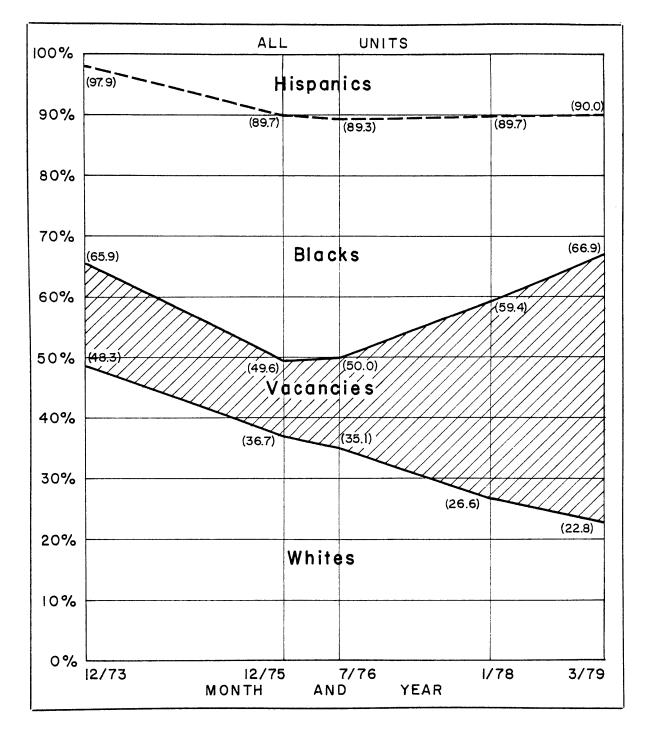
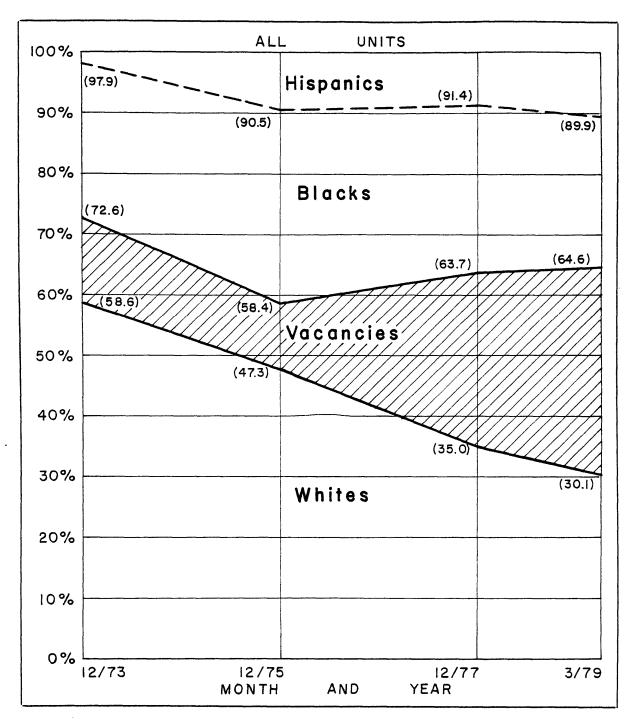


FIGURE 21: Occupancy by Race and Vacancies (12/73 to 3/79), Washington Elms. (Source of data: Cambridge Housing Authority.)



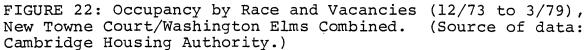


TABLE	IV:	SELECTED	POPULAT	TION A	AND	HOUSE	HOLD	CHARACTERIS-
		TICS OF T	ENANTS	AT NE	EW T	OWNE	COURT	AND
		WASHINGTO	N ELMS	(Marc	ch,	1980)		

Parameter	New Towne Court	Washington Elms	New Towne Court/ Washington Elms combined
Total population	569	581	1150
Number of households	225	170	395
Number of elderly households	45	16	61
Number of family households (excludes single person households)	155	140	295
Average family size	3.2	3.9	3.5
Minors (under 21) as a percent of household population	47.8%	60.8%	54.3%
Percent of female-headed households	80.5%	82.48	81.3%
Percent minority households Percent Black Percent Hispanic	48.5% 36.9% 11.6%	55.3% 38.8% 16.5%	51.4% 42.8% 13.7%
Average household income	\$4841	\$3787	\$4387
Percent of households below poverty level	76.0%	90.5%	82.28
Percent of individuals below poverty level	74.3%	86.98	80.7%
Sources of household income Percent A.F.D.C. Percent social security Percent government relief Percent other (SSI, government and private benefits)	46.5% 21.6% 5.2% 26.7%	57.6% 15.2% 11.1% 16.1%	50.0% 20.0% 7.1% 22.9%
Length of residence Percent 5 yrs. or less Percent under 10 yrs. Percent 10 yrs. or over	42.2% 66.2% 33.8%	39.4% 71.8% 28.2%	41.0% 68.6% 31.4%

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Source: Cambridge Housing Authority.

DEVELO	K ORDER OF PMENTS BY OLDS (3/6/	F LARGER CHA PERCENT BLA (80)	LOW-INCOM CK AND HIS	E FAMILY PANIC
Development (total units and units vacant or be- ing modernized)	Number of Households		Percent Hispanic Households	Percent Black and Hispanic Households
Washington Elms (320 units, 150 units vacant)	170	38.8	16.5	55.3
New Towne Court/ Washington Elms Combined (602 units, 207 units vacant)	395	37.7	13.7	51.4
New Towne Court (282 units, 57 units vacant)	225	36.9	11.6	48.5
Putnam Gardens (123 units, 3 units vacant)	120	41.7	5.8	47.5
Jefferson Park and Jefferson Park Ex- tension (309 units, 93 units vacant or being modernized)	216	31.5	9.7	41.2
Woodrow Wilson Court (69 units, 3 units vacant)	66	40.9	0	40.9
Lincoln Way (60 units, 3 units vacant)	57	24.6	8.8	33.4
Jackson Gardens (46 units, 3 units vacant)	43	23.3	4.7	28.0
Corcoran Park (152 units, 4 units vacant)	148	22.3	.7	23.0
Roosevelt Towers (228 units, 101 units vacant)	127	15.7	6.3	22.0
All Larger CHA Low- Income Family Develo ments (1589 units, 4 units vacant or bei modernized)	pp - 17 1172			

TABLE VI: ANALYSIS OF WAITING LIST FOR FAMILIES NEEDING PUBLIC HOUSING IN CAMBRIDGE (7/17/79)

Parameter	Number	Percent
Total number of families	1,348	100%
Total number of families used in the analysis (i.e., race known)	992	100% *
Families currently in residence in Cambridge	572	57.7%
Minority (Black and Hispanic families)	674	68.0%
Female-headed households	716	72.2%

* Considered 100% for the purpose of this analysis.

TABLE	VII:	COMPARISC	N OF	NEW	TOWNE	COU	RT AI	PARTN	1ENTS
111222	WIT	H CURRENT	MHFA	RECO	OMMENDI	ED AI	REAS	AND	HUD
	MIN	IMUM PROPE	RTY S	STAN	DARDS				

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	MHFA Average Recom- mended Areas (1980)	HUD Minimum Property Standards (1979)	New Towne Court (1937)	Percent Smaller than MHFA Recommended Areas	Percent Smaller than HUD M.P.S.
	, , , ,				
One-Bedroom Apartment	600 sq.ft	520 sq.ft.	497 sg.ft.	-17%	-4%
Livingroom	160*	160	164		
Kitchen-Dining Area	120*	120	88	-27*	-27
Bedroom	154	120	130	-16	
Two-Bedroom Apartment	825	569	606	-27	
Livingroom	160*	160	173		
Kitchen-Dining Area	120*	120	94	-22*	-22
Bedrooms	274	200	246	-10	
Three-Bedroom Apartment	1150	757	796	-31	
Livingroom	220*	170	167	-24*	-2
Kitchen-Dining Area	178*	140	113	-37*	-19
Bedrooms	394	280	340	-14	
(Number of Bathrooms)	(1.5)	(1)	(1)	(.5)	

*Estimated from sample developments.

	MHFA HUD Average Minimum Recom- Property Areas Standards (1980) (1979)		Washing- ton Elms (1941)	Percent Smaller than MHFA Recommended	Percent Smaller than HUD M.P.S.	
One-Bedroom Apartment	600 sq.ft.	520 sq.ft.	441sq.ft.	-27%	-15%	
Livingroom	160*	160	134	-16*	-16	
Kitchen-Dining Area	120*	120	94	-22*	-22	
Bedroom	154	120	115	-25	-4	
Two-Bedroom Apartment	825	569	590	-28		
Livingroom	160*	160	156	-3*	-3	
Kitchen Dining Area	120*	120	102	-15*	-15	
Bedrooms	274	200	226	-27		
Three-Bedroom Apartment	1150	757	696	-39	-8	
Livingroom	220*	170	156	-29*	-9	
Kitchen-Dining Area	178*	140	105	-21*	-25	
Bedrooms	394	280	295	-25		
(Number of Bathrooms)	(1.5)	(1)	(1)	(.5)		
Four-Bedroom Apartment	1375	922	828	-40	-10	
Livingroom	225*	180	156	-20*	-13	
Kitchen-Dining Area	178*	160	107	-40*	-33	
Bedrooms	514	380	383	-25		
(Number of Bathrooms)	(2.0)	(1)	(1)	(1.0)		

TABLE VILL COMPARISON OF WASHINGTON ELMS APARTMENTS WITH CURRENT MHFA RECOMMENDED AREAS AND HUD MINIMUM PROPERTY STANDARDS

*Estimated from sample developments.

\mathtt{TABLE}	IX: RANK ORDER OF CAMBRIDGE ELEMENTARY SCHOOLS
	AND LOCAL NEIGHBORHOODS BY PERCENT MINORITY
	ENROLLMENT ACCORDING TO U.S. GOVERNMENT
	STANDARDS (April 23, 1979)

Cambridge Elementary School	Local Neighborhood	Percent Minority Enrollment
Roberts*	4	62.9
Fletcher	4	61.7
Webster	5	57.0
King	7	55.5
Tobin	10,12	52.0
Longfellow	6	41.5
Fitzgerald	11	31.2
Morse	5	29.4
Lincoln	9,11	28.2
Agassiz	8	21.1
Haggerty	12,13	20.4
Gore	. 1	20.2
Peabody	9	16.2
Harrington	3	11.0
Kennedy	1	7.7
All Schools, Citywide		33.9

*Note: Roberts School figure is with 207 vacancies at New Towne Court/Washington Elms.

Source: Cambridge School Committee.

TABLE			NEIGHBORHOODS BY 1-4 FAMILY HOMES
Cambridge Neig	Jhborhood	Average Sales Homes (Number	Price of 1-4 Family of Sales)
10		\$118,775	(36)
9		99,809	(22)
8		83,873	(12)
12		71,700	(2)
6		68,223	(22)
5		47,947	(43)
11		47,859	(27)
13		45,083	(6)
3		36,493	(15)
7		34,234	(14)
l		26,572	(7)
4		26,473	(11)

Source: Cambridge Community Development Department.

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CHAPTER IV: CURRENT FLEXIBILITY AND RELOCATION OPTIONS

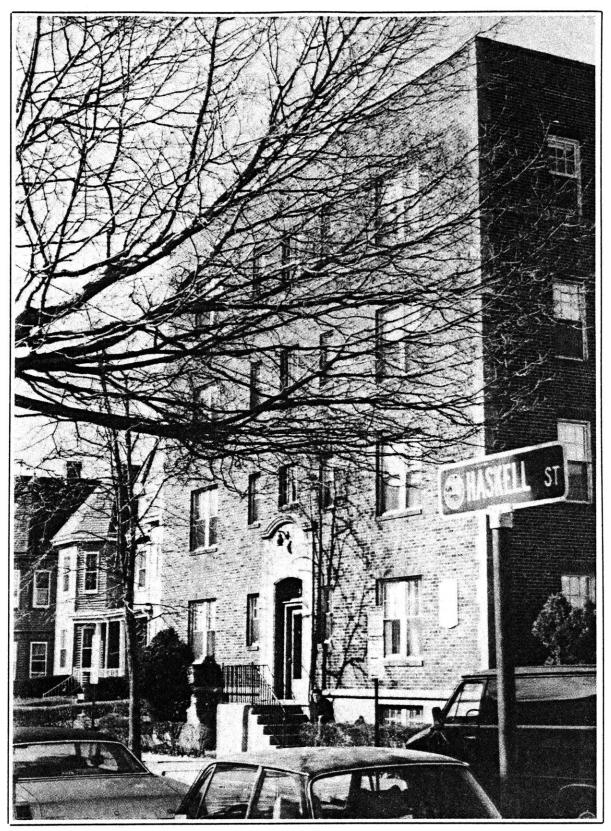


FIGURE 23: Cambridge Leased-Housing Program, Number 5 Haskell Street. Thirteen low-income households reside here under existing Section 23, Section 8 and Chapter 707 programs.



FIGURE 24: Cambridge Leased-Housing Program, Number 411 Franklin Street. Thirteen units are leased here for low-income residents.



FIGURE 25: Cambridge Turnkey-III Low-Income Home Ownership Program, 47 Lopez Street. Six low-income families reside here as a result of this C.H.A. program.

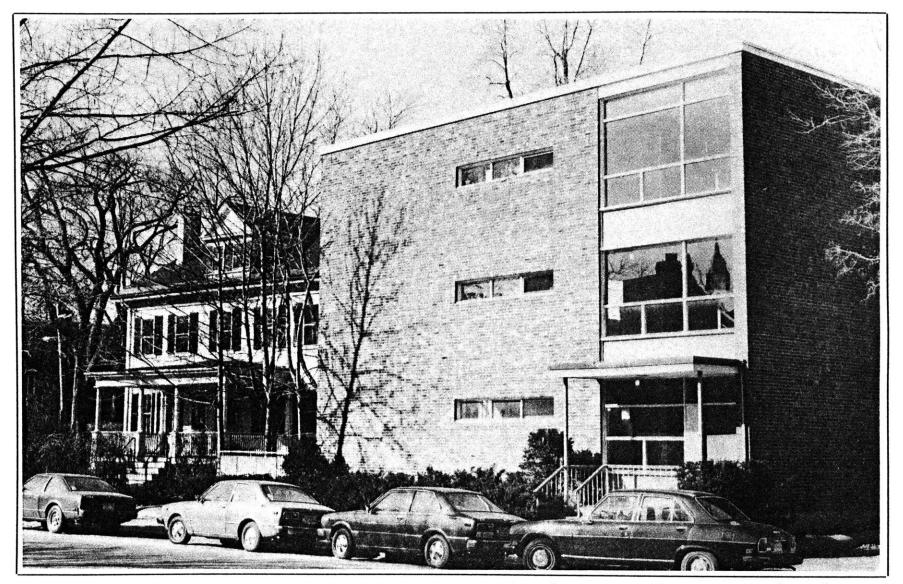


FIGURE 26: New Small-Scale Elderly Development, 45 Linnean Street. Twenty-four lowincome elderly households will occupy this building following C.H.A. adaptations.

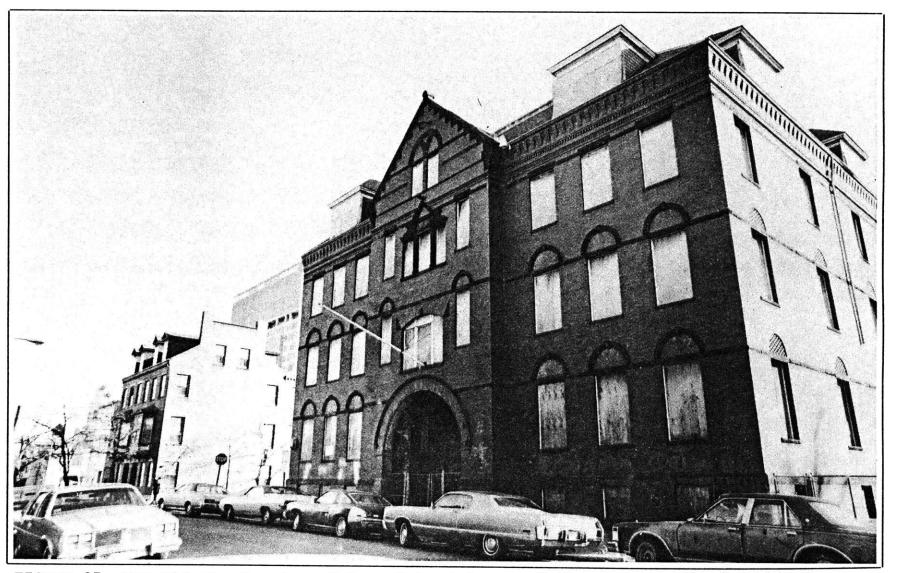


FIGURE 27: New Elderly Housing, Putnam School Conversion. Fifty-four housing units for the elderly will be available in 1981 following C.H.A. conversion.

There are now between 600 and 700 units or rental assistance subsidies available from which families at New Towne Court/Washington Elms might choose, should deconcentration be agreed upon. Approximately 350 units are in expanded leased housing and rental assistance programs; 78 units are in new developments for the elderly; 32 units are in new small-scale family housing; 67 units are available in other CHA developments due to normal vacancies, and 136 units are also available in other CHA developments due to actual or planned modernizations (Tables XI and XII, pp.93 and 95). Units available due to normal vacancies in MHFAand HUD-assisted developments and future housing in the Wellington-Harrington Urban Renewal Area, possibly on the Simplex property and at the MBTA yards in North Cambridge may additionally provide a number of low-income units from which to choose. Further, redevelopment of the Harvard Street frontage between Portland and Windsor Streets (now largely vacant) into residential rental property would allow 200 of the 395 families at New Towne Court/Washington Elms to remain in the area. This development is further described as part of CHA Option No. 1 in the proposal which follows.

Some of the units or rental subsidies noted above have been intended for other low-income clients. The CHA is presently reviewing applications from a recent offering of fifty Section 8 units, Chapter 707 Rental Assistance, and Moderate Rehabilitation programs. Elderly people on CHA

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waiting lists are anticipating completion of the Linnean Street and Putnam School developments. Families at Putnam Gardens and in Cambridgeport are awaiting the new River-Howard development. There is also a tentative CHA plan for reoccupancy of modernized buildings at Roosevelt Towers. In this context, opportunity presented by the pending conversion of Cambridge's Section 23 to Section 8 units (Table XI, p. 93) -- and the number of these units available and unassigned -- helps make this a unique time for deconcentration of families at New Towne Court/Washington This will also allow minimum disruption of the expec-Elms. tations of other low-income families. Under both CHA bylaws and the Uniform Relocation Act of 1970, however, families "displaced by public action" at New Towne Court/Washington Elms would receive preference in all developments noted above.

A crucial part of any new proposal is the willingness and ability of the Cambridge Housing Authority to utilize its present resources for future low-income benefits. Options exercised now for relocation of residents from New Towne Court/Washington Elms will be paid back later in the form of new subsidized units in mixed-income development and/or Cambridge's own interjurisdictional rent subsidy program. Alternately, present system flexibility will be traded away, New Towne Court/Washington Elms will remain a large con-

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centration of low-income families, and 207 units of public housing will remain vacant or will go unused.

The proposal which follows is the only proposal that has surfaced which attempts to deal with the issues of low-income concentration, need for more acceptable forms of public assistance and spill-over effects without reducing resources available for low-income families. For the same number of families now at New Towne Court/Washington Elms it promises a better environment. It will increase assistance presently available to low-income families, beyond the 395 families now served. The proposal will also convert the 207 vacancies into a usable resource. For this to work, however, current flexibility in the system (i.e., vacancies, new units and rent subsidies) must be used for relocation.

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TABLE XI: SUMMARY CHART OF ALL UNASSIGNED RELOCATION OPTIONS (Total: 612 - 712 Units)

New Leased Housing (354-394 units):

- Section 8, Rental Assistance in 75 units Existing Housing (1974 and 1979 Annual Contributions Contracts)
- Section 8, Moderate Rehabilitation 50 units Program (March, 1980)
- Section 8, New Interjurisdictional (40 units) Program (applied for: November, 1979)
- Section 8, Conversion of Former 189 units Section 23 units (May, 1980)
- Chapter 707, Rental Assistance 6 units in Existing Housing
- Chapter 707, Rehabilitation Program 34 units

New Elderly Developments (78 units):

- 45 Linnean Street 24 units (Expected occupancy 1/81.)
- Putnam School Conversion 54 units (Expected occupancy 9/81.)

New Small-Scale Family Housing (32 units):

- River-Howard Development 32 units (Turnkey Program: Riverside-Cambridgeport Community Development Corporation, developer; CHA, owner. Expected occupancy 1/81.)

Available Units in Other CHA Developments due to Normal Vacancies (67 units):

- March 7, 1980 CHA Vacancy Report 67 units (assumed typical)

UNASSIGNED RELOCATION OPTIONS, continued

Available Units in Other CHA Developments due to Actual or Planned Modernization (136 units):

- Roosevelt Towers Modernization 76 units (Expected occupancy 6/81.)
- Jefferson Park Extension (60 units) (Modernization still unfunded; units are vacant pending further action.)

Available Units in MHFA or HUD Assisted Developments:

"Possible" MHFA or HUD Assisted Developments in the Future

- Wellington-Harrington Area Urban Renewal Proposal
- Development of Simplex Site as Mixed-Income Housing
- Development of MBTA Yards in North Cambridge as Mixed-Income Housing
- Other
- *Note: Numbers of units are correct (and unassigned) as of 3/14/80.

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Source: Cambridge Housing Authority.

TABLE	XII:	AVA	LABLE	UNITS	IN	OTH	ER CHA	DE	VELOPMENT:	S
									PLANNED	
									/7/80)	

CHA Identification Number	Development Name	velopment Size (Units)	Date of Initial Occupancy	Normal Vacancies (3/7/80, typical)	Modernization Units, Actual or Planned	Total Number of Available Units
Mass. 3-2	John Corcoran Park	152	1953	3		3
Mass. 3-3	Putnam Gardens	123	1954	2		2
Mass. 3-4	J. F. Kennedy Apartmer (elderly)	nts 88	1963	2		2
Mass. 3-6	Harry S. Truman Apts. (elderly)	67	1970	1		1
Mass. 3-7	Daniel F. Burns Apts. (elderly)	199	1973	1		1
Mass. 3-10	Millers River Apartmen (elderly)	nts 304	1974	7		7
Mass. 3-11	Lyndon B. Johnson Apts (elderly)	s. 181	1973	4		4
Mass. 3-12	Robert C. Weaver Apts (elderly)	. 20	1973	0		0
Mass. 3-14	121 Jackson Street/ 6-8 Fairmont Street	20	1974	0		0
Mass. 3-15	35, 47 Lopez Street/ 120 - 102 1/2 Pleasant Street/12 Prince Street (home-ownership progra	eet	1974	2		2
Mass. 3-17	19 Valentine Street	6	1974	0		0
Cambridge 200-1	Woodrow Wilson Court	69	1949	2		2
Cambridge 200-2	Jefferson Park	109	1950	5		5
Cambridge 200-3	Lincoln Way	60	1950	1		1
Cambridge 200-4	Roosevelt Towers	228	1950	6	76	82
Cambridge 200-5	Jackson Gardens	46	1951	1		1

CHA Identification Number	Development Name	Development Size (Units)	Date of Initial Occupancy	Normal Vacancies (3/7/80, typcial)	Modernization Units, Actual or Planned	Total Number of Available Units
Cambridge 200-6	Jefferson Park Extension	200	1952	28	60	88
Mass. 667-1	Frank J. Manning Ap	ots. 199	1976	1	~-	1
Mass. 667-2	116 Norfolk Street	39	1975	0		0
Cambridge 705-1	Willow Street Hames	s 15	1976	l		1
Total Available Units:					136	203

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AVAILABLE UNITS IN OTHER CHA DEVELOPMENTS, continued

Source: Cambridge Housing Authority.

CHAPTER V: A DEVELOPMENT PROPOSAL FOR NEW TOWNE COURT/WASHINGTON ELMS

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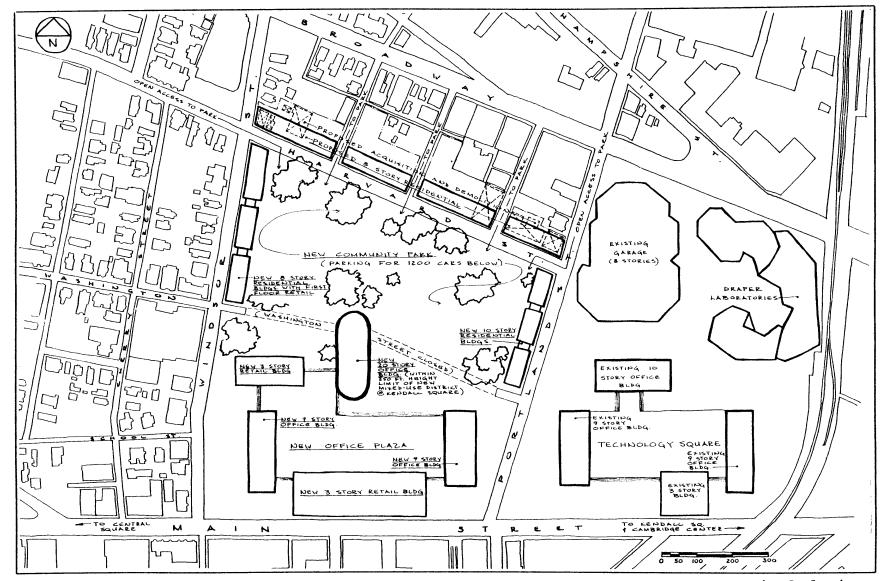


FIGURE 28: Diagram of Proposed New Development, C.H.A. Option Nos. 1 & 2. Final design will be decided by architectural competition.

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Offices:							
20 stories @ 20,761 each	415,250 sg. ft.						
9 stories @ 18,000 each	162,000 sq. ft.						
9 stories @ 18,450 each	<u>166,050 sq. ft.</u>						
Sub-total (Offices)	743,300 sg. ft.						
Retail:							
3 stories @ 44,400 each 3 stories @ 15,200 each	133,200 sq. ft. 45,600 sq. ft.						
Sub-total (separate retail)	178,800 sg. ft.						
l story @ 20,000	20,000 sg. ft.						
Sub-total (all retail)	198,800 sg. ft.						
Residential:							
7 stories @ 21,120 each	147,840 sg. ft.						
8 stories @ 11,280 each	90,240 sq. ft.						
8 stories @ 9,360 each 8 stories @ 10,800 each	74,880 sq. ft. 86,400 sq. ft.						
8 stories @ 8,160 each	65,280 sq. ft.						
10 stories @ 15,840 each	158,400 sq. ft.						
Sub-total (residential)	643,040 sq. ft.						
(approximately 60							
units)							
Parking:							
136,130 sq. ft. @ 1 car/900 sq. ft. 152 cars 805,970 sq. ft. @ 1 car/1800 sq. ft. 448 cars							
Sub-total (commercial parking) 600 cars							
600 residential units @ 1 car/unit 600 cars							
Sub-total (total parking) 1200 cars							
1200 cars @ 325 sq. ft./car	390,000 sg. ft.						
Landscaping:	753,000 sq. ft.						
Total Building Area (excluding parking): 1,565,140 sq. ft.							
Total Land Area (including acquisitions): 786,200 sq. ft.							
Floor Area Ratio (F.A.R.): 2.0							

FIGURE 29: Summary of Proposed Development Square Footage. (See also: Figure 28.)

Introduction

The following proposal sets out a demonstration project for maximizing an underutilized resource currently in the public trust for low-income families. Land and buildings of New Towne Court/Washington Elms -- 602 units, over 200 vacancies and serving only 395 households -- are leveraged to create a local Rent Subsidy Fund. The fund will be administered by the Cambridge Housing Authority. In an unfunded Urban Initiatives Proposal (August 11, 1978) the CHA had suggested demolition of four buildings and conversion of two others at Washington Elms. Breakthroughs between apartments also were recommended. The CHA proposal, intended to address the issue of low-income concentration, still left 474 low-income families living at New Towne Court/ Washington Elms. In addition, it decreased the resources available to low-income households by 128 units. To date, this proposal is the only alternative put forward which significantly addresses the issue of low-income concentration (as well as other previously noted issues) without reducing available resources for low-income families.

Objectives

The primary objective of the proposal is to serve low-income families without the hardship and stigma which, it has been argued, come from living in large, low-income concentrations. Secondary objectives of this proposal in-

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clude support of other municipal efforts for commercial area revitalization, development of an East Cambridge office market, return of land to the City's tax base, and addition of new primary and secondary jobs. A reduction of racial imbalance at local elementary schools, enhancement of neighborhood property values, increase in residential rental stock, the creation of off-street parking facilities, and development of a community park are other objectives which also are intended.

Funding Mechanisms

This proposal establishes a local Rent Subsidy Fund to pay for the difference between fair market rent and tenant contributions. The Fund is developed both through private and public mechanisms.

Private mechanisms involve either leasing or sale of New Towne Court/Washington Elms. Two CHA options include extensive redevelopment of the property. A third CHA option uses the property, largely, as it stands. Should property be leased, annual collections will go into the Rent Subsidy Fund. Should property be sold, proceeds from that sale will be invested as a local Rent Subsidy Trust Fund, the annual yield of which will then regularly subsidize low-income households.

The public mechanism used for creation of the local Rent Subsidy Fund is carryover of HUD's present annual contribution for families at New Towne Court/Washington Elms.

All three mechanisms are used to varying degrees in the three development options described below. Calculations are done both for 602 units representing the potential household population of New Towne Court/Washington Elms and for 395 households currently residing there. Required amounts for the Rent Subsidy and Rent Subsidy Trust Funds, both with and without carryover of HUD's present contribution, are summarized in Table XIII, p. 109. Throughout this proposal, "BASIC Rent Subsidy Fund" refers to the annual subsidy required, without a continuing HUD contribution. The BASIC Rent Subsidy Fund may be provided either through lease of New Towne Court/Washington Elms property or through annual yield of the sale proceeds invested in a "BASIC Rent Subsidy Trust Fund". In a similar way, the "HUD-SUPPLEMENTED Rent Fund" refers to the annual subsidy required with carryover of HUD's present contribution. The "HUD-SUPPLEMENTED Rent Subsidy Trust Fund" refers to the amount of capital investment needed to annually yield the HUD-SUPPLEMENTED Rent Fund. (See also Table E2, p. 182.)

Parties to the Proposed Action and Time Frame

Three options for the Cambridge Housing Authority which follow represent, to different degrees, the diverse group of actors necessary to make this proposal a reality: tenants of New Towne Court/Washington Elms, representatives

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of low-income families on CHA waiting lists, neighborhood residents, private developers, CHA program administrators, the Cambridge Community Development Department, the Cambridge City Council, Massachusetts Office of Communities and Development, Massachusetts Housing Finance Agency, Massachusetts Industrial Finance Agency and the U. S. Department of Housing and Urban Development. The final option also involves participation of M.I.T. Judging from past experience, outside mediation among these parties will be necessary.

The options described in this proposal will begin in 1982, following repayment of outstanding bonds on New Towne Court/Washington Elms.

Cambridge Housing Authority Option No. 1, The Preferred Option

In CHA Option No. 1, half the residents at New Towne Court/Washington Elms will be given first choice for housing alternatives listed in Chapter IV. Other New Towne Court/ Washington Elms families either will also be given Chapter IV alternatives or will be relocated to new mixed-income housing within the area. Two hundred condominiums will be developed along with 400 rental units subsidized by condominium sales. Half the rental units will be for families with low-incomes. Massachusetts' Department of Communities and Development will be asked to pay all relocation expenses.

New Towne Court/Washington Elms will be rezoned, from its present floor area ratio (F.A.R.) of .75 to an F.A.R. of

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2. (This compares to an F.A.R. of between 4 and 8 on 24 acres in Kendall Square.) Washington Street will be closed. All buildings at New Towne Court/Washington Elms will be demolished. Cambridge's Commercial Area Revitalization District (C.A.R.D.), now abutting C.H.A. property, will then be extended to include the project site.

C.A.R.D. and M.H.F.A. financing, an Urban Development Action Grant (U.D.A.G.) and a 121-A tax agreement (or equivalent) will be used to assist private development. That development will also include office and retail space underground parking and a community park. Land for commercial development will be leased with CHA proceeds used to establish the Rent Subsidy Fund. A smaller Rent Subsidy Trust Fund will be established from sale of part of CHA land for condominiums and rental housing. A tentative design proposal is illustrated in Figure 28, p. 98, with final design ultimately to be decided through architectural competition. Preliminary cash flow analyses, based upon square footage assumptions derived from Figure 28, are included in Tables El to El7 on pp. 176 to 200. These are summarized in Table XIV, p. 110 of the text.

In CHA Option No. 1, 486 low-income families will be subsidized without a continuing HUD contribution --91 more families than are currently being served. With a carryover of HUD's contribution, 676 low-income families

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will be served -- 74 more than the present capacity of New <u>Towne Court/Washington Elms.</u> In CHA Option No. 1, indexing of the Rent Subsidy Fund to commercial land rent will also allow for a 15% increase in rent subsidy requirements with only a 2.3% rise in commercial rents (Table XV, p. 111). Additionally, the building of condominiums included in this option will create an internal subsidy for development of new rental stock. For these reasons, especially, Option No. 1 is the "preferred option".

Tables XVI and XVII, pp.112 and 113 illustrate that under CHA Option No. 1, 2881 permanent jobs will be created. \$2.9 million also will be returned to Cambridge each year in the form of new real estate taxes.

Cambridge Housing Authority Option No. 2

The second CHA option also rezones New Towne Court/ Washington Elms. CARD designation and financing will be sought as well as a 121-A tax agreement and MHFA financing. In this option, however, rather than leasing land for private development, the CHA will sell the land outright. Land price will be determined by needs of the Rent Subsidy Trust Fund and a UDAG grant will be used to write down cost of land to the developer. Land prices for various Rent Subsidy Trust Fund assumptions and UDAG assistance are summarized in Table XVIII, p. 114. A price of \$15 per square foot of land (F.A.R. = 2) is consistent with the area. Six dollars per square foot of land is the underwritten price for land in Phase I of Cambridge Center.

Use of State and Federal Programs in Both CHA Option Nos. 1 and 2

Both CHA Option Nos. 1 and 2 rely on several existing State and federal programs, sometimes in innovative ways. 121-Atax benefits are sought largely for property coming <u>onto</u> the City's tax roles, rather than property already under taxation. MHFA financing is requested to <u>complement</u> a local Rent Subsidy Program rather than including MHFA Section 8 subsidies. CARD financing is also sought, providing additional benefits of tax credit against a corporation's State excise liability and a 25% payroll deduction for firms locating in CARD areas. [Limitations of \$10 million/developer or \$20 million/developer in a UDAG area, however, will require either that new development be phased or that more than one developer be utilized.]

At \$14 million, UDAG monies in this \$103 million dollar proposal will be leveraged over 6.5 times; and at \$12 million dollars over 7.5 times. In 1981, \$675 million in UDAG monies is available. Generally this is leveraged only 5 or 6 times the amount. Pittsfield, Massachusetts, in 1980 received a grant of \$14.2 million for a \$76 million regional shopping mall. The present proposal in CHA Option Nos. 1 and 2 will not only employ UDAG funds to leverage private capital but will also redirect those funds back to low-income families.

Cambridge Housing Authority Option No. 3

Both CHA Option Nos. 1 and 2 will involve demolition of buildings at New Towne Court/Washington Elms and maximize the land value. CHA Option No. 3, however, seeks to retain New Towne Court as public housing and to capitalize the value of both buildings and land at Washington Elms. CHA Option No. 3 requires neither rezoning, special financing, tax agreements nor federal grants. Instead, this option identifies M.I.T. as a likely user of Washington Elms and develops a comparative cost analysis for new graduate student housing. These figures are presented in Table XIX, p. 115. Without HUD contributions, 180 low-income families could be subsidized, from the sale of Washington Elms to M. I. T. This compares to 170 families presently subsidized with HUD contributions. A total of 270 low-income families could be subsidized if present HUD contributions for 170 families are continued as part of the local Rent Subsidy Fund.

Discussion of Cambridge Housing Authority Options

All CHA options listed above provide for deinstitutionalization of families currently living at New Towne Court/ Washington Elms. Only in CHA Option No. 1, however, is the annual Rent Subsidy Fund indexed to an expanding resource, i.e., rent from commercial development. In CHA Option Nos. 2 and 3, HUD will be required to compensate the Authority for rent subsidy increases due to inflation. HUD will then operate as it currently does with its present annual contributions contract. A policy decision will be required however, to permit HUD to carry over these funds into a local Rent Subsidy Program.

CHA Option No. 1 contains the greatest potential benefit to the CHA. It also, however, contains the greatest risk in that it relies on success of the developer.

CHA Option No. 2 allows the CHA to minimize its risk by withdrawing benefits at one point in time -- the point of sale. The Authority then is left to invest its proceeds in a Rent Subsidy Trust Fund and to rely on HUD to hedge the Fund against inflation. In both CHA Option Nos. 1 and 2, however, new commercial and residential development is brought into the area. Control or conditions on this development will be included in a land lease or as covenants in a deed of sale.

CHA Option No. 3 will involve fewer changes and a smaller number of participants. It also promises much fewer benefits, i.e., no new development, jobs or return of land to the City's tax base. Additionally, there will be less deconcentration of low-income households. In this final option, the Cambridge Housing Authority and M.I.T. would be forced to confront previous denials that negotiations had been going on, in secret, all along. Other actions of either the CHA or M.I.T. also might be jeopardized in the future.

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Item	602 Households	395 Households
Annual Requirement of BASIC Rent Subsidy Fund (i.e.: Fair Market Rent Less Tenant Contributions)	\$2,505,849	\$1,644,204
BASIC Rent Subsidy Trust Fund, annual requirement capitalized at 11% in U.S. government or corporate bonds.	\$22,780,445	\$14,947,309
Annual Requirement of <u>HUD-SUPPLEMENTED</u> Rent Fund (i.e.: Fair Market Rent Less Tenant Contributions Less Present HUD Contribution for 395 Households).	\$1,802,289	\$940,644
HUD-SUPPLEMENTED Rent Subsidy Trust Fund, annual requirement capitalized at 11% in U.S. government or corporate bonds.	\$16,384,445	\$8,551,309

TABLE XIII: SUMMARY CHART OF CHA RENT SUBSIDY AND RENT SUBSIDY TRUST FUNDS

* See also Appendix E, Table E2.

TABLE	XIV:	CHA	OPTIC	ON NC). 1,	PROCEI	EDS	FOR	RENT	
	SUB	SIDY	FROM	NEW	COMMI	ERCIAL	AND	RES	SIDENT	IAL
	DEV	ELOPI	1ENT							

Rent subsidy trust fund from proceeds of sale of condominiums	\$2,290,892
Annual rent subsidy from investment of trust in 11% U.S. government or corporate bonds	251,998
Annual rent subsidy from land rent on commercial development	1,772,996
Total annual subsidy available for low-income families	\$2,024,994
Number of low-income families subsidized as BASIC subsidy (i.e., without HUD contribution)	486
Number of low-income families sub- sidized as HUD-SUPPLEMENTED subsidy (i.e., contribution at level of 395 families)	676

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TABLE XV: CHA OPTION NO. 1, EFFECT OF SUBSIDY INCREASE ON COMMERCIAL	
Total annual subsidy available for low- income families (i.e., from both commercial land rent and rent subsidy trust fund)	\$2,024,994
15% increase	303,749
Previous commercial income -offices @ \$16.00/sq.ft. -retail @ \$13.00/sq.ft. -parking @ \$540/car	\$13,397,700 80% 16.5% 3.5%
New commercial income -offices @ 743,300 sq.ft., .90 occupancy factor -retail @ 178,800 sq.ft., .95 occupancy factor -parking @ 1000 cars, .90 occupancy factor	\$10,946,519 2,258,299 496,631
New Commercial rents/sq.ft.	

New Commercial rents/sq.it.	
-offices	\$16.36, up 2.25%
-retail	\$13.30, up 2.27%
-parking	\$552, up 2.22%

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TABLE XVI: CHA OPTION NO. 1, JOB GENERATION FROM NEW OFFICE SPACE

743,300 square feet of new office space^a ÷ 258 square feet/worker^b = 2,881 new office jobs:

- clerical and non-professional workers @ 62%^C: 1,786 jobs
 professional workers @ 38%^d: 1,094 jobs
- a) Schematic drawing, Figure 28, p. 98.
- b) Boston Redevelopment Authority, <u>The Office Industry</u> <u>Survey</u>, Boston, Mass.: City of Boston, 1979. pp. 13, 17. 37,967,626 sq.ft./147,000 workers = 258 sq.ft./worker
- c) Ibid., p. 17.
- d) Ibid., p. 17.

TABLE XVII: C.H.A. OPTION NO. 1. ANNUAL REAL ESTATE TAXES TO THE CITY OF CAMBRIDGE

- Annual real estate taxes on commercial development @ \$1.45/square foot 1: Annual real estate taxes on market rental units @ 20% gross income 2: Annual real estate taxes on subsidized low-income units @ 15% gross income 3: Annual real estate taxes on condominiums @ \$188.60/\$1,000a.v.4; a.v./m.v. =.18 5: Total annual real estate taxes to the City of Cambridge: \$2,960,785
 - 1) Cambridge Tax Assessor's Office, Cambridge Center figure
 - 2) Cambridge Tax Assessor's Office, 121-A tax rate
 - 3) Cambridge Tax Assessor's Office, 121-A minimum tax
 - 4) Cambridge Tax Assessor's Office
 - 5) Cambridge Tax Assessor's Office

		602 Households			395 Households				
UDAG		BASIC Fund		HUD - SUP- PLEMENTED		BASIC Fund		HUD - SUP- Plemented	
				Fund			~	Fun	
		**	***		_		_		
		A	В	A	В	A	В	A	B
\$ 0		\$33.61	32.57	24.47	23.43	22.41	21.37	13.27	12.23
l n	nillion	32.18	31.14	23.04	22.00	20.98	19.94	11.84	10.80
2 r	million	30.75	29.71	21.61	20.57	19.55	18.51	10.41	9.37
3 г	million	29.32	28.28	20.18	19.14	18.12	17.08	8.98	7.94
4 r	million	27.89	26.85	18.75	17.70	16.69	15.65	7.55	6.51
6 г	million	25.03	23.99	15.89	14.85	13.83	12.79	4.69	3.65
8 1	million	22.18	21.13	13.03	11.99	10.98	9.93	1.83	.79
10 r	million	19.32	18.27	10.17	9.13	8.12	7.07	_	-
12 1	million	16.46	15.41	7.31	6.27	5.30	4.21	-	-
14 1	million	13.60	12.55	4.45	3.41	2.40	1.35	-	-

CHA OPTION NO. 2, COST OF LAND TO DEVELOPER (PER SQUARE FOOT) * WITH UDAG GRANT PASSED THROUGH TO CHA FOR RENT SUBSIDY TRUST FUND TABLE XVIII:

_ current land prices on Main Street, approx. \$15/sq. ft.

Note: Cost per buildable square foot with F.A.R.=2 is half table figure.

* Total square footage of New Towne Court/Washington Elms land = 699,390
** Demolition included

*** Demolition not included

TABLE XIX: CHA OPTION 3, SALE OF WASHINGTON FOR USE AS GRADUATE STUDENT HOUS	
Land value:	
322,853 Sq. ft. @ \$7.00/sq. ft.:	\$2,259,971
Building value (new):	
249,264 sq. ft @ \$34.00/sq. ft.:	8,474,976
Sub-total:	\$10,734,947
Development expenses @ 10%:	1,073,495
Sub-total:	\$11,808,442
Less rehabilitation costs:	
249,264 sq. ft. @ \$20.00/sq.ft.:	-4,985,280
Total value of Washington Elms to MIT as graduate student housing:	\$ 6,823,162
Annual proceeds from investment of sale in 11% government or corporate bonds:	\$ 750,548
Number of households subsidized from annual proceeds of investment, without HUD supplement:	180
Number of households subsidized from annual proceeds of investment, with additional HUD supplement equal to current level of \$368,855 for 170 households:	270

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* Working assumption.

IMPLEMENTATION

CHAPTER VI: DEVELOPMENT PROPOSAL

Expansion of the Field of Participants

Implementing the options discussed in this proposal will involve expansion of the field of participants from those mentioned in other CHA recommendations. The expanded field of participants (from both public and private sectors) and primary areas of their concern are listed in Table XX p.121. A smaller number of participants involved in CHA Option No. 3 also is noted. Skillful mediation among these various actors will be required to resolve a variety of social, political and institutional issues. In the following sections, these issues are explored. While questions concerning their resolution will not always be answered, they nevertheless are raised. The next task, if this proposal is developed further, will be to deal with these issues in greater detail.

Social Issues

Social issues raised by this proposal involve willingness of low-income families at New Towne Court/Wasington Elms to relocate, difficulty in leasing other units, and apprehension about possible rejection and discrimination. Additionally, there are concerns of already having been stereotyped and that for these households, integration into the rest of Cambridge might be difficult. While some low-income residents may have ideological objections to leaving New Towne Court/ Washington Elms, other residents may feel nostalgia.

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In neighborhoods where these public housing tenants will relocate, apprenhension on the part of local residents may also have to be overcome. While Cambridge already has a sizeable leased-housing program, fear based upon stereotyped images still may persist among area residents. There also may be questions of CHA responsibility in placement of tenants, whether the Authority is "exporting its more difficult tenants," and the CHA's role should problems arise.

Desire of people to participate in decisions which affect their lives raises the issue of organization and leadership for residents at New Towne Court/Washington Elms. This also is an issue for low-income people on CHA waiting lists. There is a question of trust of information from government and need for other resources so that low-income people may be full party to all discussions and negotiations. As greater numbers of participants become involved there is further need for clear information, mediation of differences, and coordination of effort. These are required at both planning and implementation stages of this proposal as it relates to other developments in the City.

Political Issues

Dispersion of a power base for leaders of low-income groups, "gentrification" of the neighborhood, perception of much new development as "institutional expansion" and traditional "town-gown" controversy are issues which must be

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resolved in Cambridge's political arena. There also is a series of "image" issues involving the CHA and the U. S. Department of Housing and Urban Development (HUD). It will be important for the Cambridge Housing Authority to be perceived neither as gatekeepers nor as "giving up" on New Towne Court/Washington Elms. Instead, the Authority must be perceived as implementing newer State and Federal policies on deconcentration and as expanding resources available for Cambridge's low-income residents. Similarly with HUD, it is essential that this proposal be seen in terms of the many benefits which it contains for low-income families and for the City of Cambridge -- not as another Pruitt-Igoe.^{*} Good relations with the media, in these regards, are essential.

Policy Issues

Policy issues for the Cambridge Housing Authority which are raised in this proposal include: (1) expansion of the field of participants, (2) future relations with the City of Cambridge, (3) use of present relocation options for residents of New Towne Court/Washington Elms, (4) legal issues surrounding disposition of the projects, and (5) establishment of a local Rent Subsidy Fund.

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^{*} Pruitt-Igoe (St. Louis, Missouri) was a housing project dynamited by the city in 1972 after abandonment by low-income tenants. Since then, it has come to symbolize failure of government to effectively deal with problems in large, low-income housing projects.

Major issues for the U. S. Department of Housing and Urban Development (HUD) include: (1) demolition of public housing, (2) carryover of project subsidies into a local Rent Subsidy Fund, (3) continuing assistance to hedge against effects of inflation, and (4) "announcement effects" with regard to other public housing projects.

These issues notwithstanding, however: the concentration of low-income and minority residents in Cambridge Neighborhood 4, spill-over effects on neighborhood schools and local property values, obsolescence of existing structures and incongruity with surrounding development, diminution of resources for low-income people, current flexibility in the system and the potential for revitalizing an historic commercial district, assisting development of an East Cambridge office market, creating new jobs and returning land to the City's tax base -- all press for serious consideration of this proposal.

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TABLE XX: FIELD OF PARTICIPANTS AND AREAS OF INVOLVEMENT, CHA OPTION NOS. 1, 2, AND 3*

Public Participants

*1. Cambridge Housing Authority

2. Cambridge Community Development Department

- 3. Cambridge Redevelopment Authority
- 4. Cambridge Tax Assessor's Office
- 5. Cambridge City Council

6. Massachusetts Housing Finance Agency

Primary Areas of Concern

- a. overall proposal responsibility
- b. legal issues re. disposition of housing projects and establishment of local Rent Subsidy Fund
- c. tenant relocation
- d. interface with all other participants
- a. zoning revisions
- b. Commercial Area Revitalization District (CARD)
- c. Urban Development Action Grant (UDAG) proposal
- d. coordination with other development projects
- a. coordination with Kendall Square redevelopment (Cambridge Center)
- b. possible relocation assistance

121-A (or equivalent) tax agreement

- a. overall proposal approval
- b. zoning revisions
- c. Commercial Area Revitalization District (CARD) extension and approval
- d. Urban Development Action Grant (UDAG) application
- e. 121-A (or equivalent) tax agreement

bond issues for new residential development FIELD OF PARTICIPANTS AND AREAS OF INVOLVEMENT, CHA OPTION NOS. 1, 2, AND 3 (Table XX, continued)

- 7. Massachusetts Executive Office of Communities and Development
- 8. Massachusetts Industrial Finance Agency
- *9. U. S. Department of Housing and Urban Development (HUD)

- a. relocation assistance
- b. Commercial Area Revitalization District (CARD) approval

bond issues for new commercial development under CARD program

- a. disposition of public housing projects
- b. carry over of project assistance into local Rent Subsidy Fund
- c. Urban Development Action Grant (UDAG)
- d. possible proposal guarantees or insurance for low-income families

Private Participants

- *1. Residents of New Towne Court/ Washington Elms
- *2. Low-income residents on CHA waiting lists
- 3. Neighborhood 4 residents

Primary Areas of Concern

- relocation and relocation assistance
- a. lower priority in present housing options
- b. available pool of resources for low-income people
- a. socio-economic impacts of new development
- b. physical impacts of new development
- c. relocation and change along Harvard Street frontage

FIELD OF PARTICIPANTS AND AREAS OF INVOLVEMENT, CHA OPTION NOS. 1, 2, AND 3 (Table XX, continued)

- 4. Other Cambridge residents
- a. impact of integration of low-income residents into other neighborhoods
- b. impact of new development on Cambridge political structure, tax base and economic development
- *5. Massachusetts Institute of Technology (M.I.T.)
 - 6. Private developers
- *7. The media
- 8. Mediation consultants

- a. (in Option No. 3) possible perception of expansionist role in the community
- b. housing assistance for students
 - actuality of new development

projection of proposal to the public

- balancing diverse interests in order to realize this proposal
- * Indicates more limited field of participants in CHA Option No. 3.

APPENDIX A: OFFICE MARKET SURVEYS FOR BOSTON

AND CAMBRIDGE

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TABLE AL: BOSTON MARKET SURVEY*

Downtown Market

Building	Date Completed	No. Flrs.	Total Rent- able area	SF Avail.	Est. Rent/SF	Percent Vacant
470 Atlantic Ave.	1926	14	297,000	76,080	\$10.50-11.50	26
l Beacon Street	1973	40	1,100,000	full	\$15-17	0
l Boston Place	1970	41	769,153	5,788	\$16.00	.8
One Bulfinch Place	1972	5	45,000	2,670	\$14.00	6
l Center Plaza	1966	9	187,276	full	\$15.00	0
2 Center Plaza	1967	9	193,082	full	\$15.00	0
3 Center Plaza	1969	9	195,844	full	\$15.00	0
100 Charles River Pa	rk 1966	9	104,000	13,115	\$12.00	13
55 Court Street	1969 (renovation)	5	60,000	800	\$10.00	1
82 Devonshire Street	1976	10	200,000	full	\$12.00	0
l,2,3 Faneuil Hall M (South Building)	kt. 1977	5	91,323	555	\$13.00	.6
4,5,6 Faneuil Hall M (North Building)	kt. 1978	5	55,208	473	\$14.50	.9
l Faneuil Hall Squar		n)				
(Sanborn Fish Market) 1980	5	20,000	20,000	\$17.00	100
Federal Reserve Plaza	a 1976	33	1,000,000	15,100	\$15-16	2
l Federal Street (Shawmut Bank Bldg.)	1976	38	1,103,000	6,000	\$14-15	.5
70 Federal Street	1966	7	62,000	full	\$14.50	0
75 Federal Street	1920	21	200,550	full	\$15.00	0
100 Federal Street (First National Bank)	1971)	39	1,400,000	full	\$15.00	0
133 Federal Street	1960	12	111,000	8,608	\$12.00	8
175 Federal Street	1977	, 16	200,000	1,900	\$15.00	10
100 Franklin Street	(renovation 1979	, 10	100,000	full	\$12.00	0
225 Franklin Street (State Street Bank)	1966	33	852,000	full	\$14.00	0
99 High Street (Keystone Bldg.)	1971	32	775,000	full	\$14.00	0

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BOSTON MARKET SURVEY*, Downtown Market, continued

Building	Date Completed	No. Flrs.	Total Rent- able Area	SF Avail. 1		Percent Vacant
125 High Street	1959/64	16	285,000	full	\$12-13.00	0
101 Huntington Avenu	e 1971	26	432,000	full	\$14-15.00	0
45 Milk Street	(renovation 1980)) 10	65,000	30,000	\$15.00	46
l Post Office Sq.	1981-82	39	735,000	615,000	\$20-25.00	84
10 Post Office Sq.	1920	13	176,978	30,512	\$14.00	17
Ten Post Office Sq.	1920	13	201,300	6,960	\$15.00	4
45 School Street (Old City Hall)	1971	5	75,000	full	\$13.00	0
Sears Crescent	1969	5	46,840	4,500	\$13.50	10
50 Saniford Street	1975	10	181,601	5,832	\$12.00	3
28 State Street (N.E. Merchants)	1968	40	590,000	4,171 (suble	t) \$13.00	.7
60 State Street	1977	38	823,014	8,396	\$15.00	1
55 Summer Street (Charlestown Savings	1976)	10	101,000 (USF)	full	\$12.00/US	F O
100 Summer Street (Blue Cross Bldg.)	1974	33	1,034,752	full	\$13.00	0
One Washington Mall	1972 (renovatio	16 (n)	154,000	6,957	\$13.50	5
7 Water Street	1978	9	40,000	full	\$12.00	0
One Winthrop Square	1974	5	90,000	full	\$11.00	0

* Downtown: Total Rentable Area = 13,332,921 Available Sq. Feet = 198,417 Vacancy Rate = 1.5 percent

BOSTON MARKET SURVEY*, continued

Back Bay Market

Building	Date Completed	NO. Flrs.	Total Rent- able Area	SF Avail.	Est. Rent/SF	Percent Vacant
500 Boylston Street	1960	6	100,000	full	\$10.00	0
535 Boylston Street	1965	13	90,000	4,996	\$12.00	6
545 Boylston Street	1973	13	85,000	6,500	\$12.00	8
800 Boylston Street (Prudential Tower)	1965	52	1,400,000	full	\$14-15.00	0
200 Clarendon Stree (Hancock Tower)	t 1973	60	2,000,000	40,000	\$14.00	2
Copley Place	1983 2	2 bldgs.	1,000,000	1,000,000	\$17-20.00	100

Backbay: Total Rentable Area = 3,675,000 Available Sq. Feet = 51,496 Vacancy Rate = 1.4 percent

- Boston: Total Rentable Area = 17,007,921 Available Sq. Feet = 249,913 Vacancy Rate = 1.5 percent
- * Source: Spaulding and Slye Report, October 1, 1979.

Building	Date Completed	NO. Flrs.	Total Rent- able Area	SF Avail.	Est. <u>Rent/SF</u>	Percent Vacant
One Broadway	1970	16	220,000	full	\$12.75	0
Cambridge Center (Building #1)	1981	13	250,000	200,000	\$14-16.00	76
50 Church Street	1979	4	60,000	11,000	\$12.75	18
l Main Street (Riverside Office Pk	1981 :)	14	300,000	300,000	\$14-15.00	100
675 Mass. Avenue (Central Plaza)	1968	14	130,000	35,700	\$10.00	27
955 Mass. Avenue	1970	8	88,000	full	\$11.00	0
1033 Mass. Avenue	1969	6	65,000	full	\$11.00	0
1050 Mass. Avenue	1974	5	65,000	full	\$11.00	0
1100 Mass. Avenue	1979	5	48,000	full	\$12.00	0
840 Memorial Drive	1980	5	134,000	full	\$12.50	0
10 Moulton Street	1975	5	75,000	full	\$11.00	0
8 Story Street	1970	6	20,000	full	\$11.00	0
14 Story Street	1971	6	36,000	full	\$11.00	0
545 Technology Sq.	1960	9	140,000	full	\$11.00	0
555 Technology Sq.	1976	8	450,000	full	\$11.00	0
565 Technology Sq.	1963	9	181,800	full	\$11.00	0
575 Technology Sq.	1966	9	150,633	full	\$11.00	0

TABLE A2: CAMBRIDGE MARKET SURVEY*

Total Rentable Area = 1,621,433 Available Sq. Feet = 35,700 Vacancy Rate = 2.2 percent

* Source: Spaulding and Slye Report, October 1, 1979.

APPENDIX B: BUSINESSES AND PROPERTY OWNERSHIP ON MAIN STREET

		OR ORGANIZATIONS 7 OF MAIN STREET	LOCATED ON OR
Organization tion h	of Organ by Number ployees*		Type of Business Activity
Polaroid 4, Corporation	,200	549-575 Tech- nology Square	Manufacturers of photographic equipment and supplies
Draper Labora- 1. tories, Inc.	,700	555 Technology Square	Non-profit corporation; development of inertial gui- dance and navi- gation systems
Badger Company	700	l Broadway	Engineers, con- tractors and developers of oil refineries and chemical plants
U.S. Department of Transportation	645	Kendall Square	Regulation and administration of transportation
New England Bank Association	374	l Broadway	Data processing services
Nabisco Confections Co., Inc.	304	810 Main Street	Manufacturers of candies and con- fectionary products
Bioran Medical Laboratory	225	415 Massachu- setts Avenue	Medical labora- tories
Heritage Travel, Inc.	135	238 Main Street	Arrangement of passenger trans- portation
Morden Continental Construction Company	127	905 Main Street	Sewer and water construction contractors

BUSINESSES OR ORGANIZATIONS LOCATED ON OR IN THE VICINITY OF MAIN STREET, continued					
	f Organi y Number ees*		Type of Business Activity		
Kentron Inter- national, Inc.	126	55 Broadway	Computer pro- gramming and other software services		
Index Systems, Inc.	120	l Broadway	Management con- sulting and com- puter program services		
TMI System Corp.	116	l Broadway	Management con- sulting and public relations services		
Haley & Aldrich, Inc.	80	238 Main St.	Consulting en- gineers and geologists		
Computer Corporation of America	80	575 Technology Square	Computer pro- gramming and other software services		
Cabot, Cabot & Forbes Property Management Co. Inc.	70	Technology Square	Nonresidential building operators		
General Latex & Chemical Corp.	50	666 Main Street	Chemical plant, natural and syn- thetic latics and chemicals		
Honeywell Informa- tion Systems, Inc.	42	575 Technology Square	Software develop- ment		
New England Telephone Business Office	2 39	575 Technology Square	Telephone commu- nications		

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BUSINESSES OR ORGANIZATIONS LOCATED ON OR IN THE VICINITY OF MAIN STREET, continued

Business or Size of Organiza- Address Type of Business Organization tion by Number of Activity Employees*

Cambridge Sys- 33 238 Main Transportation tematics, Inc. Street planning, consulting Bay Bank Harvard -- 575 Technology National bank, Trust Square Federal Reserve

* Number does not necessarily reflect employees located at the address given.

Source: The Cambridge Directory, 1980.

TABLE B2: PROPERTY OWNERSHIP BY MAIN STREET BUILDING NUMBER*

<u>North</u> Main Street Building Number	Property Owner
29-37	Darvel Realty Trust
45-131	Cambridge Electric Light Company
137-145	Technology Realty Trust
157-163	Badger Company Incorporated
257	Massachusetts Bay Transportation Authority
261	Commonwealth of Massachusetts
275-309	Massachusetts Bay Transportation Authority
321-505	Cambridge Redevelopment Authority
545-575	Cabot, Cabot and Forbes Company
637-773	Cambridge Housing Authority
781-783	Beatrice Gordon and Alexander Mahlowitz
787	The Christian Mission
793-805	Charles A. Pappas
813-817	Thomas R. Ryan
821-823	Thomas R. Ryan and City of Cambridge Tax Title
827-833	Nabisco Confections Incorporated
853-863	Frank Mastromauro and Elena Mastromauro
865-871	S. A. Fennell, et al.
875-875A	F. S. Kimberk
877-881	Marshall E. Andelman

PROPERTY OWNERSHIP BY MAIN STREET BUILDING NUMBER*, continued

North Main Street Building Number	Property Owner
883-887	S. A. Fennell, et al.
889-891	Smillie Real Estate Trust
893-907	Leon M. Shulman

South Main Street Building Number	Property Owner
48	City of Cambridge
180-292	Massachusetts Institute of Technology
300	Patrick J. Glynn and Anne T. Glynn
304-320	F & F Corporation
326-336	Baratta Realty Trust
350	City of Cambridge
364-400	Massachusetts Institute of Technology
414-416	TRW Incorporated
418-440	United Carr Incorporated
448-528	Massachusetts Institute of Technology
568-618	Main Street Garage Incorporated
620-624	OFCO Incorporated
640-648	Polaroid Corporation
650-680	General Latex and Chemcial Corporation
700	Kaplan Baer Trust
718-734	Polaroid Corporation
740-744	S & M Realty Company, Inc.

PROPERTY OWNERSHIP BY MAIN STREET BUILDING NUMBER*, continued

South Main Street Building Number	Property Owner
782-798	Massachusetts Institute of Technology
804-830	Nabisco Confections Incorporated
838	U-Haul Company of Boston, Incorporated
840-842	Harbor Properties Trust
864-868	Nabisco Confections Incorporated
874	Massachusetts Baptist Missionary Society
882-884	Massachusetts Institute of Technology

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* Source: Cambridge Tax Assessor's Office.

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TABLE B3: PROPERTY OWNERSHIP BY MASSACHUSETTS AVENUE BUILDING NUMBER AT LAFAYETTE SQUARE*

North Massachusetts Avenue Property Owner Building Number

- 353-355 Massachusetts Institute of Technology
- 365-385 Shell Oil Company
- 401-409 Albert Smith
- 411-413 D & L Realty Trust
- 415-429 Varsames Realty Trust
- 433-445 Browne Realty Corporation
- 453-457 George Rothman
- 463-465 McDonalds Corporation

South Massachusetts Avenue Property Owner Building Number

372	Massachusetts Institute of Technology
380-392	City of Cambridge
408-420	Salvation Army
424-456	Katz Trustees
458	Vincent Mascellino, Jr.
460-464	Morris Friedman Trustee
472-476	Emile Dupont and City of Cambridge Tax Title

* Source: Cambridge Tax Assessor's Office.

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APPENDIX C: LOW INCOME HOUSING IN THE CITY OF

CAMBRIDGE

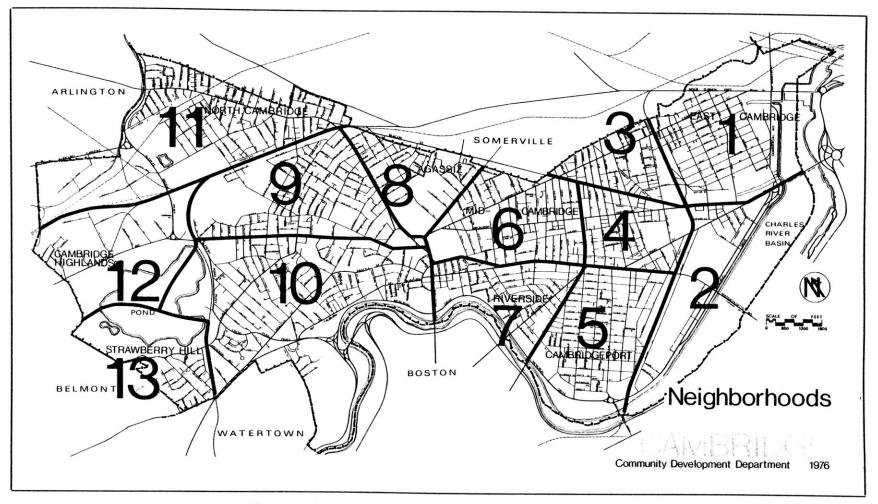


FIGURE 30: Cambridge Neighborhoods.

Neighborhood	CHA Public Housing Units	CHA Leased Units	Total CHA Units	Additional Units in MHFA Developments	Additional Units in HUD Developments	Total Low- Income Units
1	371	30	401			401
2						
3	243	84	327	52	24	403
4	767	106	835	59		894
5	495	72	567	69		636
6	46	39	85	32		117
7	123	78	201	122		323
8		11				11
9	60	95	155			155
10		17	17			17
11	478	108	586	·	456	1042
12		1	1			1
13	159	32	191		32	223
City of Cambridge	2704	673	3393	334	512	4223

TABLE C1: SUMMARY CHART OF LOW-INCOME UNITS BY CAMBRIDGE NEIGHBORHOODS*

* Includes units for the elderly.

Neighborhood	Percent of All Low-Income Units	Total Number of Low-Income Units
11	24.6	1042
4	21.5	894
5	15.0	636
3	9.5	403
1	9.5	401
Citywide Average**	8.3	353.25
7	7.6	323
13	5.3	223
9	3.7	155
6	2.8	117
10	.4	17
8	.3	11
12	less than .1	l
2		0

TABLE C2: RANK ORDER OF CAMBRIDGE NEIGHBORHOODS BY PERCENT AND TOTAL NUMBER OF LOW-INCOME UNITS*

* Includes units for the elderly.

** Assumes equal distribution among twelve city neighborhoods. Neighborhood 2 is M.I.T.

Neighborhood	CHA Public Housing (Family)	CHA Leased Housing	Total CHA Family Units	Additional Family Units in MHFA Developments	Additional Family Units in HUD Developments	Total Low- Income Family Units
l		30	30			30
2						
3	243	84	327		8	335
4	602	106	708	59		767
5	103	72	175	39		214
6	43	39	82	32		114
7	98	78	176			176
8		11	11			11
9	60	95	155			155
10		17	17			17
11	259	108	367		339	706
12		1	1			1
13	130	32	162		32	194
City of Cambridge	1538	673	2227	130	379	2720

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TABLE C3: SUMMARY CHART OF LOW-INCOME FAMILY UNITS BY CAMBRIDGE NEIGHBORHOOD*

* Excludes all units specifically designated for the elderly.

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TABLE C4: RANK ORDER OF CAMBRIDGE NEIGHBORHOODS BY PERCENT AND TOTAL NUMBER OF <u>CHA</u> , MHFA AND HUD LOW-INCOME FAMILY UNITS					
Cambridge Neighborhood	Percent of All Low-Income Family Units				
4	28.6	767			
11	25.8	707			
3	12.2	335			
Citywide averag	re 8.3	228			
5	7.8	214			
13	7.1	194			
7	6.4	176			
9	5.7	155			
6	4.2	114			
l	1.1	30			
10	.6	17			
8	. 4	11			
12	less than .1	1			

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TABLE	C5: RANK ORDER OF CAMBRIDG PERCENT AND TOTAL NUMBER INCOME UNITS (Family and	OF ALL CHA LOW-
Cambridge Neighborhood	Percent of All CHA Low-Income Units (Family and Elderly)	
4	25.1	835
11	17.3	586
5	16.7	567
1	11.8	401
3	9.6	327
7	5.9	201
13	5.6	191
9	4.6	155
6	2.5	85
10	.5	17
8	.3	11
12	less than .1	1

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PERCENT AND TOTAL NUMBER OF LOW-INCOME FAMILY UNITS IN CHA HOUSING PROJECTS				
Cambridge Neighborhood	Percent of All Low-Income Family Units in CHA Housing Projects	Total Number of Low-Income Family Units in CHA Housing Projects		
4	39.8	602		
11	16.7	259		
3	15.6	243		
13	8.4	130		
5	6.6	103		
7	6.3	98		
9	3.9	60		
6	2.8	43		
1				
8				
10				
12				

TABLE C6: RANK ORDER OF CAMBRIDGE NEIGHBORHOODS BY PERCENT AND TOTAL NUMBER OF LOW-INCOME FAMILY UNITS IN CHA HOUSING PROJECTS

	LEASED HOUSING	F CHA UNIIS IN
Neighborhood	Percent of All CHA Units in Leased Housing	Total Number of CHA Units in Leased Housing
11	16.0	108
4	15.8	106
9	14.1	95
3	12.5	84
7	11.6	78
5	10.7	72
6	5.8	39
13	4.8	32
1	4.5	30
10	2.5	17
8	1.6	11
12	.1	l
2		0

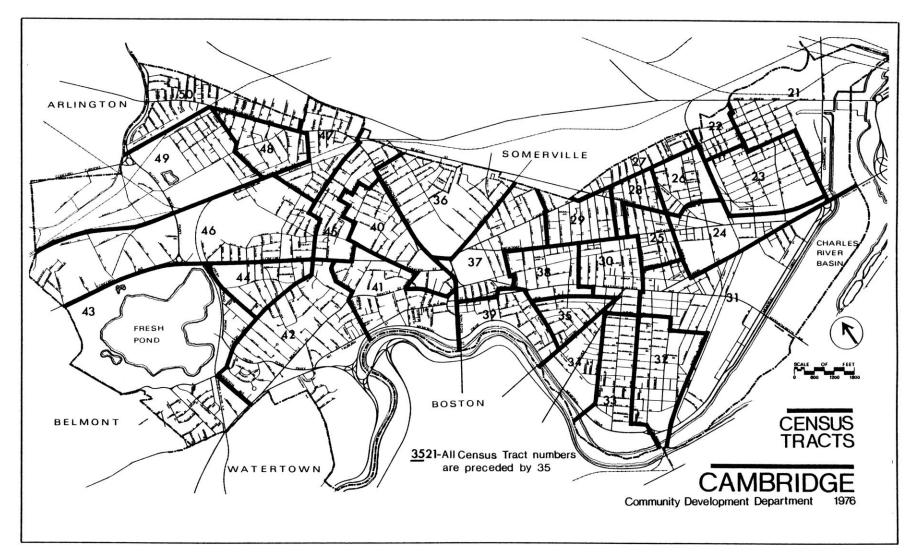


FIGURE 31: Cambridge Census Tracts.

Census Tract	CHA Public Housing Units	CHA Leased Units	Total CHA Units	Additional Units in MHFA Developments	Additional Units in HUD Developments	Total Low- Income Units
3521 3522 3523 3524 3525	371 602 39	6 11 13 12 51	6 382 13 614 90	 37	 	6 382 13 614 127
3526 3527 3528 3529 3530	15 228 134	28 32 15 15 26	43 260 15 15 160	52 	 24 	43 312 39 15 160
3531 3532 3533 3534 3535	199 296	37 25 27 30 32	37 224 323 30 32	22 3 66 28	 	59 227 323 96 60
3536 3537 3538 3539 3540	 123	11 8 31 10 3	11 8 31 133 3	 32 94		11 8 63 227 3
3541 3542 3543 3544 3545	 159 	6 2 35 6	6 2 194 	 	 32 	6 2 226 6 0
3546 3547 3548 3549 3550	60 478 	91 9 26 71 4	151 9 26 549 4	 	 456 	151 9 26 1005 4
City of Cambridg	2704 Je	673	3393	334	512	4223

TABLE C8: SUMMARY CHART OF LOW-INCOME UNITS BY CAMBRIDGE CENSUS TRACT*

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* Includes units for the elderly.

Census Tract	Percent of All Low- Income Family Units	
3549	23.7	1005
3524	14.9	614
3522	9.0	382
3533	7.6	323
3527	7.4	312
3532	5.4	227
3539	5.4	227
3543	5.3	226
3530	3.8	160
3545	3.7	151
Citywide Average	3.3	141.3
3525	3.0	127
3534	2.3	96
3538	1.5	63
3535	1.4	60
3531	1.4	59
3526	1.0	43
3528	.9	39
3548	.6	26
3529	.4	15
3523	.3	13
3536	.3	11
3547	.2	9
3537	.2	8
3521	.1	6
3541	.1	6
3544	.1	6
3550	less than .1	4
3540	less than .1	3
3542	less than .1	2
3545	less than .1	0

TABLE C9: RANK ORDER OF CAMBRIDGE CENSUS TRACTS BY PERCENT AND TOTAL NUMBER OF LOW-INCOME UNITS*

* Includes units for the elderly.

Census Tract	CHA Public Housing (Family)	CHA Leased Units	Total CHA Family Units	Additional Family Units in MHFA Developments	Additional Family Units in HUD Developments	Total Low-Income Family Units
3521 3522 3523 3524 3525	 602	6 11 13 12 51	6 11 13 614 51	 37	 	6 11 13 614 88
3526 3527 3528 3529 3530	15 228 43	28 32 15 15 26	43 260 15 15 69	 	 8 	43 260 23 15 69
3531 3532 3533 3534 3535	18 85 	37 25 27 30 32	37 43 112 30 32	22 3 36 		59 46 112 66 32
3536 3537 3538 3539 3540	 98 	11 8 31 10 3	11 8 31 108 3	 32 		11 8 63 108 3
3541 3542 3543 3544 3545	130	6 2 35 6	6 2 165 6 		 32 	6 2 197 6 0
3546 3547 3548 3549 3550	60 259 	91 9 26 71 4	151 9 26 330 4		339	151 9 26 669 4
City of Cambridge	1538	673	2227	130	379	2720

TABLE CLO: SUMMARY CHART OF LOW-INCOME <u>FAMILY</u> UNITS BY CAMBRIDGE CENSUS TRACT*

 \star Excludes all units specifically designated for the elderly.

TABLE C11: RANK ORDER OF CAMBRIDGE CENSUS TRACTS BY PERCENT AND TOTAL NUMBER OF LOW-INCOME FAMILY UNITS*					
Census Tract	Percent of All Low- Income Family Units	Total Number of Low- Income Family Units			
3549 3524 3527 3543 3546 3533 3539	24.5 23.0 9.5 7.2 5.5 4.1 3.9	669 614 260 197 151 112 108			
Citywide Average	3.3	91.2			
3525 3530 3534 3538 3531 3532 3526	3.2 2.5 2.4 2.3 2.2 1.7 1.2	88 69 66 63 59 46 43			
3535 3548 3528 3529 3523 3522 3536 3547	1.2 1.0 .8 .5 .5 .4 .4 .3	32 26 23 15 13 11 11 9			
3537 3521 3541 3544 3550 3540 3540 3542 3545	.3 .2 .2 .2 .1 .1 .1 less than .1 0	8 6 6 4 3 2 0			

* Excludes all units specifically designated for the elderly.

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TABLE C12:

NEIGHBORHOOD 1, TOTAL LOW-INCOME UNITS: 401 (30 Family Units, 371 Units for the Elderly)

CHA Public Housing Developments (371 units)

Census Tract	Development	No. of Units (elderly)	Housing	Program
3522	Truman Apartments	(67)	Federal	-
3522	Miller's River	(304)	Federal	

CHA Leased Housing (30 units)

Census Tract	Address	No. of Units	Housing Program
3521 3521 3521 3521 3521	 39 Gore St. 53 Gore St. 27 Sciarappa St. 43 Sciarappa St. 70 Thorndike St. 76 Thorndike St. 	1 1	707 23 8 8 23 23
3522 3522	<pre>642 Cambridge St. 7 Fifth St. 7 Fulkerson St. 28 Fulkerson St. 117 Gore St. 122 Otis St. 204 Otis St. 135 Thorndike St.</pre>	1 3 1 1 1	707 8 23 8 707 8 8 707
3523 3523 3523 3523 3523 3523 3523 3523	93 Sixth St. 91 Sixth St. 105 Sciarappa St.	1 3 2 1 1 1 1	8 707 23 707 707 707 23 8 23

TABLE C13:

NEIGHBORHOOD 3, TOTAL LOW-INCOME UNITS: 403 (335 Family Units, 68 Units for the Elderly)

CHA Public Housing Developments (243 units)

Census Tract	Development	No. of Units (elderly)	Housing Program
3526	Willow Street	15	705
3527	Roosevelt Towers	228	State Project

CHA Leased Housing (84 units)

Census Tract	Address	No. of Units	Housing Program
3524 3524 3524 3524 3524 3524 3524	 55 Hampshire St. 71 Hampshire St. 73 Hampshire St. 48 Webster Ave. 50 Webster Ave. 50 Webster Ave. 	1 2 3 1 1	23 23 23 23 23 23 8
3526 3526 3526 3526 3526 3526	22 Berkshire St. 48 Berkshire St. 52 Berkshire St. 96 Berkshire St. 118 Berkshire St.	1 1 1	707 8 8 707 707 707
3526 3526 3526 3526 3526 3526	<pre>146 Berkshire St. 148 Berkshire St. 744 Cambridge St. 764 Cambridge St. 10 Hamlin St.</pre>	2 1 2 1 1	8 8 23 8 8
3526 3526 3526 3526 3526 3526	6 Marcella St. 7 Marcella St. 21 Marcella St. 45 Plymouth St. 53 Plymouth St.	1 1	23 8 23 8 707
	<pre>391 Portland St. 439 Portland St. 15 Vandine St. 476 Windsor St. 376 Windsor St.</pre>	2 1 1 1 1	23 8 23 8 707
3526 3526 3526	378 Windsor St. 16 York Place 26 York St.	1 1 2	23 23 23

Census Tract Address No. of Units Housing Program 875 Cambridge St. 883 Cambridge St. 1 1221 Cambridge St. 4 1221 Cambridge St. 2 212 Film St. 1 313 Elm St. 31 Harding St.110 Hunting St.312 Hunting St.3352 Prospect St.1354 Prospect St.2 356 Prospect St.2356 Prospect St.1358 Prospect St.2358 Prospect St.1360 Prospect St.3 165 Tremont St. 3 Wellington Lane 116 Willow St. 293 Columbia St. 389 Columbia St. 1 395 1/2 Columbia St. 1 406 Columbia St. 1 3528 165 Elm St. 95 Hampshire St. 2 173 Hampshire St. 1 1 Union Place 1 25 Union St. 49 Union St.

 3528
 371 Windsor St.
 1

 3528
 469 Windsor St.
 1

 3528
 1218 Cambridge St.
 1

NEIGHBORHOOD 3, CHA Leased Housing (84 units), continued

Additi	onal Low-Income U	Jnits in MHFA Mixed-I	Income
	Developments (52	2 units)	
Census Tract	Development	No. of Additional Low-Income Units	Housing Program
•	-	(elderly)	Program
3527	Inman Square	(39)	R.S.
	Apartments	(4)	707
	-	(7)	23
		(2)	8

NEIGHBORHOOD 3, continued

Additional Low-Income Units in HUD Mixed-Income					
	Developments (2	4 units)			
Census Tract	Development	No. of Additional Low-Income Units (elderly)	Housing Program		
3528	Harwell Homes	(16) 6 2	R.S. R.S. 23		

TABLE C14:

NEIGHBORHOOD 4, TOTAL LOW-INCOME UNITS: 894 (767 Family Units, 127 Units for the Elderly)

CHA Public Housing Developments (729 units)

Census Tract	Development	No. of Units (elderly)	Housing Program
3524 3524 3525 3530	New Towne Court Washington Elms 116 Norfolk St John F. Kennedy	s 320 . (39)	Federal Project Federal Project State Project Federal Project

CHA Leased Housing (106 units)

Census Tract	Address No.	of Units	Program
3524 3524	82 Hampshire St. 208 Windsor St.	1 1	8 707
3525 3525 3525 3525 3525 3525	261 Broadway 263 Broadway 267 Broadway 269 Broadway 121 Cherry St.	1 1 3 1	707 707 8 707 23
3525 3525 3525 3525 3525 3525	162 Columbia St. 200 Columbia St. 204 Columbia St. 210 Columbia St. 210 Columbia St.	1 3 4 5 1	8 707 707 707 8
3525 3525 3525 3525 3525 3525	71 Elm St. 135 Elm St. 177 Harvard St. 181 Harvard St. 205 Harvard St.	1 1 1 1	8 8 23 23 8
3525 3525 3525 3525 3525 3525	207 Harvard St. 209 Harvard St. 211 Harvard St. 210 Harvard St. 217 Harvard St.	2 2 1 1 1	8 8 23 23
3525 3525 3525 3525 3525 3525	l Linwood Place 2 Linwood Place 3 Linwood Place 4 Linwood Place 40 Market St.	1 1 1 2	7 07 7 07 7 07 7 07 7 07 7 07

NEIGHBORHOOD 4, CHA Leased Housing (105 units), continued

Census Tract	Address	No. of Units	Program
3525 3525 3525 3525 3525 3525	<pre>168 Norfolk St 226 Norfolk St 95 Pine St. 97 Pine St. 171 Windsor St</pre>	· 1 1 1	8 8 23 8 23
3525 3525 3525 3525 3525 3525 3525	277 Windsor St 169 Windsor St 171 Windsor St 177 Windsor St 187 Windsor St 16 Worcester	. 2 . 1 . 1 . 1	707 23 23 23 23 23 8
3528 3529	184 Prospect S 199 Prospect S		8 8
3529 3529 3	29B Tremont St 31/2 Tremont St		8 23
3 5 3 0 3 5 3 0	77 Austin St. 77 Austin St. 5 Lamson Pla 1 Norfolk Pl 51 Norfolk St	ce l ace l	23 707 23 8 23
3530 3530	103 Norfolk St 103 Norfolk St 105 Norfolk St 105 Norfolk St 107 Norfolk St	. 1 . 1	23 707 23 707 707
3531 3531 3531 3531 3531	70 Austin St. 70 Austin St. 22 Columbia S 3 Columbia T 4 Columbia T	t. 1 errace 2	23 707 23 707 707
3531 3531 3531 3531 3531 3531	5 Columbia T 6 Columbia T 9 Columbia T 10 Columbia T 1 Coolidge P	Perrace 3 Perrace 3 Perrace 1	707 707 707 707 8
3531 3531 3531 3531 3531	l Coolidge P l Coolidge P 2 Coolidge P 6 Douglass S 62 Norfolk St	lace l lace 2 st. 2	23 707 8 23 707

NEIGHBORHOOD	4, CHA Leased Hous	sing (105 units)	, continued
Census Tract	Address	No. of Units	Program
3531 3531 3531 3531 3531 3531	62 Norfolk St. 103 School St. 105 School St. 107 School St. 109 School St.	1 1 1 1	23 707 707 707 707 707
Additi	onal Low-Income Un Developments (59		ed-Income
Census Tract	Development	No. of Additional Low-Income Units	Housin Progra
3525	Linwood Court	18 ing 19	707

Census Tract	Development	No. of Additional Low-Income Units	Housing Program
3525 3525	Linwood Court The Close Building	18 19	707 8
3531 3531	Cast I Cast II	16 3 3	R.S. 707 8

TABLE C15:

NEIGHBORHOOD 5, TOTAL LOW-INCOME UNITS: 636 (214 Family Units, 422 Units for the Elderly)

CHA PI	iblic	Housing	Developments	(495 units)

Census Tract	Development	No. of Units (elderly)	Housing Program
3532 3532 3532	35-45 Lopez St. Lyndon Johnson 20 Valentine St.	12 (181) Fed 6	Turnkey III eral Turnkey UDIC
3533 3533 3533 3533 3533 3533	Fairmont Village Frank Manning 120 Pleasant St. 12 Prince St. Woodrow Wilson	6 12	UDIC tate Project Turnkey III Turnkey III tate Project

CHA Leased Housing Units (72 units)

Census Tract	Address	No. of Units	Program
3530 3530 3530 3530	171 Auburn St. 222 Franklin St. 580 Massachusetts 34 River St.	1 1 Ave. 1 1	23 8 8 8
3531	214 Green St.	l	707
3532 3532 3532 3532 3532 3532	89 Allston St. 27 Acorn St. 176 Brookline St. 193 Brookline St. 247 Brookline St.	1 1 1 1	707 23 8 23
3532 3532 3532 3532 3532 3532	<pre>131 Erie St. 4 Glenn Terrace 143 Hamilton St. 96 Pearl St. 98 Pearl St.</pre>	1 1 2 2	23 8 23 23
3532 3532 3532 3532 3532 3532	100 Pearl St. 102 Pearl St. 104 Pearl St. 106 Pearl St. 108 Pearl St.	2 2 1 1 1	23 23 23 8 23
3532 3532 3532 3532 3532 3532	<pre>344 Pearl St. 18 Salem St. 20 Watson St. 22 Watson St. 25 Watson St.</pre>	1 1 2 1	23 707 8 23 707

NEIGHBORHOOD 5, CHA Leased Housing Units (72 units), continued

Census Tract	Address	No. of Units	Program
3533 3533 3533 3533 3533 3533	17 Chalk St. 23 Chalk St. 19 Fairmont St. 25A Fairmont St. 52 Fairmont St.	1 1 1 1	23 8 707 707 23
3533 3533 3533 3533 3533 3533	54 Fairmont St. 194 Hamilton St. 202 Hamilton St. 33 Magazine St. 55 Magazine St.	1 1 2 1 1	23 8 23 8 8
3533 3533 3533 3533 3533 3533	55 Magazine St. 55 Magazine St. 140 Magazine St. 151 Magazine St. 154 Magazine St.	1 1 1 1	707 23 23 8 23
3533 3533 3533 3533 3533 3533	156 Magazine St. 158 Magazine St. 158 Magazine St. 303 Pearl St. 75 River St.	1 1 1 2	8 707 23 8 8
3533 3533 3533 3533 3533	87 River St. 12 Upton St. 25 Whitney St. 21 William St.	2 1 1 1	8 707 707 8
3534 3534 3534 3534 3534 3534	10 Laurel St. 808 Memorial Drive 808 Memorial Drive 812 Memorial Drive 109 Pleasant St.	1 8 1 1	8 8 707 8 8
3534 3534	4 Rockwell St. 342 Allston St.	2 1	23 8

Additional	Low-Income	Units	in	MHFA	Mixed-Income	
Deve	elopments (6	59 unit	s)			

Census Tract	Development	No. of Additional Low-Income Units (elderly)	Housing Program
3532	Snyder	3	23
3534	808 Memorial Driv	ve 36 (30)	R.S. R.S.

NEIGHBORHOOD 6, TOTAL LOW-INCOME UNITS: 117 (114 Family Units, 3 Units for the Elderly)

CHA Public Housing Developments (46 units)

Census Tract	Development	No. of Units (elderly)	Housing Program
3530	Jackson Gardens	43 (3)	State Project
CHA Leas	ed Housing (39 un	its)	
Census Tract	Address	No. of Units	Program
3529 3529 383 3529 1523	9 Antrim St. 4 Amory Place 1 Broadway 4 Cambridge St. 3 Fayette St.	1 1 2 1	23 23 8 23
3529 353 3529 3	3 Harvard St. 3 Harvard St. 5 Highland Ave. 4 Inman St.	1 1 3 1	23 8 8 8
3530 3530 3530 13 3530 13 3530 14	2 Clinton St. 2 Clinton St. 2 Inman St. 1 St. Paul St. 3 St. Paul St. 3 St. Paul St.	1 1 3 1 1 1	23 707 23 8 23 8
3537 74 3537 63 3537 29	4 Kirkwood St. 4 Kirkwood St. 3 Magnolia Ave. 9 Roberts Road 9 Ware St.	1 1 1 3	23 8 23 23 23
3538 929 3538 929 3538 1039) Centre St.) Ellery St.) Massachusetts Av) Massachusetts Av) Trowbridge St.		707 8 707 23 23
	2 Trowbridge St. 9 Trowbridge St.	2 1	23 707

NEIGHBORHOOD 6, continued

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Additional Low-Income Units in MHFA Mixed-Income Developments (32 units)

Census Tract	Development		Additional come Units	Housing Program
3538	929 Massachusetts	Ave.	32	R.S.

TABLE C17:

NEIGHBORHOOD 7, TOTAL LOW-INCOME UNITS: 323 (176 Family Units, 147 Units for the Elderly)

CHA Public Housing Developments (123 units)

Census Tract	Development	No. of Units (elderly)	Program	
3539	Putnam Gardens	98 Fed (25)	leral Project	

CHA Leased Housing (78 units)

Census Tract	Address	No. of Units	Program
3530	5 Pleasant St.	1	8
3534 3534 3534 3534 3534 3534	25 Howard St. 3 Kinnaird St. 23 Montague St. 41 Pleasant St. 218 Western Ave.	1 2 1 1 3	23 8 23 707
3534 3534 3534 3534 3534 3534	220 Western Ave. 228 Western Ave. 230 Western Ave. 240 Western Ave. 266 Western Ave.	1 1 2 2 1	707 707 707 23 707
3535 3535 3535 3535 3535 3535	<pre>411 Franklin St. 411 Franklin St. 411 Franklin St. 516 Green St. 29 Howard St.</pre>	5 6 2 1 1	8 707 23 8 707
3 53 5 3 53 5 3 53 5 3 53 5 3 53 5 3 53 5	30 Howard St. 32 Howard St. 74 Howard St. 51 Jay St. 19 Pleasant St.	1 1 1 2	23 23 707 8 707
3535 3535 3535 3535	19 Pleasant St. 174 Putnam Ave. 127 Western Ave. 191 Western Ave.	8 1 1 1	23 8 8 707
3537	586 Green St.	1	8

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Census Tract	Ad	ldress	No.	of Units	Program
3538	848	Massachusetts	Ave.		23
3538	850	Massachusetts	Ave.	1	707
3538		Massachusetts			23
3538	852	Massachusetts	Ave.	5	23
3538	852	Massachusetts	Ave.	1	707
3538	852	Massachusetts	Ave.	1	8
3538		Massachusetts			23
3538		Massachusetts		1	23
3538		Massachusetts			8
3538		Massachusetts			23
3539	30	Banks St.		1	23
3539		Banks St.			23
3539		Flagg St.		1 1 1 1	23
3539		Flagg St.		1	23
3539		Putnam Ave.		1	23
3539	89	Putnam Ave.		2	23
3539		Riverside Pla	ce	1	23
		Grant St.		1 2	23

NEIGHBORHOOD 7, CHA Leased Housing (78 units), continued

Additional Low-Income Units in MHFA Mixed-Income Developments (122 units)

Census Tract	Development	No. of Additional Low-Income Units (elderly)	Housing Program
3535	411 Franklin St.	(28)	236
3539	Putnam Square	(94)	23

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TABLE C18:

NEIGHBORHOOD 8, TOTAL LOW-INCOME UNITS: 11 (11 Family Units, 0 Units for the Elderly)

CHA Leased Housing (11 units)

Census Tract	Address	No. of Units	Program
3536	20 Carver St.	1	23
3536	46 Eustis St.	1	8
3536	ll Everett St.	1	23
3536	18 Forest St.	1	23
3536	54 Garfield St.	1	23
3536	28 Gorham St.	1	23
3536	76 Hammond St.	1	23
3536	15 Sacremento St.	. 1	23
3536	47 Sacremento St.	. 1	23
3536	84 Wendell St.	1	8
3536	84 Wendell St.	1	8

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TABLE C19:

NEIGHBORHOOD 9, TOTAL LOW-INCOME UNITS: 155 (155 Family Units, 0 Units for the Elderly)

CHA Public Housing Developments (60 units)

Census Tract	Development	No. of Units	Housing Program
3546	Lincoln Way	60	State Project

CHA Leased Housing (95 units)

Census Tract	Ad	ldress	No.	of Units	Program
3 54 0 3 54 0 3 54 0	19 Gar 1610 Mas 1648 Mas	den St. ssachusetts ssachusetts	Ave. Ave.	1 1 1	23 23 8
3546 3546 3546	7 Bla 353 Cor 237 Gar	air Place air Place ncord Ave. rden St. rden St.		1 1 4 3	8 8 23 23
3546	241 Gan 241 Gan 243 Gan			2 2 3 4	707 23 8 23 23
3546 3546 3546	249 Gai 251 Gai	rden St. rden St. rden St. rden St. rden St.		7 4 5 4 1	23 23 23 23 8
3546 3546	255 Gai 98 She 1 Wal	rden St. rden St. erman St. lden Sq. Rd lden Sq. Rd	•	3 1 1 2 1	23 707 707 23 8
3546 3546 3546 3546 3546 3546	3 Wa 3 Wa 4 Wa	lden Sq. Rd lden Sq. Rd lden Sq. Rd lden Sq. Rd lden Sq. Rd	•	2 1 1 2	23 8 23 8 8

NEIGHBORHOOD	9,	CHA	Leased	Housing	(95	units),	continued
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Census Tract	Address	No. of Units	Program
3546 3546 3546 3546 3546 3546	5 Walden Sq. Rd 7 Walden Sq. Rd 7 Walden Sq. Rd 8 Walden Sq. Rd 9 Walden Sq. Rd	. 1 . 1 . 1	23 8 707 707 8
3546 3546 3546 3546 3546 3546	10 Walden Sq. Rd 11 Walden Sq. Rd 11 Walden Sq. Rd 11 Walden Sq. Rd 12 Walden Sq. Rd	. 1 . 2 . 1	8 707 23 8 23
3 54 6 3 54 6 3 54 6 3 54 6 3 54 6 3 54 6	13 Walden Sq. Rd 14 Walden Sq. Rd 15 Walden Sq. Rd 15 Walden Sq. Rd 16 Walden Sq. Rd	. 1 . 3 . 1	8 8 23 8
3 54 6 3 54 6 3 54 6 3 54 6 3 54 6 3 54 6	17 Walden Sq. Rd 17 Walden Sq. Rd 18 Walden Sq. Rd 19 Walden Sq. Rd 20 Walden Sq. Rd	. 1 . 2 . 1	8 23 8 8 8
3 54 6 3 54 6 3 54 6	21 Walden Sq. Rd 21 Walden Sq. Rd 225 Walden St.		8 23 8
	30 Cambridge Ter 115 Upland Rd.	race l l	23 8

TABLE C20: NEIGHBORHOOD 10, TOTAL LOW-INCOME UNITS: 17 (17 Family Units, 0 Units for the Elderly)

CHA Leased Housing (17 units)

Census Tract	Address	No. of Units	Program
3541 3541 3541 3541 3541 3541 3541	6 Bennet St. 5 Concord Ave. 24 Concord Ave. 29 Concord Ave. 31 Concord Ave. 56 Concord Ave.	1 1 1 1 1	8 23 8 8 23 23
3542 3542	83 Aberdeen St. 180 Larch Rd.	1 1	23 23
3543 3543 3543	229 Lexington Ave. 237 Lexington Ave. 252 Lexington Ave.	1 1 1	23 23 8
3544 3544 3544 3544 3544 3544 3544	 346 Concord Ave. 372 Concord Ave. 122 Fayerweather St. 293 Huron Ave. 53 Standish St. 112 Vassal Lane 	1 1 1 1 1	8 8 23 8 8

TABLE C21: NEIGHBORHOOD 11, TOTAL LOW-INCOME UNITS: 1042 (706 Family Units, 336 Units for the Elderly)

CHA Public Housing Developments (478 units)

Census Tract	Development	No. of Units (elderly)	Housing Program	
3549	Daniel Burns	(199)	Federal Turnkey	
3549	115 Jackson St.	10	UDIC	
3549	Jefferson Park	249	State Project	
3549	Robert Weaver	(20)	Federal Turnkey	

CHA Leased Housing (108 units)

Census Tract		Address	No. of Units	Program
3547 3547 3547 3547 3547 3547	22 23 221	Blake St. Creighton St. Creighton St. Elm St. Porter Rd.	1 1 1 1 1	23 23 23 707 8
3547 3547		Shea Rd. Woodbridge St.	1 1	8 707
3548 3548 3548 3548 3548 3548	10 12 14	Alberta Terrace Cogswell Ave. Cogswell Ave. Cogswell Ave. Cogswell Ave.	1 1 1 1	23 707 707 707 707 707
3548 3548 3548 3548 3548 3548	12 5 5	Cogswell Ave. Fairfield St. Haskell St. Haskell St. Haskell St.	1 1 11 1	707 23 23 707 8
3548 3548 3548 3548 3548 3548	57 6 3	Massachusetts Ave Norris St. Rice St. Warwick Park Walden St.	e. 1 1 1 2	8 8 23 8
3549 3549 3549 3549 3549 3549	6 30 32	Cedar St. Clay St. Clay St. Clay St. Clifton St.	1 1 1 1	23 23 23 23 23 707

NEIGHBORHOOD 11, CHA Leased Housing (108 units), continued

Census Tract	Address	No. of Units	Program
3549 3549 3549 3549 3549 3549	41 Clifton St. 43 Clifton St. 45 Clifton St. 47 Clifton St. 49 Clifton St.	1 1 1 1	8 707 707 8 8
3549 3549 3549 3549 3549 3549	51 Clifton St. 115 Clifton St. 123 Clifton St. 125 Dudley St. 129 Dudley St.	1 3 2 1 1	707 8 8 8 707
3549 3549 3549 3549 3549 3549	216 Harvey St. 3 Harrington Ter 6 McLean Place 39 Montgomery St. 362 Rindge Ave.	1	707 23 8 8 23
3549 3549 3549 3549 3549	364 Rindge Ave. 154 Sherman St. 154 Sherman St. 21 Verdun St.	21 1 1 1	23 8 23 23
3550 3550 3550 3550 3550	24 Camp St. 14 Claredon Ave. 20 Columbus Ave. 52 Washburn Ave.	1 1 1 1	23 8 23 23

Additional Low-Income Units in HUD Mixed-Income Developments (456 units)

Census Tract	Development	No. of Additional Low-Income Units (elderly)	Housing Program
3549	Rindge Towers	284 (117) 55	23 23 R.S.

TABLE C22: NEIGHBORHOOD 12, TOTAL LOW-INCOME UNITS: 1 (1 Family Unit, 0 Units for the Elderly)

CHA Leased Housing (1 unit)

Census Tract	Address	No. of Units	Program
3546	59 Griswold St.	1	8

TABLE C23: NEIGHBORHOOD 13, TOTAL LOW-INCOME UNITS: 223 (194 Family Units, 29 Units for the Elderly)

CHA Public Housing Developments (159 units)

Census Tract	Development	No. of Units (elderly)	Housing Program
3543	Corcoran Park	130 : (29)	Federal Project

CHA Leased Housing (32 units)

Census Tract		Address	No. of Units	Program
3543	83	Belmont St.	1	8
3543	700	Huron Ave.	30	8
3543	15	Norumbega St.	1	707

Additional Low-Income Units in HUD Mixed-Income Developments (32 units)

Census Tract	Development	No. of Additional Low-Income Units	Housing Program
3543	Huron Towers	32	R.S.

APPENDIX D: EXISTING LEASED HOUSING/RENT SUPPLEMENT PROGRAMS IN THE CITY OF CAMBRIDGE

TABLE D : EXISTING LEASED HOUSING / RENT SUPPLEMENT PROGRAMS IN THE CITY OF CAMBRIDGE (March, 1980)

I. United States Department of Housing and Urban Development (HUD) Low-Income Leased Public Housing Program (Section 23)

- Nature of Program: HUD pays basic annual contributions which permit the CHA to lease decent private housing for low-income families at rents they can afford. The annual contributions make up the difference between the rents paid to private owners (plus local public agency operating expenses) and what low-income tenants can afford to pay. That amount is based upon the tenant's income but may not exceed 25% of adjusted income.
- CHA Authorization: 500 units (311 units assigned; 189 units unassigned)
- Note: In May, 1980 all 500 units will be converted to Section 8. At that time, the 189 units which are currently unassigned will then be available for assignment.
- II. United States Department of Housing and Urban Development (HUD) Lower-Income Rental Assistance Program (Section 8)

HUD makes up the difference between what Nature of Program: a lower-income household can afford and the fair market rent for an adequate housing unit. Eligible tenants pay no more than 25% of their adjusted income towards rent. This rental assistance may be used either in existing housing, new construction or substantially rehabilitated units. The CHA administers the existing housing program. Non-profit or profit-motivated developers, alone or with the CHA, submit proposals for substantial rehabilitation or new construction in response to invitations from HUD. They may also apply directly to the MHFA. On approval of proposals, HUD contracts to subsidize units that will be occupied by eligible families.

EXISTING LEASED HOUSING/RENT SUPPI	LEMENT PROGRAMS, continued
CHA Authorization for Rental Assistance in Existing Housing (12/79):	290 units (215 units assigned; 75 units un- assigned)
Note: In May, 1980 upon conversion units to Section 8, there wind in this program (526 units a assigned).	ill be a total of 790 units
CHA authorization for Rental Assistance under the Moderate Rehabilitation Program (3/80):	50 units, unassigned
CHA authorization for Section 8 funds under the Substantial Rehabilitation Program (for renovation of tower buildings at Roosevelt Towers):	76 units, unassigned
Total CHA Section 8 units:	916 units (526 units assigned, 390 units un- assigned)
CHA <u>application</u> for Section 8 units under the new Interjuris- dictional Program:	40 units
Additional Section 8 units in	24 units

- MHFA developments:
- III. United States Department of Housing and Urban Development Rent Supplement Program (to reduce rents for certain disadvantaged low-income people)
- Nature of Program: HUD pays rent supplements on behalf of eligible tenants to certain private owners of multi-family housing, insured by the Federal Housing Administration. Payments make up the difference between 25% of tenants' adjusted income and the fair market rent determined by HUD.

Total Number of Cambridge 262 families Families Receiving Rent Supplement Payments in MHFAand HUD-Assisted Developments: EXISTING LEASED HOUSING/RENT SUPPLEMENT PROGRAMS, continued

IV. Commonwealth of Massachusetts Rental Assistance Program (Chapter 707)

- Nature of Program: The Commonwealth of Massachusetts makes up the difference between 25% of a household's income, for eligible families, and the market rent of an apartment. The CHA may either lease the unit itself and then sublet it to an eligible family or it may co-sign the lease with the tenant. As with federal Section 8, assistance under the Chapter 707 program may be for existing housing or moderately rehabilitated units.
- CHA Total Chapter 243 units (203 units assigned; 6 units 707 Authorization: in existing housing and 34 units under the moderate rehabilitation program, unassigned)

APPENDIX E: DEVELOPMENT PROPOSAL ASSUMPTIONS AND CALCULATIONS

TABLE E1: ASSUMPTIONS FOR DEVELOPMENT CALCULATIONS

Assumption

Source

- 1. Units to be subsidized annually: a. 28% 1-BR b. 35% 2-BR c. 30% 3-BR d. 7% 4-BR and over
 Cambridge Housing Authority, unit breakdown New Towne Court/ Washington Elms
- 2. 50% of annually subsidized units are assumed to be in existing construction, 50% in new construction. All units subsidized in existing buildings are assumed to be calculated on the basis of fair market rents, not rent control. All units in new construction are calculated as walk-up.
- 3. Fair market rents for existing HUD Area Office
 buildings: (4/14/80)
 a. 1-BR = \$299/mo. = \$3,588/yr.
 b. 2-BR = \$355/mo. = \$4,260/yr.
 c. 3-BR = \$409/mo. = \$4,908/yr.
 d. 4-BR and over = \$462/mo. = \$5,544/yr.

4. Fair market rents for new construc- HUD Area Office
 tion walk-up: (4/14/80)
 a. 1-BR = \$442/mo. = \$5,304/yr.
 b. 2-BR = \$488/mo. = \$5,856/yr.
 c. 3-BR = \$570/mo. = \$6,840/yr.
 d. 4-BR and over = \$686/mo. = \$8,232/yr.

- 5. Average household income = \$4,387; 25% of average household income = \$1,097
 New Towne Court/ Washington Elms, Cambridge Housing Authority
- 6. Present HUD contribution for 395 Cambridge Housing households at New Towne Court/ Authority Washington Elms: \$703,560
- 7. Capitalization rate for U.S. <u>The Appraisal Journal</u> government or corporate bonds: (4/80)

ASSUMPTIONS FOR DEVELOPMENT CALCULATIONS, continued

8.	<pre>General land values for commercial property in Cambridge: a. high: \$35-\$40/sq.ft. of cleared land on Massachusetts Avenue in Harvard Square, F.A.R. = 4 (\$8.75-\$10/buildable square foot) b. medium-low: \$25/sq.ft. of cleared land at Lafayette Square, F.A.R. = 4 (\$6.25/buildable square foot) c. Main Street: \$5-\$7.50/buildable square foot</pre>	Philip Trussel, MIT Real Estate Office
9.	Market value of Harvard Street frontage = 2.5 x Assessed Value, approximately \$6.50/square foot of land	Cambridge Tax Assessor, Cambridge Redevelopment Authority
10.	Total square footage of apartments at New Towne Court: 224,070	Cambridge Housing Authority,drawings
11.	Total volume of buildings at New Towne Court: 2,913,970 cu.ft.	Cambridge Housing Authority,drawings
12.	Total square footage of apartments at Washington Elms: 249,264	Cambridge Housing Authority,drawings
13.	Total volume of buildings at Washing- ton Elms: 3,157,344 cu.ft.	Cambridge Housing Authority,drawings
14.	Total volume of buildings on Harvard Street frontage: 579,000 cu.ft.	Sanborn Map Company
15.	Demolition costs: \$.12/cu.ft.	R. S. Means, 1980
	Construction costs: a. offices: \$60/sq.ft. b. retail space: \$40/sq.ft. c. all residential: \$34/sq.ft. d. parking: \$10/sq.ft.	Eton Journal of Real Estate Invest- ment (2-3/80) [a&b] M.H.F.A. [c] Spaulding & Slye Construction Co.
	e. landscaping: \$5/sq.ft.	R. S. Means, 1980
17.	C.A.R.D. financing: a. interest (1982): 9.5% or approximately 60% of prime rate	Carl Sapers, real estate attorney M.I.F.A.
	b. term: 50 years	
	c. financing up to 100% of cost	M.I.F.A.

ASSU	IMPTIONS FOR DEVELOPMENT CALCULATIONS,	continued
17.	d. limits: \$10 million/developer, \$20 million/developer in UDAG area	M.I.F.A.
	e. three year interval between eligible projects from the same developer	M.I.F.A.
18.	<pre>M.H.F.A. financing a. interest (1982): 9.5% b. term: 40 years c. financing: up to 90% of cost d. limits: 6% return on equity, minimum of 25% low-income units</pre>	M.H.F.A. M.H.F.A. M.H.F.A. M.H.F.A. M.H.F.A.
19.	Commercial property depreciation at 150% Declining Balance	P. Talbot, The March Co.
20.	Construction period losses amortized over 10 years	P. Talbot
21.	Office income (1980): \$16.00/sq.ft. per year	Boston Properties, Cambridge Center
22.	Retail income (1980): \$13.00/sq.ft. per year	Carpenter/Cambridge Seven Proposal for Parcel 1B, inflated @ 10%/yr.
23.	Residential rental income (1980): \$6,480/yr./2-BR apartment	HUD fair market rent for new construction with elevator
24.	Condominium sales income: \$90/sq.ft.	Cambridge Condomi- nium Sales Survey
25.	Condominium marketing costs: 5.5% total sales	AIA Preliminary Cost Guide
26.	Parking income: \$45/car/month	Draper Garage
27.	Occupancy factors: a. offices: 90% b. retail: 95% c. parking: 90% d. rental housing: 95% e. condominiums: 50% sold first year, remainder sold during second year	working assumption working assumption working assumption working assumption working assumption

year, remain second year

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ASSUMPTIONS FOR DEVELOPMENT CALCULATIONS, continued

- 28. Office expenses: \$3.28/sq.ft./yr. Carpenter/Cambridge Seven Proposal for Parcel 1B (1978) inflated @ 10%/yr.
 29. Retail expenses: \$.40/sq.ft./yr. Dollars and Cents
- of Shopping Centers (1978) inflated at 10%/yr.
- 30. Residential rental expenses: \$2,030/ Ed Blackman, M.H.F.A. 2-BR unit/yr.
- 31. Parking: \$242/space/yr. Carpenter/Cambridge Seven Proposal for Parcel 1B (1978)
- 32. Real estate tax on commercial property: \$1.40-\$1.50/sq.ft./yr.
- 33. 121-A real estate tax on market residential: 20% gross revenues
- 34. 121-A real estate tax on sub-
sidized residential: 15% gross
revenuesCambridge Tax
Assessor, statutory
minimum
- 35. Constant net cash flow in commerci- working assumption al development, i.e., all increases passed through to CHA for land rent
- 36. Commercial development deal, developer:
 - a. gets 1% of mortgage as partial fee, i.e., \$400,000
 - b. receives management contract for property
 - c. sells 90% of tax shelter and remains a 10% limited partner
 - d. retains residual benefits with property reverting to 50-50 ownership after 10 years

Mark Waltch, developer

inflated at 10%/yr.

Assessor, Cambridge

Cambridge Tax

Cambridge Tax

Center

Assessor

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ASSUMPTIONS FOR DEVELOPMENT CALCULATIONS, continued

37.	Constant net cash flow in residenti- al development, i.e., all increases in rent offset by expense increases	working assumption
38.	Cash flow period equal to 17 years for residential development to avoid depreciation recapture	working assumption
39.	<pre>Residential development deal, developer: a. receives 10% profit on sale price of condominiums b. retains 50% of after tax benefits c. receives management contract for property</pre>	Mark Waltch, de- veloper
40.	All figures are stated in terms of 1980 dollars	working assumption

TABLE E2: CALCULATION OF ANNUAL RENT SUBSIDY FUND

Annual Fair Market Rent for 602 Households:

1-BR: (.5)(.28)(602)(\$3588) + (.5)(.28)(602)(\$5304) = \$ 749,418
2-BR: (.5)(.35)(602)(\$4260) + (.5)(.35)(602)(\$5856) = 1,065,721
3-BR: (.5)(.30)(602)(\$4908) + (.5)(.30)(602)(\$6840) = 1,060,844
4-BR
and over: (.5)(.07)(602)(\$5544) = (.5)(,07)(602)(\$8232) = 290,260
Total Annual Fair Market Rent for 602 Households: \$3,166,243

Annual Fair Market Rent for 395 Households:

l-BR	a: (.5)(.28)(395)(\$3588) + (.5)(.28)(395)(\$5304)	= \$	491,728
2-BR	R: (.5)(.35)(395)(\$4260) + (.5)(.35)(395)(\$5856)	=	699,269
3-BR	R: (.5) (.30) (395) (\$4908) + (.5) (.30) (395) (\$6840)	=	696,069
4-BR and over	R : (.5)(.07)(395)(\$5544) = (.5)(.07)(395)(\$8232)	=	190,453
Tota	al Annual Fair Market Rent for 395 Households:	\$2	,077,519

Total Annual Fair Market Rent for 602 Households Less Tenant Contributions:

\$3,166,243 - (602)(\$1097) = \$2,505,849

Total Annual Fair Market Rent for 395 Households Less Tenant Contributions:

2,077,519 - (395)(1097) = 1,644,204

Total Annual Fair Market Rent for 602 Households Less Tenant Contributions and Present HUD Contribution (for 395 households): \$2,505,849 - 703,560 = \$1,802,289

Total Annual Fair Market Rent for 395 Households Less Tenant Contributions and Present HUD Contribution (for 395 households):

\$1,644,204 - 703,560 = \$940,644

TABLE E3: CHA OPTION NO. 1, COMMERCIAL DEVELOPMENT SUMMARY Demolition of New Towne Court/ \$728,600 Washington Elms 743,300 sq.ft. of new office space 44,598,000 @ \$60/sq.ft. 178,800 sq.ft. of new retail space 7,152,000 @ \$40/sq.ft. 325,000 sq.ft. of parking @ \$10/sq.ft. 3,250,000 753,000 sq.ft. of landscaping @ \$5/sq.ft. 3,765,000 Total cost of commercial construction \$59,493,600 Construction-related fees (architects, 14,873,400 construction financing, real estate taxes, etc.) @ 25%

Total cost of commercial development \$74,367,000

TABLE E4: CHA OPTION NO. 1, COMMERC FINANCING	IAL DEVELOPMEN
<pre>Projected commercial income Offices: (743,300 sq.ft.)(\$16) (.90) = Retail: (178,800 sq.ft.) (\$13) (.95) = Parking: (1000 cars) (\$540) (.90) =</pre>	\$10,703,520 2,208,180 486,000
Total projected commercial income	\$13,397,700
<pre>Projected commercial operating expenses Offices: (743,300 sq.ft.) (\$3.28) = Retail: (178,800 sq.ft.) (\$.40) = Parking: (1000 cars) (\$242) =</pre>	2,438,024 71.520 242,000
Sub-total	\$2,751,544
Real estate taxes (@ \$1.45/sq.ft.) =	\$1,808,295
Sub-total	\$4,559,839
Land rent to CHA (@ \$1.42/buildable sq.ft.)	1,772,996
Total projected commercial operating expenses	\$6,332,835
Projected annual income before financing	\$7,064,865
Capitalized value of annual income before financing @ 9.5%	\$74,367,000
Plus partial developer's fee as general partner @ 1% mortgage value	400,000
Sub-total	\$74,767,000
Less equity of limited partners @ 90% present value of net cash flow after taxes (construction period plus years 1-10) internal rate of return @ 15%	-22,323,295

Sub-total

\$52,443,705

CHA OPTION NO. 1, COMMERCIAL DEVELOPMENT FINANCING, continued

Less U.D.A.G. Grant	12,443,705
Total C.A.R.D. Financing	\$40,000,000

Note: Commercial development will require either phasing by one developer (with a three year gap between phases) or two separate developers. This will be necessary in order to meet current C.A.R.D. restrictions of \$20 million/developer in a U.D.A.G. area.

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Year	Outstanding Mortgage	Interest Rate	Interest	Constant Payment	Amortization
1	\$40,000,000	.095	3,800,000	3,811,339	11,339
2	39,988,661	.095	3,798,923	3,811,339	12,416
3	39,976,245	.095	3,797,743	3,811,339	13,596
4	39,962,649	.095	3,796,452	3,811,339	14,887
5	39,947,762	.095	3,795,037	3,811,339	16,302
6	39,931,460	.095	3,793,489	3,811,339	17,850
7	39,913,610	.095	3,791,793	3,811,339	19,546
8	39,894,064	.095	3,789,936	3,811,339	21,403
9	39,872,661	.095	3,787,903	3,811,339	23,436
10	39,849,225	.095	3,785,676	3,811,339	25,663

TABLE E5: CHA OPTION NO. 1, AMORTIZATION OF C.A.R.D. FINANCING (Years 1-10)

interest: 9.5%

term: 50 years

constant payment factor: 10.495

Total development cost (excluding \$73,638,400 demolition and site preparation)

\$ 1,636,409 Annual straight line depreciation (assuming 45 year useful life)

2.22% Percent annual depreciation 3.33%

150% declining balance

.

Year	Balance	Factor	Depreciation
1	\$73,638,400	.0333	\$2,452,159
2	71,186,241	.0333	2,370,502
3	68,815,739	.0333	2,291,564
4	66,524,175	.0333	2,215,255
5	64,308,920	.0333	2,141,487
6	62,167,433	.0333	2,070,176
7	60,097,258	.0333	2,001,239
8	58,096,019	.0333	1,934,597
9	56,161,422	.0333	1,870,175
10	54,291,246	.0333	1,807,899

Total 150% declining balance depreciation (yrs. 1-10)

\$21,155,053

.

Year	Net Cash Flow ^a	Amortization	Construction b Period Losses	Depreciation	Mortgage Interest	Net Taxable Income
Cl			(\$1,487,340) ^C			(\$1,487,340)
C2			(1,487,340)	hard and		(1,487,340)
1	\$3,253,526	\$11,339	(\$1,487,340)	(\$2,452,159)	(\$3,800,000)	(4,474,634)
2	3,253,526	12,416	(1,487,340)	(2,370,502)	(3,798,923)	(4,390,823)
3	3,253,526	13,596	(1,487,340)	(2,291,564)	(3,797,743)	(4,309,725)
4	3,253,526	14,887	(1,487,340)	(2,215,255)	(3,796,452)	(4,230,634)
5	3,253,526	16,302	(1,487,340)	(2,141,487)	(3,795,037)	(4,154,036)
6	3,253,526	17,850	(1,487,340)	(2,070,176)	(3,793,489)	(4,079,629)
7	3,253,526	19,546	(1,487,340)	(2,001,239)	(3,791,793)	(4,007,300)
8	3,253,526	21,403	(1,487,340)	(1,934,597)	(3,789,936)	(3,936,944)
9	3,253,526	23,436	(1,487,340)	(1,870,175)	(3,787,903)	(2,381,116)
10	3,253,526	25,663	(1,487,340)	(1,807,899)	(3,785,676)	(2,314,386)

TABLE E7: CHA OPTION NO. 1, COMMERCIAL DEVELOPMENT NET TAXABLE INCOME (CONSTRUCTION PERIOD PLUS YEARS 1-10)

- a. \$7,064,865 \$3,811,339 = \$3,253,526
- b. $$14,873,400 \div 10 = $1,487,340$
- c. () indicates tax loss

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Year	Net Taxable Income	Tax Rate	Income Tax
Cl	(\$1,487,340)*	.7	(\$1,041,138)
C2	(1,487,340)	.7	(1,041,138)
1	(4,474,634)	.7	(3,132,243)
2	(4,390,823)	. 7	(3,073,596)
3	(4,309,725)	.7	(3,016,808)
4	(4,230,634)	. 7	(2,961,444)
5	(4,154,036)	.7	(2,907,825)
6	(4,079,629)	• 7	(2,855,740)
7	(4,007,300)	.7	(2,805,110)
8	(3,936,944)	• 7	(2,755,861)
9	(2,381,116)	.7	(1,666,781)
10	(2,314,386)	.7	(1,620,070)

TABLE E8: CHA OPTION NO. 1, COMMERCIAL DEVELOPMENT INCOME TAX (CONSTRUCTION PERIOD PLUS YEARS 1-10)

*() indicates tax loss

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TABLE E9: CHA OPTION NO. 1, COMMERCIAL DEVELOPMENT PRESENT VALUE OF NET CASH FLOW AFTER TAXES (CONSTRUCTION PERIOD PLUS YEARS 1-10) --

INTERNAL RATE OF RETURN @15%

•		Taxes (Value of	Net Cash Flow After	Present Value	Present Value of Net Cash
Year	Net Cash Flow	Tax Shelter)	Taxes	Factor	Flow after Taxes
C1		\$1,041,138	\$1,041,138	,870	\$905 , 790
C2		1,041,138	1,041,138	,756	787,100
· 1	\$3,253,526	3,132,243	6,385,769	,658	4,201,836
2	3,253,526	3,073,596	6,327,122	,572	3,619,114
3	3,253,526	3,016,808	6,270,334	,497	3,116,356
4	3,253,526	2,961,444	6,214,970	,432	2,684,867
5	3,253,526	2,907,825	6,161,351	,376	2,316,668
6	3,253,526	2,855,740	6,109,266	, 327	1,997,730
7	3,253,526	2,805,110	6,058,636	.284	1,720,653
8	3,253,526	2,755,861	6,009,387	,247	1,484,319
9	3,253,526	1,666,781	4,920,307	,215	1,057,866
10	3,253,526	1,620,070	4,873,596	.187	911,362

Present Value of Net Cash Flow after Taxes (Construction Period Plus Years 1-10) -- Internal Rate of Return @ 15%: \$24,803,661 TABLE E10: CHA OPTION NO, 1, RESIDENTIAL DEVELOPMENT SUMMARY Condominium development (excluding land): 200 new condominium units @1100 sg.ft./unit @ \$34/sg. ft.: \$7,480,000 65,000 sq. ft. of parking 650,000 @ \$10/sq. ft: Total cost of condominium and \$8,130,000 parking construction: Construction related fees (architects, construction financing, real estate taxes, etc.) @ 25%: \$2,032,500 Total cost of condominium \$10,162,500 development (excluding land): Residential rental development (excluding land cost paid to CHA in condominium transaction): Acquisition of Harvard Street 334,750 \$ frontage: Demolition of buildings on 69,480 Harvard Street frontage: 400 new rental units @1000 sq. ft/ 13,600,000 unit @ \$34/sq. ft.: 20,000 sq. ft. of retail space @ \$40/sq. ft.: 800,000 Total cost of residential rental \$14,804,230 construction:

TABLE El0: (continued)
Construction related fees
(architects, construction
financing, real estate taxes,
etc.) @ 25%:
Total cost of residential rental
development (excluding land):
\$18,505,288

TABLE Ell: CHA OPTION NO. 1, PROCEEDS DEVELOPMENT	5 FROM CONDOMINIUM
Condominium sales, 200 units @ 1100 sq. ft./unit @ \$90/sq. ft.:	\$19,800,000
Less total development cost (excluding land):	-10,162,500
Sub-total:	\$ 9,637,500
Less marketing costs @ $5\frac{1}{2}$ % total sales:	1,089,000
Sub-total:	\$ 8,548,500
Less interest cost on 50% of units for 1 yr:	- 482,719
Final proceeds from sale of condominiums:	\$ 8.065,781
Less developer's profit @ 10% of sales price: Sub-total:	-1,980,000 \$ 6,085,781
Less subsidy for rental development:	\$ 3,794,889
CHA proceeds for investment in Rent Subsidy Trust Fund:	\$ 2,290,892

TABLE E12: CHA OPTION NO. 1, RESIDENTIAL RENTAL DEVELOPMENT FINANCING Projected Rental Income: 200 market units @ \$6480: \$ 1,296,000 200 subsidized units @ \$1097 219,400 CHA subsidy for 200 units @ \$4163/unit 832,600 Total residential rental income: \$ 2,348,000 Less vacancies @ 5%: -117,400Net residential rental income: \$ 2,230,600 20,000 sq. ft. retail @ \$13/sq, ft.: 260,000 Less vacancies @ 5%: 13,000 Net retail income 247,000 \$ Net residential rental and Retail income: \$ 2,477,600 Projected Operating Expenses: 400 residential units @ \$2030 unit: \$ 812,000 8,000 20,000 sg. ft. retail @ \$.40/sg. ft.: Real estate tax on market units @ 20% gross market rentals: 259,200 Real estate tax on subsidized units @ 15% gross subsidized rentals: 157,800 \$ 1,237,000 Sub-total Projected annual income before \$ 1,240,600 financing: Capitalized value of annual income \$18,505,288 before financing @ 6.7%: Less equity of limited partners @50% present value of net cash flow after taxes (construction period plus years 1-17) -- internal rate of return \$ 2,710,400 @ 208:

Sub-total:	\$15,794,899
Less subsidy from sale of	
condominiums:	3,794,88.9
Total M.H.F.A. financing:	\$12,000,000

TABLE E13: CHA OPTION NO. 1, AMORTIZATION OF M.H.F.A. FINANCING (Years 1-17)

Year	Outstanding Mortgage	Interest Rate	Interest	Constant Payment	Amorti- zation
1	\$12,000,000	.095	1,140,000	\$1,163,298	\$23,298
2	11,976,702	.095	1,137,787	1,163,298	25,511
3	11,951,191	.095	1,135,363	1,163,298	27,935
4	11,923,256	.095	1,132,709	1,163,298	30,589
5	11,892,667	.095	1,129,803	1,163,298	33,495
6	11,859,172	.095	1,126,621	1,163,298	36,677
7	11,822,495	,095	1,123,137	1,163,298	40,161
8	11,782,334	.095	1,119,322	1,163,298	43,976
9	11,738,358	.095	1,115,144	1,163,298	48,154
10	11,690,204	.095	1,110,569	1,163,298	52,729
11	11,637,475	.095	1,105,560	1,163,298	57,738
12	11,579,737	.095	1,100,075	1,163,298	63,223
13	11,516,514	.095	1,094,069	1,163,298	69,229
14	11,447,285	.095	1,087,492	1,163,298	75,806
15	11,371,479	.095	1,080,291	1,163,298	83,007
16	11,288,472	.095	1,072,405	1,163,298	90,893
17	11,197,578	.095	1,063,770	1,163,298	99,528

.

Interest: 9.5%
Term: 40 years
Constant payment factor: 10.3155

TABLE E14: CHA OPTION NO. 1, DEPRECIATION OF RESIDENTIAL RENTAL DEVELOPMENT (Years 1-17)

Total development cost (excluding land acquisition, demolition, and site preparation): \$18,101,058 Annual straight line depreciation (assuming 40 year useful life): 452,526

Percent annual depreciation:

200% declining balance:

Year Balance Factor Depreciation 1 \$18,101,058 .05 905,053 2 17,196,005 .05 859,800 3 16,336,205 .05 816,810 4 15,519,395 .05 775,970 5 14,743,425 .05 737,171 6 14,006,254 .05 700,313 7 13,305,941 .05 665,297 8 12,640,644 .05 632,032 9 12,008,612 .05 600,431 10 11,408,181 .05 570,409 11 10,837,772 .05 541,889 12 10,295,883 .05 514,794 13 9,781,089 .05 489,054 14 9,292,035 .05 464,602 15 8,827,433 .05 441,372 16 8,386,061 .0.5 419,303 17 7,966,758 .05 398,338

2.5%

5.0%

Total 200% declining balance depreciation (Years 1-17): \$10,532,638

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	Net Cash		Construction		Mortgage	Net Tax-	
Year	Flow ^a	Amortization	Period Losses ^b	Depreciation	Interest	able Income	
Cl			(\$370,106) ^C			(\$370,106)	
C2		र ू स	(370,106)	÷		(370,106)	
			,				
1	\$77 , 302	\$23 , 298	(370,106)	(\$905,053)	(\$1,140,000) (2,314,559)	
2	77,302	25,511	(370,106)	(859,800)	(1,137,787) (2,264,880)	
3	77,302	27,935	(370,106)	(816,810)	(1,135,363) (2,217,042)	
4	77,302	30,589	(370,106)	(775,970)	(1,132,709) (2,170,894)	
5	77,302	33,495	(370,106)	(737,171)	(1,129,803) (2,126,283)	
6	77,302	36,677	(370,106)	(700,313)	(1,126,621) (2,083,061)	
7	77,302	40,161	(370,106)	(665,297)	(1,123,137) (2,041,077)	
8	77,302	43,976	(370,106)	(632,032)	(1,119,322) (2,000,182)	
9	77,302	48,154		(600,431)	(1,115,144) (1,590,119)	
10	77,302	52,729	~ ~	(570,409)	(1,110,569) (1,550,947)	
11	77,302	57 , 738		(541,889)) (1,512,409)	
12	77,302	63,223		(514,794)	(1,100,075) (1,474,344)	
13	77,302	69,229		(489,054)	, ,) (1,436,592)	
14	77,302	75 , 806		(464,602)) (1,398,986)	
15	77,302	83,007		(441,372)) (1,361,354)	
16	77,302	90,893		(419,303)) (1,323,513)	
17	77,302	99,528		(398,338)) (1,285,278)	
a. $\$1,240,600 - \$1,163,298 = \$77,302$							

TABLE E15: CHA OPTION NO. 1, RESIDENTIAL RENTAL DEVELOPMENT NET TAXABLE INCOME (CONSTRUCTION PERIOD PLUS YEARS 1-17)

a. \$1,240,600 - \$1,163,298 = \$77,302

b. $$3,701,058 \div 10 = $370,106$

c. () indicates tax loss

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TABLE E16: CHA OPTION NO. 1, RESIDENTIAL RENTAL DEVELOPMENT INCOME TAX (CONSTRUCTION PERIOD PLUS YEARS 1-17)

Year	Net Taxable Income	Tax Rate	Income Tax
Cl	(\$370,106)*	.7	(\$259,074)
C2	(370,106)	. 7	(259,074)
1	(\$2,314,559)	.7	(\$1,620,191)
2	(_2,264,880)	.7	(1,584,416)
3	(2,217,042)	.7	(1,551,929)
4	(2,170,894)	.7	(1,519,626)
5	(_2,126,283)	. 7	(1,488,398)
6	(2,083,061)	.7	(1,458,143)
7	(2,041,077)	.7	(1,428,754)
8	(2,000,182)	. 7	(1,400,127)
9	(1,590,119)	.7	(1,113,083)
10	(1,550,947)	. 7	(1,085,663)
11	(1,512,409)	.7	(1,058,686)
12	(1, 474, 344)	.7	(1,032,041)
13	(1,436,592)	.7	(1,005,614)
14	(1,398, <u>9</u> 86)	.7	(979,290)
15	(1,361,354)	.7	(952,948)
16	(1,323,513)	.7	(926,459)
17	(1,285,278)	.7	(899,695)

*() indicates tax loss

TABLE E17: CHA OPTION NO. 1, RESIDENTIAL RENTAL DEVELOPMENT PRESENT VALUE OF NET

CASH FLOW AFTER TAXES (CONSTRUCTION PERIOD PLUS YEARS 1-17) --

INTERNAL RATE OF RETURN @ 20%

Year	Net Cash Flow	Taxes (Value of Tax Shelter)	Net Cash Flow After Taxes	Present Value Factor	Present Yalue of Net Cash Flow After Taxes
C1		\$259,074	\$259,074	,833	\$215,809
C2		259,074	259,074	,694	179,797
1	\$77,302	\$1,620,191	\$1,697,493	, 579	\$982,848
2	77,302	1,584,416	1,661,718	,482	800,948
3	77,302	1,551,929	1,629,231	,402	654,951
4	77,302	1,519,626	1,596,928	,335	534,971
5	77,302	1,488,398	1,565,700	,279	436,830
6	77,302	1,458,143	1,535,445	,233	357,759
.7	77,302	1,428,754	1,506,056	,194	292,175
8	77,302	1,400,127	1,477,429	,162	239,344
9	77,302	1,113,083	1,190,385	,135	160,702
10	77,302	1,085,663	1,162,965	.112	130,252
11	77,302	1,058,686	1,135,988	.093	105,647
12	77,302	1,032,041	1,109,343	,078	86,529
13	77,302	1,005,614	1,082,916	,065	70,390
14	77,302	979,290	1,058,592	,054	57,056
15	77,302	952,948	1,030,250	,045	46,361
16	77,302	926,459	1,003,761	,038	38,143
17	77,302	899,695	976,997	.031	30,287

Present value of Net Cash Flow after Taxes (Construction Period plus Years 1-17) -- Internal Rate of Return @ 20%: \$5,420,799 APPENDIX F: OWNERSHIP AND VALUE OF PROPERTY ON NORTH HARVARD STREET BETWEEN PORTLAND AND WINDSOR STREETS

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Building	Owner	Building Value	Lot Square Footage	Land Value	Total Value
111-113	John J. Fischer, Trustee	\$15,200	3,180	2,300	17,500
115	John J. Fischer, Trustee	10,200	1,839	1,300	11,500
117-119	John J. Fischer, Trustee	15,400	3,304	2,200	17,600
121-123	John J. Fischer, Trustee	15,400	3,416	2,300	17,700
125-127	Mayfair Realty Trust	35,400	7,045	4,200	39,600
149-151	Margaret Fuller Neighbor- hood House, Inc.	_	12,268	6,200	6,200
153- 155 1/2	Polaroid Corporation	-	4,000	2,400	2,400
157	Polaroid Corporation	-	3,000	1,800	1,800
159	Polaroid Corporation	-	3,000	1,800	1,800
163	C.D.A. Inc.	23,400	6,000	3,600	27,000
165-165A	Anna F. Ward	-	1,677	1,200	1,200
167*	John T. Casey	5,700	1,627	1,200	6,900
169 - 169A	Eleanor H. Fillios	5,600	2,048	1,400	7,000
Total:		126,300	52,404	31,900	133,900

TABLE F: OWNERSHIP AND VALUE OF PROPERTY ON NORTH HARVARD STREET BETWEEN PORTLAND AND WINDSOR STREETS

* Most recent sale, 1979. Sales Price: \$17,500.

LIST OF REFERENCES

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City of Cambridge Publications

- 1. City of Cambridge Board of Assessors. <u>Cambridge</u> <u>Condominium Sales Survey</u>. Cambridge, Mass.: City of Cambridge, 1980.
- 2. City of Cambridge Community Development Department. Cambridge Directory of Establishments. Cambridge, Mass.: City of Cambridge, 1980.
- 3. City of Cambridge Community Development Department. Zoning Primer - An Introduction to Cambridge Zoning. Cambridge, Mass.: City of Cambridge.
- 4. City of Cambridge Community Development Department. <u>Report of Technical Consultants to Cambridge MBTA</u> <u>Yards Project Review Board.</u> Cambridge, Mass.: <u>City of Cambridge, 1978.</u>
- 5. City of Cambridge Community Development Department. <u>Central Square Commercial Area Revitalization</u> District. Cambridge, Mass.: City of Cambridge, 1980.
- 6. City of Cambridge Community Development Department. <u>Condominium Conversions in Cambridge: A Profile of</u> <u>New Owners and Former Tenants.</u> Cambridge, Mass.: <u>City of Cambridge, 1978.</u>
- 7. City of Cambridge Community Development Department. <u>1975 Mid-Decade Census Survey.</u> Cambridge, Mass.: <u>City of Cambridge, 1975.</u>
- City of Cambridge Community Development Department. "Housing Sales Study: 1-4 Family Homes in Cambridge", Cambridge, Mass.: City of Cambridge, 1980.
- 9. City of Cambridge Community Development Department. Neighborhood: 4 Profile. Cambridge, Mass.: City of Cambridge, 1975.
- 10. City of Cambridge Historical Commission. <u>Survey of</u> <u>Architectural History in Cambridge</u>. Report Three: <u>Cambridgeport</u>. Cambridge, Mass.: M.I.T. Press, 1971.
- 11, City of Cambridge Housing Authority. "Breakdown by Race of Families Who Moved Into, Moved Out Of, and Refused Public Housing July 1, 1977 to December 31, 1977", Cambridge, Mass.: Cambridge Housing Authority, 1977.

- 12. City of Cambridge Housing Authority. <u>Development</u> Directory. Cambridge, Mass.: City of Cambridge, 1979.
- 13. City of Cambridge Housing Authority. Leased Housing Records. Cambridge, Mass.: Cambridge Housing Authority, 1980.
- 14. City of Cambridge Housing Authority. "Memorandum re Racial Composition Task Force", Cambridge Mass.: Cambridge Housing Authority, 30 April, 1979.
- 15. City of Cambridge Housing Authority. "Occupancy by Race at Selected Times in Washington Elms and New Towne Court", Cambridge, Mass.: Cambridge Housing Authority, January, 1978.
- 16. City of Cambridge Housing Authority. Public Housing Urban Initiatives Anti-Crime Program. Cambridge, Mass.: Cambridge Housing Authority, 5 September, 1979.
- 17. City of Cambridge Housing Authority. "Public Housing Urban Initiatives Program: Targeted Rehabilitation and Management Assistance Component: Washington Elms (Mass. 3-1), New Towne Court (Mass. 3-5)", Cambridge, Mass.: City of Cambridge, 11 August, 1978.
- 18. City of Cambridge Housing Authority. "Report on Certain Selected Statistics", Cambridge Mass.: Cambridge Housing Authority, 8 March, 1980.
- 19. City of Cambridge Housing Authority. Target Projects Program Application. Cambridge, Mass.: Cambridge Housing Authority, 1976.
- 20. City of Cambridge Housing Authority. "Waiting List Composition as of 1/10/79", Cambridge Mass.: Cambridge Housing Authority, 1979.
- 21. City of Cambridge Housing Authority. "Washington Elms Rejection by Month/Race and New Towne Court Rejection Rate - 1978 and 1977", Cambridge, Mass.: Cambridge Housing Authority, 11 January, 1979.
- 22. City of Cambridge Office of the Mayor: Annual Budget 1979-1980. Cambridge, Mass.: City of Cambridge, 1979.
- 23. City of Cambridge Planning and Development Department. Social Characteristics of Cambridge 1971, Volume 1. Cambridge, Mass.: 1971.

- 24. City of Cambridge Planning and Development Department. Social Characteristics of Cambridge 1970, Volume 2. Cambridge, Mass.: 1973.
- 25. City of Cambridge School Department. "Elementary School Enrollment Statistics", Cambridge, Mass.: City of Cambridge, 23 April, 1979.

City of Boston Publications

- 26. City of Boston Redevelopment Authority. <u>A Decade</u> of <u>Development in Boston</u>. Boston, Mass.: <u>City of Boston</u>, 1979.
- 27. City of Boston Redevelopment Authority. Population Projections by Five-Year Age Groups for the City of Boston in 1985. Boston, Mass.: City of Boston, 1978.
- City of Boston Redevelopment Authority. <u>The Office</u> Industry Survey. Boston, Mass.: City of Boston, 1979.

Commonwealth of Massachusetts Publications

- 29. Commonwealth of Massachusetts Department of Community Affairs. "751 CMR 8:00: Commercial Area Revitalization District (CARD) Plans". Boston, Mass.: Massachusetts Department of Community Affairs, 1979.
- 30. Commonwealth of Maasachusetts Executive Office of Communities and Development. <u>Chapter 121A - A Hand-</u> book for Local Officials. Boston, Mass.: Massachusetts Executive Office of Communities and Development, 1979.
- 31. Commonwealth of Massachusetts Housing Finance Agency. Architect's Guide. Boston, Mass.: Massachusetts Housing Finance Agency, 1980.
- 32. Commonwealth of Massachusetts Housing Finance Agency. "Average Development Unit Cost for 12 Family Developments", Boston, Mass.: Massachusetts Housing Finance Agency, 1979.
- 33. Commonwealth of Massachusetts Housing Finance Agency. Housing List, January, 1979. Boston, Mass.: Massachusetts Housing Finance Agency, 1979.
- 34. Commonwealth of Massachusetts Housing Finance Agency. <u>Progress Report: Housing for the 1980's.</u> Boston, Mass.: <u>Massachusetts Housing Finance Agency</u>, 1980.

- 35. Commonwealth of Massachusetts Housing Finance Agency. <u>The Processing Handbook</u>. Boston, Mass.: Massachusetts Housing Finance Agency, 1979.
- 36. Commonwealth of Massachusetts Industrial Finance Agency. An Introduction to the Industrial Revenue Bond Incentive Program of the Massachusetts Industrial Finance Agency. Boston, Mass.: Massachusetts Industrial Finance Agency, 1979.
- 37. Commonwealth of Massachusetts Office of Communities and Development. Urban Investment - A Guide to Federal Resources. Boston, Mass.: Massachusetts Office of Communities and Development, 1980.
- 38. Commonwealth of Massachusetts Office of the Governor. "Executive Order No. 74 by His Excellency, Michael S. Dukakis, Governor", Boston Mass.: Commonwealth of Massachusetts Office of the Governor, 1975.

U. S. Government Publications

- 39. U.S. Government Department of Housing and Urban Development. "How HUD Helps with Relocation", Washington, D.C.: U. S. Government Printing Office, 1973.
- 40. U.S. Department of Housing and Urban Development. List of Insured Multifamily Housing Projects. Boston, Mass.: U.S. Department of Housing and Urban Development, Boston Area Office, 1979.
- 41. U.S. Government Department of Housing and Urban Development. <u>Minimum Property Standards</u>. Washington, D.C.: U.S. Government Printing Office, 1979.
- 42. U.S. Government Department of Housing and Urban Development. "Site and Neighborhood Standards for Subsidized Newly-Constructed or Substantially-Rehabilitated Housing", Washington, D.C.: Federal Register, 24 January, 1977.
- 43. U.S. Government Department of Housing and Urban Development. "Title 24 Housing and Urban Development, Chapter VIII Low-Income Housing, Part 811 Tax Exemption of Obligations of Public Housing Agencies and Related Amendments, Final Rule", Washington, D.C.: Federal Register, 6 March, 1979.

- 44. U.S. Government Department of Housing and Urban Development. "24 CFR Part 870, PHA-Owned Public Housing Projects - Demolition of Buildings or Disposition of Real Property: Policy and Procedures, Final Rule", Washington, D.C.: Federal Register, 9 November, 1979.
- 45. U.S. Government Federal Reserve Bank of Boston, New England Economic Indicators. Boston, Mass.; Federal Reserve Bank of Boston, March, 1980.
- 46. U.S. Government Federal Reserve Bank of Boston, New England Economic Indicators. Boston, Mass.: Federal Reserve Bank of Boston, January, 1980.

Private Sector Publications

- 47. Architectural Data Corporation. Architect's <u>Preliminary Cost Guide</u>. Pasadena, California: Architectural Data Corporation, 1974.
- 48. Building Owners and Managers Association International. 1979 Downtown and Suburban Office Building Experience Exchange Report. Washington, D.C.: Building Owners and Managers Association International, 1979.
- 49. Building Owners and Managers Association of Greater Boston. "Office Occupancy Survey", Boston, Mass.: Building Owners and Managers Association of Greater Boston, Fall, 1979.
- 50. Codman Company, Inc. <u>The Codman Survey</u>, Boston, Mass.: The Codman Company, 1975.
- 51. First National Bank of Boston. <u>New England Report.</u> Boston, Mass.: First National Bank of Boston, 1980.
- 52. Greater Boston Community Development, Inc. America Park Fact Finding Report. Boston, Mass.: Greater Boston Community Development, Inc., 1972.
- 53, Institute of Real Estate Management. <u>Apartment</u> <u>Building Income/Expense Analysis</u>. Chicago, Illinois: Institute of Real Estate Management, 1979.
- 54. Leggat, McCall and Werner. "Projected Suburban Office Buildings", Boston, Mass.: Leggat, McCall and Werner.
 9 November, 1979.
- 55. Massachusetts High Technology Council, Inc. Results of Survey on Human Resource Needs. Boston, Mass.: Coopers and Lybrand, 1980.

- 56. Massachusetts Institute of Technology. <u>East Campus</u> <u>Master Plan.</u> Cambridge, Mass.: Massachusetts Institute of Technology, 1980.
- 57. Massachusetts Taxpayers Foundation, Inc. <u>Municipal</u> <u>Financial Data</u>. Boston, Mass.: Massachusetts Taxpayers Foundation, Inc., 1979.
- 58. R. S. Means Company. <u>Building Construction Cost Data</u>, <u>1980</u>. 38th Annual Edition. Kingston, Mass.: R. S. Means Company, 1980.
- 59. Ryan, Elliott, and Company, Inc. "Forcast of the Real Estate Economy in 1980 for Greater Boston", Boston, Mass.: Ryan, Elliott and Company, Inc., 1980.
- 60. Spaulding and Slye Corporation. "The Spaulding and Slye Report", Burlington, Mass.: Spaulding and Slye Corporation, 1 October, 1979.
- 61. Spaulding and Slye Corporation. "The Spaulding and Slye Report", Burlington, Mass.: Spaulding and Slye Corporation, 1 April, 1980.
- 62. Technical Marketing Associates, Inc. <u>High Technology</u> Enterprise in Massachusetts - Its Role and Its Concerns. Concord, Mass.: Technical Marketing Associates, 1979.
- 63. Urban Land Institute. <u>Dollars and Cents of Shopping</u> Centers. Washington, D.C.: Urban Land Institute, 1978.

Newspaper and Magazine Articles

- 64. Bauer, Catherine. "The Dreary Deadlock of Public Housing", <u>Architectural Forum</u>. May, 1957, Pages 140-142, 219, 221.
- 65. "Boston: Consulting Capital of the World", <u>The Boston</u> Globe, 30 March, 1980, page 49.
- 66. "Boston is Ready for New Hotels", <u>The Boston Globe</u>, 17 February, 1980, section F, page 1.
- 67. "Cambridge Sees \$2 Billion Development in Next 10 Years", The Boston Globe, 24 February, 1980, section C, page 3.
- 68. "Cities will Reverse Flight to the Sururbs Attracting Younger Settlers", <u>The Boston Globe</u>, 6 January, 1980, section A, page 8.

- 69. Clay, Phillip, <u>Neighborhood Revitalization</u>: The State of Experience in Large Central Cities. Draft: M.I.T., 1977.
- 70. "Commercial Mortgage due to Change" The Boston Globe, 20 April, 1980, section E, page 59.
- 71. Davis, Donald, Mortgage Officer, Massachusetts Housing Finance Agency; letter 2 May, 1980.
- 72. "Demand may keep Boston Office Market Booming", The Boston Globe, 6 January, 1980, section F, page 1.
- 73. "Despite Headaches, MHFA Producing", <u>The Boston Globe</u>, 2 March, 1980, section F, page 1.
- 74. Howell, James M., Senior Vice President of the First National Bank of Boston. "Statement Before the Subcommittee on Transportation, Aviation and Communications U. S. House of Representatives", Boston, Mass,: First National Bank of Boston, 16 July, 1979.
- 75. "Income Approach Determining the Adequate Rates", The Appraisal Journal, April, 1980.
- 76. Marchant, Edward, Director of Development, Greater Boston Community Development, Inc., letter 23 April, 1980.
- 77. "Massachusetts in '80", <u>The Boston Globe</u>, 10 February, 1980, The Boston Globe Magazine, pages 12, 29, 30.
- 78. "Massachusetts State of Opportunity", <u>The Boston</u> Globe, 27 January, 1980, pages 61, 70.
- 79. "NASA Picks Cambridge", <u>Traveler</u>, 20 August, 1964, page 1.
- 80. "NASA Picks Kendall Square Site", <u>The Boston Globe</u>, 24 August, 1964, page 1.
- 81, "NASA Site Future Weighed by Council and Local Chamber", The Cambridge Chronicle, 1 January, 1980, page 1.
- 82, "New England", <u>The New York Times National Economic</u> Survey, 6 January, 1980, section 12, page 78.
- 83. "1980 Outlook Bright for Boston", The Boston Globe,
 30 December, 1979, section C, page 1.

- 84. Putnam, Frederic. "Memorandum re Racial Composition Task Force", City of Cambridge Housing Authority, 30 August, 1979.
- 85. "Redevelopment Authority Acts Quickly to Offset NASA Loss and Save Jobs", <u>The Cambridge Chronicle</u>, Cambridge Annual Report, 1969, page 5.
- 86. "Semidoncutors M.I.T.'s Chase", <u>The Boston Globe</u>, 9 March, 1980, pages 46, 47.
- 87. "Slye: Housing Problem is Production", <u>The Boston Globe</u>,20 January, 1980, section E, page 75.
- 88. "The Dreary Deadlock of Public Housing How To Break It", <u>Architectural Forum</u>, June, 1957, pages 139-141, 218, 222, 224, 226, 228, 230, 232.
- 89. "The New MOMA: Mixing Art with Real Estate", The New York Times Magazine, 4 November, 1979, pages 46, 52, 56.
- 90. "UDAGs Escape Carter Budget Axe", The Boston Globe, 20 April, 1980, section E, page 59.
- 91. "Urban Centers Eye New Bond Mechanism", <u>The Boston Globe</u>, 29 April, 1979, section J, page 1.

Interviews

- 92. Balcomb, Donald, Zoning Administrator, Cambridge Community Development Department; 22 April, 1980.
- 93. Barrett, David, Vice President, Boston Properties, Inc.; 15 November, 1979.
- 94. Blaine, Edward, Development Coordinator, Boston Housing Authority; 30 April, 1980.
- 95. Boothe, Roger, Head of Urban Design, Cambridge Community Development Department; 19 March, 1980.
- 96. Cohen, Howard, Attorney and former Counsel to Cambridge Housing Authority; 6 May, 1980.
- 97. Derosier, Betty, Associate Planner, Cambridge Community Development Department; 20 February, 1980.
- 98. English, Kenneth, Site Development Officer, Cambridge Redevelopment Authority; 28 November, 1979.

- 99. Gilchrist, Byron, Manager of Development, George Macomber Company; 21 November, 1979.
- 100. Hughes, George, Director of Tenant Selection, Cambridge Housing Authority; 29 January, 8 February, and 14 March, 1980.
- 101. Johnson, Paul, Administrative Assistant to Director of Fiscal Affairs, Cambridge Housing Authority; 12 March, 1980.
- 102. Menez, George, Deputy Director of Fiscal Affairs, Cambridge Housing Authority; 12 March, 1980.
- 103. Putnam, Frederic, Director of Planning and Development, Cambridge Housing Authority; 23 November, 1979.
- 104. Raphen, Dawn, Real Estate Manager, Cabot, Cabot, and Forbes; 28 March, 1980.
- 105. Rugiero, Richard, Estimator, Spaulding and Slye Construction Company; 16 May, 1980.
- 106. Russo, Rudolph, Chairman, Cambridge Board of Assessors; 25 April, 1980.
- 107. Sapers, Carl, Real Estate Attorney, Hill and Barlow Attorneys; 25 April, 1980.
- 108. Steinberg, William, Assistant Vice President, The March Company; 24 April, 1980.
- 109. Sullivan, Barbara, Acting Director, Cambridge Chamber of Commerce; 27 February, 1980.
- 110. Talbot, Peter, Vice President, The March Company; 2 May, 1980.
- 111. Taylor, Elspeth, Director of Fiscal Affairs, Cambridge Housing Authority; 8, 14, 20, 29 February and 4, 6, March, 1980.
- 112. Thall, Mathew, Assistant to the Director of Planning and Development, Cambridge Housing Authority; 14 March, 1980.
- 113. Truax, Judith, Legal Counsel, Cambridge Housing Authority; 18 March, 1980.
- 114. Trussell, Philip, Real Estate Officer, M.I.T. Real Estate Office; 2 May, 1980.

- 115. Tulimeri, Joseph, Deputy Executive Director, Cambridge Redevelopment Authority; 19 November, 1979.
- 116. Vickery, David, Assistant City Manager for Cambridge Community Development; 27 November, 1979.
- 117. Waltch, Mark, Developer, Mark Waltch Associates; 5 May and 23 May, 1980.
- 118. Wuenschel, Daniel, Executive Director, Cambridge Housing Authority; 28 January, 1980.
- 119. Youngworth, Joseph, Community Development Services Coordinator, Cambridge Redevelopment Authority; 28 November, 1979.