PUBLIC HOUSING RENOVATION

AN OPPORTUNITY FOR A BETTER HOUSING ENVIRONMENT

by

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PABLO JORDAN

Submitted to the Department of Architecture on May 9, 1984
in partial fulfillment on the requirements for the Degree
of Master on Science in Architecture Studies.

ABSTRACT

The central hypothesis of this study is that the current renovation
program of public housing projects is based on a predominantly physical
perspective. Understanding the administrative and implementation
aspects of the public housing system, the neighborhood context of the
projects, the program's social context, and can make the renovation
process successful.

With this idea, this study looks at the renovation program of public
housing projects from three perspectives: how the overall public
housing system has evolved and affected the project typology; how the
local agencies (LHA) have framed their role in relation to the public
housing system and project administration and; a comparative case study
between successful and unsuccessful projects, that illustrates the
previous analysis.

The understanding of the means and objectives of the overall system,
together with the influential elements in the project's outcome derived
from the case study, are used as criteria in the analysis of the
renovation program exemplified in the Cambridge project of Washington
Elms.

This thesis uses two Cambridge projects as cases: Newtowne Court and
Washington Elms. Located one by the other, they represent the first
projects in the city, with the Elms currently undergoing renovation.

This work concluded that the political aspects of public housing should
be a part of formulating the renovation program so that it reflects the
relationships between the physical form and society, while overcoming
the physical deterministic approach. In this sense, the local agency's
role becomes clearer as a facilitator of the process with less emphasis
on the predetermination of the physical environment.

Thesis Supervisor: Edward Robbins
Title: Associate Professor of Anthropology in Architecture
To my parents
ACKNOWLEDGEMENTS

This work would have never been completed without the collaboration, understanding and support of my advisor Ed Robbins whose help in organizing my ideas as well as getting them into paper, was very valuable. I must also mention here the guidance and help provided by James Stockard to whom I owe the initial interest in the topic of this thesis. His advice in choosing the cases, his intermediation in introducing me to the CHA, and his experience with public housing, which he gladly shared with me, were fundamental.

Dennis Frenchman also contributed his idea and criticisms to the problem, while also putting at my disposal his personal work and research topic. Special mention deserves the assistance received by the CHA's staff, especially from Steven Swanger and Bill Ewal whose generosity in providing me with material for my research was invaluable.

A word of thanks also go here, to the tenants of the projects, represented in their Tenant Council and Women's Group, who gave me all their collaboration and confidence.

Finally, a word to my wife and companion in this task, without whose ever present support and encouragement this work wouldn't have been finished on time. For her love, patience and sense of humor, thank you. To all of them, thank you.
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INTRODUCTION
INTRODUCTION

In the 1937 Wagner Steagall Housing Act, the Government of the United States determined the right, of every citizen, to have access to a safe and sanitary living environment. As a direct result of this public initiative a series of programs were devised to provide housing for the poor. The most important of these programs was the building of public housing. Today, after nearly fifty years, some of these projects are in such a state of decay that a complete renovation has become necessary in order to allow tenants to still occupy the premises. Several reasons have been pointed out in the related literature as to why a state of decay of that magnitude came to be, including: lack of maintenance, poor tenant selection, inadequate physical design, changes in household types over time, etc.

While this has been the case, there are other examples of public housing projects that remain to this day in acceptable conditions and levels of occupancy.

In recent years, a considerable effort is being committed by several public housing agencies (PHAs), with support from the state or the federal government, to renovate the deteriorated projects. This process, known as modernization, is conceived of as a way of stopping the increasing deterioration, of sometimes considerable magnitude, that has as direct consequences, the increase in maintenance and administrative costs, the reduction of levels of occupancy, the formation of "stigma" projects to which new tenants refuse to go, and
finally the vandalization and obliteration of the structures. An important impulse to this program has been given by the increasing demand for public housing, that makes it even more necessary to upkeep the existing units, as well as for the PHAs to make a conscientious effort to better their public image and to create adequate means for public participation and active involvement of neighborhood organizations in the design and execution of alternative solutions to the problem.

In this effort the agencies' activities have been concentrated in the preservation and maintenance of existing units, and in renovation processes designed to update structures and environmental conditions in relation to prevailing standards. These processes are normally coupled with new site organization schemes and landscaping and with the establishment of stricter tenant selection mechanisms.

The most clear ideological concern is that of transferring as much as possible existing public areas to the tenants' private domain, thus relieving the agencies of control, maintenance costs and responsibilities, and promoting public participation. It needs to be emphasized finally, that the deterioration process schematically described above is not that of all public housing projects; some of the original projects are still running in acceptable condition.

This difference become intellectually more intriguing and suggestive, when the projects--successful and deteriorated--have great similarities in location, tenant population and program. What determines success or failure emerges thus as an important issue to be explored.

It is then the purpose of this thesis to examine different
successful and decayed projects in an effort to analyze the reason for the existing differences that can then be articulated in a system of parameters for the evaluation of the current renovation proposals. The overall conception of the PHAs, its role and its consequence in the relationship between process and product, I believe to be of utmost importance in the outcome and analysis of current renovation strategy.

Furthermore, the results of a project, although undoubtedly determined by its physical design, are also conditioned, and maybe at a greater degree by the form in which the project first into an existing environment, the ways in which the interaction of these two elements occurs and the degree of integration, both physical and social, that is established between them. This implies looking not only at the projects themselves, but also at their social structure and very importantly, at their environment.

Implied in the above statement is the notion that housing is a key element of the urban milieu, but not the only one. This notion has been reinforced by the incorporation, in the legislation related to housing deprivation standards and measures, of neighborhood quality as a new category complementing those of sound structure, quality of services and overcrowding. This means that even if a housing unit is safe and in accordance to standards, but the neighborhood--its environment--is not, it can still be considered unhealthy or unsafe.

Are the current renovation strategies considering these elements? Are they of any importance in the outcome of the projects? What implications does this have for policy formulation? This thesis contends that a deeper analysis of the specific environmental characteristics of the projects can throw some light over areas disregarded in current renovation strategies, and could therefore help
inform the ongoing process, so as to make a better use of the
opportunity in the hands of the housing agencies by maximizing use of
policy, money and institutions to generate integral projects, of good
quality in themselves and that help solve prevailing environmental
problems.

The ideological focus of this thesis, is therefore, that of
analyzing the factors, physical and otherwise, that make one specific
environment better than another, and of exploring ways of improving
existing ones. The emphasis of the renovation program is today on
physical readaptation and transformation of existing projects, that
over time, and for reasons not always clearly stated, have become greatly
deteriorated, vandalized, deserted and eventually closed down.

Physical readaptation centers mainly on unit renovation and
building disposition. Intended as a one time investment the projects
are conceived as completed products with little if any consideration
given to the provision of design alternatives for future adaptation to
changing needs (a basic condition for the current state of the
projects), alternative ways of resource allocation to establish a more
balanced relation between physical and social investment, or
considerations over the appropriateness of the project as the physical
counterpart of the program policies. Apparently the orientation of
renovation projects, seems to be that of physical determinism, which
consists in seeing the provision of units of housing, solely, as the
social mechanism for the betterment of the poor.

This thesis, through comparative case work, explores variables not
explicitly dealt with in the critical analysis of public housing.
The first one is the notion of the "projects" as a unit for design, management and analysis. With this "agency" approach, we contend, the overall picture gets distorted and the "boundarization" of the projects takes place; the relationship and integration of the project to its immediate urban tissue becomes obscured and issues such as location are not considered; but also the reduction of the problem to its physical boundaries prevents the agencies and designers from directly addressing the social implications of such a vision: stigma, "social dump", housing of the last resort, etc.

This problem solving focus is a result of taking the system, its products and processes, as granted, with little consideration given to potentials for improvement or variation—ideological or practical—of the projects system.

Is it possible to conceive public housing provision in a different set-up than projects? Can the actual tendency of permanent residence be articulated into potential alternative tenure structures? Should the considerable investment committed to renovation be concentrated on the projects' physical renewal, or is it possible to divert some of it to neighborhood upgrading, job creation and supportive programs? Will the current renovation "work" if only physical changes occur? And if so, what degree of adaptability to modification is being incorporated? In second place, and very importantly, an analysis of the historic evolution of the projects is necessary, to try to determine conditions other than physical that can explain the success or failure of them. These can include special political support, social composition, other supportive programs, etc.
Finally, a study of the integration to the neighborhood, of the projects, is also necessary. The project's location and its relation—physical and social—to its immediate environment can help diagnose areas of potential trouble or problems that have to be addressed in the proposal. Physical notions such as grain, density and image, are here of great importance.

With these variables in mind it is possible two suggest to different areas of the problem, with which each of the above mentioned aspects is to be related:

a) the system conception, and its implications in terms of management, resource allocation, tenant selection, alternative project selection, etc., and

b) the projects themselves, their social and physical conditions, presently and over time: location, neighborhood fit, unit design and quality, tenant composition, population shifts, unit turnover, household types, etc.

In relation to data, this work relies mostly on that provided by the Cambridge Housing Authority (CHA). Interviews with administrators, tenants, policy formulators, and, information from a research work done by the Womens Center of Newtowne Court, and Washington Elms, dealing with tenants perception and feelings of their projects overtime. Finally, for this thesis I worked also with research publications in relation to standards definition, tenant selection and project management.

The scope of this thesis makes it impossible to deal with many case studies, which would help in the generalization stages of this work, so
only two cases have been analyzed. Hopefully this will present the reader with a number of generalizable characteristics in relation to the public housing picture. No effort has been made to elaborate a typology of projects under any given category, but rather the selection of the cases was made so that certain conditions were fulfilled. First, that successful and deteriorated projects were to be compared, but also, and in order to make the analysis less complicated given the large numbers of actors and circumstances to be considered, that these projects had to bear similarities in location, program, age and population. Thus it is hypothesized that, variables not normally considered would come to light. Two projects are presented in the historic analysis—Newtowne Court (NTC) and Washington Elms (WE); both located in Cambridge's neighborhood 4. The renovation proposal for WE is presented in detail in relation to evaluation, as well as to the exploration of the design process implementation strategy.

Some complications arouse in relation with this situation: basically that, given the projects proximity—side by side—and age—roughly 45 years—they have had almost parallel development (at least in the initial stages), with great levels of mutual interaction.

Available information dealing with the relationship between the projects and its neighborhood, that can be then traced back in history, made them a good choice for study. The relationships between the two projects, their physical and historical differences, their environment connections, as well as their actual state and potential implications of the WE renovation are analyzed.

In finalizing it needs to be said that an effort was made so as to organize this work so that in the framework of the analytical procedure
derived from its exploratory working hypothesis it covers the different elements, factors and categories implicit therein: the neighborhood, the social characteristics of the projects and its implications in relation to demand, use and participation, management and implementation process, physical analysis and agency's characteristics and approach.
CHAPTER I

THE PUBLIC SYSTEM
CHAPTER I - The System

"An Act to provide financial assistance to the States and political subdivisions thereof for the elimination of unsafe and insanitary housing conditions, for the eradication of slums, for the provision of decent, safe and sanitary dwellings for families of low-income, and the reduction of unemployment and the stimulation of the business activity"

1937 - Wagner - Steagall Housing Act

Public Housing, as we see it nowadays is the outcome of a theoretical/political process that has left its tracks in the diverse tipology and quality of government provided/assisted housing overtime. Some constant ideas or elements are present along the history of the process, elements that guide the changes in the policy in time with regards to different perceptions of the problem of housing the poor and the implications of these in the physical outcome of the program. The understanding of this process can become of great importance when analizing the current renovation program. Thus a historical overview of the system of public housing and its characteristics is seen as necessary.

The purpose of this effort is to try to identify the constant thread of the changes of the policies in time that make their impact on the physical outcome of the program: the projects. Some light can be thus cast upon the reasons that made the construction of the specific tipology of projects that most clearly identify the american housing system. The text states the goals and objectives of the different policies in time, as well as the ideologies that sustained them, and the consequences of these in the physical form. The final objective is to
arrive at parameters and conclusions that can help analyse the current policy of renovation in the perspective of the system's history and development.

The Public Works Administration: This Administration, the most widely known of the government's early public housing efforts, undertook the task of removing the urban slums, while simultaneously building low-income housing.

In the second half of the 1930's, the pressing needs of 15.000.000 unemployed, living in slums, many of them forced to do so by the economic depression, created the necessary social demand for the government to undertake a major emergency effort in relation to housing.

The rising immigration to the cities, motivated by the same depression, and manifested in the big rural-urban migration of the period, together with the "Dust Bowl" drought of 1937, and the Mexican-American and oriental workers immigration to the U.S., all created on never faced before demand for housing and employment.

Simultaneous to this scarcity of shelter and work, social reformers were pushing at the beginning of the thirties for better housing conditions for the poor, based on humanitarian reasons but also on ideological changes in the perception of the poor, that didn't portray them anymore as the authors of the slums (the they live like that because they want to, ideology) but rather as the victims of the whole socio-economic system. It was unthinkable to consider 15 to 19.000.000 people bums or quasi savages.

Although previously to the PWA, there had been some official efforts made in relation to housing the poor, especially through the New
Deal and its proposal of agrarian self-contained communities of migrants built by the government on land acquired for that purpose, it wasn't called at that time (1930-35) Public Housing. It wasn't also, an urban product but in its essence, rural.

The Public Works Administration, with its Housing Division started out financially with 30% federal grants to aid in the needs of housing of limited dividend or non profit corporations. Politically it started with heavy opposition from the real estate lobby that perceived government's assistance on housing "as eroding the noble virtues of individual dignity and self-sufficiency," considered the pillars of the american society, while also viewing the notion of public subsidies to housing as "socialistic" (the tax payers supporting dependant poor). On the other extreme, the initiative of the government was very much supported by the reformers, such as Catherine Bauer, who encouraged the workers to organize and express their demands and needs for housing and work tied to their political support. Reformers also developed educational campaigns to create conscience among the workers of their rights, of which subsidies for housing was seen as one of them.

Thus, soon the PWA was acting as developers, buying land, destroying substandard units and building new ones. Within the understanding of housing as "a way station for the temporarily impoverished, a house the families could take pride in, a social environment that would help them get back on their feet again," the social organization of the tenants was perceived as an integral part of the package by the social workers from the beginning. A typical outcome of this was the organization of socialized cooperatives that would
encourage the pooling of the tenants efforts to override their circumstancial situation.

A particular aspect of the tenants was thus, them being perceived as "deserving poor". This is to say with steady although moderate incomes: basically, depression hurt households. Conceived as an emergency relief program, the explicit purpose was to help out those temporarily impoverished. No concern was expressed at that time for the permanent poor - the undeserving, so to speak. It was only later in the evolution of public housing that the system was seen as vehicle to social mobility, to achieve the incorporation of the poor into the socio-economic system. During the PWA period those helped were considered as being already in the socio-economic system. This social perception of the program had enormous effects in the actual implementation of it. The most crucial aspect of the program was that it should combine the eradication of the slums, with the construction of new units for those being evicted. The actual outcome was that in the process of tenant selection (a very rigorous one - the projects were to be "models" in every sense), a lot of evicted households weren't rehoused in the new projects, basically for their incapacity to afford the specified rents. The consequence of this was that demand for existing tenements increased, making their rents rise too, which encouraged overcrowding, and made the housing opportunities of the very poor even narrower.

The other important result of this approach, combined with the understanding of the program as instrumental for the creation of jobs (1/3 of the unemployed were from the building industry), was that the
units provided were of very good quality and standards, architectonically very attractive, with sometimes very expensive detailing.

One of the principal problems faced by the PWA, was the acquisition of land: land pooling was necessary in order to make the projects economically wise. This was hard to do in central cities where the poor were to reside if they were to be located near jobs. The PWA lacked the instruments or power to do this, which nevertheless was in the hands of the municipalites (they could take land from the private market if it was meant for social purpose), therefore, suggesting the implementation of local housing authorities (LHA), who, from then onwards (1940's) were responsible for the location and tenant selection of the public housing projects. The role of the federal government, through the PWA was to finance the projects and subsidize rents to cover maintenance expenses.

The racial integration of the projects was held as one of the principal goals of the program, but with the change in controlling agency, from federal to local level, this was a hard thing to implement: the existing communities tried to preserve their present level of racial mix. On the positive side though, the new management besides enabling the obtention of reasonably sized parcels of land, allowed local authorities to modify the federal guidelines in accordance to local needs and characteristics. Notwithstanding, the issue of control over the projects, federal or local, became an important and debated one.

In relation to tenant population characteristics, the PWA, and later the USHA, encouraged the racial mix within the projects. This
idea was not backed up with enough regulations or criteria for tenant selection, the normal outcome were racially segregated projects (i.e., black, white, mixed). In any instance if the racial mix was not achieved, the same level of amenities and services were to be provided for black families than for white ones. Since its inception the program, and the PWA, as mentioned were under heavy criticisms, mostly referred to: 1) its promotion of socialist ways, not only in the financing of the projects but also in the organization of the tenants: the cooperatives were perceived as a socialist expression; 2) it being unfair competition to the private, self-made merchants (in the case of cooperatives) and builders or developers (in the case of the units) and, 3) the provision of high quality units, that discouraged people's interest in homeownership.

The 1937 Housing Act, and the LHA's

The ideals behind the PWA period, based on the perception of public housing as a vehicle for social reform, combined with the criticisms mad to it, the change of administration, the accumulated experience, and the relatively better overall economic situation, while making the job provision aspects of the program less vital, set the basis for the 1937 Housing Act.

The Act, as presented, specified the right for a decent, safe and sanitary dwelling for every citizen, in a decent environment. The presentation also included as objectives the provision of jobs and the betterment of business. The legislation became the foundation stone of the Public Housing system as we know it today, generating the legal basis over which different programs could be based. It materialized and
settled the different criticisms, defined federal and local authorities roles and responsibilities, as well as the limits of the program.

The Act, "officially redefined the slum to encompass the physical condition of the buildings, the absence of amenities, and the overcrowding of the land." The obligation of the government to eradicate the slums was now legally stated. The incorporation of categories of physical deterioration (overcrowding, level of services, structural safety) etc., determined the consolidation of an approach to public housing that had been present implicitly in the New Deal and PWA times and that somehow still guides the public housing system: that of emphasizing the physical analysis and programming of the problem: the idea that a good physical environment conditions the social group that inhabits it and that the quality of life can be the instrument for social reform. At the same time, the economic argument that the public housing program generated jobs and had countercyclical economical effects has been with it until recently. (Lately the job provision argument has been discredited by demonstrations that argue that more jobs are generated if the money goes to leasing with or subsidizing rents.)

In practical terms, the Act further shifted power to local authorities that were from then on to own, operate and rent public housing while the government's role, through the newly created United States Housing Authority (USHA), would be that of defining the guidelines and loaning the money.

1 Ch. Abrams - "The City is the Frontier", pg. 2
2 See Arthur P. Solomon "Housing the Urban Poor"
In a combined economic effort in which the local authority was to raise 10% of the building costs, the government would provide the rest, on a 60 year low-interest loan. The roles and jurisdiction of the different agencies were then settled, with the local agency having to go by the book set by the federal government.

The program was now explicitly conceived to meet the needs of the very poor, not anymore those of the "deserving" and temporarily poor. This in part was a reaction to the fact that the conditions of those most needy were deteriorating day by day (they were being evicted from the slums but no new housing was being provided), but also as a way to settle the criticisms from the private sector in relation to unfair competition. Income and unit cost brackets were imposed on the system as part of the regulations; the tenants income had to be 20% lower than that which allowed access to the least expensive private market unit. The main drawback with this clause was the loosing of the incentive among the tenants, to achieve income increases: they had to move out if they went over the limit. This meant serious problems for all the households inbetween both levels of income.

In relation to unit construction costs, these were fixed at $1000 per room or $4000 per unit. This disposition was meant to discourage any "extravagance" in the design. The consequence: no storage space (the poor don't have enough money to have anything to store), no closet doors (encourage neatness), small parent's bedroom (no infant in the same room), etc.

The rent, was based on the tenants income, and shouldn't exceed 20% of it. The supplement needed to cover maintenance costs was to be provided by the USHA.
The projects were to alleviate social problems, by combining slum clearance and new unit building with control-physical and administrative, therefore being instrumental to the achievement of social reform. Translated into codes and regulations, very stringent controls were imposed on tenant selection (especially given that enough new units were being provided after slum demolition), as well as everyday control mechanisms: social workers, interviews, police-record checks, home visits, etc. The agencies favored the selection of complete families seeing the education of children through the environment, as a good potential of the program.

Great part of the success of the projects resides precisely in this aspect of being a tightly controlled environment. The paradigm of the physical environment conditioning the users was either taken to its limits with the provision of severe control mechanisms, or it wasn't "strong" enough so it had to be supplemented by the mentioned controls.

Physically, the new 1940's public housing projects were thus characterized by much lower standards than their predecessors of the PWA. These lowered standards were also a result of the shortage of money derived from the war time effort. Typically a three to four storey walkup (the PWA model), with an image of sturdyness and functionality, they were designed to last 40-60 years (the length of the loan repayment period), intendedly austere and inexpensive. The projects shouldn't be of a quality that would encourage people to stay in them. This was overtime identified as the "institutional" image of the projects, that coupled with the social controls mentioned above.

3 G. Wright - "Building the Dream"
created a climate, on the long run, of rejection from the tenants themselves but also and most importantly from other residents in the community, although these two conditions appeared more strongly after new variations were added to the program.

The 1950's

Later on in the process, two more Acts were passed: the Housing Act of 1949 and the Urban Renewal Act of 1954. These encouraged the demolition of "blighted" areas of inner cities and their ulterior redevelopment. Both these acts were an official response to private business interests that demanded a greater degree of participation in the demolition of slums and rebuilding, perceived rightly as a source of very good business.

Typically this meant the destruction of tightly built residential communities and the redevelopment transformation of the sites into office buildings, luxury apartments, convention centers, etc. The goal was to increase the tax base of the cities. Included in the Act, but very rarely complied with was the obligation to build at least the same number of units housing, in the same location. An important consequence of this was a greater demand for public housing, especially from black families (The Urban Renewal Act came to be known as the Negro Removal Act). A historical pattern can be seen here: the removal of the poor from their residences, slums then "blighted areas" now, in which public housing construction is to provide the alternative. The rehousing purpose of the programs wasn't complied with, while valuable

4 In relation to this, see the West End case in Boston documented by Herbert Gans in "The Urban Villagers"
5 See Ch. Abrams' book "The City is the Frontier"
land was being reincorporated to the market: housing the poor was instrumental to the removal of the poor from valuable sites. In the 1950's and because of the high cost of the Korean War, the federal budget for social services was heavily reduced forcing the building features to become even more minimal, which meant reducing room sizes and increasing the densities and scales of the projects.

These economic constraints, coupled with modern stylistic changes in architectural taste and theory - that tied very firmly form and society modelling, made for the appearance of the largest projects ever. In these, the change of scale was assumed to help users to break with their past and acquaintances.

The typical expression of the public housing projects of the 1950's, the high rise tower (allowed by USHA) in big "park" areas architecturally represents the shifts in policy.

The notion of a model environment was now that of massive projects of common if not identical characteristics. The idea was to create self-contained communities that could effectively defend themselves from the negative influence of the deteriorated areas nearby. Site planning and selection were carefully done to produce artificial barriers, or benefit from natural ones. Most of the projects were therefore located by highways (the construction of highways demanded demolition of large areas of the inner cites, most of them of low-income, making the reuse of the land for Public Housing a logical thing to do) or natural limits such as rivers, parks, industrial plants, railroad tracks, etc.

The expressly made effort to produce boundaries with surrounding communities, done by formal differences - in scale, grain and density -
and site planning, was seen at the time as a positive asset, that overtime turned out to be one of the most pervasive factors of the projects: not only did it keep the community out - with its deterioration - but likewise and in the other direction, kept tenants isolated, marginalized from the community at large. On top of this, physical features of the projects, such as excessive open areas, lack of surveillance capacity, large numbers of potential criminal activity spots, etc; coupled with the tenants perception of the projects as "institutional" contributed to the strong and rapid decline of the structures, otherwise seen as architectural design break throughs and symbols of order and progress.

The 1960's to Today

In the 1960's, the generalized criticism of the "tower in the park" scheme, along with studies that demonstrated the economic inefficiency of the projects (it was cheaper to operate low-scale site scattered projects), the less affluent resources, and the deterioration of the social tissue of the projects, made way for the implementation of newer programs, focused on the incorporation of the private market into low-income housing provision, making for the subsidization of demand rather than of supply. This new shift in the policy, reaching for adaptations to fit the changing conditions and outcome of projects, was articulated by the 1965 Johnson Administration, Housing Urban and Development Act, that provided funding for two new programs: rent supplement and leased housing. It also meant the creation of the U.S. Department of Housing and Urban Development - HUD.

7 Housing America's Low-Income Families
Of the two new programs, leased housing was the easiest to accept. Problems came with rent supplements that were perceived as dangerous because:

"it kills the incentive of the American family to improve its living accommodations by its own effort;
it kills the incentive for home ownership,
it makes renters wards of the government;
it fosters a system of economic integration... through government subsidy;
it is the way of the socialistic state"

- The similarities with the arguments against the PWA, are appalling. The rent supplement legislation was finally approved but has since met with a lot of trouble: curtailment of requested funds by Congress and modifications of the regulation concerning quality of units, amenities and potential location, all of which tend to the minimal standards approach and to restricted areas for public housing location. The initial objective of promoting integration of diverse economic groups is thus very difficult to achieve.

Also in the sixties, and as a result of the Civil Rights Act of 1964 that stressed the need for equitable government policies with regards to race and income, the public housing system was basically affected, in relation to the clarification and formalization of tenant selection procedures, that so far had been left at the discretion of the local housing authorities. The abolition of the screening process and the imposition of the first come first served procedure, had an enormous

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8 Minority report of the House Committee on Banking and Currency 1965/66 - cited by A. Solomon in "Housing the Urban Poor"
impact in the social composition of the projects that tended everyday more to house minorities and the very poor.

Finally, and much more recently, studies that demonstrated the economic unfeasibility of building new units has made the public efforts center around the recuperation and reuse of existing ones, being the system at a point where most of the newly built public housing is for the elderly, whose population has increased steadily, and that being a less conspicuous and troublesome tenant group, can be housed on nicer areas (that don't make use of their right to veto public housing construction). This is coupled with higher price ceilings allowed by Congress that allows the buildings not to have the Public Housing "look".

The most recent policies in the system are the rehabilitation of existing units of public housing, some experimenting on tenure structures, an expanded system of housing vouchers for the needy, and amendments and reinforcement of the fair housing law. The solution of the housing shortage for the poor is seen by HUD as conditioned to the "return of the Nation to economic stability, to the redistribution of authority and responsibilities among the Federal, State and local governments and to the stressing of partnerships between the public and the private sector"

CONCLUSIONS

This rapid account of the evolution of the public housing system overtime allows us to conclude that:

1. The notion of environment has been always attached to the notion of it being conditioned by the built form. Physical determinism

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9 G. Wright - "Building the Dream"
10 "Programs of the HUD" - Published by HUD, 1982.
so to speak. The case has been such that, the building of housing has been coupled systematically with clear explicit and implicit indicators to who should benefit from it. The users appear as yet another element to control in the process, to guarantee its success.

2. The system has gradually but steadily adapted itself to the demands of the society at large, trying to fulfill the need of social response to the problem of housing the poor, while simultaneously, elaborate itself in a way that it won't compete with the more established private market, but also won't make the government appear as "socialistic".

3. The notion of environment seen merely from a physical standpoint incorporates in every stage of the evolution of the process a larger number of variables - from the unit to the neighborhood, including level of services and amenities as well as criteria on sanitary issues such as overcrowding, ventilation, etc.

4. The different models proposed (PWA, USHA low rise, high rise, etc.) all have been designed under a very positive approach, a sort of renovation spirit, very much in contrast with the skepticism of today's approach.

5. The process has undergone a series of stages in relation to public versus private role in the provision of housing for the poor. Originally, a purely federal effort, it reached its peak with the creation of local housing authorities, only to gradually incorporate the private sector, first, in the Urban Renewal Act, as an economic interest and producer, and today, through leasing units and rent supplements as a direct supplier. Presently, the notion of joint ventures is one of the
most appealing to the authorities, in the exploration of alternatives that might prove more efficient economically and administratively.

6. The physical approach to public housing provision, has consistently been that of "projects," for reasons of economies of scale, land pooling, scale of the program, and/or social theory (make self-contained communities). Only very recently have the authorities gone back to propose the site-scattering of public housing, as well as the stopping of new construction.

7. The goals and ideals of the program have remained practically intact overtime: provision of housing for the poor, equal opportunity, racial mix (later transformed into keeping the racial mix of the area), education of the poor; while simultaneously favorably argumenting for the policy given its beneficial economic impact.

8. Public Housing is basically a political activity. The consequences and problem any given program can have are very difficult to articulate given the great number of different interests involved.

9. The program conceived as a temporal relief to the deserving poor got transformed into a social service for the very poor. The original notions of a small supply with a rapid turnover were shattered by the rising need for more housing, as a result of other urban policies the war time effort, the elderly needs, as well as by the negative balance in housing generation of the program itself; but also by the permanent residence characteristic the projects took when they became housing of the last resort. It accommodates today roughly 1% of the population in approximately 900,000 units.
10. In relation to the present situation, in a global vision, the program, its process and products are going through a redefinition stage, searching for alternative methods to fulfill the objectives originally presented in the 1937 Housing Act.

New policies are being deviced tending to release the LHA's from administrative responsibilities - home ownership loans, site scattering of projects, private managing of projects, leasing of units, rent subsidies -, as well as aiming at the perception of low-income rental units as only one alternative to poor citizen's housing. The traditional role of the State as subsidizer of supply - built, lease, rent, etc. - is expanding to incorporate demand subsidies (rent supplements, leasing of private market units, etc.) while testing supply alternatives that would incorporate the private market in joint ventures.

In relation to new production, little new units are being built, except for elderly housing, with emphasis being put on renovating existing stock rather than building anew. Here though, the historical pattern of physical determinism is still present, although consideration is being given to tenants through a more participatory process, via tenant councils, meetings, etc.

Finally, and in relation to this thesis, renovation is only one part of the public housing program today, that tends, so already said, to diversify the alternatives used and, to some extent the typology of available supply, to adjust to a much more diverse demand, than that of a "standard" family.
It is under this understanding that this work proceeds in Chapter II, to analyze the role of the agency, exemplified in the case of the CHA, its understanding of the task and its products, the projects, as well as an analysis of the renovation procedure administratively and functionally.
CHAPTER II

THE AGENCY AND THE RENOVATION PROGRAMS
As presented in the previous chapter, the main actor in the provision of housing for the poor, is, under the current system, the Local Housing Authority (LHA). It is to the LHA that it corresponds to own, build, rent and manage the projects, as well as all the alternative housing programs available. The LHA plays a bridging role between the needy residents of any city and the federal government. Funding for the programs comes from the federal budget to social services, channeled through the U.S. Department of Housing and Urban Development (HUD). In relation to regulations of the system, these are imposed by the government via HUD. These regulations are a way of ensuring a minimal homogeneous quality in the provision of housing all across the nation. Notwithstanding, the LHA's must comply with any specific regulations or codes the respective state or municipality might have in relation to the buildings', design, quality, standards, or location.

The agencies are relatively free in relation to internal organization, as long as they have the required departments to fulfill their tasks.

In an administratively vertical system, LHA's occupy the lowest step before the implementation of the projects. Originally intended to be the instruments to articulate the policies (which otherwise were difficult to implement) the agency's autonomy is today relative, dependant as they are for funding upon compliance with regulations.

Nevertheless, the local housing authorities have managed to have a level of autonomy that allows them to propose and articulate the programming and implementation of different programs. Furthermore, the LHA's become the ground to, given political support from the city,
experiment alternative administrative mechanisms for the supply of housing, but mainly for the management of the public housing system.

Needless is to say that public housing projects constitute the central part of the LHA's activities, that otherwise provide the framework for putting to practice other housing programs for the poor, such as leased housing, or rent supplements.

The agency also has to attend the complaints and suggestions of tenants, although it is not required to administer social service programs.

In the case of Cambridge Housing Authority, the agency has taken onto itself also the responsibility of organizing the tenants, assist them in the search for jobs, health, education, and legal advice. The CHA, in a model attitude, has a special Social Services department, commissioned to fulfill the above mentioned tasks, but that nevertheless has to face the funding shortages derived from the non-existence of dispositions within the HUD (and thus also in the LHA's) in relation to fund provision for social services. The overall federal aid system is not an integrated one, with the federal authorities stressing the role of the housing agencies to concern themselves only to the realm of physical shelter provision, attitude that permeates down to the LHA's that see themselves "more as real estate agencies than a social service agency." The example set by the CHA in this context is remarkable;

Currently the City of Cambridge has 39 publicly assisted housing developments, spread on 9 of its 10 neighborhoods, with roughly 5,270

11 Interview with Steven Swanger, Director of Tenant Services, CHA
12 Ibid.
units, divided in subsidized elderly, low-income family and moderate income family (mostly section 236, 221d3 and M.H.F.A. Program). The CHA, manages 24 of these projects: those for low-income families and some elderly projects. Programs involved are Federal Public Housing, State Public Housing, Federal Turnkey, Turnkey, and State 667. (see map (fig. 1 and table I).

The LHA's are then the administrative expression of the overall system of subsidized housing provision; the political/administrative outcome of the Acts of Congress. Their role is to articulate the different housing subsidy programs and act as liaison with the users, taking their format and ideology in the problem's approach, from the system, mirroring in their focus the one of the bureaucratic hierarchy.

Because of the LHA closeness to the tenants and users of the system they are in an excellent position to judge where the programs are having or not the effects desired, and in a very good position to elaborate on the federal guidelines in relation to local needs. Being this the case it is sad to see that due to bureaucratic and financial constraints this potential isn't completely fulfilled. The mechanisms for feedback from the tenants and managers to the LHA and from here to the higher system are most of the time cumbersome, and at any rate slow. Policies or programs get approved and develop a "bureaucratic inertia" that is very hard to deter. From the historical analysis of the public housing system, we see that the constant in its evolution, has been the approach to problem solving, conceptually guided by physical determinism as the

13 Data from the Camb. Comm. Development Department.

14 Concept elaborated by Ch. Abrams in "The City is the Frontier" (1965)
main ideology. Environment, housing and ultimately form are seen as instrumental in the achievement of social change and overall betterment. This ideology naturally filtered down to the Local Housing Authorities, that as pointed out, materialized as a consequence of the evolution of the system [the instruments, to solve particular barriers to the implementation of the programs].

The problems the LHA's face, are mostly originated in their role of mediators having to react to pressures from the tenants themselves, but also from other social forces - political and economical. The combined role of implementing and mediating agency is not an easy one to play: the LHA must answer to different bureaucratic bodies and constituencies whose interests, goals or views do not necessarily coincide. This aspect of the LHA's performance is of great importance when new alternatives for housing provision are to be tested or proposed. The participation and influence of other social forces in the process of housing the poor, makes in general, that the outcome of the program has rarely met the ideal goals presented in the legislation. A number of "environmental" issues have to be present, at the right moment, in order to make for the project's success. This "opportunism" to policy generation and program implementation we believe, is of key importance, demanding from the LHA, a permanent "state of alert" to make the best use of the legislation, resources and circunstantial conditions in the locality, in order to fulfill their task. Political pressures, financing problems, lack of supporting services, general public rejection, a non-integrated decision-making process in relation to social service provision, are but some of the problems the LHA has to face.
<table>
<thead>
<tr>
<th>Number</th>
<th>Map Development</th>
<th>Address</th>
<th>Type of Unit</th>
<th>Number of Units</th>
<th>Type of Structure</th>
<th>Federal/State Programs for Housing Assistance</th>
</tr>
</thead>
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<td>Britton Arms</td>
<td>247 Garden Street</td>
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<td>154 85 69</td>
<td>Garden Apts</td>
<td>Section 236 &amp; M.H.F.A.</td>
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<td>Townhouse</td>
<td>Federal Housing</td>
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<td>Close Building</td>
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<td>199 199</td>
<td>High-rise, elevator</td>
<td>Section 236, M.H.F.A. &amp; Rent Supplement</td>
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<td>Mid-rise, elevator</td>
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<td>Franklin 41</td>
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<td>Mid-rise, elevator</td>
<td>Section 236 &amp; M.H.F.A.</td>
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<td>High-rise, elevator</td>
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<td>High-rise, elevator</td>
<td>10c Leasing &amp; M.H.F.A.</td>
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<td>River and Howard Sts.</td>
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<td>Fairmont at Maguire St.</td>
<td>Low-rise, walk-up</td>
<td>69 69</td>
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</tr>
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</table>

*Single persons and unrelated individuals under age 65.

**TOTAL** Cambridge Publicly Assisted Housing Development
The Project as a Concept

Physical determinism has as its logic outcome the conception of built form as instrument for action. This result is a direct one of the analytical perception of the problem: lack of sufficient or sanitary units of housing, coupled with the government's responsibility to house the nations (defined by law). So, more construction was to solve a twofold problem: not enough units plus a lot of substandard ones, while simultaneously helping solve the economic problem. This approach wouldn't have been a problem, or by itself, the argument for project construction. The key reason for this solution type, is that this practical focus of the problem was simultaneously coupled with the ideas and notions provided by the social reformers, that not only demanded that the government participate more actively in the provision of housing, but also, that the opportunities should be used to educate and socially upgrade the poor. The consequence of this was the promotion of the establishment of model communities, which varied in kind and type over time but whose ideal was always present. This meant that along with the economies of scale in construction plus the practical constraints of land pooling, the physical outcome of the program had to be defined and identifiable pieces of the urban tissue. From here to the project as a preferential product there is very little distance.

Thus the typical public housing product is to be found everywhere in the country originally three to four storey brick or masonry walkups that later became high rise concrete towers, homogeneous in shape, layout and architectural detailing, organized in an array of patterns on

15 Arthur P. SoTomen - "Housing the Urban Poor - A critical evalua- tion of Federal Housing Policy".
a clearly defined site. At the beginning (PWA stage) of very good architectural quality, only to be diminished after the population to be served was by law defined as the very poor. Of a very clear formal image with, as pointed out already, acute differences in density, scale, grain and architectural language, they very rarely mix or blend into the surrounding urban tissue.

The development of the project as a model as well as the product of the system provided also the required instrument to achieve efficient control and monitoring of the process, given its federal and its political aspects. (An easily identifiable product had to be shown for political and good accounting reasons).

Not only were the projects as demonstrations of the program's realization (easy to show) but also as examples of the ideology behind the policy. The physical delimitation of the areas greatly facilitated the construction, management and administrative stages of the process, while providing the conditions for an environment [conceived of as the interactions of people within a physical form] to develop: the fulfillment of the self-contained communities ideal, required the provision of self-contained forms.

The physical-social duality, if it was to succeed, had to be controlled closely. The physical side of it is the project - a limited, measurable place - while the social side, harder by its essence to predetermine or control, was monitored through regulations, in relation to tenant selection and imposition of certain life modes - i.e., tenant groups, coops, social workers assistance, and interviews, etc.

For this reasons, "project" was to become the typical outcome of the system, almost since its conception, over which variations and modifications were aggregated in accordance to shifts in ideology or resource availability. The model concept grew to reach its formal peak in the 1950's - high density, high rise - "tower in the park" projects, to gradually loose its predominance since then. Today, in fact, very little new projects are being built, with more emphasis being put in the renovation of existing ones.

Is the previous reasoning being considered in the modernization analysis? Or are the agencies merely trying to reestablish "ideal" environments within the same formally deterministic ideology? What are the lessons of the process that are being addressed in the modernization proposals?

It looks more as if the "project" ideology still predominates, partially because the physical projects are here still, but also because of the hierarchical disposition of the system, coupled with the "policy inertia" factor mentioned above, making the chances of LHA's to question the validity of the solutions minimal. The alternative pattern is then to take modernization as a fact and try to articulate it in ways that would at least address the issues and problems discovered over the years. The fact is the projects are there and something must be done about them, for political, economical and practical reasons.

The question becomes then, how does a LHA approach the task? How is the modernization program articulated to meet the demands of the law, the political system, and the users? This aspect will be dealt in relation to the specific case to be analyzed and the role of the Cambridge Housing Authority (CHA) as the implementing local agency.
Summarizing then, the "project" becomes useful as an analytical unit, not only because they are the subject of the modernization program, but also because it embodies, as a product, the different aspects of the system, both ideological and practical, representing also from the program's implementation perspective, the conceptual, economical, administrative, and of course, physical basic unit.

What have been the consequences of this "project" approach of the system? Over time maybe the most clear result of this approach, has been the boundarization of public housing. Defined by law as a program to serve the marginal poor, those that couldn't "stand up on their feet" by themselves, the physical product has contributed largely to the perpetuation, now in the social realm, of this marginal condition. Even though the programs stressed racial and economical mix, the practical outcome - greatly due to local social forces - has been that this ideal is far from being reached. Moreover the tendency is that the projects become enclaves, socially and economically: the ghettoification of public housing. The projects are instrumental in isolating the tenants physically and socially from the surrounding areas and community.

The incorporation of behavioral studies in relation to Public Housing, specifically oriented to project analysis has demonstrated the tremendous negative impact the poor design of the structures has had in the maintenance of them by the tenants or the community. Typical problems associated to form - generated conducts [be it unit design, building type and/or sit layout scheme] have been: the vandalization of the structures, insecurity of tenants, high indexes of criminality,

17 O. Newman - "Defensible Space" (1973)
generalized neglect (including policing and maintenance), and finally abandonment of the projects. Coupled with this, in a vicious circle difficult to break, community perception of the places as social dumps generate increasing rates of turnover and rejections from the tenants offered units.

The projects are also a good analytical unit in this work, because of their scale, that enables environmental analysis to take place, as well as the incorporation of different actors related to the problems, besides the fact that having been a historical constant of the system, they represent its evolution with great fidelity.

The two project cases analyzed in the following chapters, were chosen for this reasons. Although they do not represent the 1950's type of massive projects, they nevertheless have in them all the elements general to the problem. Specially interesting is them being products of the two first official attempts of Public housing: the PWA and USHA stages. Interesting also, is that one of them, Washington Elms, is undergoing modernization, which allows us to follow the analysis to its actual stage of development, while the other, Newtowne Court, is still working in good conditions, with only some repairs over its life time.

Why is this? Can we learn anything from the two projects? As a way of closing this chapter, related to the agency its role and characteristics, a closer look at the modernization administrative and implementation process, can help inform the relation of the LHA's to the overall system and to this specific program, as well as illustrate specific aspects of the policy that can affect the outcome product of it.
Public Housing Modernization Program and the CIAP

Created as an amendment to the 1937 Housing Act, it was conceived to provide federal aid to public housing agencies to finance capital and management improvements in public housing projects. By this, it constitutes the latest in the historical series of modifications and additions to the 1937 Housing Act, in order to adapt it to current trends and needs.

These are, in this case, the evident deterioration of much of the public housing stock, that has rendered partial improvements done by LHA's as useless efforts to curtail the process of decay. Furthermore, in a different perspective, it can be interpreted as the failure of the system to achieve its objectives. Arguments related to economical efficiency state that it is less expensive to renovate or modernize than to build anew, while the increasing demand for public housing due to the economic situation further supported the creation of this program.

Thus, in 1980, with the Housing and Community Development Act, the ongoing modernization programs became part of the new Comprehensive Improvement Assistance Program (CIAP). This, was amended after public debate and LHA's management and administrative suggestions, in May 1982. The nature of the suggestions mostly referred to the reduction of the red tape of the procedures involved in the obtention of funding.

The program regulations cover all modernization projects underway from 1977 onwards. An important aspect of the CIAP program is that it systematizes the procedures for fund allocation, project implementation,

18 A.P. Solomon - "Housing the Urban Poor" (1974)
as well as defining the technical aspects of the process. By doing this the federal government has laid the basis for the equitable allocation of resources along with the definition of the parameters for evaluation and design.

The objectives of the CIAP, as stated in the publication of the "Public Housing Modernization Standards" of June 1982 are:

a) to provide housing projects that are safe, in physically sound conditions and with all systems performing their intended design function.

b) to provide livable residential environments

c) to provide energy efficient buildings and systems.

d) to increase security of tenants and project property.

e) to provide repair and replacement guidance that will be cost-efficient, extend building life and reduce maintenance costs, and to result in a project that can be efficiently maintained at a reasonable cost after rehabilitation.

Implicit in the codes are the objectives of achieving a 97% level of occupancy with a 5% turnover, in an economically balanced development. The criteria set out to define the approach through standards to modernization are: health and safety, systems integrity, project improvement, energy conservation and project specific ones. Special emphasis is put on the categories of health and safety, site security and criminal abuse resistance, and energy conservation opportunities. Administered by the HUD, the program had through September 1982 financed approximately $5,350,400,000 of improvements which gives an expression of the dimension of "need".

20 'Programs of HUD' (1982)
In accordance to the HUD handbook, 7485.1. Rev. 1, that describes the CIAP, the PHA's get financing from HUD to "improve the physical conditions and upgrade the management and operation of existing public housing projects to assure that projects continue to be available to serve low income families."

Thus the program, as stated both in its official publication and in the supporting standards guidebook, covers not only the physical upgrading of structures, but the betterment of the managerial and administrative ones as well.

This is a very interesting aspect to analyze, since it acknowledges for the first time in the legislation, the potential responsibilities that the overall system can have in the outcome of the projects life. Not only is the analysis explicitly and implicitly assuming the environments decay as a consequence of the tenant population combined with poor designers, but certain degree of guilt is attached to the public housing implementation procedures. Although this is never openly stated in the legislation, it is perceived in the sections referring to the potential and capacity of the PHA's to carry out this program (and any other for that matter), allowing funds to be allocated, within the CIAP, to the updating of administrative procedures and staff.

Financially, the capital improvements are to be financed over a 20 year period, during which the LHA must operate the modernized projects in strict accordance to HUD requirements as set forth in the Annual Contribution Contract (ACC) signed between the LHA and the HUD. The assignment of funds is thus conditioned to the fulfilment of HUD's ordinances in relation to all the different aspects of the process,
including tenant selection, monitoring techniques, regular HUD inspections, etc.

In effect what the federal government is obtaining through the modernization program, is the opportunity to intervene much more directly in the systems outcome, reducing the LHA's independence - given to them by law, but curtailed through financing. The program also becomes an instrument for HUD to modify or alter the prevailing structure of some LHA's.

In terms of procedure, the assignment of funds follow a very long process from the Federal Housing Commissioner, down to the regional office of HUD, and from this to the LHA. The funds are divided into three different groups: contract, loan and budget authority.

The administrative and financing procedures to make a proposal of CIAP funding is as follows: organized like in a set of regulatory stages, that concern fund obtention, project implementation and cost recovery, when a local housing authority (LHA) or public housing agency (PHA) determines the necessity to renovate or modernize a development or project, it must apply to the HUD's local office for the assignation of funds. HUD requires, for this application to be valid, that at least two tasks should be fulfilled by the LHA: first, a complete survey of the site in accordance to HUD's forms and methodology, as a consequence of which a determination of need, in relation to prevailing standards.

These three are technical jargon for the annual debt service of the cost of modernization (contract), the capital of modernization (loan) and the "run out costs" (budget) - Budget costs is the total amount of annual contributions paid by the HUD. It is equal to the contract cost times the number of debt service annual contributions, which in this case is fixed at 20.

-HUD handbook 7485.1 - Rev. 1.
(the new updated form of which was published in 1982) is produced and, second, inform the tenants of the project about the agency's intention to undergo modernization of their residences.

The funds provided by HUD can be channelled to comprehensive modernization - which requires the assessment of physical and management improvement needs - or to specialized needs of the project(s), under the special purpose, emergency or home-ownership modernization programs. Our area of interest is related to monies that go to comprehensive modernization of projects. This is to say, projects that are recognized as being in great state of decay requiring radical intervention. This can vary in scale and scope but can cover up to total remodelling of structures, site plan variations and demolition of "mothballed" buildings. The scope of the effort is to be determined through the survey. Appendix 1 contains the forms of management survey, 2 revisar.

In relation to physical standards to refer to, the program calls for the use of the published Modernization Standards, by HUD, that "provide design, construction and environmental criteria for uniformly evaluating the physical condition and energy efficiency of existing public housing projects and determining what rehabilitation is necessary."

In relation to tenant consultation the legislation in brief: it enhances the duty of the LHA to inform tenants of the agency's plans, accept ideas and suggestions -- at least 3 weeks before the submittal of the application -- and to formulate the proposal in conjunction with them as well as with local officials. The objective is to get an agreement

22 HUD's Transmittal Handbook 7485.1 Rev. 1, May 1982
among the affected tenants before funds are assigned, together with the provisions of an early opportunity for discussions of the issues involved while testing the possibilities, in relation to local officials, of articulating the program of modernization with other related to neighborhood revitalization, service provision, etc. The code calls for "full and serious consideration" to be given to tenant recommendations.

The HUD, once approved the initial need form, establishes the requirement of a series of joint meetings HUD/LHA to jointly review and/or modify the modernization proposal. This disposition allows HUD to control the process in its initial stages, to see that the federal government objectives are carried out, and, furthermore, to control the amount and quality of modernization to thus avoid excessive expenditures.

If the proposal comes out of this meetings still as a viable one, [the process has three yes/no instances] the funds are granted and the monies allocated through contract. This, as mentioned, cover physical and management needs, being also eligible tasks for funding, the advance planning of the project, salaries needed for other than normal LHA personnel, monitoring and evaluation expenses and resident relocation and transportation costs from and back to the project, if suitable (see appendix 2 for actual procedure chart).

The HUDs role in the process doesn't nevertheless end here: the LHA, who is in charge of implementing the project must on a quarterly basis hand in reports on the progress of the program while the field office of HUD is responsible for ensuring that the LHAs are carrying out

23 HUD Handbook 7485.1 Rev. 1, May 1982.
their programs in accordance to plans, schedules and the law. This can imply anything from site-inspection to overall auditing.

With regards to the provision of funds for non-physical elements, such as funding of tenant organization, discussion groups, information procedures, community participation initiatives, social services, etc., the legislation specifically stresses the inaplicability of HUD funding for these matters, unless under the payment of salaries for specific construction or management work. The regulation rather, encourages the LHA's to develop initiatives to complement the CIAP fundings with other programs in the realm of social service provision.

The description and analysis done so far, demonstrates that the CIAP, the main funding source for rehabilitation of old projects (other than State or city money), is thus clearly emphasizing in its approach a physical orientation, to take place in the buildings, in compliance with a set of standards - as evaluation and control instrument - within a clearly determined implementation process. The social aspects of the problem are explicitly avoided, via non funding of related activities or by transferring the responsibilities to the LHA and other social service agencies. The ideological limits of the approach appear to be those imposed by the comprehension of the "environment" solely in its formal aspects.

The program's procedures, characterized by an intensive bureaucracy, if clearly oriented to obtain better and healthier living environments nevertheless emphasizes only one side or aspect of it: its physical form. The reasons for this can be hypothesized to be related with the need, set by the same process of achieving control. Therefore,
controllable aspects are stressed. This purpose also reflects in the articulation of the program, that indirectly enables HUD to exert more control over the LHA, restraining or conditioning on one hand the provision of funds, while on the other it demands from the LHAs the compliance with federally set goals in relation to race, income and opportunities of the tenants.

It is to the LHAs duty to see for the diagnostic and policy program articulation in relation to social services and tenants concerns. Furthermore, in the line of HUDs control over LHA's, the legislation imposes over these, the need to rearticulate its tenant selection and eviction policies to meet harder or more stringent criteria. The purpose here is to produce social environments that will attract higher income tenants, as well as insure the demand for the project [the "social dump" barrier must be removed to get better tenants to take the units] and thus meet the 97% level of occupancy goal.

We see then, as deeply tied into the regulations the issue of tenants, their "quality" - good or bad - and the process of their selection. The program is perceived by the authorities as a chance to reinforce the original principles of the agency such as racial mix, equal opportunity, together with more subjective goals such as ideal or model communities.

The goals of the agency - a 97% occupancy level, 5% turnover, racial mix income balance, etc. - imply with regards to implementation that the projects have to be of a quality such that they will attract moderate-income working families, hopefully within a balanced racial mix.

24 Interview with Frank DiMeeo - HUD Office, Boston, Mar. 1984
In practical terms this can imply, a reformulation of the LHA's tenant selection system, its procedures and objectives. In relation to existing tenant population of the projects, the likelihood of eviction of a % of them, is quite large.

What's being argumented implicitly in the policy, is that if the "new" public housing is to have federal monies for its renovation and upgrading those funds should be spent on more worthier tenants than the actual residents of the projects. The unsolved issue of whom is the "client" group of public housing, the "deserving" poor or the very poor comes to mind again. Although explicitly defined for the very poor, the program has lately adjusted itself again, by the removal of the 20% income bracket requirement, in an attempt to make the public housing projects, not only available to, but demanded by higher income groups, concretely salaried middle-income working class. The reversal of the focus on the very poor, if to be effectively achieved has to encompass a substantial betterment of the public housing stock, while also rearranging the projects population.

Both these objectives are hopefully going to be met through modernization. Some problems can he anticipated in this sense: the relocation or displacement of "undeserving poor," where will they go? If the condition of public housing as the "housing of the last resort" is removed, what alternatives are there for the very poor? Is an income mixed project something feasible? Will the poor that remain in the project gradually be "pushed out" by higher income groups? On the other hand, one of the primary has reasons for the decay of the projects was

the very low amount of money being collected from rent (the rent as % of income pattern) that didn't allow the agencies to properly manage and upkeep the premises. This new formula can generate that extra needed funds. With regards to these questions some answers have been proposed, namely referring to the setting up of rental price brackets (rent prices determine income required from tenant). In this way some units would be permanently available for the very poor, even if they pay zero rent.

In any instance there exists, from HUD's orientation, a renewal of the original concepts of the program, conceived now, not as way to help the temporarily poor, but as an articulation of the temporarily poor resources to make public housing feasible. The program thus addresses the issue of society in the projects, with the "good tenants approach, that within the conception of the "model" project (as well as an economically sound one) plays the balancing role in a "good" environment. The correlation between form and society is made explicit, reinforced by regulations and controls, in what seems, at least ideologically, a return to the PWA period. The paradox of this cyclical pattern is that once again the very poor, to whom the programs are originally conceived, are at risk of being evicted and "dumped" elsewhere. Seen as the responsible agents of the deterioration of the structures, they have to either readapt to new dispositions and regulations or decide to move out.

In brief, the current legislation related to modernization, further stresses the historical perception within the public housing system, of "environment" as that piece of it that can be regulated and effectively controlled, over which decisions are easily implementable and around which more political consensus is obtained: the physical form.
The renovation programs, explicitly does not consider the "renovation" of the existing social environment, except by means of the application of stricter "standards" of control and regulation. The people thus appear as another part or piece that has to be articulated through regulations, to match the needs of a "safe and decent living environment."

CONCLUSIONS

This analysis enables us to conclude on the first place that the complex and lengthy administrative procedure makes the implementation of the programs a very direct process with little real opportunity for the LHA to innovate or adjust them. The financing constraints imposed on the agencies plus the bureaucratic management of the system make the chances for effective and quick feed-back, very narrow. This demands, on the ground, LHA staffs of great inventiveness and motivation to effectively articulate the federal directives to make the best use of the available resources, or to adapt to the local characteristics.

Secondly, the system is rigid or inflexible given the incredible vertical integration of it, with regards to law and financing.

Thirdly, the internal agency characteristic of managing simultaneously diverse programs of housing assistance, with public housing being just one of them, can become a source of excessive rigor in the implementation phases of programs and policies, with emphasis being put in searching for definitive solutions as opposed to more dynamic ones in time, or participative in process.

Fourthly, and for the reasons mentioned above, a project than "runs smoothly" or is successful, is that one in which an that "runs smoothly"
or is successful, is that one in which an administrative system is established that clearly identifies roles and tasks of every actor, with little autonomy to allow changes or adaptations to occur.

Notwithstanding all of the above, maybe the most important aspect today, of the public housing system, is that new tools and legislative procedures are being set up to make the transferral of federal guidelines objectives and ideologies, to the local housing agencies, more expedient and explicit. The natural vertical transmission of them, within a bureaucratic hierarchy is thus reinforced.
CHAPTER III
TWO CAMBRIDGE PROJECTS
CHAPTER III - Two Cambridge Projects

In this section, the two case projects are presented. Adjacent to one another and very similar in age, overtime only one of them has been successful with its own share of problems, while the other had to be close down and is undergoing renovation. Our interest is understanding why. The two projects represent two different periods in the public housing system: the PWA, in the case of Newtowne Court, and the USHA-LHA effort in the case of Washington Elms. The projects then constitute a physical representation of the different policies than generated then and to some extent their evolution in time.

The analysis and presentation incorporates the different elements analyzed so far, plus some that were suggested as necessary in the previous sections of this work, in the understanding of environment, the general one and the projects' one, as more than the physical form: the neighborhood - its history and present characteristics, - the social composition of the projects, their physical characteristics and the administrative process that generates and manages them.

The focus of the work is in determining the characteristics of the relationship and interaction of the projects with their context, and try and determine the consequences these might have had in the project's outcome. An effort is made to see how the projects responded to the policies behind them as well as extracting special features that can explain the different outcomes. Of key importance at this point is the presentation of the tenants views, that can help in the understanding and evaluation of the projects' performance.
The final objective of this section is the obtention of criteria to undergo the presentation and evaluation of the modernization project of Washington Elms, done in following sections.

As analyzed earlier in this work, the grave economic depression of the 1930's forced the government, to intervene and alleviate the shelter problems of a poverty stricken society. The task of clearing slum areas was thus undertook, with the immediate building of public housing to rehouse the evicted poor.

Cambridge was one of the first cities in the nation to participate in the program. Newtowne Court (NTC) and Washington Elms are the first examples of the impact of such a program in the City.

Constructed from 1936 to 1938 under the Public Works Administration (PWA), Newtown Court (NTC) (Mass 3-5) is the oldest and second largest public housing project in Cambridge. Newtowne was the name Cambridge was known by between 1630 and 1634 when it acted as the capital of Massachusetts.

The city's largest and second oldest public housing project, Washington Elms (WE) was built in 1941 under the recently created U.S. Housing Authority and located adjacent to Newtowne Court. The name of this second project honored the day General George Washington received the command of the Continental Army while standing under the biggest elm in the Cambridge Common, more than 200 years ago. Originally, a lot of elms decorated the project. Both projects combined represent the largest concentration of public housing in the city, on 17.4 acres of land with originally 618 units of housing that after some transformations were brought down to 602. Located in the City's
neighborhood 4, Census Tract 3524, they were constructed on land cleared after the demolition of nearly two hundred small buildings - mostly housing of black people-affecting a total of eight streets and combining fourteen small blocks in what at the time (mid 30's) had become a slum area. All over the 1940's these two projects were the only public housing available in Cambridge.

The projects are also representative, in that they are some of the first projects built in the program in the United States.
Development Summary Sheet: Newtowne Court

Ownership: Cambridge Housing Authority

Management: CHA

CHA Ident. #: Mass 3-5

Develop. Type: Federally aided family development

Year Built: 1937/8

General Loc: Adjacent to Technology Square, bordered by Portland, Washington, Windsor and Main Streets.

Land: 10.2 acres

Present Zoning: C-1 - Residential district (i.e. multi-family, apartments, hotels, dormitories

maximum height: 35 feet
Dwelling units/acre: 36 (actual NTC: 27.1)

Number of Units: As designed 294
Presently 282

Occupancy to Elderly/Family: Elderly 11%
Family 89%

Unit distribution

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<th>Unit distribution</th>
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<th>Existing</th>
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<tr>
<td>TOTAL</td>
<td>294</td>
<td>282</td>
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</table>

Vacancy rate: June 1980 20% = 57 units

Building number and types: 6 buildings, each 3 story masonry walkups, 36 doors-hallways serving either 6 or 9 units either.

Other Structures: gymnasium and management office - 1 story masonry boiler room & garage - 1 story masonry.

Conditions of existing structures:

and kitchens modernized (1978). All size 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 locks, vandalized mailboxes need replacement. Courtyard need extensive renovation.

Original Mortgage - Bonds repaid
Outstanding Modernization Notes: $2,284,284 (due 10/10/80).

Source: CHA (1980)
FIGURE 3: New Towne Court (Mass. 3-5), Site Plan. (Source: Cambridge Housing Authority.)
Development Summary Sheet: Washington Elms

Ownership: Cambridge Housing Authority
Management: CHA
CHA Ident. #: Mass 3-1
Dev. Type: Federally-aided family development
Year built: 1941 (project approved 1938)
General loc: adjacent to Draper laboratories and Technology Square, bordered by Portland, Harvard, Windsor, and Washington Streets.
Land: 322,853 (7.4 acres)
Resent zoning: C-1 Residential District (i.e. multi-family, apartments, hotels, dormitories. maximum height - 35 feet dwelling units/acre - 36 (actual WE #: 44.0).

# of units: As designed 324
Existing 320

Occupancy to Elderly/Family:

    Elderly 5%
    Family 95%

Unit distribution:

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<td>7BR</td>
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<td>TOTAL</td>
<td>324</td>
<td>320</td>
<td>151</td>
<td>169</td>
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</table>
Vacancy Rate (June 1980 – closing date): 47%

Building Number & Types = 18 buildings; each 3 story masonry with 18 units, three common halls, each serving 6 units. No other structures on site.


Original mortgage outstanding (1980) - $235,000 (due 4/1/82)

Annual HUD contribution (4/79 3/80) - $369,855

Outstanding Modernization Notes 51,055,782 (due 10/10/80) (were frozen)

Status of Modernization Funding:

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<th>Phase</th>
<th>FY</th>
<th>Amount Approved</th>
<th>Amount Expended</th>
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<td>1976</td>
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<td>182,070</td>
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<tr>
<td>3</td>
<td>1975</td>
<td>0</td>
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<td>TOTAL</td>
<td></td>
<td>$3,075,020</td>
<td>$1,445,606</td>
</tr>
</tbody>
</table>

Source: CHA (1980)
FIGURE 4: Washington Elms (Mass. 3-1), Site Plan.  
(Source: Cambridge Housing Authority.)
FIGURE 5 Aerial view of the projects in 1942. The foreground corresponds to today's Tech Sq. area. Note Washington Street connected with Main Street.
Physical Characteristics: Buildings, Site Layouts, Units

When compared physically the projects become demonstrations of the different approach to project design the PWA and the USHA had. Although at first sight the characteristics of Newtown Court (NTC) and Washington Elms (WE) may appear to be similar, a closer inspection proves us wrong.

Both the projects use as building types the three story walkup masonry building, in the case of NTC brick, and WE concrete block. Major differences are to be found in the site layout, unit size and overall material and building quality.

NTC, built by the PWA, with great governmental economic support was constructed with much higher standards, unit sizes are larger, and the quality is better (hardwood floors v/s asphalt in WE, units with verstibule, brick against mortar block, etc.). The differences are further justified by the historical conditions at the time of building each project: NTC was built at the end of the Depression years, conceived as housing for low-income families but also as a work source for the unemployed. IN 1936 money was available from the government, but most importantly materials were abundant and labor wasn't a problem. The natural outcome of the project was, as seen in previous sections, a model with regards to building quality, and a base for social reform.

On the other hand, WE, although with construction approved in 1938, didn't get started until 1941. With the country going into World War II, the conditions reversed completely. Also the change of approach of the agency affected the project design. (The USHA, because of the 1937 Housing Act aimed the construction of public housing towards the needs of the very poor, expressly built at non-competitive standards with the
private market). The scarcity of money, labor and materials, all advocated to the war effort, contributed to the much lower standards of Washington Elms. Structural steel and wood, for example were rationed war materials. The outcome of this circumstances was then, a project built with much more spartan standards than its neighbor. Based on the necessity to build quick and inexpensively, the building technology that was used filled the requirements: mortar blocks, asphalt floors, sash windows, etc.

With regards to site layout, the criteria for this also varied dramatically in those few years. NTC, conceived as a family housing project was aimed to the creation of a self-contained community and thus accordingly layed out: the buildings enclose a central space that acts as formal focus of the design. Children playgrounds, green areas and main pedestrian thruways are located or cut through this space. Furthermore, the saw-tooth building plan (see site plan Fig. 4), helps to identify different semi-enclosed courtyards that effectively provide the project with a hierarchy of spaces from the more public (outside the building perimeter/parking to be located here), to the semi public (central space), semi private (courtyards and building accesses) and finally, the private (units) areas (see Fig. 6).

The disposition of the buildings creates a clear demarcation between the outside and inside spaces of the project, further determined by the absence of major pedestrian thruways, that keep the property from becoming an uncontrolled area for strangers to walk through, while at the same time encouraging the surveillance of the grounds by the tenants themselves. The only major pedestrian walkway in the project reinforces
The symmetry of the plan. It provides also two foci of activity located at its ends: the gymnasium and administrative building on one extreme, and a garden plaza on the other. Both these design decisions act as control "doors" to the project, disencouraging any vehicular through traffic.

The pattern of enclosure is reinforced also, by the positioning of building entrances: all facing the central yard. This aspect takes away some vitality from the project's edges, which are used for gardens and parking. Originally the project had many more trees and gardens, blown away in a storm and never replaced.

In brief, the clever positioning of the buildings on a 45° grid is very effective in providing physical limits to the project, as well as a clear hierarchy of spaces, together with controlled accesses and views. All these give the development a sense of enclosure which has played an important role in the life of the project (see tenant testimonies below).

The site layout of Washington Elms, on contrast, although conceived of originally as an extension of NTC, was done with absolute disregard to the principles used in the neighboring project. In accordance to the reformed objectives of the USHA, plus the negative impact the War effort had on its construction, the criteria in its layout answer more to efficiency considerations them to form as an instrument in the achievement of a specific social environment. Disposed on an almost orthogonal grid, the three storey walkups are organized on a barrack type disposition perpendicular to the longitudinal axis of the site (see plan Fig. 4). Thus oriented, the buildings benefit from an almost
East/West exposure to sunlight. This positioning of the buildings, although efficient with regards to sun exposure, leaves the narrower side of the structures facing the street, which then loses its continuity in terms of facade, while also offering a non-hierarchized set of accesses to the project grounds. The overall repetitive positioning of the L-shaped basic type building makes of the project site a set of non hierarchically organized spaces, without conforming any legible inner area the community can identify with, except for an insufficient, somewhat larger court in the North West corner.

The conformation of small courtyards shared by two L-shaped buildings is not powerful enough to impede their usage as thruways therefore creating a series of differentiated, difficult to control pedestrian areas, that eventually become paved and used as parking lots.

The barrack like arrangement of the structures, coupled with a repetitive pattern of unrelated spaces makes for the institutional "look" of the project perceived of as one of the major reasons for its decay. The lack of hierarchy combined with too many entrances to the area, on the other hand, acts against the possibility of achieving efficient control, of the site, be it official or done by the tenants' surveillance.

No clear demarcation was done between the inside and outside of the project, between the public and private areas, thus inviting for the usage of the project grounds as an "open turf", with no opportunities for the tenants to identify with specific areas of it.

As already mentioned the circulation systems - vehicular and pedestrian - overlap with the end result of the cars taking over areas originally conceived for play or green.
Entrances to the buildings, consequence of the building type, are located along the long sides of the structures, making them, in the overall design face one building to the other, on both facades, therefore reinforcing the non hierarchical spaces of the layout (no front or back is to be recognized in the buildings therefore not on the site either), but also neglecting the streets on both the long sides of the site: Washington and Howard. An exception to this is building 8, in the North West corner of the site, that because of its isolation form the rest of the project eventually become a focus of drug distribution and prostitution.

In summary, the efficiency criteria in the design made for a series of layout mistakes which would have grave consequences in the outcome of the project. Not only did the building arrangement pattern keep WE from spatially relating to the neighbor NTC and/or neighborhood (the destruction of the previously existing scale and street patterns was not at all addressed in the design), but also kept the project from achieving a sense of unity. The homogeneity of the structures, coupled with their uncreative disposition didn't allow for control and identity of the project, but also made it very difficult for the visitors, as well as the tenants, to achieve a sense of the whole. The direct consequences of these were the overall deterioration of the physical support of the environment.

**Unit Design**

The analysis of the types and characteristics of the design of the units in each project, further exemplifies the different standards and criteria under which both projects were built.
Although both of them compare unfavorably with current HUD and MHFA standards (see table II, III), especially in the kitchen and dining areas, Newtowne Court apartments are relative much better designed.

Rooms and units are generally approximately 25% larger in NTC than in WE. The reduction in space standards in the case of WE, responded to the "no frills" policy of the USHA. Direct consequences of this are a severe shortage of closet space and circulation areas (see unit plans Figs. 7, 8, 9, 10). Exemplar of this in the lack of, in the case of WE, of any vestibule, with the access door going directly into the living room this inducing a circulation pattern which makes the furnishing of the already small room very difficult.

The best illustration of the difference in unit quality (of labor and materials) given by the construction costs. NTC had a construction cost of $2,377,911 to build 294 units at a room cost of $2,028 while WE, build with inflation hit prices of the Wartime, had a total cost of $1,877,096 for a total of 324 units, at a per room cost of $1,327. Not even at this low cost did WE meet the required standard of $1000 per room.

The major area differences with the current living standards are in relation to servicing spaces, especially kitchens (they get to be a 40% smaller than current MHFA standards) and bathrooms. With regards to amenities or quality of materials, the already mentioned difference in flooring (NTC: hardwood, WE: asphalt) serves as token. Also, WE units were not provided with closet doors, or no storage space for large items such as suitcases or vacuum cleaners, brooms, etc. Both the projects had overtime to have their bathrooms - appliances and fittings -

MHFA - Massachusetts Housing Finance Agency
remodelled, as well as the windows, plus plumbing and electrical repairs (see summary sheets).

The "patch and mend" attitude failed to make WE recuperate to a level of occupancy, safety and security such that would impede its closing down. In 1978, the basic design characteristics of the project were judged to be the cause of the substantive decay of the development, failing to meet present standards and tenant aspirations. CHA considered it a dangerous project, socially and physically, lacking the minimum qualification to make it a "safe, decent and sanitary housing environment", and presented it as a candidate for comprehensive modernization funds. These were granted by HUD, and the project is now two years into its renovation schedule.

With regards to unit types, in NTC only 1, 2 and 3 bedroom units were constructed, aspect considered later to be a deficiency (space for large families was necessary). This deficiency was counterbalanced in the production, at WE, of 4 bedroom units. Some later remodelling of the projects produced some 5 and 6 BR units.

An aspect considered today as a design deficiency, is the excessive amount, in both projects, of one bedroom units, that when vacated are very difficult to reassign.

Site Amenities

In this category WE again compares unfavorably with NTC: the PWA program, aimed at achieving social organization and participation, saw as a requirement the provision within the project of amenities and spaces to achieve this goal. In this sense, NTC was provided with an on-site gymnasium and administrative office, both of which combined into
the social center of the community, becoming a key piece of its social activities. The place is recognizable by its formal differences as well as by its location - at the project's "door" - on one of the main axis' entrances. Furthermore, the already mentioned site layout favored NTC with extensive children's playgrounds and recreational areas.

In the case of WE, the complete disregard for this "extravagances" is apparent. No structure on the site serves other purposes than housing, with very little space for children's playgrounds, most of it taken by vehicular circulation and parking.

Over the project's history, the NTC site amenities and playgrounds served both the projects. Other places for social activities were provided by the city on the streets surrounding the project: the Neighborhood House (across Washington St) replaced WE non-existing common room, and the Margaret Fuller House.
FIGURE 6 Newtowne Court. Typical building. Outside view. Note well kept gardens, and absence of entrances facing the street.
FIGURE 7 Newtowne Court. Interior semi-private space. Note well kept patio, garbage collector and the architectonical detailing of entrances.
FIGURE 8-9: Newtowne Court. Pedestrian accesses: careful design discourages strangers walking through project, and help control project grounds.
FIG. 10: Newtowne Court: a corner, the disposition of buildings generates residual perimetral space used for gardens and trees.

FIGURE 11: Newtowne Court: parking spaces are located in the periphery of the project allowing close surveillance from the units. Parking areas also act as intermediate space.
FIGURE 12: Newtowne Court: playground areas are located in central yard. At the back, the buildings of Tech. Square.

FIGURE 13: Newtown Court - tenant participation - laundry area: fences, benches, curbs, new pavement and grass planting done by the tenants with the CHA support.
FIGURE 14: Architect's original rendering of the Washington Elms project.

FIGURE 17: Windsor Street facade opposing Washington Elms project. Note building type variety and architectural detailing.
FIGURE 18: NTC - spatial hierarchy
FIGURE 19: Washington Elms - original project spatial hierarchy
### TABLE II

COMPARISON OF **NEW TOWNE COURT APARTMENTS** WITH CURRENT MHFA RECOMMENDED AREAS AND HUD MINIMUM PROPERTY STANDARDS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>One-Bedroom Apartment</strong></td>
<td>600 sq.ft.</td>
<td>520 sq.ft.</td>
<td>497 sq.</td>
<td>-17%</td>
<td>-4%</td>
</tr>
<tr>
<td>Livingroom</td>
<td>160*</td>
<td>160</td>
<td>164 ft.</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Kitchen-Dining Area</td>
<td>120*</td>
<td>120</td>
<td>88</td>
<td>-27*</td>
<td>-27</td>
</tr>
<tr>
<td>Bedroom</td>
<td>154</td>
<td>120</td>
<td>130</td>
<td>-16</td>
<td>--</td>
</tr>
<tr>
<td><strong>Two-Bedroom Apartment</strong></td>
<td>825</td>
<td>569</td>
<td>606</td>
<td>-27</td>
<td>--</td>
</tr>
<tr>
<td>Livingroom</td>
<td>160*</td>
<td>160</td>
<td>173</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Kitchen-Dining Area</td>
<td>120*</td>
<td>120</td>
<td>94</td>
<td>-22*</td>
<td>-22</td>
</tr>
<tr>
<td>Bedrooms</td>
<td>274</td>
<td>200</td>
<td>246</td>
<td>-10</td>
<td>--</td>
</tr>
<tr>
<td><strong>Three-Bedroom Apartment</strong></td>
<td>1150</td>
<td>757</td>
<td>796</td>
<td>-31</td>
<td>--</td>
</tr>
<tr>
<td>Livingroom</td>
<td>220*</td>
<td>170</td>
<td>167</td>
<td>-24*</td>
<td>-2</td>
</tr>
<tr>
<td>Kitchen-Dining Area</td>
<td>178*</td>
<td>140</td>
<td>113</td>
<td>-37*</td>
<td>-19</td>
</tr>
<tr>
<td>Bedrooms</td>
<td>394</td>
<td>286</td>
<td>340</td>
<td>-14</td>
<td>--</td>
</tr>
<tr>
<td>(Number of Bathrooms)</td>
<td>(1.5)</td>
<td>(1)</td>
<td>(1)</td>
<td>(.5)</td>
<td>--</td>
</tr>
</tbody>
</table>

*Estimated from sample developments.
TABLE III

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

<table>
<thead>
<tr>
<th>MHFA Average Recom-</th>
<th>HUD Minimum Property Standards</th>
<th>Washington Elms (1941)</th>
<th>Percent Smaller than MHFA</th>
<th>Percent Smaller than HUD M.P.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Areas (1980)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

One-Bedroom Apartment
- Livingroom: 160* sq.ft.
- Kitchen-Dining Area: 120* sq.ft.
- Bedroom: 154 sq.ft.

<table>
<thead>
<tr>
<th>Livingroom</th>
<th>Kitchen-Dining Area</th>
<th>Bedroom</th>
</tr>
</thead>
<tbody>
<tr>
<td>160*</td>
<td>120*</td>
<td>154</td>
</tr>
</tbody>
</table>

Two-Bedroom Apartment
- Livingroom: 825 sq.ft.
- Kitchen-Dining Area: 120* sq.ft.
- Bedrooms: 274 sq.ft.

<table>
<thead>
<tr>
<th>Livingroom</th>
<th>Kitchen-Dining Area</th>
<th>Bedrooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>160*</td>
<td>120*</td>
<td>274</td>
</tr>
</tbody>
</table>

Three-Bedroom Apartment
- Livingroom: 1150 sq.ft.
- Kitchen-Dining Area: 178* sq.ft.
- Bedrooms: 394 sq.ft.

<table>
<thead>
<tr>
<th>Livingroom</th>
<th>Kitchen-Dining Area</th>
<th>Bedrooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>220*</td>
<td>140</td>
<td>394</td>
</tr>
</tbody>
</table>

Four-Bedroom Apartment
- Livingroom: 1375 sq.ft.
- Kitchen-Dining Area: 178* sq.ft.
- Bedrooms: 514 sq.ft.

<table>
<thead>
<tr>
<th>Livingroom</th>
<th>Kitchen-Dining Area</th>
<th>Bedrooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>225*</td>
<td>160</td>
<td>514</td>
</tr>
</tbody>
</table>

*Estimated from sample developments.
FIGURE 20 Existing unit plan. Architect's analysis. Source CHA

HUD MINIMUM PROPERTY STANDARDS ANALYSIS

LIVING ROOM/DINING ROOM

Required furniture cannot be accommodated
Required space = 210
Existing space = 143
Poor circulation
No entry closet
Insufficient electrical outlets

KITCHEN

No counter space provided
No drawer space provided
Range located near window
No provisions for handicapped
Insufficient electrical outlets
No broom closet provided

BATHROOM

BR closet is inadequate
No doors on closets
Insufficient electrical outlets

STORAGE

Insufficient storage
No outdoor storage

EXISTING ONE BEDROOM UNIT

Washington Elms Housing
Analysis of existing design

Gelardin/Bruner/Cott, Inc.
HUD MINIMUM PROPERTY STANDARDS ANALYSIS

LIVING ROOM/DINING ROOM

Required furniture cannot be accommodated
Required space = 210 FT²
Existing space = 196 FT²
Poor circulation
No entry closet

KITCHEN

No counter space provided
No drawer space provided
Range located near window
No provisions for handicapped
No broom closet provided

BATHROOM

Required accessories are not provided
No provisions for handicapped
No provisions for elderly

BEDROOMS

BR #1 has no closet
BR #2 closet is inadequate
No doors on closets

STORAGE

Insufficient storage
No outdoor storage

EXISTING TWO BEDROOM UNIT

Washington Elms Housing
Analysis of existing design

Gelardin/Bruner/Cott, Inc.

FIGURE 21 Existing unit plan. Architect's analysis. Source CHA
FIGURE 22 Existing unit plan. Architect's analysis. Source CHA

HUD MINIMUM PROPERTY STANDARDS ANALYSIS

LIVING ROOM/DINING ROOM
Required furniture cannot be accommodated
Required space = 230 FT²
Existing space = 168 FT²
Poor circulation
No entry closet
Insufficient electrical outlets

KITCHEN
No counter space provided
No drawer space provided
No provisions for handicapped
Insufficient electrical outlets
No broom closet provided

BATHROOM
Required accessories are not provided
No provisions for handicapped

BEDROOMS
Bedroom closet inadequate
No doors on closets
Insufficient electrical outlets

STORAGE
Insufficient storage
No outdoor storage usable

USABLE OUTDOOR AREA
No usable outdoor area
400 FT² required

EXISTING THREE BEDROOM UNIT
Washington Elms Housing
Analysis of existing design
Geldin/Bruner/Cott, Inc.
HUD MINIMUM PROPERTY STANDARDS
ANALYSIS

LIVING ROOM/DINING ROOM
Required furniture cannot be accommodated
Required space = 250 FT²
Existing space = 172 FT²
Poor circulation
No entry closet
Insufficient electrical outlets

KITCHEN
No counter space provided
No drawer space provided
Range located near window
No provisions for handicapped
Insufficient electrical outlets
No broom closet provided

BATHROOM
Required accessories are not provided
No provisions for handicapped

BEDROOMS
Closets are inadequate
No doors on closet
Insufficient electrical outlets

STORAGE
Insufficient storage
No outdoor storage

USABLE OUTDOOR AREA
No usable outdoor area
400 FT² required

EXISTING FOUR BEDROOM UNIT
Washington Elms Housing
Analysis of existing design
Gelardin/Brumer/Cott, Inc.

FIGURE 23 Existing unit plan. Architect's analysis. Source CHA
Social Aspects and the Role of CHA

One of the most important reasons for the decay of both the projects, but specifically Washington Elms (because of its original inferior quality), was the variation of the tenant selection system operated by the CHA until 1968. As a LHA, the Cambridge Housing Authority abided pretty much with the federal dispositions with regards to tenant selection (or unit allocation which is the same) until 1964. In that year the passing of the Civil Rights Act "banned federal assistance to public agencies that discriminated in federally, financed projects," thus imposing non arbitrary procedures regarding tenant selection. The CHA openly refused to modify its procedures to incorporate the 1-2-3 system of selection. This mechanism demanded a first come first served basis for unit allocation regardless of race, creed or marital status. The prospective tenant was to be offered a unit in the project with more available units; if she/he didn't want the unit, a second choice was offered after which if the unit was still rejected, the applicant stepped down to the bottom of the list.

In the case of applicants with less pressing needs, this system entitled them to wait for the unit or project of their choice to be available. In 1974, the legislation was amended to allow "emergency" tenants to be served first. This opportunity was also given to white households that wanted to move into projects with more than 35% of black families, or, inversely to black families that wanted to reside in a 65% white project.

27 1964 Civil Rights Act, cited by Ch. Abrams in "The City is the Frontier" p. 273.
The method was accepted by CHA in 1968, making for a series of changes into the administration tending to a more transparent system: a good an reliable record, a public waiting list that allowed tenants to know their position, supression of tenant selections officers and their replacement with social workers, etc. All these impositions generated an adverse climate in the CHA, that up to that moment had been assigning units in accordance to a dual system of formal and informal procedures.

The formal one was equivalent to the federal guidelines which were very unspecific on criteria for tenant selection. This had been the case since the 1937 Act, to which ulterior amendments only specified the income criteria for selection (the 20% income bracket). No criteria were enunciated with regards to race, priority order or basis for rejection, all of which were to be devised by the LHAs.

The only guidelines in this respect were those set up by the ideological objectives of the program, which included social and income mix. The program, in reality, operated with a clear segregative orientation. The LHAs were entitled to administer the program with their own criteria and procedures. In the case of CHA, this meant that the final decision of unit allocation resided on a Tenant Selection Officer. After a series of interviews, applications, visits and record examinations the prospective tenant had to go through, the agency notified him/her regarding their classification as good or bad candidate, and if proceeding, offer the unit in a specific project. No procedures were available for the applicants to challenge this classification. Criteria for selection were mostly oriented towards "good moral character" and regular families as decisive qualities.

Ibid.
This loopholes in the legislation entitled the CHA to operate and assign the projects with regards to an informal system, where political patronage and board members repaying favors were common features.

The possibility to operate the system in this way allowed for the CHA to preserve, racially and income wise, the city's status quo: the projects were occupied by people of similar race to that predominating in the area in which they stood, with clear absence of projects from the wealthier areas.

With the imposition and final acceptance of the 1,2, 3 system by CHA in 1968 the agency couldn't anymore control tenants characteristics or assign them to specific projects, at less formally.

During this period, this new approach to the projects coupled with other factors, (such as the projects location, density, neighborhood, quality and history), in making for the image of them as "good" or "bad", in the public's perception but most importantly in the informal classification done by the CHA.

Washington Elms very early was classified as a bad project, given its already high turnover (that had made possible a shift of residents primary income source towards welfare as from 1955 when the veterans moved out), its size (the largest project in Cambridge), its location and racial characteristics (WE and Putnam Gardens were the only projects to house blacks).

Once the 1, 2, 3 method was put in practice the project became increasingly minority populated, given that white applicants decided to wait. This made for the gradual desertion of "good" tenants from the project with the consequent loss of political support to the community (political leaders regarded supporting tenants as a way of obtaining
votes and propaganda). The vicious circle of social and physical deterioration closed only to be broken with the final closing down of the Elms for renovation, in 1980. Elsewhere the hypothesis has been presented that the CHA, in order to make the overall system work, required the existence of at least one bed project, which became Washington Elms. The project combined in it the law requirements - no segregation or rejection on no account - while keeping the other city projects from facing racial or income imbalances.

The rapid decline of WE, with regards to population, is shown in the increasing minority resident characteristic (55% of the tenants in 1979 were black or hispanic), and the high level of turnover and vacancies experienced by the project since the 1960's. At the time of closing it down 47% of the units were empty.

Later changes operated in the system, which included the CHA publication of the Applicant Selection and Transfer Plan of 1975 and the change in the CHA's orientation towards a more equitable and low-income agency and procedures (CHA assumed the 1975 equal opportunity Act of 1975), made that the unofficial support to applicants ceased to come from politicians or officers to be replaced by social workers in a more transparent procedure. This made for a substantial increase in welfare families being assigned units, especially in otherwise rejected projects such as WE. The general deterioration of neighborhood 4 in the 60's, towards a crime ridden area didn't favor the projects either.

Finally, with regards to population, a general aspect of the housing system has also been present in the Cambridge projects: the loss 30

There is no text material missing here. Pages have been incorrectly numbered.
of the market of the middle income families that given the federal programs of FHA have had an opportunity, since the 1950's to become homeowners. This couples with a general betterment of construction and housing standards that acts against the project ones, much more modest in every respect. The effort of the government to attract middle-income families to public housing is reflected in the abolition of the 20% income bracket requirement for eligibility (the 1974 Housing Act) together with the modernization program. This seeks to upgrade the units and projects to make them attractive to mid-income households.

WE, in 1968 met all the conditions to become the dump project of Cambridge, formally and informally. Its high turnover allowed CHA to house large minorities in a short time, therefore saving face against HUD, without interfering with the process of the "good" developments.

The deterioration of the project was due partially to the CHA attitude in tenant selection that produced a vicious circle of social deterioration and perception of the project as "dump".

We see that good reasons for the decay or success can be found in the whole system, how its organized and the consequences this can have on a specific project. In this case it was the combination of an imposed new tenant selection procedure on the agency, with the project being perceived as a "bad" development, that set the condition for it to become the "dump" of the local public housing system.

Therefore, if the tenants are to be blamed for the physical deterioration of the projects, whose to blame for the tenant selection?

On the same token, the local system could argue that the imposition of rules from above, was what generated this specific outcome. The CHA had no formal tools to control the racial or income tendencies of any
development, playing a mere intermediary role, until the LHA's were allowed under specific reasons, to impose maximum racial quotas to a specific development. This was done in WE in 1977/8, but it was already too late. This article translated rather into an increase in vacancies that coupled with the abandonment of the project by 58% of its elderly population when elderly housing was built in Cambridge, to create a situation that offered very few alternatives. The changes in the procedures for the selection of tenants not only affected WE, but also NTC. Both the projects reflect the tendency after 1968 towards increasing indexes in relation to minority households, reducing amount of income, number of families under AFDC, female headed households, etc. In brief towards the substantial impoverishment of their tenants groups. Notwithstanding, as the analysis of the figs. in Table IV show, WE is consistently, until its closing in 1980, in a worst situation than NTC, presenting larger percentages of families below poverty level (90.5% v/s 76.0% in NTC) black and hispanic households (WE combines a 55.3% minority in 1980), larger average family size (3.9 vs 3.2 at NTC) and a much larger % of minors 60.8% vs 47.8 of NTC. All the figures reinforce the hypothesis and generalized perception of WE as a social dump, a ghetto of poverty, largely minority in population.

Undoubtedly this social group, is not ideal or model in any sense and didn't but reflect the physical conditions of the projects. Interesting aspects to point out with regards to social conditions are: that only 31.4% of the households has been in the projects for more than 10 years (in 1980), with more than two thirds residing there for anywhere between 5 and 10. These figures show the high rate of turnover that affects both the projects but specifically the Elms, also
signalling that a fundamental change in residents did occur during the last decade and a half. This data are coincidental with the changes in the CHA administration (1975) and with the CHA abiding in the late 1960's to the 1, 2, 3 first come first served methods for tenant selection.

At the time of closing down the Elms, which meant the relocation of some tenants in the vacant units in NTC, both projects combined 207 empty units, with only 395 rented: an approximately 33% vacancy rate, that's far away from the expected public housing standard of 3% vacancy (see figs. 24 and 25 on occupancy %). The examination of figs. 24 and 25, that show the racial and vacancy percentages in the projects until WE closing down, illustrates the increasing and rapid diminishing percentage of white households over a period of six years (from 60% in 1973 to 30% in 1979, with black households having a maximum of 32% in 1975 to stabilize in 26% of both projects combined). The other clearly perceptible feature is the increase in vacancies on the WE projects towards the time it closed down (almost 46%).

With regards to income 50% of the households received AFDC in 1980 which is but a consequence of the large percentage of female headed households: 80.5 in NTC, 82.4% in WE.

The percentage of rejection and acceptance of units in both the projects, (figs. 26 and 27) reflects the perception of these among the public housing applicants. In general the tendency was towards a larger acceptance of hispanians (the most recent ethnic group to inmigrate to Cambridge) followed by black households with white families in a distant

31 Assistance for Families with Dependant Children.
### TABLE IV: SELECTED POPULATION AND HOUSEHOLD CHARACTERISTICS OF TENANTS AT NEW TOWNE COURT AND WASHINGTON ELMS (March, 1980)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>New Towne Court</th>
<th>Washington Elms</th>
<th>New Towne Court/ Washington Elms combined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>569</td>
<td>581</td>
<td>1150</td>
</tr>
<tr>
<td>Number of households</td>
<td>225</td>
<td>170</td>
<td>395</td>
</tr>
<tr>
<td>Number of elderly households</td>
<td>45</td>
<td>16</td>
<td>61</td>
</tr>
<tr>
<td>Number of family households (excludes single person households)</td>
<td>155</td>
<td>140</td>
<td>295</td>
</tr>
<tr>
<td>Average family size</td>
<td>3.2</td>
<td>3.9</td>
<td>3.5</td>
</tr>
<tr>
<td>Minors (under 21) as a percent of household population</td>
<td>47.8%</td>
<td>60.8%</td>
<td>54.3%</td>
</tr>
<tr>
<td>Percent of female-headed households</td>
<td>80.5%</td>
<td>82.4%</td>
<td>81.3%</td>
</tr>
<tr>
<td>Percent minority households</td>
<td>48.5%</td>
<td>55.3%</td>
<td>51.4%</td>
</tr>
<tr>
<td>Percent Black</td>
<td>36.9%</td>
<td>38.8%</td>
<td>42.8%</td>
</tr>
<tr>
<td>Percent Hispanic</td>
<td>11.6%</td>
<td>16.5%</td>
<td>13.7%</td>
</tr>
<tr>
<td>Average household income</td>
<td>$4841</td>
<td>$3767</td>
<td>$4387</td>
</tr>
<tr>
<td>Percent of households below poverty level</td>
<td>76.0%</td>
<td>90.5%</td>
<td>82.2%</td>
</tr>
<tr>
<td>Percent of individuals below poverty level</td>
<td>74.3%</td>
<td>86.9%</td>
<td>80.7%</td>
</tr>
<tr>
<td>Sources of household income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent A.F.D.C.</td>
<td>46.5%</td>
<td>57.6%</td>
<td>50.0%</td>
</tr>
<tr>
<td>Percent social security</td>
<td>21.6%</td>
<td>15.2%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Percent government relief</td>
<td>5.2%</td>
<td>11.1%</td>
<td>7.1%</td>
</tr>
<tr>
<td>Percent other (SSI, government and private benefits)</td>
<td>26.7%</td>
<td>16.1%</td>
<td>22.9%</td>
</tr>
<tr>
<td>Length of residence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent 5 yrs. or less</td>
<td>42.2%</td>
<td>39.4%</td>
<td>41.0%</td>
</tr>
<tr>
<td>Percent under 10 yrs.</td>
<td>66.2%</td>
<td>71.8%</td>
<td>68.6%</td>
</tr>
<tr>
<td>Percent 10 yrs. or over</td>
<td>33.8%</td>
<td>28.2%</td>
<td>31.4%</td>
</tr>
</tbody>
</table>

Source: Cambridge Housing Authority.
FIGURE 24: Occupancy by Race and Vacancies (12/73 to 3/79), New Towne Court. (Source of data: Cambridge Housing Authority.)

FIGURE 25: Occupancy by Race and Vacancies (12/73 to 3/79), Washington Elms. (Source of data: Cambridge Housing Authority.)
FIGURE 26: Acceptance-Rejection Rate by Race (1978), New Towne Court. (Source of data: Cambridge Housing Authority.)

FIGURE 27: Acceptance-Rejection Rate by Race (12/75 - 1/77), Washington Elms. (Source of data: Cambridge Housing Authority.)
third place. When comparing both projects, until February 1977, when WE ceased to be offered, the general rejection in WE was at 78% after computing 198 offers in two years. In NTC during the same period only 43 offers were done to end up with a 42% rejection. This clearly shows the difficulty CHA was having in renting at the time they decided to close it down, and also the tendency in the project towards a racially unbalanced community.

In this sense the problem faced by the CHA in the renovation of the Elms is how to achieve a design quality such that the project's stigma and social problems are erased by a new revitalized demand from other sectors of low income, and hopefully from middle-income. This demands from the CHA a deliberate effort to improve the project's image not only physically, but socially.

Tenant's Views and History - Life in the Projects

The availability of testimonies of old and recent tenants, collected by an initiative of the Women's Center of NTC and WE, when Washington Elms was to be closed down, makes a good source to verify some of the ideas presented so far in this work, as well as providing an inside perspective of virtues and problems of the projects.

Historically by the population pattern of the project's wasn't always exclusively low-income minorities. When both the projects were inaugurated, they were rapidly occupied by emergency tenants: those needing housing in relation to the War. Even though NTC had started out as a low-income project, its first tenants were "deserving poor" that very much matched the needs, of a wartime effort. Being, as they were, unemployed and in-poverished workers from the Depression, WWII brought
them jobs. Washington Elms, was since its first opened, occupied by workers coming into the Boston area (a key city in the defense industry) to jobs generated by the demands of the war. Not only were the projects used by war workers, but also by service men families.

"Three hundred and thirteen men workers including college instructors, mechanics and farmers, representing 32 states were among the 324 families residing at Washington Elms. Service men's families occupied the remaining 11 apartments. In total there were 1011 children in Washington Elms."

In its initial years, both projects are thus filled with tenants that share among them something more than their poverty. There is a conscient solidarity among the families (most of the units were occupied by "good" families) that thus developed tight bonds of friendship and solidarity, as well as a clear sense of community.

"If there was something that you needed and it couldn't happen in your house, there was always a friend that could do it. It was like, all kinds of people, you know, just different kinds of things they could give to each other."

"It was such a family thing. It was always a happy place. People would help each other."

"Do you know there was a time when I knew every family in WE and NTC by name? I mean neighbors were neighbors. I mean we didn't lock doors. People got together ... I remember if somebody was ill or going to the hospital my mother would have neighborhood kids for a week. Neighbors were supportive. It was more like a family, not neighbor. We shared everything!

No racial imbalances existed in the projects - almost 100% of the tenants were white, and the structures themselves were then new, and by contrast to their previous homes much nicer.

"It was luxurious in there. Pretty luxurious, compared to outside. Oh yes. You
had plenty of heat, always plenty of hot water. You weren't ashamed to say you come from the project. Never was and never will be"

After the war, over-income tenants got evicted and the projects turned low income again only that the units were preferentially given to veterans and their families, while they readjusted to civilian life: i.e., got a well payed job that entitled them to by a house of their own.

Until 1955 both projects are basically all white communities, with some permanent residents and clear self-contained communities. Social services, both city provided as well as tenant organized are in abundance, social activities are an important aspect of everyday life, as is testified in these statements:

"There were numerous functions sponsored by the CHA, the Cambridge School Department, various community groups, Grace Sullivan's office and the residents. Some of the activities held in the development were: a nursery school, a summer formal, an annual baby contest, a garden club, a father-daughter dinner, a horrible parade, a playground pageant and story telling hours."

Educational and recreational opportunities were provided also by the NTC Men's Club, the NTC Women's Club, the Neighborhood House-across the street from WE, the Margaret Fuller House, and the Art Center in NTC, that has been on constant operation since 1942.

The role played by the NTC gymnasium is highly valued by the old tenants as a center for activities:

"There were all kinds of festivals at the NTC gym. It wasn't just used for gym. You could hire it if you had a wedding in the family or birthday parties and you didn't want to mess up your house. It was nice."
With regards to actual services provided, Head Start, a pre-kindergarten program for children 3 to 5 years old has been in operation since 1968 in NTC. Serving the project as well as the surrounding area, its purpose is to prepare children to kindergarten by teaching the basics such as colors, alphabet and numbers.

Since 1975, the Tenant Services Office has provided social services to the residents of NTC and WE. Its purpose is to act as bridge between CHA tenants and the larger community of agencies and people in which the CHA exists.

From 1977 to 1981, a Community Education and Resource Center (CERC) operated in the basement of Door 12 at NTC, serving all different group ages with recreational and educational activities.

Two important aspects of the project's life come to light when analyzing the tenants memories, both of which appear as fundamental in the structuring of the community as well as the successful outcome of the projects: an efficient and in-residence maintenance and management crew or person, and the in-residence CHA employed social workers.

The original management encouraged the compliance with very strict rules with regards to property maintenance as well as conduct.

"We had a good maintenance staff. The maintenance men were there for years. So you got to know them and they got to know you."

"Our maintenance crew was fantastic here. They were more like family than they were maintenance men. They took care of you personally".

Rules were strictly enforced by the manager of the projects home for each and tasks were assigned to the tenants periodically. In the tenants eyes this situation changed very much over time:
"It was much different then. However, the kids used to go outside and pull up the bricks (from the fences). I can remember the maintenance men coming around, putting them back again."
"If a kid walked on the grounds they almost got thrown out." "I can remember if they found a piece of paper on the grounds with your name on it you had to pay a dollar. No cars were ever inside the project, or bicycles either".

This aspect fits tightly with the description of the program dealt with in Chapter 5. The environment is tightly controlled via an active and respected member of the community.

One tenant recalls a time when she decided to hang out her laundry from her living room window:

They weren't there five minutes, when a knock came to my door. It was Mr. Joyce, he said "Are those your clothes?" I said "yes". He replied "take them in". so in they came. So now when I go there and see all the clothes lines...I think "well boy, we come a long way haven't we, huh."

Both sides of the environment were thus controlled: the physical and social aspects. On the other hand the need for control is diminished by the conscious pride the tenants took in their environmental qualities, that translates in active participation in its surveillance and maintenance.

"We each had to take a month at a time to care of our hallways. If you were good at it and kept it clean, fine, but if you were not and Mr. Joyce (the manager) came along..God help you if the place was dirty" "you were proud to say, where do you live? Newtowne Court."

Grace O'Sullivan, a resident CHA employee played a basic role in the shaping of the community. She lived in NTC for nearly 40 years acting
as Community Coordinator. She dedicated her efforts to both the projects.

"She mainly worked out of Newtowne Court, but she worked with both projects. She had a huge room that we'd have pot lucks in. When things went wrong then you'd had your meeting there to try to work things out. When we first moved there (WE), people used to get together a lot and iron out their differences, rather than all the fighting and bickering goes on now. So I guess it was more or less like a meeting place between the two projects to solve things out, to make things work smoothly, and it worked."

"She was a very clean person, always scrubbing and cleaning things. Everything was organized with her. I learn't an awful lot from her." "She was very helpful to old people ... got a lot of things going for them".

The self imposed role of organizer of activities, and active participation in helping advising and advocating for the tenants, conferred this person a central role in the NTC/WE community. The possibility of incorporating such an "activist" in the new communities is something to consider.

Not all the memories are good though. Some tenants recall the feeling of being isolated from the larger community:

"There was a lot of fun parts about growing up there. There are a lot of good memories. The hard part about growing up there was you were not connected to the larger community in a lot of ways. You were a kid that lived in the project. You were somewhat isolated from the rest of the community. That's changing."

With regards to the tenants perception of the deterioration of Washington Elms, it causes and symptoms, the old tenants are categorical:
"When I first moved in people were really screened. You know, the screening process stopped, and that's when it went down-hill. Because then they let every Tom, Dick, and Harry in. It wasn't a family housing project any more. It's too bad, because I mean that changes were drastic. You had to start locking doors and buying locks for your windows. I guess I noticed a change in 1962, 63...When they came around and started putting the big heavy doors downstairs and locking them, that's when you know there was a big change, society is changing. The projects had to change to".

Washington Elms went down because it was a black project. An nobody cared for it."

They also remember the changes in the appearance of the project.

"There were red brick walls which kids were taking apart and throwing at people, windows, etc. Also kids were digging holes in the grass. So they put down hot topping to avoid these problems." "They put cement where grass was."

and in the tenants behavior.

"So awful you couldn't believe. Such a change over. In the tenants and in the attitudes, and unconceived about what happened to the property. Even the office (CHA) changed." "It just went downhill all the whole time. At least I moved out I was ticked to go (1950's)"

or

"Well it went down...because a lot of tenants had no interest in keeping it up. There were kids that used to hang around there. Half of them didn't even belong in the project. The management tried, but without cooperation from tenants they were fighting a losing battle (from 60's to the 80's). It could have been a good project, if people took interest and care"
The same tenants when consulted in relation to the modernization program expressed high hopes and stressed the issues of participation as a source for tenant control and care of the projects.

Almost all the tenants regarded the social issue of the projects almost as, if not more, important than the physical part of their environment. The sense of community, sharing and solidarity of the old days is what they miss most.

"The most important change that I see is the modernization. Modernization and resident participation make the project more like your place. You can make decisions around where you live, and can have a say in what happens in your community...A feeling that when you go to tenant council and you make some decisions about planning in your area, you see some of your ideas go into practice and feel more like this is part where you live...People weren't caring, losing incentive. I think modernization program gives energy and incentive back to the residents".

Almost all the tenants regarded the social tissue of the projects as important, if not more, as the physical part of their environment. The sense of community, sharing and solidarity of the old days is what they miss most:

"I think people make the projects. The project is only a stone building. It's the people who live in it that make it or break it. And as people change, the project changes."

"They (the agencies) might call our homes a project. We prefer to think of them as condominiums."
The Neighborhood

Neighborhood 4 (see fig. 28), and Census Tract 3524 are today among the worst areas of the City, although concrete signs of revitalization are being observed.

Historically, the area has played the role of workers residence for the once expanding Cambridge industry, being fully developed by 1910 when the whole of Cambridgeport (today's neigh 2, 3, 4, 5 and 7) reached a population of 51,000. Immigrants came from Europe-Swedes and Russians, The British Isles and Canada. At the beginning of this century the area was then "a fully developed working class and low middle class residential/industrial community which reflected a very mixed and varied ethnic heritage." In the decades since the role of eastern Cambridge as a reception area for immigrant workers to the City was definitely settled. Neighborhood 4, of all the area, has been one of the larger Black communities in the city, while more recently the influx of hispanics has been the major trend.

With regards to its present conditions, the neighborhood conforms with the city patterns for land use, although somewhat inclined to "high activity" uses such as residential-commercial-industrial, with a scarcity of open recreational space, private or public, or institutional activities, as can be seen in Table V.

Table V: Distribution of Land Use

<table>
<thead>
<tr>
<th></th>
<th>Neighbor 4</th>
<th></th>
<th>City</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Acres</td>
<td>%</td>
<td>Acres</td>
<td>%</td>
</tr>
<tr>
<td>Residential</td>
<td>72</td>
<td>49</td>
<td>1344</td>
<td>41</td>
</tr>
<tr>
<td>Commercial</td>
<td>20</td>
<td>15</td>
<td>246</td>
<td>7</td>
</tr>
<tr>
<td>Industrial</td>
<td>22</td>
<td>16</td>
<td>504</td>
<td>15</td>
</tr>
<tr>
<td>Institutional</td>
<td>8</td>
<td>5</td>
<td>281</td>
<td>9</td>
</tr>
<tr>
<td>Government</td>
<td>2</td>
<td>1</td>
<td>129</td>
<td>4</td>
</tr>
<tr>
<td>Public Open Space</td>
<td>4</td>
<td>2</td>
<td>311</td>
<td>10</td>
</tr>
<tr>
<td>Private Open Space</td>
<td>0</td>
<td>0</td>
<td>127</td>
<td>4</td>
</tr>
<tr>
<td>Vacant/Parking</td>
<td>18</td>
<td>12</td>
<td>316</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>146</strong></td>
<td><strong>100</strong></td>
<td><strong>3258</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Physically, the area is densely developed, with one to three storey buildings on a historical subdivision in small lots, with the majority of the residential structures dating from the turn of the century period. The case projects WE and NTC, clearly do not follow the neighborhood physical pattern.

The building of both the projects, in accordance to previously determined physical models, in no way resembles or considers the physical pattern, appearance or style of the surrounding area. The projects show obvious differences type (3 story walk-up buildings as opposed to town houses), densities, and even material quality. The traditional neighborhood pattern of buildings relating directly to the street, with some physical articulation (stoop, stairs, veranda, etc.) was explicitly not considered in the projects, which in one case (NTC) reject a vital relationship with the street and in the other (WE) only marginally does so, through the intermediation of a courtyard as thruststreet (see plan Figs. 3 and 4).
Furthermore, in terms of scale and circulation pattern, the projects break the small block tissue of the neighborhood, interrupting the fluidity of existing streets turning them into dead-end, while encouraging the hierarchization of others (Windsor).

This aspects, it must be remembered, at the time were advocated as advantageous, as a way of telling model from slum, safe from unsafe, new from old, both physically and socially.

Commercial activities are located in the Central Square area, with some other provision along Prospect Street and scattered locations. Industry, in the neighborhood is located in the South-East triangle determined by Main Street, Massachusetts Avenue and the railroad tracks. A problem exists in the present existence of many scattered non-conforming industrial and commercial uses. This means that they couldn't have been built or operate under current zoning restrictions. Their presence is seen as the source for many environmental problems such as odors, noise, trucking, visual blight, lack of parking, etc.

Present zoning C-1 (residential) allows for moderate densities up to 3 stones, in accordance with the neighborhood's tissue. Industrial B (IB) allows for nearly all industry and commercial uses. Business A (BA) is a transitional commercial area (see zoning map - Fig. 29).

The present zoning regulation leaves the projects' area in as the easternmost section of a residential zone, surrounded on three sides by IB industrial area, that constraint industrial uses to nonpolluting ones. This zoning enabled the development of what is known as Technology Square. Characterized by the concentration of industrial technology firms - Draper Laboratories, Polaroid, etc. - the area is a
strong influence over the projects, although the specialized type of work provides only minor job opportunities for the projects residents.

With regards to population and social characteristics, the most salient aspect of the present condition of the area is its reduction in population over the last three decades, due to out-migration of families and smaller birth rates, and the shift experienced since the 1960's from family to single persons households which account now for almost 40% of the area's residents. Elderly population percentage is the same as in the rest of the city, with neighborhood 4 having the largest % of residents below 18 years of age all Cambridge's neighborhoods.

Summing up, the area is undergoing a dynamic period in regards to population, tending towards a less family-oriented sector of the city, with high percentages of transient population living alone or in groups, at lower densities. Neighborhood 4 is the poorest of all Cambridge, comparing very unfavorably with the city as a whole. With nearly 18% of its population earning wages below poverty level, almost one fifth of the families being female headed, two and a half as many AFDC cases per 1000 families (see table below) than the city, high levels of juvenile delinquency, etc. the area as a whole is need of urgent revitalization. Intervention, especially concerning possibilities of employment given the area unemployment rate, estimated as much as two time the median for the city, that stands at 8.5% (1979). The area was one of the most powerful struck by the parting from Cambridge of industries, which meant a loss of nearly 6000 jobs in the period 1967/71, most of them in the eastern half of the city.
FIGURE 28: Neighborhood 4 zoning
Table VI: Selected Social Characteristics - Neighborhood 4

<table>
<thead>
<tr>
<th></th>
<th>Number or %</th>
<th>City-wide</th>
<th>Neighborhood Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female headed families with children as % of all families</td>
<td>22.9%</td>
<td>7.9%</td>
<td>1</td>
</tr>
<tr>
<td>% of children in female headed families</td>
<td>32.9%</td>
<td>17.3%</td>
<td>1</td>
</tr>
<tr>
<td>AFDC cases/1000 families</td>
<td>206.6</td>
<td>74.9</td>
<td>1</td>
</tr>
<tr>
<td>Old Assistance cases/1000 elderly</td>
<td>221.0</td>
<td>119.0</td>
<td>2</td>
</tr>
<tr>
<td>Gen. Relief Cases/1000 families and unrelated individuals</td>
<td>48.6</td>
<td>13.4</td>
<td>2</td>
</tr>
<tr>
<td>Juvenile Delinquency cases/1000 juveniles</td>
<td>57.7</td>
<td>22.8</td>
<td>1</td>
</tr>
<tr>
<td>Crime Prevention cases per 1000 juveniles</td>
<td>31.9</td>
<td>18.5</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Cambridge Community Development Department.

With 51% of its work force classified as "blue collar", one of the highest proportions in the city, Neighborhood 4 suffers disproportionately from industrial job base losses in Cambridge (50% the workers labor in the city) or Boston (another 25% works there).

Census tract 3524 is statistically distortioned by the heavy inpac NTC and WE have on it: two thirds of the tract's households live in the projects. The 1980 Census showed that Tract 3524, when compared to other Cambridge tracts had:

- the largest percentage of people below poverty level (more than twice the city wide 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 families receiving Aid to Families with Dependent Children (AFDC)
- the largest average family size.
- the biggest percentage of female headed households, and
- the largest percentage of children in female headed households.

All this aspects make the image of the neighborhood that of an area of great poverty, coupled with severe social problems including crime.

In relation to services and transportation, the neighborhood has two public schools, very little open areas or recreation space (the most deficient when confronted with being the area with the largest number of children), and two indoor social service facilities. Neighbors have also access to the Cambridge Hospital, and the Libraries from the Harrington School and the Green-Franklin Branch Library in Central Square. Transportation is adequately available in Central Square to all points of the area, although transport lines make the north/south trip in the city very difficult.

In brief, it is seen that the area is today one of the poorest of the city, with all indexes - including the overcrowding of housing units, - qualifying it as a below standard neighborhood, even though being located very favorably in terms of commerce and potential jobs, as well as transportation. Public services are good all over the area, with shortage of recreational space as the outstanding deficiency.

The neighborhood always was a workers area. It never, in its history went beyond its role as immigrants way station in a
residential/industrial community. Its locational advantages - close to railroad tracks, on the route from Cambridge to Boston - made it an area of quick development based on local industry. The decline the neighborhood has had since the 1960's has as its mayor source the loss of jobs when the local industries closed down on their move to the suburbs, which generated the sequence of middle-income households leaving soon afterwards. A once lively and attractive part of the city, thus deteriorated into a poverty struck neighborhood.

This process coincides with that of the projects analysed in this work, that show as their "nice" period that of 1940-1955. Tenants were attracted to live here because of war-created jobs and could stay after it was over, as part of a prosperous community. The decline of the projects, specifically WE, started in the 1960's following very closely the path of the neighborhood as a whole.

Originally the projects played a renovation role with regards to the existing tissue - old, had turned into slums - becoming a source of jobs as well as of activity and income similar or somewhat higher than that of the area. The deterioration of the economic base of the neighborhood ended up by "engulfing" the boundarization in a clear case-effect relation that the projects have derization and physical differences couldn't prevent, being today the projects perceived and shown as a source for the neighborhood deterioration.

Thus a relationship is verified between surrounding area and project, that cannot be overlooked in the renovation process, if this is to be successful. How does the fact that the projects are surrounded by industrial zoning affect their design? Can some of the ongoing
redevelopment of the neighborhood be channeled towards the projects as a job source?

Current events indicate a revitalization of the neighborhood (Technology Square, housing remodeling, etc.). A part of this is the modernization of Washington Elms. Hopefully the current signs will be conducive to an overall revitalization and betterment of the area, within an integral program that considers the new projects as potential residency for workers of the same area.

Conclusions

This work, in its analysis, seeks to demonstrate the idea that the "environment" in public housing involves more than the projects and its users. The project itself, its outcome and use are products of a larger environment that involves the overall public housing system, the implementation agency with its programs and procedures, the urban context of its location and the social condition of its tenants. Potential sources of problems or influences, with regards to the outcome of the projects, can be found in any of these area. It is difficult to suppose that the sole physical change of a project, will cover all the necessary aspects.

The relationship between physical form and society is a fragile one, that demands a constant process of readaptation, to withstand the shifts in societal needs, means or objectives.

Both the projects analyzed had a nice and successful period, during which the physical environment did well as a support for the community. The community, on the other hand, was not only structured as such because of the spatial proximity but mostly because of shared purposes
and characteristics. It was ethnically homogeneous with tenants sharing the hardships of poverty and the fears and hopes of a war.

In this stage, the role of the local housing agency is clearly that of facilitator of the housing process, establishing physical and social controls as well as providing services and support to the tenants, all tending to the production of a specific type of environment.

With the changes in laws and regulations concerning tenant selection procedures, plus the shift of the vital circumstances of the resident population towards "permanent poor" sectors and/or minorities, the physical support of the environment starts to show increasing signs of lack of adaptability to change or of insufficient quality with regards to standards.

The role of the agency, on the other hand, consciously or unconsciously ceases to be that of facilitator to become that of provider and controlling body. This is done in accordance to regulations coming from the system's hierarchy, with little room left for changes or innovation.

It is perfectly right to assume that given the population shift towards poorer sectors, the services should have been augmented. The cases prove the contrary. Implicitly the public housing programs were not more conceived of as "way stations", but instead tend with great strength towards becoming housing of the last resort for the very poor. In this set up, the efforts tending to reincorporate, or incorporate, the poor to the socio-economic system, cease or are replaced by the minimal ones needed to comply with the law.
The physical structures grow older, in themselves and in relation to new construction of higher quality and standards, contributing by their own design to the vicious circle of stigma and deterioration. In no way do the projects offer possibilities of readaptation to new uses in accordance with the needs and characteristics of the new tenants, characterized by a tendency towards permanent residency, lower levels of income and female headed households. On the contrary, the institutional image of the projects is reinforced by the increasing abandonment on the agency's behalf, that seek the simplification of their tasks, and maintenance cost reductions. An example of this is given by the paving of the common green areas, or the provision of physical security measures instead of seeking for social alternatives to the problem.

The analysis done of the two cases, from a physical, administrative and social perspective, allows us to conclude:

1) The original design quality of the structures and their lay-out was key for the project's development over time, making its criticisms and readaptation necessary. The final purpose of this, though, should be that of creating more than a series of modernized structures, a physical support for the community. This means that the effective participation of the tenants, in the modification and design of the project is a must. This should not only happen today, but mechanisms - both physical and social - must be incorporated so as to allow this to happen in the future too. An approach that considers renovation as a physical product frozen in time, runs the risk of having similar bad outcomes in the medium or long run.

2) The role and approach of the CHA, its methods and programs were in the past determinant of the project's success of failure. The
examination of the potential consequences of those being used presently is also needed.

3) Form - society relationships were fructiferous and beneficial in the past, when the resident community had cohesive elements. Is this a possible feature to incorporate to the projects? In this sense the participation and effective tenant organization is necessary, creating potentials for tenant to identity, responsibility and care of the projects.

4) CHA must clearly define its goals and objectives. To whom is the project focused? The tenant selection procedure, interrupted in 1968 is seen by the agency and the users as one of the main causes for community deterioration. A minimal level of control of the project residents is needed to avoid the overconcentration of households or individuals socially troubled.

5) The analysis also showed that the relationship between neighborhood and project was more than circumstancial. The incorporation within the renovation process of an analysis of the neighborhood is necessary to determine the opportunity - good or bad - to realize the project. It is hard to imagine that a physically remodelled project located in the middle of areas of great deterioration, will attract population that would guarantee its maintenance over time. In this sense, we can suggest the articulation of the renovation programs within integral and coordinated actions - public or private - related to overall area betterment. Otherwise the future of the projects remains unclear.

6) With regards to management and administrative mechanisms, one of the fundamental elements in the success of one project that compared to
the others, was the presence of an in-residence manager that combined his efforts with that of an in-residence, CHA employed, social worker. Is it possible to reinstate this policy with charge to the renovation funds?

7) The level of services within the project was another differentiation element in outcome. The provision of space for community gathering provided in the past a focus of identity and activity. With the same token, the provision of parking space (the car is a part of this society at all levels) within the project grounds is indispensable if green areas are to be preserved.

8) With regards to physical design, of units and site, the defensible space theory of Newman defines with precision the criteria to use: space hierarchization, minimal common-use areas, minimal number of entrances per hallway, disposition of units in ways that allow for mutual surveillance, etc. This set of guidelines constitutes today the paradigm of the renovation actions.

What's questionable, is that this approach presupposes again the now classical concept in public housing: form conditions society. This work demonstrates that this is true up to a certain extent. All renovation efforts that are limited to the rearticulation of form, without an accompanying program of social supports we think will tend to fail. The exclusive physical formulation of the environment tends to produce forms difficult to adapt in the future, with which extraordinary efforts have to be made in order to guarantee and control the according users. What happens if these demand different forms?
CHAPTER IV

A RENOVATION PROJECT:

THE RENOVATION OF WASHINGTON ELMS (MASS 3-1)
Chapter IV: A Renovation Project  
The Renovation of Washington Elms (MASS 3-1)

This section is aimed at reviewing the renovation program of public housing projects, through a case study. In the previous section the characteristics and evolution of two adjacent projects in Cambridge was described and analyzed. The purpose was to do a revision of the different parts of the public housing environment and their relation to a project's outcome. The administrative system, the physical structures, the social context and the neighborhood physical and social characteristics were studied. A series of conclusions referred to key elements in the project's outcome - successful or unsuccessful - were outlined at the end.

The specific proposal for the renovation of Washington Elms is analyzed in this chapter. The project itself constitutes the link with the previous sections of this work, while offering the opportunity of studying the current concept of government generated environments.

The analysis is organized in a division of the proposal in three aspects: the agency's analysis, the implementation process and the physical proposal itself.

The criteria and/or variables determined before are used here to question the proposal. The hypothesis of this work, that renovation is done mainly with a physical approach to environment building is here tested. How does CHA approach the renovation of WE given the constraints imposed by the system (HUD)? Are the elements this thesis proposes as necessary, a part of the program? Which are the objectives - explicit or implicit - of the housing agency?
The CHA's Diagnostic

The Washington Elms decay process reached in 1977 a point in which the CHA decided to stop offering new rentals in the project, given its high rejection and turnover rates. The partial modernization efforts that had been taking place in the last five years (see summary sheets, Chapter III) had failed to substantially improve the quality of life of the project. In 1979 the decision was made to defer all modernization projects in the Elms until a resolution was taken concerning the long term future of the project. $1.4 million of allocated modernization funds remained unexpended.

Since 1977 the CHA had had the idea of completely remodelling the project. In June 1980 the official proposal of a Comprehensive Modernization Program for Washington Elms was presented to the HUD's regional office. CHA requested $8.8 million for the redevelopment of Washington Elms under the federal Comprehensive Modernization Program (later CIAP). This funding was to cover the cost of relocation of the current residents, redesign of the entire development, selective demolition and construction. No mention is made of administrative management costs. In the CIAP proposal, the CHA, through its executive director, argued in favor of the project on two grounds:

First, the general revitalization of the neighborhood, evidenced in the development of Tech Square and Kendall Square redevelopment areas immediately adjacent to the project; the City's involvement in the development of the area by creating recreation areas out of four vacant lots surrounding Washington Elms; private business in the housing market (a non-profit housing organization was rehabilitating housing in
Neighborhood 4); the improvement experienced in the neighbor project of Newtowene Court where active tenant participation combined with modernization funds had had substantial effects in reducing turnover; and finally the accessibility of the project grounds to public transportation.

Some suggestion is given in the proposal as to a possible betterment of the job opportunities in the area, given the city's regulation that any new industry or firm to be located in the Kendall Square/Tech Square redevelopment should at least hire 25% of their payroll in Cambridge residents, 15% of which with less than 12 years of education.

In second place reasons were presented concerning the project itself and the incapacity, under the then present conditions, of CHA to make of WE a "stable living environment". The foremost argument was the poor initial design and quality of the units, that didn't meet 1980's needs. Small apartments with insufficient spaces for family activities or storage, vulnerable entryways and yards are mentioned. Deteriorated physical appearances of the grounds and buildings, poor reputation (image), racial imbalance, high vacancies, and high crime incidence are the other project-related arguments for redevelopment.

The concern expressed in relation to physical appearance is tightly tied to the "bad" image idea. The condition of the project left "an immediate negative impression on the observer or on a potential new tenant. With regards to the existing racial imbalances of the project, these are, in the proposal, referred to the project's tendency

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33 CHA Executive Director letter to HUD, in the Comprehensive Modernization Proposal for Washington Elms.
towards a minority development, which is argued, would affect the racial balance of the neighborhood school.

The high incidence of crime is presented as a consequence of the physical design which allows for outsiders to go into the project's grounds, while producing an excessive number of vacant units (poor standards) and poor conditions.

In this presentation of the problem, CHA clearly stressed the negative cause-effect relationships determined by the project's physical condition, design and appearance, with regards to levels of occupancy, racial imbalance, and crime. This approach in the proposal is consistent with the CIAP, which provides funding exclusively for comprehensive alterations of the physical aspects of public housing projects. Although clearly a need of WE, physical renovation is presented in the fund request as the sole instrument to achieve a more stable and vital community. No evaluation is given, in the causes for decay, is given to other potential reasons: administrative difficulties or problems, neighborhood historical patterns of social context. Rather, all these, excluding administration are presented as consequences of the physical design of the project. Is this a concept articulated for the purpose of fund obtention (federal funds are conditioned, and therefore potential allocation distorts the agency's potential for different analytical perspectives), or rather an ideology that permeats the public housing system? The role of the Local Agency appears as that of solely managing and administering a specific set of housing programs aimed at the availability of a stock of housing in safe and sanitary conditions. Limited by the administrative and legal
requirements of the federal hierarchy, the local housing agency acts within the limits of these reglaments, which include compliance with equal opportunity and civil rights legislations.

Notwithstanding the physical orientation of the modernization proposal, the program contemplates issues related to tenants, such as participation procedures, tenant council consultancy, etc.

Designed in five major components, the program covers:

- Development of Redesign Proposal
- Resident Participation
- Relocation
- Final Design Bid Package
- Reoccupancy

I. Development of Redesign Proposal - This is analyzed in detail in the next section, referred to the specific architecture and landscape project.

II. Resident Participation - The City funded technical assistance (lawyer and architect) to help the Washington Elms Tenant Council reach positions and decisions concerning the renovation proposal. The Tenant Council, organized in three committees - Relocation, Design, Proposal - sought to have a say in the different aspects and consequences of the proposal.

III. Relocation - The CHA, foresaw the need to relocate the 167 remaining tenants at the time of closing the project. These were offered vacancies in other projects or Section 8 certificates. The CHA also hired a relocation consultant to help minimize the potential problems to tenants (jobs, transportation costs) being relocated. Relocation began in July 1980.
IV. Final Design and Bid Package - The CHA would hire an architectural firm to develop the design, which would later be publicly presented for construction bidding.

V. Reoccupancy - Based on the tenant characteristics - mainly minorities, female headed households, very poor (too many AFDC families), etc., the CHA established as a primary goal in the renovation of the Elms the need to revise and alter the tenant group. The objectives to be fulfilled with the population changes were aimed at establishing a more balanced - racially and economically - community as well as generating social base that that could guarantee the maintenance of the project. This was seen as a requisite for its success. The reoccupancy aspect of the program again fits very closely with the HUD dispositions, that require a revision of the LHA tenant selection procedures. The proposed reoccupancy plan was to be developed in conjunction with the Tenant Council of Washington Elms.

The criteria, set forward by CHA, to be considered in the reoccupants selection included but were not necessarily limited to:

1) Racial balance - CHA estimated that the project should reflect the current city wide and Neighborhood IV racial characteristics, the current racial composition of both WE and NTC; consider the racial impact on the neighborhood school, and the general condition of more limited federal housing opportunities for the minorities.

The strict application of this criteria means an effective reduction of the minority population in the project (a 67% of the project was minority (specially black) when it closed down, compared to a Neighborhood IV one of 21.7, the highest of the city).

35 Neighborhood 4 Profile - Cambridge Community Development Dept.
2. Economic Mix In Their Public Housing Incomes - CHA's approach with regards to the economic social base of the project seeks to achieve a cross-section of people, within the eligibility limits set forward by the HUD guidelines (see Appendix 3). These guidelines published in 1977 allow households of up to $14,876 (in the case of a six-person, non elderly family), to apply for public housing.

The goal of the Authority at this point is to generate higher rent returns from the project, making it, through renovation, appealing to low middle-income and middle-income groups.

3) Rent - The rent records of the current tenants are to be decisive in the consideration of re-entry to the project, trying not to reincorporate tenants with bad rent records. The criteria considers the possibility of tenants settling their arrearages during the period of reconstruction. Clearly, here the idea is to not give new remodelled units to tenants regarded as problematic to the system i.e. - only "good" tenants will be housed in the new environment.

4) Conduct - Conduct records of detrimental behavior to the property or to other tenants, are suggested as criteria to define rights to tenancy. The Authority sees the renovation program as an opportunity to obtain a "fresh start" for WE, making the need to relocate problematic tenants as necessary. The presentation of positive references from previous landlords or other persons is presented in the CIAP proposal as an implementable tool.

The potential problems envisioned by the CHA with regards to present tenants are to be settled by the participation of the WE Tenant Council in the definitions of the final Tenant Selection Plan. In any
instance, the CHA is to give priority to those residents, who meet the established criteria, in the project reoccupancy. CHA also proposed to HUD and the Tenant Council the establishment of a minimum percentage (30%) of present tenants to be admitted as reoccupants of the new development.

The combination of the diagnostic elements and program structure presented by CHA, makes clear the Authority's perception of the project's decay as caused by the failure of the physical support of the environment, that then made, in an almost natural process, for it to be occupied by a tenant population with severe problems of poverty and unfavorable social conditions. This in turn contributed to the further deterioration of the physical structures, closing a vicious circle of poverty and deterioration.

The outcome of this pattern is the consolidation of a public housing slum, in itself a tautology given the objectives of the public housing program (creation of safe, sanitary and decent living environments). The physical symptoms of decay, are then the accelerated outcome of the gradual social decay of the tenant group, that renders all partial modernization or upkeeping initiatives as useless.

The negative externalities, both physical and social, of the existence of a public housing slum, affect the surrounding area of the city as well as the image of the Authority and of the project. Having reached a point where these are perceived as dangerous or detrimental to other interventions in the area - the neighborhood is clearly showing signs of revitalization - the renovation effort is clearly justified. The fresh start of the project can have positive consequences on the fresh start of the area.
An implicit criticism is made to the no-rules-or-controls period in relation to tenants, of the system from 1968 onwards, with regards to potential administrative causes for decay. The approach at this point is aimed at the recuperation, via selective criteria, of some social control of the projects. The implicit notion - stated by HUD - is that if the projects are to succeed some measures of control are to be reimposed in the system. The outcome of this is a much more strict tenant selection procedure which seeks to reestablish "good" families in the project (both morally and economically). Typical landlord criteria are proposed - recommendation, rent record, conduct - to achieve this objective. An interesting aspect of it though, is the approach of CHA, that explicitly involves the Tenant Council in the process. As seen previously some tenants would agree with stricter procedures, that coupled with their active voice in criteria definition encourages their own compliance with the rules and regulations.

Clearly then, the renovation process is not focused on the provision of a better environment - and opportunity therefore - to the very poor, (the current resident population). Rather, the program aims at the upgrading of the physical stock of the CHA, to which the tenant characteristics must be adapted. The relationships between form and society are redefined again as: a good form requires a good society to be successful. Instead of seeing the new project as a publicly provided new opportunity for the very poor, it is conceived of as a way of alleviating administrative and law requirements (the agency has to have a safe-decent-sanitary-stock of housing to have a "smooth" process and also to abide to the law).
The conclusion is that the form by itself cannot condition or modify the users and must therefore, be supplemented by controls of the user characteristics. The upgrading of physical standards requires the upgrading of the social ones as well.

In any event, these observations are not aimed at discrediting the renovation program. Its benefits are obvious. Rather, they aim at a theoretical questioning of the process-product relationship, in the analysis of which some conclusions can be reached.

Clearly, housing the very poor, a national duty, as well as an individual's right, is not an easy task, more so for its political consequences than for its economical requirements. What is being implicitly said in the renovation program, is that public housing cannot be anymore the housing of the last resort, or for that matter a welfare program. Rather the aim is to transform public housing through its renovation, into one alternative more within a diversified spectrum of choices, making it on the way, maybe recuperate its "temporary support" characteristic. This approach not only reflects on the project's renovation but on the overall system, currently seeking to establish tighter bonds with the private sector in mixed-venture/management schemes.

The reconception of public housing as instrumental for social mobility if assumed by the LHAs, will demand an integral conception of the program, relating it to other City, State or Federal initiatives tending to provide the necessary social support supplement (orientation, training, jobs, credit, etc). Is this being done?
On the other hand, if public housing isn't anymore for the very poor (it still might be on paper but if the objectives of economic mix of renovation are fulfilled it is hard to imagine it will be a reality, at least on "new" developments), where will they go? What opportunities do they have? The hypothesis can be raised that the end goal is to have a diversity of projects, serving different income groups within the low-income category with a minimal standard quality - a somewhat natural set-up if one examines the Cambridge projects for example. In this sense the renovation program would be taking a project from the very bottom, to the top of the list again, while other projects in the system will furnish residence for those tenants that do not reoccupy the renovation project. With regards to the administrative structuring of the system, the case demonstrates how determinant the role of the federal administration (HUD) is with regards to the definition of the typology of public housing products, but more importantly, in setting the ideological focus of the program. The need to upgrade the stock of housing is being, through regulations, used to redefine the orientation of the public housing program making the necessary efforts to reduce its isolation from the whole socio-economic system. The renovation of the projects is then instrumental not only for the betterment of the public housing population, but also, and through it, to reincorporate the public housing system into the overall stream of society. The redefinition of the form, seeking a more effective blending with the physical environment, hopefully will generate social blending of the tenant population. By making its stock less marginal (both physically and socially) public housing will have a better image as an activity and better communities as residents.
The Implementation Process

The presentation and approval of the CIAP funding proposal by CHA, had to undergo all the required steps described with detail in Chapter II (also refer to appendix 2). All of the technical surveys and meetings took place without presenting mayor problems of interest for this work. The architects - Gelardin/Bruner/Cott, Inc. - did the physical evaluation of the project as well as the design of the renovation project. These are analyzed in the following section.

The required participation of the tenants in the decision process proved to be the most troublesome requirement to meet. The law requires the approval by the Tenant Council of the renovation proposal, being the process of attaining it, the opportunity for the tenant's views, suggestions and/or objections to be presented and solved.

The relationship between WE Tenant Council and the CHA had always been tense, although within cordial limits.

The proposal of renovation awakened a series of protests from the tenants in which clear mistrust of the agency was spelled out. Active tenants promoted the organization of strategies to keep the process of renovation from taking place.

A series of meetings were held in June 1980, previously to the HUD-imposed deadline for proposal submittance, aiming at achieving the required agreement. At the time of proposal submittance this hadn't yet been accomplished (it was obtained later).

All throughout this process, the tenants were represented via their tenant council and three specially created committees: Proposal, Design and Relocation. The tenants had ample opportunities to present
their positions. These can be summarized as follows: mistrustful at the beginning, the tenants gradually agreed to the renovation idea, once securities were given to them by the CHA that an informal and transparent process was to be held. The CHA paid for an independent lawyer and architect to assist the tenants in their decisions. Issues raised by the tenants varied from administrative ones to design concepts, including concerns for the possibility of using the program for generating tenants jobs or the conceptions of it as a way of making them leave so us to rent the project to high-income families. In general, CHA agreed to the vast majority of tenants demands, all of which were actually lawful rights. The two most difficult aspects to agree upon were: the relocation of tenants and the demolition of structures.

The relocation of tenants, necessary to enable renovation was perceived as the tenants as a disguised eviction. They repeatedly demanded to stay in the project while renovation was undergoing or if this wasn't possible, to have guaranteed reoccupancy of the project. CHA, as specified, included as part of the program, the development in conjunction with the Tenant Council of a tenant selection procedure aimed at achieving a racially balanced and economically-mixed population for the project. The fear of the tenants that they would not be allowed to reoccupy the project were dismissed when the CHA certified that the project was to be rented only to low-income families, and further more would stress a minimum level of 30% of present tenant reoccupancy. Finally, agreement was obtained in this respect with more than 50% of tenants being able to reoccupy their homes after renovation.
Demolition of structure - a necessary feature of the project (see below) - was also heavily opposed. The issue here was that the public housing stock shouldn't diminish, especially given the rising demand for public housing in the area. This aspect had also to be addressed specifically in the CIAP proposal, requesting HUD's approval for demolition. Both HUD and the tenants agreed to it once CHA provided demonstration that the actual housing stock of Cambridge was not going to be reduced the units demolished or lost in WE were to be replaced by others built elsewhere. The demonstrated need of the project of 168 units (the # occupied at closing down time) was exactly the proposed total number of renovated units. After the obtention of the funds, and during construction, CHA agreed to maintain the WE Tenant Council properly informed of development progress.

Currently, the project is being constructed, and its expected to reopen in three stages, the first of which should be September 1984.

This outline of the implementation process has been biased towards the aspects of tenant participation, being it the most salient aspect of the process in relation to product outcome. The importance of it was determined in the previous chapter.

The analysis of it, although brief, allows us to conclude that the CHA had during the definition stages of the proposal, a very supportive attitude, within the limits imposed by time, of the tenants initiatives, not only encouraging them but being very responsive to the Tenant Council's worries and suggestions. Since its Board and staff change in 1975, the CHA is reputed as being committed to the achievement of a better public housing system in Cambridge. This means, among other
things, a special dedication to assisting the tenants in ways that can help them overcome their problems: legal assistance, job finding, medical care, education opportunities, etc. All this effort is channeled through their special Tenant Services department. The attention paid to the WE tenants in the proposal and implementation stages of the renovation (which include their relocation) only confirms this trend. Active tenant involvement is seen by CHA as a necessary part of any project, as a way for them to achieve identity with their housing and therefore, a more efficient or less costly administration and management process for the agency. This notion of the tenants taking an active role in the upkeeping of their environment takes a primary role in the design proposal, analyzed below.

The Project

The physical analysis of Washington Elms, done by the architects Gelardin, Brune, Cott Inc., and their architectonical proposal for the renovation of the project typify the current modernization project typology.

Based on the standards and guidelines of HUD, the firm undertook an evaluation of the project according to three categories: site organization, building design and unit layout. The proposal follows the same lines. The approach is then that of renovating the projects combining the issues of standards - of safety, sanitary, material quality, or otherwise - and security/control. This twofold approach originates from, in the case of standards, the general betterment of housing standards and the construction industry, that determine reasonably higher levels of expectation from both the users and the
producers. With regards to security criteria these have been mostly set by the defensible space theory and research done by Oscar Newman on an assignment by HUD, to study the public housing conditions in New York, with regards to the relationships between design, tenant behavior and structure maintenance. Central to the whole theory is that space, in order to be safe and well kept, must be under someone's control or surveillance. The notion of personal or communal territories and its coupling with identity and care are also fundamental to the success of an environment. Newman's research became the paradigm of renovation. Its recommendations were translated into specific guidelines, and when adequate, regulations.

The architects' analysis, thus is representative of the ideological approach of the agency and the public housing system in general concluding that the project - is "far below the acceptable standard for modern housing," having "reached a point where it can no more endure" with a "mend and patch" approach.

More specifically, the architects identified, with regards to site organization, that the most condemning feature of the development was its density. At 44. units per acre (145.9 persons per acre) the project is way above current HUD or MHFA standards (see Table VII).

When compared with the neighbor project, Newtowne Court (128.6 d.v. per acre - 85.8 persons/acre) or with the overall City of Cambridge (30 d.v./acre - 74.6 persons/acre) the project compares also very unfavorably.

36  O. Newman "Defensible Space" and "Design Guidelines for Creating Creating Defensible Space."
37  Architect's letter to HUD, in the Comprehensive Modernization Proposal for WE.
Other site problems were: no parking, no clear demarcation of spaces and pathways, no landscaping, no furnishings in the common areas.

With regards to building design, the architects found the buildings in sound structural conditions (they could be renovated). Bad features were their monotony, ugliness and institutional "look" (figs. 15, 16, 34) (flat roofed, one color, cement block construction). The layout was considered efficient but the entrances poorly location and designed, providing ample opportunity to muggings, vandalism of mailboxes, etc. In relation to unit layout, the analysis of the four types of units (see attached graphics figs. 20, 21, 22, 23) proved that all units were below HUD Minimum Property Standards, with regards to overall size - no dining area, poor circulation, no storage space, etc. (see Fig. 32) - and service standards (number of electrical outlets, kitchen counters, etc.

The overall project was considered unsafe, unhealthy and with critical problems of indefiniton of territorialities, surveillance capacity and overall spatial clarity.

Finally, the architects argue that all these aspects contribute to the deterioration of the project and also to its perception by the neighborhood as a "project."

With this analysis, the design goal was defined as the upgrading of the physical structures to bring them to present standards, using the existing buildings. These were to be redesigned, undergoing a drastical transformation in organization. Actually, the three storey walkups of 1, 2, 3 and 4 bedroom flats are to be transformed, within a rowhouse or town-house concept, to 2, 3, 4, 5 and 6 bedroom units in a combination
of flats (primarily for the elderly) duplexes and triplexes (see fig. 24). The assemblage of old units to create larger ones, allowed the designers to incorporate storage room, vestibules, additional bathrooms and of course, larger rooms (fig. 33).

A crucial concept in the design is the provision of organized and hierarchical spaces providing varying degrees of privacy in a unit design conducive to family life.

The townhouse concept, made clearer on the facade alteration of the buildings - pitched roofs, balconies, garden walks, exterior staircases, etc. (fig. 35) - is considered to be more consonant with the neighborhood building typology (fig. 17).

The transformation of the units, dramatically reduces the density of the project - 324 old units are transformed into 168 - making it fit therefore with its surrounding environment.

Also, the new interior design enables the designers to reduce the number of stairhalls, further reduced by providing ongrade access to numerous units.

With regards to the site organization, the proposal demands the demolition of three buildings to add private outdoor spaces, increase community spaces and parking, and make for the building of a community building (see plan fig. 30).

With the addition of open areas, the project will break the original monotonous rhythm in building disposition, producing necessary variations in an otherwise repetitive pattern.

The grounds of the project, are to be furthermore provided with spatial hierarchies (fig. 31) with regards to privacy and control.
Organized around the concept of semiprivate courtyards, these are in the project enclosed between pairs of buildings, with clearly controlled accesses which simultaneously provide a continuous facade (the courtyards, divided into private outdoor space per unit are to be, by regulation, of exclusive responsibility of the tenants for its maintenance and control). The concept of active participation is made explicit, both formally - give them a personal identifiable turf - and in the regulations. Also related to participation is the duty of the tenants to take out their garbage to centralized collectors spread around the project.

The original spatial axis of the project, as well as its original main court, with the new courtyard/cluster design, gain in spatial definition and can clearly be identified as semi public space. Finally, the provision of parking space and a community building repair the existing lack of on-site services and facilities. Conceived of as a modern building, the community center is to become a focus for activity and identity. Located centrally in the site, and on the N wtowne Court side of it, it will contain a large meeting room, kitchen, resource center, library, tenant council office, provisions for day care, Headstart program as well as for the elderly. In relation to management, training space, public bathrooms and health and human services, these will be provided on a portion of one of the readapted buildings.

The project presented by Gelardin, Brune, Cott, Inc. clearly and effectively addresses all the negative issues identified by them, as representatives of the ideology of the general public housing system.
Carefully designed to, within the limitations imposed by the original form, achieve a complete alteration of the development, the proposal ultimately seeks to erase the bad image (physical and social) of the project. This is done by altering the basic design concept from apartment flats to townhouses with private yards. A conscientious effort is made by the designers to modify the original form in ways that it combines the compliance with current living standards with the overall betterment of security and safety, plus encouraging the active identification of individual homes and territories. This aspect of tenant-house identification, implicitly considered to encourage tenant participation in maintenance tasks.

Limited by the requirements imposed by HUD through regulations, the project takes an approach to unit design that foresees as user a prototypical family. The fact that most of the project was occupied by an 83% female-headed households, or the potential need for different space requirements, derived from cultural differences in style of life (hispanic and/or haitian population) are not addressed. Along the same lines the chances for future adaptability of the units or of the site organization are minimal. Conceived of as a good quality sturdy project, supposed to promote specific ways of life, the form is designed with the intention that WE becomes a model project with respect to the current ideologies in the system.

The clear effort to minimize the "institutional" appearance of the project, as well as its density, can effectively achieve the destruction of the negative formal and social boundaries of the present project.

Elsewhere, the idea has been suggested the concept of the project 38 Proposal for Jefferson Park Public Housing project renovation.
should be replaced by an understanding of the public housing development as a "part of the neighborhood." This approach is evidenced in the WE modernization proposal. The task of the architects was to articulate the current public agencies approach to public housing modernization. This was clearly achieved.

Furthermore, the design process intricately reflects the CHA's effort to meet the design needs of the tenants. The Design Committee of the Tenant council actively collaborated with the designers. The outcome of this was that the combination of elderly and family units within the buildings, the number of parking lots on the site, and the organization of the courtyard scheme, are all product of this dialogue.

The physical design project then clearly embodies not only the explicit codes or guidelines set forward by the agencies (HUD and CHA) but also their implicit perceptions and ideas regarding the program objectives, population group and commitment to service.

Conclusions

The analysis of a specific renovation proposal, its administrative and practical aspects, shows that with regards to process-product relationships, the definition of objectives by the federal financing agency, not only conditions the procedures for fund allocation but clearly influence the product outcome as well as the local housing agency's methods and administrative process. The overtly physical approach to problem-solving permeates the whole system, its ways and products. The renovation program does not incorporate, or articulate with, any initiative with regards to social service provision to parallel the considerable economic effort being undertaken. This aspect is
perceived as the loss of a great opportunity to really help the poor. The social service support is left for the local housing agency to articulate, pending on its implementation from other sources for funding. In this sense, the example set by CHA is a very good one. The agency supports the provision of services parallel, not only to the finished project, but to its development process. Unclear as the objectives with regards to target population might be, CHA nevertheless clearly and effectively addresses the agency's tenants needs. The key role of the local housing agencies is thus made more important by the federal formulation of the public housing program. Its dual role as a mediator, articulator and simultaneously implementator - facilitator and provider/controller - is a difficult but necessary one. The historical need for control - of the process and the products of public housing - impedes the formulation of the programs in ways in which alternative product options can be presented.

The dual agency condition of the process, with the decision control mostly in the hands of the federal one, and the design and implementation phases in those of the local agency, makes the generalization from the case difficult.

The renovation of Washington Elms is clearly a good example of the maximum potential the process has, to incorporate non-physical issues in the analytical and design-implementation process. In this sense, the proposed modernization project for Washington Elms is an adequate one. Carefully thought has been given, by CHA designers and the architects to make of the opportunity's outcome, the best. The proposed renovation we

39 Steve Swanger - CHA, Director of Tenant Services Department
think will constitute a very good physical support to the formation of a new community, now not predetermined to exist within specific physical boundaries, but rather to blend with the social community of the area. The effectiveness of the design-towards-maintenance approach remains to be tested. The active participation of tenants demands time and often money, both of which are scarce in low-income households, especially female-headed ones that with fixed incomes and little time but to raise their children, have little time or money to spare. The population characteristic of the projects - mostly women and children - makes maintenance also a difficult chore.

The participation of the tenants, in the case analyzed, has been taken to the limits permitted by the law, both in consultive and resolutive roles. In effect, the renovation process has served to smooth-out previous tensions and differences between the Authority and the Tenant Council. An interesting aspect of the implementation process is that it demonstrated, from the tenants perspective, a higher degree of interest in political issues of the program, than those related with design.

The foremost difficulties encountered in the CHA-Tenant Council relationship were those related to the tenants' fear of eviction. The CHA proposed revision of the tenant selection procedures served thus a twofold objective: appease the present residents, but also provide the base for a greater agency control of tenant group characteristics. A conscious effort is being made to rearticulate this aspect of the process, perceived by many as one of the most important causes for project deterioration. The agency's indefinitiveness with regards to final objectives in relation to target population group - probably done, so as
to reduce tensions with current residents - is still needed. The laissez-faire policy of the 70's is clearly being reformulated: to whom will it be addressed? In this sense the differences between HUD and the CHA are clear. HUD implicitly supports the residence of the wealthier of the poor, while CHA argues in favor of their "good stander" poorest of the poor approach.

A very positive aspect of the analyzed proposal is that it clearly considered an analysis of the neighborhood as part of the process, socially and formally, to clarify the good opportunity of doing the renovation, but also as a way of defining social and formal design guidelines so as to facilitate the blending of the project into the community.

Finally, the open orientation to on-site provision of services make us foresee the project's success.
<table>
<thead>
<tr>
<th>Washington Elms Existing</th>
<th>HUD Minimum¹</th>
<th>MHFA² Minimum</th>
<th>City of Cambridge</th>
<th>Neighborhood 4</th>
<th>River Howard</th>
<th>New Towne Court</th>
<th>Washington Elms Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site area</td>
<td>7.4 acres</td>
<td>1344 acres</td>
<td>72 acres</td>
<td>1.55</td>
<td>10.2 acres</td>
<td>7.4 acres</td>
<td></td>
</tr>
<tr>
<td>Number of dwelling units</td>
<td>324</td>
<td>120 units³</td>
<td>74 units⁴</td>
<td>40,000</td>
<td>1954</td>
<td>32</td>
<td>282</td>
</tr>
<tr>
<td>Density units/acre</td>
<td>16 units (rowhouses)</td>
<td>10/acre⁴</td>
<td>29.8/acre</td>
<td>27.1/acre</td>
<td>21.3/acre</td>
<td>27.1/acre</td>
<td>22.7/acre</td>
</tr>
<tr>
<td>Density people/acre</td>
<td>142/acre⁵</td>
<td>74.6/acre⁶</td>
<td>103/acre⁶</td>
<td>74.5/acre⁵</td>
<td>85.8/acre⁵</td>
<td>99.9/acre⁵</td>
<td></td>
</tr>
<tr>
<td>Bedroom/acre</td>
<td>9.2/acre</td>
<td>49.6/acre</td>
<td>57.2/acre</td>
<td>67.4/acre</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open space/dwelling unit</td>
<td>.017 acres</td>
<td>Open space ratio³</td>
<td>N/A</td>
<td>N/A</td>
<td>.0361 acres</td>
<td>.0298 acres</td>
<td>.045 acres</td>
</tr>
<tr>
<td>Private usable outdoor space</td>
<td>0sf/unit</td>
<td>400sf/unit</td>
<td>400sf⁷</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>400sf/unit</td>
</tr>
<tr>
<td>On site parking</td>
<td>0</td>
<td>1.3/unit³</td>
<td>1.5/fam. unit²</td>
<td>29</td>
<td>0</td>
<td>27-1 BR</td>
<td>46-2 BR</td>
</tr>
<tr>
<td>Unit mix</td>
<td>90-1 BR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>108-2 BR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>90-3 BR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>36-4 BR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FOOTNOTES:**
1. U.S. Department of Housing and Urban Development Minimum Property Standards, HUD 4900.1, HUD 4910.1, HUD 4920.1, HUD 4930.1
3. Based on maximum land-use intensity of 4.8 for 2-story townhouse and an average living unit size of 1,000sf. HUD MPS Manual of Acceptable Practices, HUD 4930.1, Section 303.3 "Favorable Land-Use Intensity Ranges for Various Building Types".
5. Computed at 1.5 persons per bedroom.
7. MHFA practice is to follow HUD standard.

**TABLE VII**  
Washington Elms housing density study.  
Source: CHA
<table>
<thead>
<tr>
<th>APARTMENT TYPE</th>
<th>WASHINGTON ELMS EXISTING</th>
<th>HUD MINIMUM</th>
<th>MBFA MINIMUM</th>
<th>NEXTOWNE COURT</th>
<th>WASHINGTON ELMS PROPOSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Bedroom</td>
<td>452</td>
<td>460</td>
<td>600</td>
<td>505</td>
<td>625</td>
</tr>
<tr>
<td>2 Bedroom</td>
<td>625</td>
<td>540</td>
<td>800</td>
<td>576</td>
<td>875</td>
</tr>
<tr>
<td>3 Bedroom</td>
<td>755</td>
<td>690</td>
<td>1200</td>
<td>810</td>
<td>1200</td>
</tr>
<tr>
<td>4 Bedroom</td>
<td>875</td>
<td>860</td>
<td>1400</td>
<td>1350</td>
<td>1350</td>
</tr>
<tr>
<td>5 Bedroom</td>
<td></td>
<td></td>
<td></td>
<td>1650</td>
<td></td>
</tr>
<tr>
<td>6 Bedroom</td>
<td></td>
<td></td>
<td></td>
<td>1905</td>
<td>1850</td>
</tr>
</tbody>
</table>

FIGURE 29 Washington Elms renovation project: unit combination patterns and size analysis
Source: CHA
FIGURE 32
Architects analysis of existing unit problems.
Source: CHA
FIGURE 33

Architects tentative proposal for typical unit layout renovation. Washington Elms Housing
Proposed Apartment Plans/Ideas

Source: CHA
FIGURE 34: Washington Elms: original building elevations.
FIGURE 35 Washington Elms renovation: proposed building elevations.
FIG. 36: Washington Elms renovation: exterior building facade: materials and lack of architectural detailing offered no possibility for tenant identity.

FIG. H: Washington Elms renovation - interior original building facade and disposition did not differentiate public from private space.
Washington Elms renovation: view from Washington Street. Original project did not spatially define the street or the intended court-yards. Note foundations for future walls and courtyard partitions.
FIGURE 40 Washington Elms renovation: architect's rendering of renovated project.
FIGURE 41: Washington Elms renovation: birds eye view showing final project. Note building facade transformation, parking spaces, enclosed courtyards and community building at the back.
The final conclusions to this work are presented in relation to the general process of administration and implementation of Public Housing, and its consequences at the dimension of the specific project, and its renovation strategy.

The purpose of these conclusions is to try to clarify, from a more global perspective, the different aspects mentioned along this thesis, complementing the partial conclusions presented in each section.

In the first place, it is necessary to underline the fact that the initial hypothesis of this work, that the renovation projects were being undertaken only from a physical perspective, turned out, after the research and in relation to the analyzed case, to be invalid. The CHA is effectively looking for alternative mechanisms for public housing provision, along with the development, within their possibilities, of instruments and/or mechanisms that allow the users of Public Housing to make a better use of the opportunity of a renovated housing environment. In this sense, we think, the CHA is an exemplar agency in the method of approaching the problem, having even a special department dedicated to social service provision. The analysis of the renovation project, its process and product, are demonstrative of the wide vision of CHA.

Nevertheless, mention can be made, of some aspects, that without damaging the process in its actual development, could offer an opportunity for its betterment. In relation to these, it is difficult to differentiate the role of CHA, from roles of the municipal, state and federal government.

In any instance, it is clear along the development of this work, the basic role the Housing Authority has played and still plays in the outcome of the projects.
Finally, and given the prevalessent pattern in the projects, of permanent residence, of the users, increasingly by low levels of maintenance, and particular household conditions, an incentive policy for the users that have a role in the upkeeping of the area, can be an alternative to ever-increasing levels of agency involvement. As an example, cancelation or reduction in rent costs can be used. In a somewhat more difficult to imagine situation, it is even possible to propose alternative tenure systems, that would demand a bigger role of the tenants in maintenance, but that also allow tenants, through their "stock" in housing, to achieve better opportunities in other realms.

Thus, for example, collective tenure, condominiums schemes, gradual assignation of property over time, etc., are some ideas that come to mind.

This undoubtedly would involve a redefinition of LHA towards more complex aspects in administration, but it is at least hypothesisable, of lesser costs. This might also mean a more active role of the public agencies in the production of housing given expected rising demands.

The advantages of this spatially dispersed systems in regards to social benefits have been demonstrated, elsewhere especially european nations.

The direct impact of the local agency's tenant selection and unit allocation procedures on the other hand was also central in any specific project's outcome.

The analyzed boundarization of the "projects" was in the past the source of a great number of social problems of the developments. Renovation efforts are clearly addressing the issue, aiming at the
renovation of motion barriers to achieve an effective blending of the developments with their surrounding tissue.

In this sense, and with regards to policy formulation, we can suggest that, even if its true that original advantages made the construction of the projects possible land availability, scale economies in construction and maintenance - which makes it an imperative to recuperate the existing projects, in the future, programs tending towards production of public housing, should seek alternative prototypical solutions, thus maybe abandoning the "project" approach, trading it for another more sensible to the already mentioned problems, and that can materialize in the dispersion of units within the "healthy" tissue.

Focused on the exploration of the process - product relationships of the public housing system, and more oriented towards problem finding, question formulation and issuer raising than solving them this thesis fails presenting an analysis of the alternatives proposed; their feasibility or factibility.

Nevertheless, we feel that by the suggestion of them any further work can consider the variables presented here, that explicitly or not affect a project's outcome.

The understanding of the products of public housing within a larger and more complex universe - environment - that incorporates the social tissue of the area, the physical environment beyond the project's limits, together with the administrative structure that implements the program, feel, determines opportunities for new research and solutions, in relation not only to existing projects but also to mechanisms and instruments that make a better future outcome of the program objectives.
Public Housing, conceived nowadays as the societal remedy to alleviate the shelter needs of those for which the economic system is incapable of doing so, has undoubtedly a social mission, in relation to welfare and social betterment. From another perspective it can be interpreted as the instrument through which the "failures" of the system are hidden, allowing this to perpetuate - a social cost.

Is Public Housing really taken as a vehicle for helping out the poor? To suppose this is real and logic because it is coherent with other actions of the socio-economic system. The question is then how to make it more effective.

In this sense one of the most clear conclusions to be obtained from a historical analysis of the projects is precisely this change in the ultimate objective of the system and the primary role of the agencies. Originally, the projects were temporal housing, sometimes even conceived for emergency tenants. The rest of the social system made this explicit by generating supportive social programs. There was a certain pride in the program and a significant support from the government (economic, of service provision, etc). The tenants were then giving direct services to the community (war time workers, soldier families), or were being retributed by service already given ie- veterans.

The general financing system of post-war housing, allowed that through access to easy credit, the veterans could be effectively be a part of the american dream: becoming a home owner. Even more, the support given for the obtention of education, training and jobs was very large.
It is clear then that under these circumstances Public Housing plays a role as transitory housing, and that as a system it is absolutely incorporated into the global system of opportunities and housing.

The typical household was then a classical family with great social and community interest and ties (given the similarities of condition and special historical circumstances lived).

This household type differs dramatically from the population that followed them into the projects, characterized by much lower levels of incomes, lack of opportunity, racial difficulties, lack of jobs, etc.

The consequences of this were that more social services became in need to support the communities (social assistance, education, welfare, etc.). This, coupled with the new fact that the population radicates in the projects created the "housing of last resort" condition. The projects no longer are a transitory residence, but rather the last opportunity the system offers.

Thus, a pattern very difficult to break was established — Public Housing becomes the synonym of the residence of the poor the system doesn't incorporate. Simultaneously, the possibilities for improvement offered before (education, easy credit, construction boom, etc.) are not there anymore.

This vicious circle, that makes of Public Housing, the social dump system had negative effects at least along two lines: internally, within the projects the level of participation and positive interaction among the tenants was greatly reduced, increasing levels of vandalism appeared, destruction, and finally even abandonment of the property. In
relation to the whole system, this is perceived as a large burden on the general social system, its global financing reduced and in general the user of the Public Housing system marginalized.

The existence of a dual society within the context of development is made explicit.

The internal variations of the project, of type of household and residence period, impose demands over the physical structure, and the system in general, for which it is not prepared physically or administratively. A key to successful projects has been their capacity for adaptation to changing demands.

The public housing system should then, over the last 25 years face varied and complex demands:

1) The original level of physical design of the projects, as well as their sanitary standards do not accept modifications to sustain the new uses and users, requiring increasing levels of expenditures for maintenance - the structures in general were poorly built with emphasis on the efficiency and brevity of the construction period.

2) Its administrative and maintenance structures must readapt totally tending more to a welfare institution, having to face the increasing isolation of the Public Housing system from the overall political and economical system.

3) increasing economic demands on behalf of the users.

4) increasing maintenance and administration costs

5) the shrinking resources

This apparent distancing between the objectives, real demands, and available funds, made the objective of the agencies more difficult to
fulfill, demanding greater ingenuity in resource obtention and allocation.

It is clear at this point that successful projects are due to original conditions, physical specially, but not exclusively, that made their on the one hand more desirable for prospective tenants (good families got to live in them), but also had the capacity to readapt to changing needs.

The direct impact of the local agency's tenant selection and unit allocation procedures, on the other hand, was also central in any specific project's outcome, and should therefore be given special consideration in the future.

Presently, the agencies are faced with a series of dilemmas in relation to the definition of their own role and instruments to achieve them: is it their role that of a real estate agency that cares for the maintenance of an existing stock? Are they welfare institutions and therefore should have more federal support? Should they be concerned with producing more units of housing? With what other instruments or agencies do Housing Agencies combine their efforts to produce an effective impact on poverty? Is there to be long term planning in relation to tenure of the units? Should the system be a patch for society's mistakes or a source of energy and support to programs focused on positively benefiting the conditions of the poor?

It is therefore, important at this stage of the process, to explore alternative formulas that can produce the clarification of the system's objectives of Public Housing. These should tend to a greater integration of the users to the socio-economic system, as well as to the reduction
of the barriers imposed by the notion of "project". These can be summarized in alternative renovation projects, new tenure and participatory concepts and strategies, and alternative physical products in relation to Public Housing provision.

As mentioned earlier the administrative notion of project and its physical reflection, produce very hard barriers to surpass solely through physical renovation. Undoubtedly renovation constitutes a big step in the overall image redefinition, that should nevertheless be accompanied by effective actions in relation to spatial and social integration to the immediate urban context, to avoid the conceptualization of the projects as ghettoes. In this sense it is important to conceive the renovation projects as part of an integral strategy of neighborhood upgrading - given that in general the projects locate in areas of great poverty and deterioration. This implies an integrated effort of different agencies in charge of the urban environment. Alongside with this, the promotion of programs of social incorporation are basic (new jobs, training, etc.) if the projects are to succeed over time.

This, an alteration of the focus, from project renovation - with its spatial and administrative consequences - towards a more global vision of the environmental problem, could have a better outcome over time. This should encourage the exploration of alternative solutions in the public housing system, along with the integration of the different actions of different agencies that aim towards similar goals.

It is important, in this sense to stress the importance of doing opportunity analysis in relation to renovation projects: it is
advisable to do renovation only in areas where there is a general positive potential for development and betterment. In other words, where there exist clear indicators of neighborhood revitalization (the analyzed case does exactly this). If this condition is not fulfilled, it can very well be the case that after an initial success period the long-run trend of the project be towards failure. Also the fact that the renovation project is located in areas that are experimenting development allows agencies to articulate the projects with other initiatives, private or public, to obtain larger economic support or other benefits such as jobs, loans, etc.

It is also important to remark the importance that in the deteriorated areas can have the positive impact of the housing stock betterment: not only does this leave immediate positive effects - more or better units - but can also have long-term ones, product of the positive perception by the general public of the government investment in renovating the area. This can encourage other investors to participate in the sector, given the supposition that further improvements are to come.

In relation with the projects themselves, the role of tenants participation in the modification of their own environment, cannot be sufficiently stressed. It is to them that it corresponds, with adequate technical support, the definition of their environment characteristics. Not only can the users be incorporated in a consultive character, but also in a resolutive one. This can mean a lot of extra problems and difficulties to be faced by already over-burdened agencies which they are not generally willing to undertake, but it is nevertheless of
primary need to do all pertinent efforts in this sense. These have as
direct benefits a greater commitment of the users towards their
environment, which can translate in better levels of maintenance, a
better relationship between agencies and users, and the organization of
users in relation to problems of their vital environment. This aspect
is a basic requirement to shape a community, the end goal of the
program. The users must then be regularly informed, questioned with
regards to their needs and interests and included in the diagnosis
stages regarding projects' definition. Of course, it cannot be
anticipated that users' solutions are the only ones to consider, or that
theirs is the last word, but a participatory process has better success
chances, then if its not.

In the same sense, user or tenant participation can play a key role
in the criteria definition for new tenant selection, given their own
experiences and their interests.

Furthermore a collective organization that feels some degree of
control over their housing that sees in the LHA a supportive agency and
not a controller landlord, can constitute excellent attraction motives
to bring more "established" households to the projects, and given the
physical transformation of them, of relatively higher levels of income.

The benefits of this are a better consolidation of the community
and better maintenance of the area. The users participation in the
design and implementation stages, is basic for the effective
incorporation of them in maintenance tasks: surveillance, cleaning,
etc.
Finally, and given the prevalescent pattern in the projects, of permanent residence, of the users, increasingly by low levels of maintenance, and particular household conditions, an incentive policy for the users that have a role in the upkeeping of the area, can be an alternative to ever-increasing levels of agency involvement. As an example, cancelation or reduction in rent costs can be used. In a somewhat more difficult to imagine situation, it is even possible to propose alternative tenure systems, that would demand a bigger role of the tenants in maintenance, but that also allow tenants, through their "stock" in housing, to achieve better opportunities in other realms.

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APPENDIXES
**U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT**
**HOUSING – FEDERAL HOUSING COMMISSIONER**
Comprehensive Improvement Assistance Program

**PROJECT PROFILE**

**NOTE** Public Housing Agencies (PHA's) with 100 or less units in management are only required to fill out the highlighted fields.

14. Project Name

15. Project Address

16. Project Number

17. End of Initial Operating Period (EIOPI) Date

---

**2 PHYSICAL DESCRIPTION**

<table>
<thead>
<tr>
<th>UNITS BY BEDROOM AND BY STRUCTURE TYPE (Enter Data Below)</th>
<th>2. Brief Description of Non-Dwelling Space (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TYPE OF BEDROOM</strong></td>
<td><strong>ELEVATOR</strong></td>
</tr>
<tr>
<td>0 Bedroom</td>
<td></td>
</tr>
<tr>
<td>1 Bedroom</td>
<td></td>
</tr>
<tr>
<td>2 Bedrooms</td>
<td></td>
</tr>
<tr>
<td>3 Bedrooms</td>
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</tr>
<tr>
<td>4 Bedrooms</td>
<td></td>
</tr>
<tr>
<td>5 Bedrooms</td>
<td></td>
</tr>
</tbody>
</table>

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**3 OCCUPANCY DATA**

<table>
<thead>
<tr>
<th>3a. Current Vacancy Rate</th>
<th>3b. Average Rent</th>
</tr>
</thead>
<tbody>
<tr>
<td>5%</td>
<td>$</td>
</tr>
</tbody>
</table>

---

**5 RENT COLLECTION**

<table>
<thead>
<tr>
<th>5a. Does the PHA have a written rent collection policy for the project?</th>
<th>5b. Are rent examinations current?</th>
<th>5c. Tenant Accounts Receivable (TAR) of tenants in arrears as a percentage of the total monthly charges</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] YES</td>
<td>[ ] NO</td>
<td>[ ] YES</td>
</tr>
</tbody>
</table>

---

**6 TENANT SELECTION, ASSIGNMENT AND EVICTION**

<table>
<thead>
<tr>
<th>6a. Is project management implementing the HUD approved Tenant Selection and Assignment Plan?</th>
<th>6b. Is project management implementing the Non-discrimination Section 8 Management Plan?</th>
<th>6c. Estimated number of notices to quit issued in the last twelve months</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] YES</td>
<td>[ ] NO</td>
<td>[ ] YES</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>6d. Estimated number of eviction notices filed in the last twelve months</th>
<th>6e. Estimated number of units vacated due to evictions in the last twelve months</th>
<th>6f. Estimated number of units vacated in the last twelve months</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] YES</td>
<td>[ ] NO</td>
<td>[ ] YES</td>
</tr>
</tbody>
</table>

---

**7 MAINTENANCE**

<table>
<thead>
<tr>
<th>7a. Is project management conducting a regular preventive maintenance schedule?</th>
<th>7b. Estimated average routine response time from date of request to service in the last twelve months</th>
<th>7c. Estimated average emergency response time from date of request to service in the last twelve months</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] YES</td>
<td>[ ] NO</td>
<td>[ ] YES</td>
</tr>
</tbody>
</table>

---

**8 SECURITY**

<table>
<thead>
<tr>
<th>8a. Does the project have a crime or vandalism problem?</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] YES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8b. Is there an active project PHA-wide tenant organization?</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] YES</td>
</tr>
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</table>

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Use this space if needed for additional remarks. Identify remarks to approximate item number above.
Flow Chart - Application Processing - Comprehensive Improvement Assistance Program

<table>
<thead>
<tr>
<th>Headquartes A</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Office B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field Office Director C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Director Housing Division D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chief Asst Hsg. Mgmt Division E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing Management Officer F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance Engineer G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Management Specialist H</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupancy Specialist I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AHM Clerk J</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FH&amp;E Division K</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N&amp;CA Staff L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field Office Counsel M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHA N</td>
<td></td>
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</tr>
</tbody>
</table>

Flow Chart:

1. **Start**
2. Determine modernization needs & assign funds to ROs
3. Determine modernization needs and sub-assign funds to FOs
4. Sign and send notification
5. Prepare notification of fund availability
6. Prepare letter
7. Consult informally with PHA
8. Check and distribute Preliminary Application
9. Receive, log and forward Preliminary Application
10. Receive interest
11. Consult informally with HUD FO
12. Prepare and submit Preliminary Application
13. Preliminary Application
14. Stop
Flow Chart - Application Processing - Comprehensive Improvement Assistance Program

Headquarters

Regional Office

Field Office Director

Director Housing Division

Chief Assl Hsg. Mgmt Division

Housing Management Officer

Maintenance Engineer

Financial Management Specialist

Occupancy Specialist

AHM Clerk

FH&EO Division

N&CA Staff

Field Office Counsel

PHA
Flow Chart - Application Processing - Comprehensive Improvement Assistance Program

Headquarters A

Regional Office B

Field Office Director C

Director Housing Division D

Chief Assistant Housing Management Division E

Housing Management Officer F

Maintenance Engineer G

Financial Management Specialist H

Occupancy Specialist I

AHM Clerk J

FH&EO Division K

N&CA Staff L

Field Office Counsel M

PHA N

Sign and send letter to PHA.

Conduct meeting

YES

NO

Prepare letter informing PHA of determination.

Prepare letter requesting submission of Final Application.

Participate in meeting.

Participate in joint review.

Participate in joint review.

Participate in joint review.

Participate in meeting.

Participate in joint review.

Participate in joint review.

Participate in meeting.

Participate in meeting.

Participate in meeting.

Receive letter of HUD determination.

Yes or not approved?
Flow Chart - Application Processing - Comprehensive Improvement Assistance Program

1. **Headquarters A**
   - **Regional Office B**
     - **Field Office Director C**
       - **Director Housing Division D**
         - **Chief Asst Heg Mgmt Division E**
           - **Housing Management Officer F**
             - **Maintenance Engineer G**
               - **Financial Management Specialist H**
                 - **Occupancy Specialist I**
                   - **AHM Clerk J**
                     - **FIRHOST Division K**
                       - **NRCA Staff L**
                         - **Field Office Counselor M**
                           - **PHA N**
                             - **RAD reserves funds and notifies FO.**

Steps:
- Prepare, sign and distribute Program Approval Sheet.
- Prepare Approval Letter and HUD notification.
- Assemble documents and forward to Director.
- Send documents to RAD.
- Arrange for HUD Notification.
- Prepare List and FAD.
- Fax Notification to Headquarters.
Flow Chart - Application Processing - Comprehensive Improvement Assistance Program

A. Legislative Affairs notifies Congress and releases FGA.

B. Regional Office

C. Field Office Director

D. Director Housing Division

E. Chief Asst. Hg. Mgmt. Division

F. Housing Management Officer

G. Maintenance Engineer

H. Financial Management Specialist

I. Occupancy Specialist

J. AHM Clerk

K. FH&EO Division

L. V&CA Staff

M. Field Office Counsel

N. PHA

Execute ACC Amendment

Send approval letter to PHA and distribute documents

Send List to Field Office Counsel

Prepare ACC Amendment and forward to PHA

Receive ACC Amendment and forward to FO Director

Distribute copies of ACC Amendment

Sign ACC Amendment and return to FO Counsel.
### Income Distributions of Income Eligible Tenant Households, by Household Size and Type: Prospective Rent-Paying Capacities by Income Intervals: Estimated Average Rents by Selected Rent-Income Factors

#### Place: Cambridge

#### Insuring Jurisdiction: Boston, Massachusetts Area Office

<table>
<thead>
<tr>
<th>Income Limit</th>
<th>104</th>
<th>126</th>
<th>130</th>
<th>149</th>
<th>76</th>
<th>75</th>
<th>113</th>
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<tr>
<td>RENT</td>
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<td></td>
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</tbody>
</table>

#### Estimated Number of Income Eligible Households

<table>
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<tr>
<th></th>
<th></th>
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<th></th>
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<tr>
<td>11893</td>
<td>10071</td>
<td>8022</td>
<td>2049</td>
<td>1822</td>
<td>114</td>
<td>1678</td>
</tr>
</tbody>
</table>

**Prepared by Emad (CO) February 28, 1977**

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**Appendix 3:** HUD regulations for Cambridge's public housing income limits.
APPENDIX 4

Questionnaire for "Life in the Projects"

I. Personal Questions

1. How long have you been here? What year was that?
2. Where did you move here from? Were you raised here? Where were your parents from?
3. How did you come to live here? Who decided?
4. Did you raise your family here?
5. Did you have a job? What did you do?

II. Memories

1. Did a lot of people from here work where you did? Who else employed resident?
2. Where did children go to school?
3. Do you remember who your neighbors were? Did you get together with your neighbors?
4. How was the place managed? Did the management sponsor activities? Did you go to the Neighborhood House? What happened to the Neighborhood House?
5. Where did you do your shopping?
6. How did this place change in appearance?
7. Do you have photos we could look at? Can we use pictures?

III. Feelings/Opinions

1. What is the most important change here that you've seen?
2. Why did that change occur?
3. How do you feel about living here now?
4. Would you like us to put this together? We need volunteers to sew, type, transcribe, organize and file, get the word out.
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