



COMMUNITIES IN DECLINE:

THE USE AND REBUILDING OF OLD NEIGHBORHOODS

by

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ABSTRACT

The process of population decline that is now under way in the old residential areas of most large American cities raises many questions about the future of such areas. Current interpretations emphasize the difficulties of rebuilding these "gray areas" even though they are apparently diminishing in usefulness in their present form. This study examines recent trends in the utilization of old residential neighborhoods in the central cities of large urban regions, and prospects for rebuilding them with new private housing.

Declining residential areas still play an important role on the metropolitan scene: they provide a supply of cheap housing for low-income groups. Migrations of low-income minority groups into the cities are currently at record levels. These migrations, plus high birth rates among low-income families already in the cities, promise a large continuing demand for low-cost housing during the next decade or two. The movement of earlier central-city residents to the suburbs during the 1950's, which accounts for population losses, enabled remaining occupants to improve their living conditions and helped provide housing for the newcomers. Old residential areas are generally still well-utilized; large-scale programs to rebuild them at the present time would remove needed low-cost housing from the market.

The main alternatives for public policy are either to attempt a gradual rebuilding by replacing surplus housing in small parcels as abandonment proceeds, or to wait until the declining areas have been thoroughly vacated and then to clear large areas for rebuilding. On social as well as economic grounds, a gradual replacement of deteriorated housing would be preferable. To determine the feasibility of attracting new private housing into the declining areas, this study analyzes rebuilding prospects in the central cities of three contrasting regions: New York, Los Angeles, and Hartford.

The test of this feasibility consists of two pre-conditions: (1) land costs for sites to be rebuilt must be commensurate with their re-use value for new housing, and (2) the total demand for cleared land must be great enough to permit a replacement of all deteriorated housing within a reasonable number of years.

Several regional characteristics have special significance in establishing these pre-conditions for rebuilding. In regions where the downtown core is particularly strong as a place of employment and service, the central location of declining areas may constitute a distinct asset in the market for new housing. The supply of vacant land competitive with new housing sites in the declining areas, and the density of existing development in these areas also influence the feasibility of rebuilding. Further, the total demand for new multifamily housing within the region sets an upper ceiling on the potential rate of rebuilding the older areas, since site costs are normally too high for new single-family homes.

Despite the importance of these characteristics, rebuilding is feasible under many different sets of regional circumstances; no unique combination of factors is required. The highly divergent cities of New York and Los Angeles both meet the pre-conditions for rebuilding, while Hartford is borderline in meeting the first requirement and fails to meet the second.

Where the pre-conditions are weak, public action can have some effect in strengthening them, but rebuilding will probably require some direct public subsidy if it is to proceed at a reasonable pace.

In cities that meet the pre-conditions for rebuilding, the task of public action is to create a suitable environment for new housing in the declining areas. Failure to establish this final condition accounts in large part for the lack of construction activity in declining areas where the economic basis for new development is sound. Although public programs for gradual rebuilding have rarely been attempted, recent experience in New York and Los Angeles suggests several useful approaches for integrating new housing into old areas as part of a steady rebuilding process.

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PREFACE

Research into problems of urban policy first requires a diagnosis of current and emerging urban conditions. This study is directed largely toward understanding the significance of recent changes in population patterns and the utilization of old housing in American cities, and evaluating the prospects for rebuilding declining neighborhoods. Recommendations for public policy follow from these empirical analyses.

Information for the study has come principally from an examination of three contrasting cities: New York, Los Angeles, and Hartford. Assembling necessary facts on the relevant characteristics of these cities and their surrounding regions has required extensive contact with government agencies, realtors, and individuals well acquainted with housing market conditions. My indebtedness to these local sources is acknowledged specifically in the course of this work, but several individuals and organizations are due for special thanks for their very generous assistance.

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CHAPTER I

DECLINING AREAS: A PROBLEM FOR OUR CITIES

Vast and complex changes mark the current development of American cities. People choose to live in new locations: large numbers migrate into urban regions, while others within these regions move into new suburban patterns of settlement. Powerful forces are producing major urban transformations, and intricate cross-currents of population movement. In this dynamic situation, analysis and prediction are difficult. The winds of change are obvious to all, but their speed and direction are not yet gauged.

It is clear that growth and decline go hand-in-hand in the modern metropolis. Of our ten largest cities in 1950, nine lost population between 1950 and 1960, while their metropolitan regions continued to grow. Even the large central cities that continued to expand, such as Los Angeles, lost population near the core while expanding at the outer fringe. The same combination of central decline and over-all increase also characterized many smaller urban regions in the 1950's. Suburban growth has thus had a side effect of depleting population in central residential areas.

Current interpretations of the American city emphasize the problems of obsolescence and decline in a period of generally buoyant expansion. The rebuilding of older areas has become a matter of national concern, with the federal government spending millions of dollars every year for urban renewal subsidies. And the picture of urban problems that has emerged with this new interest is a grim one.

The "Gray Areas" Hypothesis

Many square miles of our cities consist of old residential areas where population decline has already begun or appears imminent. To recent analysts,¹ these are the "gray areas" of obsolescent housing, destined to become increasingly vacated in the near future. In their view, the old residential structures are rapidly outliving their usefulness, and will shortly be ready for clearance and replacement. Further, according to the gray areas hypothesis, economic and social forces are operating inexorably both to destroy the present usefulness of these parts of the city, and to block their rebuilding as new residential communities.

What is the nature of this hypothetical process that seems to ensure indefinite stagnation in the old residential areas, long after they are fully ripe for rebuilding? Changing public taste is expected to bring about a rapid obsolescence of buildings constructed to the standards of past generations, while the buildings themselves deteriorate with age. Residents will withdraw, leaving behind a set of partially occupied buildings. These semi-abandoned structures are at the base of the gray areas hypothesis: their continued presence is expected to constitute a severe liability encumbering the land they occupy. It is argued on the basis of current experience that such land can be cleared only at a high cost, for old structures are expensive to acquire despite their waning utilization.

Recent experience also suggests that desirable building sites will be available at a lower cost on vacant outlying land. Suburban sites have already become the overwhelmingly popular choice for new housing, and little evidence is at hand to suggest a sharp reversal of this trend. The attractions of the suburbs hardly need elaboration, and a steadily growing highway network within our metropolitan areas promises to open up an increasing supply of suburban land with good accessibility to jobs and consumer services.

The gray areas, in comparison, offer few present or potential advantages. The central location of most of these areas was formerly a considerable asset for their development, but with the outward spread of jobs and services, and with improved highway access to the suburbs, central locations no longer play a dominant role in the housing market. While a limited number of people want to live near the center, and are willing to pay enough for their housing to compensate for high land costs, the vast majority of those in the market for new housing choose suburban dwellings.

Thus the gray areas argument constitutes both an explanation of current population decline with its concomitant lack of new construction, and a prediction of more widespread abandonment and stagnation in the coming decades. The argument rests on assumptions -- drawn largely from current experience -- about cost differentials between built-up and vacant land, and assumptions about the extent of housing demand for inner locations. A further elaboration concerns the type of housing that people will choose. While multifamily housing can overcome high land costs by economizing on the amount of land required for each unit, the mass market is for single-family dwellings, which require a lavish amount of land per unit. Although a certain portion of the population favors apartment living, an increasing share of the demand for apartments is also expected to favor suburban locations.

On all these grounds, analysts of the gray areas foresee a bleak future. For the mass new housing market, the value of gray area land is expected to fall far short of its acquisition cost. The housing demand that remains for gray area locations is assumed to be too small to permit extensive clearance of the large residential sections that are becoming obsolete. In short, this hypothesis holds that the market for new housing will decisively reject locations in the declining residential areas, in favor of suburban locations on vacant land. "Gray area" has become a pejorative term, synonymous with decay and stagnation.

According to this argument, the only prospects for new development would require using tremendous public subsidies to wipe out current cost differentials between gray area sites and competitive vacant land, or waiting many years until acquisition costs fall to low levels.

The Declining Areas in a Different Perspective

This study will take issue with the basic perspective of the gray areas hypothesis, and with many of its supporting assumptions. As a diagnosis of current trends, the gray areas view accurately identifies the direction of changes now under way. But it exaggerates the rate of change, and thus leads to an ill-founded notion of the under-utilization of older residential neighborhoods, with undesirable implications for public policy. For these areas serve vital social purposes, and will probably continue to do so for at least the next two decades. They provide housing for the flow of low-income migrants now streaming into urban regions. The gray areas hypothesis poses a premature issue: how to accomplish the large-scale rebuilding of these declining areas.

The task of the next twenty years in most of our large cities is more properly one of conserving the old housing and improving it, so that it can continue to serve low-income groups in the population. Deteriorated areas that are truly ripe for clearance will be measured by the acre rather than by the square mile. Limited clearance of deteriorated housing would permit a gradual rebuilding of the old areas, with small increments of new development replacing the old structures as they wear out, and with a steady influx of new population during the long period of transition. For this scale of clearance, the economic pre-conditions of rebuilding -- a price relationship in which site costs do not exceed re-use values, and a sufficiently large potential demand for housing sites in the older areas -- can be met in many metropolitan regions.

Further, this type of selective clearance can permit a desirable alternative to the long process of abandonment and decay, followed by eventual total clearance, as foreseen in the gray areas view. Where the pre-conditions for rebuilding are present, new development can gradually replace deteriorated housing, bringing a steady influx of new population while occupancy of the old housing declines.

The components of this argument are developed and tested in the following chapters, but they can be summarized briefly here.

Use of Declining Areas

Utilization of old residential neighborhoods is closely linked to the migration of low-income people into urban areas. Historically, such migrant groups entering the cities have generally occupied housing that has been abandoned by earlier residents. In the 1950's, record numbers of central city residents moved out to the suburbs, leaving a partial vacuum in the older areas. At the same time, however, record numbers of low-income migrants from the South and from Puerto Rico poured into the urban regions on a scale equal to that of the great European migrations of the past. The new migrants, like their counterparts from Europe fifty years ago, settled largely in old sections of the central cities.

Migration alone did not fill the housing vacuum: minority populations already in the cities expanded significantly, and there was a general reduction of household size among other residents of the central cities. The change in household size reflects in part a rising proportion of small families in the center, and in part an increase in dwelling space for the average family. On balance, most large central cities declined slightly in population in the 1950's, but their housing stock was still well utilized, and vacancy rates were only moderate. Population loss thus had little to do with falling utilization of the housing stock. Instead, it facilitated an upgrading of space standards for many families, and enlarged the supply of housing for expanding low-income groups.

In time, present low-income minority groups will surely vacate the old neighborhoods in their search for better housing. This process is already under way in many areas, but at a rate so slow that it is barely perceptible. Discrimination in the housing market is one factor that seems likely to hold down the pace of decentralization for Negroes and other minorities now concentrated in the central cities, even when their incomes rise. When minorities and other low-income groups eventually vacate the old housing, provided that they are not replaced by future in-migrants, a large part of the old housing stock will be truly abandoned and ready for large-scale clearance. But the present peak rate of low-income migration to the cities, the slow pace of minority group movement from central cities to suburbs, and the high birth rates among minority groups, suggest that few cities will be ready for wholesale clearance within the next decade or two.

Housing in the declining areas is by no means uniformly substandard. Many of the structures no longer conform to predominant middle-class taste, but only a small proportion are seriously deteriorated or lacking in basic facilities. Since the old housing is still very much in demand, any general clearance program would create considerable hardship, unless alternate housing were provided for low-income groups to replace whatever is cleared. Under the circumstances, clearance efforts should logically be limited to a scale consistent with the supply of vacant low-cost housing, and should concentrate on removing only dilapidated or clearly substandard structures. Since the need for low- and moderate-cost housing is likely to persist for some time, public policy should also aim at rehabilitating and conserving the old housing, in order to prolong its usefulness during a period when it will be needed.

Public Policy Alternatives

If clearance is feasible on a limited scale, is there any reason to promote the rebuilding of cleared sites in the near future? One alternative

for public policy is to await the gradual abandonment of declining areas, and to defer rebuilding until depopulation is well advanced and site acquisition costs have fallen to a generally low level. A contrasting policy would be to promote the gradual rebuilding of such areas, clearing old buildings as they deteriorate or become vacant, and replacing them with small parcels of new construction.

The first alternative -- gradual abandonment, followed by ultimate large-scale clearance -- is implicit in the gray area view of the future. This pattern of decline has some highly objectionable features, however. During the long period of abandonment, service costs would be high in relation to the number of people using local facilities. Streets, utilities, and public services would have to be maintained for a dwindling population. New capital investments in schools and environmental improvements would be difficult to justify against other pressing claims on public funds, since the life of many of these facilities would be a short one, geared to the life expectancy of the old housing. In all likelihood, public services would be cut back to minimum levels, despite the needs of remaining low-income people.

In time, high vacancy rates will reduce acquisition costs sufficiently so that large-scale clearance and rebuilding can begin. Yet most areas will be far from completely vacant even at this point; perhaps half the dwelling units will still be occupied. Remaining residents are likely to be those with the greatest attachment to the community. They will have to be relocated, with all the well-known hardships that have already beset large redevelopment projects.

The alternative course of action is to rebuild declining areas gradually, so that new housing develops at the same time that occupancy of the old units declines. This pattern of change avoids the problems of underutilization by supplying an influx of new occupants throughout the transition period. A high level of services can be provided for the total population, while capital investments can be related to new housing as well as old. Further, low-income residents would leave the area at

times of their own choosing. The limited clearance of deteriorated and predominantly vacant structures would displace some people from time to time, but if they wished to remain in the area, they could move into other buildings with a longer useful life. Some old residents might wish to move into the new buildings. Continual rebuilding would also broaden the range of residential choice for new occupants, offering them an opportunity to find new housing and good local services at inner locations formerly occupied entirely by the old residential areas. Finally, gradual rebuilding will promote greater internal variety in an area than complete clearance and rebuilding at one stroke.

In some cases, the physical constraints of gradual rebuilding will run counter to the desired direction of change. When the new function of an area requires a radically different land use pattern, with a complete reorganization of streets and utilities, rebuilding by small sections may prove impractical. Or if the new development is incompatible with housing -- heavy industry, for example -- partial redevelopment would deteriorate the environment still further for remaining residents. In general, the constraints of slow rebuilding will create more complex physical planning problems than a clean sweep, but only rarely are these problems likely to make a gradual approach unworkable. Where no compelling reasons dictate a choice of large-scale clearance, gradual rebuilding offers clear advantages in avoiding the problems of slow decline and subsequent dislocation.

Feasibility of Gradual Rebuilding

A gradual replacement of worn-out housing with new construction may be socially desirable, but is it economically feasible? New construction could take many forms: shopping areas, factories, housing, community facilities. Our analyses are limited to the feasibility of attracting new housing, with the assumption that supporting activities -- shopping, schools, public facilities -- will follow the housing pattern. We thus omit any consideration of industrial development or other forms of

non-residential construction, which may nevertheless replace old housing in some areas.

The feasibility of attracting new housing to old residential areas, as we define it, depends upon two sets of requirements. First, economic pre-conditions must be such that large public subsidies will be unnecessary to market cleared land for new housing. Second, the surrounding environment must be upgraded sufficiently so that it neither obstructs new development nor exercises a blighting influence upon it.

The pre-conditions, then, are twofold: (1) the value of cleared land for new housing must be commensurate with its acquisition cost, and (2) the demand for housing sites must be great enough to utilize all cleared land that is not needed for environmental improvements (schools, public works), within a reasonable number of years.

If these pre-conditions are fulfilled, other problems remain before rebuilding can be accomplished. First, the environment must be brought up to a level high enough to attract residents willing to pay the cost of new housing. Second, cleared areas must be properly integrated with surrounding residential development so that older existing structures do not deter new building or lower its quality. This second set of requirements will call for experimentation with various types of neighborhood plans, involving different proportions of clearance and rehabilitation, and different treatments of the environment.

Current lack of new development in older areas does not necessarily indicate the absence of pre-conditions for rebuilding. Even when an area meets the pre-conditions for attracting new housing, further public action is necessary to create the final conditions for rebuilding.

In many cases, the present stagnation of older areas results from a failure to capitalize upon basically favorable circumstances.

Meeting the final conditions for rebuilding -- upgrading the environment, replanning the neighborhood -- will surely involve sizable outlays of public funds for new community facilities, for assistance in rehabilitation, and for general overhead. These expenditures will bring obvious benefits in terms of improved living conditions and prolonged usefulness for old residential areas. In each locality, these social benefits will have to be weighed against the costs involved, and against alternative welfare policies. Except for a brief glance at cost levels, we shall not analyze the issues involved here in any detail. Our concern is: if environmental improvements are undertaken, can new housing be attracted into declining areas without large additional subsidies?

Influence of Regional Structure

The first pre-condition for attracting new housing -- a balance between site cost and re-use value -- depends in part upon the characteristics of individual metropolitan regions. The structure of a region influences this balance in several ways:

- a. The older areas, which are generally near the center of the region, may or may not derive special advantages from their location. Depending upon the strength and functional significance of the downtown core, the value of inlying housing sites may be considerable.
- b. Alternate vacant sites may or may not be competitive with clearance areas, depending upon their respective locations and the regional transportation system.

- c. The density of existing development, which influences the cost of site acquisition, varies considerably in the old residential areas of different regions, as well as within regions.

Aside from structural influences, regional differences in consumer housing taste, in public acceptance of high densities, and in the cost of new construction also create significant differences in the feasibility of rebuilding declining areas.

New housing can be feasible in the declining areas under many different regional circumstances; no unique combination of factors is required.

Our detailed analyses cover three contrasting regions: New York, Los Angeles, and Hartford. Site costs and potential re-use values for new multifamily housing are roughly in balance in the declining sections of all three central cities. Housing demand need not favor central locations in order to bring land values in line with site costs in central areas. Centrality has little significance in the Los Angeles housing market; yet land costs and potential returns from new housing are commensurate in the aging inner areas of Los Angeles.

A factor of special significance in establishing current relationships between site costs and re-use values is the density of development before and after rebuilding. The density of existing housing in clearance areas has a major effect on land cost, with cost rising in direct relation to density. The density of new housing has a parallel effect in establishing the maximum land price that is feasible for new development: the higher the density, the higher the price that can be paid. When new buildings are developed at higher densities than existing structures on the site, as is generally the case in Los Angeles, the economics of new development permit an easy conversion of old housing to new. When preferences in the housing market dictate a moderate reduction in density, as in parts of New York, such a change may also

be feasible. Only a radical downward break with the densities of the past is likely to create a wide gap between high site costs and low re-use values.

Demand for Multifamily Housing

The second pre-condition for rebuilding calls for a balance between the amount of land to be cleared of deteriorated housing and the amount of land that can be utilized by new housing in the clearance areas. Present land prices for sites that must be cleared of old structures are generally too high to permit the use of the land for single-family homes. Thus the size of the market for new multifamily housing is a basic factor in establishing the rate at which cleared sites can be rebuilt.

Where the total demand for new apartments is small and cannot be increased, the rate of rebuilding must be slow. Alternatives then are either to provide subsidies to counter the high cost of cleared sites and make them available for single-family homes, or to await the eventual abandonment of the declining areas and a fall in their acquisition cost.

Few large cities have so limited a demand for new multifamily housing that a rebuilding of their declining areas is obviously unfeasible on these grounds alone. Only a portion of the new multifamily demand can be attracted to the old areas, however, depending in part upon consumer locational preferences, as well as upon the price of competitive sites and the total cost of developing and operating new housing in the old areas and alternate locations.

To judge how much of this new housing could occupy cleared sites in the declining neighborhoods requires a careful analysis of locational characteristics of the housing market in each metropolitan region. In two of the three regions that we analyze in detail, a sufficient

amount of new multifamily construction could potentially be drawn into the old locations to permit a reasonably rapid replacement of deteriorated housing. At current land consumption rates for such new housing, New York could rebuild its deteriorated areas in nine years, In Los Angeles, fourteen years would be required.

Of the three regions studied in detail, only Hartford would be unable to rebuild its cleared land in a reasonable time. Hartford may be representative of a common situation among small cities where the total current demand for new multifamily housing is quite limited. Even if a significant part of this demand could be satisfied within the declining areas, the pace of land utilization would be slow, and several decades would be required before sites cleared of deteriorated housing could be rebuilt with new construction.

A glance at recent homebuilding in large urban regions indicates that many have the raw material for a rebuilding program in the form of a sizable volume of multifamily housing. In addition to New York and Los Angeles, the metropolitan regions of Chicago, Philadelphia, Washington, San Francisco, San Diego, Atlanta, Miami, Minneapolis, and Seattle all have been building a large number of multifamily units in recent years.² These regions warrant a close examination of locational aspects of their housing markets, to determine the extent to which the new multifamily construction can serve as a basis for rebuilding their deteriorated areas in the near future.

Variations in Public Policy

Public policies for rebuilding can differ considerably in various cities, depending upon the presence or absence of the pre-conditions for attracting new housing to the old residential areas. Where these pre-conditions are weak, as in Hartford, limited action may be possible to strengthen them through the general physical planning of the region.

Changes in regional structure -- the transportation system, the functional importance of the center -- and changes in the regulation of building on competitive sites, may create additional demand for housing locations in the old neighborhoods. Federal action in the fields of housing and tax policy may increase the demand for multi-family housing by altering price relationships between single-family and multifamily housing. Barring such changes, the rebuilding of declining sections in these regions will have to proceed very slowly until such time as land costs fall, or rebuilding will have to be accomplished with the aid of sizable public subsidies.

In the large cities that already meet the pre-conditions for rebuilding, policies can be shaped to accomplish a gradual replacement of deteriorated housing. Public action will have to be taken to create the final conditions for integrating new and old housing. Individual neighborhoods will require many different types of treatment to render their environments satisfactory for new housing, and experimentation will be necessary to develop appropriate planning techniques. The gradual transformation of old areas will not be simple to manage, but with an economic basis assured, public policy can focus increasingly on detailed techniques for initiating and maintaining a steady rebuilding process.

FOOTNOTES

1. The "gray areas" hypothesis is most fully developed in the work of Raymond Vernon cited in Appendix C, but see also the work of Hoyt and Rapkin in Appendix C, and the general interpretations of Paul N. Ylvisaker, "The Deserted City," Journal of the American Institute of Planners, XXV, No. 1 (February 1959), 1-6, and "Opening Minds and Expanding Cities," in Ends and Means of Urban Renewal, Philadelphia, Philadelphia Housing Association, 1961, pp. 7-21.
2. See Gardner F. Derrickson, "Recent Homebuilding Trends in Major Metropolitan Areas," Construction Review, VI, No. 9 (September 1960), 5-10. Of the eleven areas cited, five had more than 15,000 new multifamily units (in 5-or-more family structures) in 1958 and 1959, and the remainder had more than 5,000 new multifamily units in this two-year period.

CHAPTER II

THE USES OF AGING AREAS:

POPULATION LOSSES AND HOUSING GAINS

The use of old housing is intimately bound up with migrations of low-income groups into the city, and migrations of earlier residents out of it. Relationships between migration patterns and the old neighborhoods have become clear enough to take on the status of an urban American tradition. Thus the narrator of a 1960 novel by Philip Roth visits the old Jewish section of a city and finds it now the heart of the Negro area:

The neighborhood had changed: the old Jews like my grandparents had struggled and died, and their offspring had struggled and prospered, and moved further and further west, towards the edge of Newark, then out of it, and up the slope of the Orange Mountains, until they had reached the crest and started down the other side, pouring into Gentile territory as the Scotch-Irish had poured through the Cumberland Gap. Now, in fact, the Negroes were making the same migration, following the steps of the Jews, and those who remained in the Third Ward lived the most squalid of lives and dreamed in their fetid mattresses of the piny smell of Georgia nights.¹

This dual movement of old groups and new provides a source of housing for the newcomer, and a market for the old structures. Currently, both movements are operating at record levels, pumping low-income migrants into the old neighborhoods almost as rapidly as the old residents desert them. Many central cities regard the loss of their former residents to the suburbs as a civic tragedy. Remaining occupants of the old areas, however, as well as the newcomers, have been well served by the great move to the suburbs in the 1950's. For the thinning

out of population in central areas brought with it a gradual improvement of living conditions, with more interior space per person and an easing of the housing shortage of ten years ago.

Still, the improvement has been modest, representing an inching up of housing standards rather than a dramatic rise. In most large cities, the gains of the past decade are tenuous as yet, and could be set back considerably by unwise public policies. Large-scale programs to clear the old residential areas pose a particular threat to the presently improving situation. As the housing market has been operating, the production of new units has barely taken care of new household formation, with just enough of a surplus to create a slight expansion in the general housing supply. If future production maintains the same relationship to growing demand, the destruction of a large number of old units would undo much of this expansion and plunge cities once again into a period of shortage and overcrowding.

To gauge the results of population shifts of the 1950's and their implications for the aging neighborhoods of American cities, we shall look briefly at the recent experience of the ten cities that were largest in the nation in 1950. Following this general survey, we shall investigate in more detail three contrasting urban regions -- New York, Los Angeles, and Hartford -- to examine the nature of their changes in population and the utilization of their housing, and to determine the character of their declining sections. We want to know (1) whether the old housing supply is still useful, (2) whether the new migrants are following close on the heels of their predecessors in leaving the older parts of the cities, and (3) whether new private construction shows any signs of replacing the old structures in these locations.

Migration to the City

The future of declining urban neighborhoods will be determined largely by the flow of low-income migrants to the city. This type of migration

is thus basic to our study of both the national scene and our three selected cities.

The United States is now involved in a migration of historic proportions: the movement of Negroes from the South to the urban areas of the North. In the 1950's, this flow reached a record level, with net migration of nonwhites from the South at 1,457,000.² Some figures on earlier migrations from Europe lend historical perspective here. The great Irish and German migrations of the 1850's each brought less than one million people to the United States in a decade. Peak Jewish migrations from 1900 to the first World War were at the rate of approximately one million per decade, while the Italian migration of 1901-1910 reached two million, but with a considerable backflow occurring simultaneously.³ Thus the scale of the contemporary Negro migration exceeds that of most of the great European migrations of the past.

Nor is this the only low-income migration to the cities at the present time. Net migration from Puerto Rico to the mainland was 430,000 in the 1950's,⁴ and other internal migrations of rural whites to the big cities are as yet uncounted. Taken together, these vast population shifts confront most of our big cities with problems they have not had to face since the early 1900's. Not the least of these problems is the need for providing adequate housing and a suitable living environment for the incoming groups.

Are these migrations temporary phenomena, destined to grind to a halt in the near future? The evidence does not support such an assumption, although the question is certainly a debatable one. Negro and Puerto Rican migrations have been building up steadily for some time. During the 1940's, net nonwhite migration from the South was 1,245,000 -- only slightly less than the 1950's figure. Yet several decades of out-migration from the South and from Puerto Rico have not even begun to exhaust the pool of remaining potential migrants. After years of

exodus, more Negroes remain in the South, and more Puerto Ricans remain on the island, than ever before -- thanks to impressive rates of population increase. Industrial development in the South and in Puerto Rico may well slow the pace of future out-migration, but no sudden downturn is in sight unless economic conditions in the big cities deteriorate.

Further, the new migrants are young, and once settled in the big cities they tend to have large families. Whether or not migration rates drop, recent arrivals and their offspring will swell population pressures on the urban housing stock. If these groups succeed in raising their incomes quickly, they may be able to take care of their increasing housing needs by finding accommodations outside the old residential areas. If the experience of earlier Negro arrivals is repeated, however, the newcomers will be slow to disperse from central cities to suburbs. One study of the twelve largest metropolitan regions has pointed out that nonwhites constituted 3 percent of their combined suburban populations in 1930, and no more than 5 percent in 1960. More strikingly, the proportion of nonwhites has declined in the suburban areas of five of these regions, varied only slightly in six, and increased notably in only one, while the proportion of nonwhites in the central cities mounted steadily.⁵

Large City Experience in the 1950's

Of the country's ten largest cities in 1950, all but Los Angeles lost population from 1950 to 1960, while their metropolitan regions continued to grow. As we have already indicated, 1960 levels in the central cities reflected a notable growth of nonwhite population since 1950, and an equally notable departure of whites to the suburbs. Although this conjunction of nonwhite expansion and white withdrawal may suggest a causal connection, there is probably less in this situation than meets the eye. Middle-class dispersal to the suburbs is a long-standing trend that has proceeded rapidly in the 1950's even in such cities as Minneapolis, where the nonwhite population is small.

Similarly, the abandonment of housing formerly occupied by whites seems to have no major attractive force in drawing Negroes to particular cities: cities with tight housing supplies, such as New York, nevertheless draw large numbers of migrants who live in overcrowded single rooms.

For the nine cities that lost population, white out-migration was slightly greater than nonwhite population growth. Population losses were relatively small, however, ranging from below 5 percent in six of the cities up to 13 percent in Boston (see Table II-1).

Nonwhite population, on the other hand, showed sizable rates of increase, from 40 to 70 percent in most cases, but as much as 97 percent in Los Angeles. Rates of this magnitude reflect heavy in-migration, as well as rapid natural increase among nonwhite families already in the cities by 1950.

What have these population shifts meant for the utilization of housing? Despite the large influx of nonwhites, housing conditions improved generally, but the improvement was only a limited one. In 1950, residential space was in short supply in all these cities. Gross vacancy rates (including substandard units) were all below 3 percent, except in Los Angeles (Table II-2). Net rates of sound vacant units were all far below 2 percent, except again for the Los Angeles rate of 2.7 percent.

By 1960, vacancy rates were beginning to reach the 5 percent level that housing economists have long considered the desirable minimum to facilitate normal turnover and reasonable residential mobility. The significant measure of vacancies is the proportion of sound housing units available for rent or sale. In terms of this measure, only two cities -- Los Angeles and Detroit -- achieved a satisfactory level by 1960, but the rest came up significantly since 1950. New York

TABLE II-1

Population Changes, 1950-1960, in Ten Largest Cities of 1950

	<u>Total Population 1950</u>	<u>Percent Change 1950-1960</u>	<u>Nonwhite Population 1950</u>	<u>Percent Change 1950-1960</u>
New York	7,891,957	- 1.4	775,516	+47.2
Chicago	3,620,962	- 1.9	509,437	+64.4
Philadelphia	2,071,605	- 3.3	378,968	+41.2
Los Angeles	1,970,358	+25.8	211,585	+97.2
Detroit	1,849,568	- 9.7	303,721	+60.4
Baltimore	949,708	- 1.1	226,053	+45.3
Cleveland	914,808	- 4.2	149,544	+69.3
St. Louis	856,796	-12.5	154,448	+39.9
Washington	802,178	- 4.8	284,313	+47.3
Boston	801,444	-13.0	42,744	+60.2

Source: Calculated from U. S. Census of Population: 1950, Vol. II, Characteristics of the Population, Part 1, United States Summary, 1953, Table 86; U. S. Census of Population: 1960, General Population Characteristics, Final Report PC(1) series, 1961, volumes for each state, Table 20; U. S. Census of Population: 1960, Supplementary Reports PC (S1)-7, "Rank of Cities of 100,000 or More: 1960," June 16, 1961.

TABLE II-2

Selected Housing Characteristics, 1950-1960, in Ten Largest Cities of 1950

	Non-Seasonal Dwelling Units 1950	Percent Vacant 1950	Non-Seasonal Housing Units 1960	Percent Vacant 1960	Percent of Non-Seasonal Units Vacant & Available in Sound Condition		Number & Percent of Non-Seasonal Units With 1.01 or More Occupants Per Room			
					1950	1960	1950		1960	
							Number	Per- cent	Number	Per- cent
New York	2,406,169	1.8	2,735,272	3.0	1.1	2.0	386,167	16.7	325,060	12.2
Chicago	1,105,692	1.5	1,212,264	4.5	0.8	3.7	163,007	15.2	not available	
Philadelphia	599,126	2.3	647,914	5.0	1.3	3.4	56,405	9.8	45,206	7.3
Los Angeles	697,620	4.2	933,354	6.1	2.7	4.9	65,822	10.0	72,007	8.2
Detroit	521,988	1.7	552,050	6.7	1.0	5.6	51,787	10.2	not available	
Baltimore	277,527	3.1	289,734	4.9	1.8	3.7	31,675	12.0	29,010	10.5
Cleveland	270,846	1.6	282,358	4.4	0.9	3.4	26,645	10.1	27,686	9.8
St. Louis	262,873	1.7	262,383	5.2	0.7	3.8	53,521	20.4	40,842	16.4
Washington	229,609	2.0	262,287	3.9	1.2	3.0	31,035	14.1	31,157	12.4
Boston	221,974	1.7	237,596	5.5	0.9	3.9	27,261	12.7	17,956	8.0

Source: Calculated from U. S. Census of Housing: 1950, Vol. I, General Characteristics, Part 1: U. S. Summary, 1953, Tables 27, 29; U. S. Census of Housing: 1960, Advance Reports, Housing Characteristics: States, HC(A1), Table 1; U. S. Census of Housing: 1960, Vol. III, City Blocks, Series HC(3), 1961, Table 1.

Units classified as vacant and available in sound condition are year-round, non-dilapidated units available for rent or sale.

continued to have a tight supply, with only 2 percent vacant, but the others all reached 3 percent or more. In no case did vacancy levels climb enough to suggest a real surplus of housing.

Still another test of the adequacy of the supply is the number of persons per room in occupied housing units. Table II-2 presents comparative information for 1950 and 1960 on the number of units with more than one person per room. In every city for which we have information, the proportion of units with more than one person per room declined from 1950 to 1960. From a social welfare point of view, city housing policies should aim at a reduction in the absolute extent of overcrowding. Of the eight cities for which information is available, five had fewer units with more than one person per room in 1960 than in 1950, one had about the same number, and two had an increase in absolute number.

This test requires qualification, however. As a result of changes in the types of units enumerated, many single-room quarters were counted in 1960 but not in 1950. In cities where a considerable number of families live in one-room units, as in New York, 1950 figures understate the extent of overcrowding. Consequently, the 1950-1960 increase in residential space per person was probably somewhat greater in a number of large cities than our data show.

Extent of Improvement

On balance, the improvement in housing conditions is clearly noticeable but probably limited. Further, we do not know how the gains were divided among various groups in the population. Only a portion of the vacant housing consists of low-cost units that new migrants can afford. As we shall see in our closer look at New York, vacancy rates are considerably higher in new and expensive apartments than in the old stock. Similarly, the reduction of internal crowding may reflect gains for middle-income residents rather than low-income groups. Nationally,

Negroes are better off in terms of housing now than in 1950, but they are still far behind the white population. In 1960, only 43 percent of units occupied by nonwhites were classified as sound with all plumbing facilities, while 73 percent of white-occupied units met these standards.⁶

Thus the gains of the 1950's offer few grounds for complacency, but they do offer hope for further improvement. As far as we can tell from this quick survey of ten large cities, the old housing stock remains almost fully utilized and continues to serve valuable social purposes. Operations of the housing market in the 1950's have provided some expansion of the supply of residential space relative to population pressure, but unless increasing volumes of new construction accelerate the abandonment of more old housing, the time is not yet ripe for large-scale clearance.

If the housing market maintains the same relationship of new construction to new population pressure that prevailed in the 1950's, large-scale clearance of old housing would begin to wipe out recent improvements in housing conditions. Only Los Angeles and Detroit appear to be in a position where rebuilding may be possible without lowering housing standards, and even here the situation is somewhat doubtful. Los Angeles has a favorable vacancy rate, but the number of units with more than one person per room increased from 1950 to 1960.

Without the departure of many former residents from the central cities, it is clear that there could have been no real improvement of housing conditions from 1950 to 1960. Despite the fears of many cities about losing their middle-class elements, and despite their inclination to regard population decline as an unfavorable omen, both these developments have been necessary in order to achieve vacancy levels approaching desirable standards, and to relieve residential crowding. Unless the patterns of population movement and housing development change considerably in the

future, large cities will have to continue losing population if they are to provide decent living conditions for the migrant groups of the mid-twentieth century.

Three Contrasting Regions

Three metropolitan regions will serve as test cases for detailed study: New York, Los Angeles, and Hartford. These areas cover a wide range of characteristics. The New York region is old and intensively developed, by American standards. Los Angeles is new and sprawling, Hartford old and relatively compact. But we are not concerned with these differences solely as random illustrations of the variety to be found in American urban regions. Our concern is with the declining sections of these regions, their changing utilization and their prospects for rebuilding.

The three study areas illustrate contrasts in a number of structural features that relate in theory to the demand for new housing in central locations -- the locations now being abandoned in the push to the suburbs. We review the body of theoretical literature on this subject in Appendix C, and we shall detail the relevant characteristics of our three study areas when we consider their markets for new housing in the following chapter. Briefly, structural features of major interest are the strength of the downtown core and the access advantages of declining locations over competitive vacant sites for new housing.

New York is a center-oriented region with a strong core, Los Angeles an extremely decentralized region. Hartford has a moderately strong core, but a large supply of vacant land highly accessible to the center.

These contrasting regions all have their declining sections, differing in extent but similar in many ways. All are characterized by central location, a concentration of old housing, the thinning out of former residents, and a rapid growth of low-income groups. Further, all these sections are still well utilized, and their new low-income occupants show few signs of joining the march to the suburbs in the near

future. Declining areas in our three regions display varying ability to attract new housing, but we shall postpone judgment of their prospects for rebuilding until we analyze the economics of new construction in a later chapter.

New York Region: Population Shifts

The decade from 1950 to 1960 was one of profound change for the New York metropolitan region. The major central cities -- New York, Newark, Jersey City -- all lost population, but total population movements were far greater than their relatively small losses suggest. Appendix A presents detailed statistical information on changes in population and housing for all three study regions. Data cited there indicate a combined drop of 166,000 from a 1950 population of 8,600,000 in the central cities of the New York region, or a loss of 1.9 percent. When we analyze the population change separately for whites and nonwhites, a more striking picture of massive residential shifts becomes clear. The three boroughs of New York City that lost population -- Manhattan, the Bronx, and Brooklyn -- plus the declining cities of Newark and Jersey City, lost a total of almost 600,000 whites in ten years, and even this figure understates the total departure of former residents.

A wave of Puerto Rican immigration into central parts of the New York region does not register separately in these statistics, since most Puerto Ricans are enumerated within the totals for white population. The three declining boroughs of New York City, plus Newark and Jersey City, had 443,000 more Puerto Ricans in 1960 than in 1950.⁷ Thus the loss of non-Puerto Rican whites was well over a million in this ten year period.

Net out-migration was still greater than this loss of white population, since a factor of natural increase is also involved here. Estimates for the City of New York place net out-migration of non-Puerto Rican whites at 1,294,000 for the 1950-1960 period. The reverse flow was far smaller, consisting of a net in-migration of 163,000 nonwhites and

274,000 Puerto Ricans. High rates of natural increase accounted for additional gains of 188,000 nonwhites and 157,000 Puerto Ricans in the City, while natural increase among whites partially countered their huge out-migration. On balance, New York City lost 892,000 non-Puerto Rican whites, and gained 782,000 nonwhites and Puerto Ricans, for a net loss of 110,000.

Can we expect a rapid dispersal of Negroes and Puerto Ricans from the central locations they now occupy? Relative diffusion of the Negro population has been under way for some time⁸ and a similar pattern is detectable among Puerto Ricans, but two qualifications are important. First, the decentralization has been solely relative, with Negro and Puerto Rican populations continuing to grow in absolute terms in all central areas. Second, even the relative dispersal has been proceeding at a glacier-like pace, except for shifts within the central cities themselves.

Appendix Table A-1.3 depicts the regional decentralization of Negroes from 1950 to 1960. Manhattan's share of the regional total dropped markedly from 37.9 percent to 25.5 percent, while New York City outside Manhattan increased its proportion of the total from 35.8 to 44.4 percent, and the two New Jersey cities also registered proportional increases. According to migration estimates, Manhattan even had a net out-migration of 40,000 nonwhites. But the proportional decentralization has not yet been reflected in absolute numbers: Manhattan and the remainder of the central cities all gained in Negro population. And the position of the central cities relative to the entire region barely changed at all, moving from 83.2 percent of total regional Negro population in 1950 to 81.1 percent in 1960.

Information on the Puerto Rican population is not available at the regional level, but relative shifts from Manhattan to the Bronx and Brooklyn seem to be under way. Between 1956 and 1960, Manhattan's share of total Puerto Rican enrollment in New York City schools fell

from 43.4 to 36.9 percent, while the Bronx and Brooklyn gained correspondingly (Table A-1.4). Once again, the shift was purely relative, however, for Puerto Rican school enrollment increased in Manhattan during this period.

These limited decentralization tendencies within the low-income minority groups suggest that the old central areas are not the inevitable locations for an expanding Negro and Puerto Rican population. Yet the limited scope of recent decentralization also suggests that, in the near future, prospects for a further depopulation of the declining areas will depend primarily upon the continuing dispersal of white, non-Puerto Rican residents.

Population and Housing Demand in the New York Region

The housing demand that a given population generates depends directly upon its organization into households. With adequate earning power for each household to afford a separate dwelling unit, the more households in a population, the more dwelling units it will occupy. Changing population totals do not in themselves indicate even the direction of change in housing units required. When population declines, a shift to smaller average household sizes can nevertheless produce a demand for increased housing resources. This has been the experience of areas losing population in the New York region.

White and nonwhite components of the population generate very different housing demands in the New York area. Appendix Table A-1.5 illuminates some of the significant differences between the two populations. The white population is an older one, with a smaller proportion below the age of 18 and a greater proportion aged 65 and over in the region at large, and in the central city areas of population loss. Differences between the two racial groups have become more pronounced from 1950 to 1960, with notable increases in the proportion of nonwhites under 18 and the proportion of whites 65 and over. In addition, the

white population of the central cities has become more divergent from the white population in the region at large during the 1950's , with a substantially smaller proportion under 18 and a larger proportion 65 and over.

These age differences suggest that the white population will consist of smaller families than the nonwhite: families with children will have, on the average, fewer children per family, and the great number of people 65 and over will account for more childless families and single individuals. We can guess from these statistics that for a given population, whites will generate a greater demand for dwelling units than will nonwhites in the central cities. Evidence from the 1960 Housing Census points clearly to this conclusion: average population per housing unit is significantly lower for the white population than for the nonwhite population in all the central cities (Table A-1.6).

Although the central cities declined substantially in white population from 1950 to 1960, those whites who remained were particularly voracious users of housing. The new nonwhite population generated less demand for housing in relation to its numbers. What was the composite result in terms of housing demand? Dwelling unit comparisons for 1950 and 1960 are difficult to make, since the U. S. Census definition of a dwelling unit changed in the interim, but we have information for New York City (Table A-1.7) that uses the 1950 definition for both years. The number of dwelling units increased in Manhattan, the Bronx, and Brooklyn, while total population decreased. Average population per dwelling unit consequently fell sharply. The implication that average household size must have fallen, too, is consistent with the long-term reduction in household size that has continued steadily in New York since the end of the 19th century.⁹

We have noted several factors suggesting a high level of housing demand despite the loss of population in central cities of the New York

region: small family sizes among the remaining white population, and a decrease in population per dwelling unit in Manhattan, the Bronx, and Brooklyn. The only sure gauge of the extent to which the housing supply continues to be utilized is the proportion of vacant units. Information for 1960 (Table A-1.8) reflects the new and broader definition of housing units. The New York region outside the central cities had a vacancy rate of 3.7 percent in 1960. The central cities had lower vacancy rates, except for Newark with its rate of 5.2 percent.

These rates include vacant units in substandard condition. More to the point for determining whether the declining areas are ready for clearance is the amount of unutilized housing in sound condition that can be used for relocating displaced people. The vacancy reserve of sound units is much lower (Table A-1.9); in Brooklyn and the Bronx it has increased only slightly since 1950.

Further, only part of this reserve consists of low-cost units within the means of low-income families. The Manhattan vacancy reserve of 2.5 percent undoubtedly includes many apartments in new luxury buildings not yet fully rented at the time of the 1960 Census. Numerous surveys in Manhattan have shown higher vacancy rates in new buildings than in old. Surveys of vacancies in old-law tenements (built before 1901) have indicated a decline from 16 percent in 1944 to 0.1 percent in 1954.¹⁰ Additional evidence of a severe shortage of low-cost housing in New York appears in the experience of families receiving City welfare aid and housed in single furnished rooms: of 14,000 families in this category in 1960, 10,000 paid rents ranging from \$60 to \$200 per month for "essentially slum accommodations".¹¹

With the possible exception of Newark, the declining sections of the New York region appear still to be heavily utilized as residential areas. As of 1960, the void left by families moving to the suburbs

was well filled, and the slowness of low-income minorities to decentralize promises to maintain a steady demand for the old housing for some time to come.

Vitality of New York's Declining Areas

Why have New York's declining areas remained so fully occupied? Their high degree of occupancy is particularly striking in view of the age and deterioration of much of the housing stock. More than one-third of the non-transient dwelling units in Manhattan in 1960 were in old-law tenements built before 1901; 20 percent of the non-transient units in Brooklyn and 7 percent of those in the Bronx in 1960 were also old-law tenements. In New York City as a whole, 16 percent of the housing units were classified as deteriorating or dilapidated in the 1960 Housing Census. Substandard conditions were still more evident in the other central cities, with 29 percent of the housing units in Newark and 19 percent of those in Jersey City deteriorating or dilapidated.¹²

One reason for the continued utilization of old housing in New York is that, as we have observed in most big cities, the old units have made possible a raising of housing standards. Vacancy reserves are still low in New York, but overcrowding has been reduced notably since 1950. Units with more than one occupant per room have declined in absolute number, as well as in proportion to total housing in all central cities of the region (Table A-1.9). In this sense, intense utilization of the old areas reflects a general desire for more residential space, and reflects also the failure of the housing market to provide alternate low-cost housing capable of meeting this need.

Beyond this typical situation for big cities, New York has some special characteristics that promote continued use of the central areas. Rent control is one of these special factors. In New York

City, rents are still controlled by law in apartments completed before the end of World War II. Rent levels in controlled apartments are substantially lower than those in typical postwar units. The effects are likely to be twofold: encouraging people to remain in old central housing rather than move to the suburbs, and encouraging older couples who no longer need large apartments to hold them rather than look for expensive smaller apartments in new buildings. Both effects help account for the continuing utilization of housing in the declining areas.

Other special influences may derive from the metropolitan structure that led us to choose New York as a region to study. Although we expect this structure to produce more clear-cut effects in the market for new housing, it is likely also to influence the utilization of older housing. The New York region exemplifies a structure that is theoretically highly favorable for inlying housing: the core is a powerful magnet, and vacant sites for new development are far removed from the center. These factors can make old housing in central areas more attractive than it would be in a region with a weaker core or with highly accessible vacant land. This situation contains elements of great danger for the rebuilding of inlying areas. If a regional structure that creates demand for new central housing also prolongs the life of older central structures, acquisition costs may rise to levels that block rebuilding.

Rebuilding the Declining Areas

We shall postpone a full consideration of prospects for rebuilding the old areas for later chapters, but a few observations are in order here. Areas that have declined in population cover a large part of the central cities. Tabulations for small statistical districts in New York City indicate that declining areas blanket all of Manhattan, large parts of Brooklyn and the Bronx, and the inner parts of Queens.¹³ These sections differ considerably in a number of ways. Some are occupied by old-law tenements with densities exceeding 250 dwelling

units per acre of residential land, others by brownstones at lower densities, and still others in Brooklyn, the Bronx, and Queens by small structures with densities ranging from 20 to 100 units per acre. Some, in and near Manhattan, have obvious access advantages to the central business district; others, in the mid-Bronx and Brooklyn, involve fairly long trips to the core. Some have high proportions of deteriorated housing, and some have such major social problems as juvenile delinquency and broken families.

All these characteristics play a part in determining the attractiveness of such areas for new housing. The greater the access advantages, the better the surrounding environment, the fewer the social problems -- the more attractive these areas are likely to seem to developers of new housing.

How much new construction went into these areas in the 1950's? Newark and Jersey City had relatively little new housing -- 6,500 private units and 9,000 units of public housing -- but new construction boomed in New York City (Table A-1.10). The declining boroughs of Manhattan, the Bronx, and Brooklyn together attracted 136,000 new units of private housing, while public construction added another 60,000 units.

This new private housing is not spread evenly throughout the declining areas. In Brooklyn and the Bronx, much of the new construction is not in declining sections, but in newer areas farther out where the surrounding environment is in better condition. Similarly, many new private apartment buildings in Manhattan are in "desirable" locations, on streets where adjoining buildings are in good condition. Newark and Jersey City have fewer desirable sections where new housing can locate. Although publicly sponsored renewal programs could conceivably alter the situation in the New Jersey cities, their present lack of good environments may have had much to do with their small volume of new private construction in the 1950's.

At typical densities for new development in the three declining boroughs of New York City, new private construction in the 1950's covered some 700 acres of net residential land. Had this construction been integrated into plans for rebuilding old housing, it would have constituted a basis for extensive renewal. We estimate the total land area occupied by deteriorated housing in New York as 1145 acres (Appendix B), using a definition that limits deteriorated housing to structures that are in dilapidated condition or are deteriorating and lacking in plumbing facilities. Thus the volume of new private construction in the 1950's might have served as a basis for clearing 60 percent of the land now occupied by deteriorated structures, if the new development could have been induced to use these sites rather than alternate locations.

Public housing construction in the 1950's occupied an estimated 700 additional acres of net residential land in Manhattan, the Bronx, and Brooklyn. New public and private housing together utilized considerably more land than the total area now covered by deteriorated housing in these three boroughs.

We reserve for later analysis the question of how much new private housing can conceivably be attracted to sites cleared of deteriorated structures. Even this brief look at new construction suggests, however, that the demand for housing sites located in the declining boroughs of New York is at a high level, and that population losses from these boroughs do not indicate a drying up of the demand for new housing, provided that suitable environments are available for new construction.

Los Angeles Region: Population Shifts

Los Angeles has not experienced the spectacular population shifts of New York in the 1950's, but similar changes at a smaller scale have created areas of decline even in this newer, more dynamic region.

Changes in the Los Angeles area are more difficult to chart, since the sprawling City of Los Angeles contains rapidly growing sections as well as declining ones. Thus the central city as a whole continued to expand in the 1950's, but we can detect traces of the declining area syndrome as we have found it in New York. Central city growth was small in comparison with growth elsewhere in the region: population increased 25.8 percent in the City of Los Angeles and 77.8 percent in the rest of the region. Within the central city, nonwhite population almost doubled, while white population increased only 17.2 percent (Appendix Tables A-2.1, A-2.2).

Areas of population loss were concentrated in a zone surrounding downtown Los Angeles and extending to the north and northeast. The Los Angeles County Regional Planning Commission compiles data for thirty-five statistical areas comprising the County. The three statistical areas that lost population from 1950 to 1960 constitute this central zone; their location is described in Table A-2.7. Total population loss in the three areas from 1950 to 1960 was 66,000, or about 12 percent of the 1950 total.

As in New York, the components of population change in these loss areas were a net increase in minority group population, and a larger net decrease in whites of native American background. The three statistical areas consist of eleven communities in the City of Los Angeles and three in unincorporated territory of the County; some population information is available for the eleven City communities. Seven of these had substantial minority-group populations in 1950, with Negroes, other non-whites, and Mexican-Americans constituting more than 20 percent of their population. In three of the seven cases, minority groups accounted for more than 50 percent of the total population. No information is available for the Mexican-American population since 1950, but nonwhites registered gains in almost all these communities since 1950, while total population declined.¹⁴

The major expansion of nonwhite population has not been in these communities, however. Other parts of central Los Angeles have attracted far greater numbers of nonwhites in the past decade. Exposition Park, Green Meadows, and West Adams have all experienced more significant absolute growth in the nonwhite population. These other central communities would have been counted among the declining areas if not for their large gains in minority population.

In Los Angeles, as in New York, decentralization of minority groups was negligible in the 1950's. The City of Los Angeles accounted for a slightly smaller share of the region's total Negro and Japanese population in 1960 than in 1950, but both groups doubled in absolute size within the City during this time.

Population and Housing Demand in the Los Angeles Region

For insight into the utilization of loss area housing, we must examine age and household characteristics of the population. The nonwhite population is younger than the white, both in the City of Los Angeles and in the metropolitan region (Table A-2.5). A greater proportion of nonwhites than whites were under 18 years of age in both 1950 and 1960, and a smaller proportion were 65 or over. For both racial groups, the City population was older than that of the region at large in both Census years. Thus the City population of both groups is likely to generate a greater demand for housing, in relation to its size, than the population of the region at large: fewer children per household, and a greater proportion of childless older people suggest a demand for more dwelling units among an older population than among a younger one. As in New York, the white central city population is likely to be a particularly great consumer of housing, with a significantly higher proportion of old people and a lower proportion of children than the nonwhites.

Data on housing units occupied by the two racial groups in 1960 confirm these expectations. Average population per housing unit was notably lower for whites (2.76) than for nonwhites (3.21) in the City of Los Angeles. Within the areas of population loss, we have comparable housing information for both 1950 and 1960, using the 1950 definition of a dwelling unit, but without a breakdown according to race. The composite population per dwelling unit fell in all three statistical areas during the 1950's (Table A-2.7). The extent of this decline was less than in New York, however, and the housing supply changed differently. In New York City's declining areas, pressure for additional housing was sufficient to bring about a net increase in dwelling units despite the loss of population, while both dwelling units and population declined in two of the three Los Angeles areas.

What do these population characteristics mean for the utilization of housing in the declining areas? Central city housing was utilized less fully in Los Angeles than in New York in 1960; gross vacancy rates were 6.1 percent in the City of Los Angeles and 3.0 percent in the City of New York. But housing in the declining areas is more fully utilized than housing elsewhere in the City. City Planning Department estimates for the eleven declining communities indicate a vacancy rate of 4.7 percent as of October 1960, compared with a rate of 5.4 percent for the rest of the City.¹⁵ These vacancy figures include substandard units. Vacancy rates for sound units are somewhat lower (4.9 percent for the entire City), so that Los Angeles has probably not yet achieved a satisfactory vacancy surplus for starting large-scale clearance of its old areas.

Information on residential crowding also suggests that the removal of old low-cost housing would be premature under present circumstances. Between 1950 and 1960, the number of units with more than one occupant per room increased by 11 percent. This increase, in the face of rising vacancy rates over the same period, probably indicates that vacant units are largely in the high-cost brackets, and

that low-cost housing is still in short supply. Housing in the declining areas of Los Angeles thus retains considerable social value, according to all the evidence we can muster, but the situation is not one of extreme housing shortage, as in New York. If present trends continue, Los Angeles will have a surplus of old housing ready for replacement long before New York.

Prospects for Rebuilding in Los Angeles

The declining sections of Los Angeles are not as diverse in character as those in New York. Like their counterparts in New York, they are centrally located, but they do not extend out as far from the core. Densities of existing housing are more homogeneous, with single-family homes on small lots the predominant type of development. Net residential densities are mostly 8 to 10 units per acre, while declining areas in New York range from more than 250 units per acre in parts of Manhattan to less than 50 in parts of Queens.

Whether these characteristics will facilitate the rebuilding of declining areas in Los Angeles remains to be seen. Their central location is likely to count for less in the housing market than central locations in New York, since the core of Los Angeles is less important functionally than the core of Manhattan. On the other hand, low densities of existing development are likely to mean low site acquisition costs. We shall investigate the implications of both these factors in later chapters, but a preliminary look at new construction trends in the declining areas furnishes some insight into prospects for rebuilding.

Information on new residential construction is not directly available for Los Angeles areas of decline, but data on net changes in the number of dwelling units suggest a fair amount of building activity. Eight of the eleven communities had net increases in dwelling units from 1956 through 1960, with a total increase of 3,284 units.¹⁶ This net increase takes account of conversions as well as new construction, minus mergers and demolitions; it consists entirely of

private housing. Total new construction probably exceeds the net increase in dwelling units, since a number of units have been demolished for non-residential development and freeway construction in these areas. Detailed information for the Westlake section just outside downtown Los Angeles shows 1,914 new units (including conversions) constructed from 1955 through 1960, 1,728 demolitions, and a resulting net increase of 186 units.¹⁷

The performance of Los Angeles' declining areas is not in the same class as New York's building boom of the 1950's, but it does indicate continuing interest in these areas on the part of developers. At typical densities for new construction in this part of the region, 4,000 new units would occupy a net land area of some 80 acres. We estimate the total land area occupied by deteriorated housing in the City of Los Angeles as 2,755 acres (Appendix B), but much of this land lies outside the declining sections. Still, it is clear that rebuilding blighted housing in the declining areas will require attracting new development that now locates elsewhere in the region. The extent to which new development can be attracted into these areas is the subject of our next two chapters.

Population and Housing Changes in the Hartford Region

The Hartford region presents a clear-cut case of population loss coupled with racial change in the central city, and substantial population growth in the suburbs. Central city shifts in population from 1950 to 1960 closely parallel those we have found in the central areas of New York and Los Angeles: a net loss of 28,000 whites was partly balanced by a net increase of 12,000 nonwhites, with the difference constituting a net loss for the City of Hartford. Despite a doubling of the nonwhite population in the central city from 1950 to 1960, the Negro minority showed weak signs of a relative decentralization. The City of Hartford had a somewhat smaller share of the region's Negro population in 1960 than it had in 1950, but even in relative terms the dispersal was minor (Table A-3.3).

In terms of numbers alone, minority group expansion failed to fill the gap created by a declining white population in Hartford. Once again, however, we must look into population characteristics for insight into the utilization of housing in the declining areas. The gulf between white central city occupants and the total white population widened significantly, with fewer children and more old people in the center than in the region at large in both 1950 and 1960, but with greater differentiation of the central city population from that of the total region in 1960 than in 1950 at both ends of the age distribution. Age differences between whites and nonwhites in the central city also sharpened between 1950 and 1960, with a significantly higher proportion of nonwhites under 18 and whites over 65 in 1960 than in 1950. If we consider the white population of the central city alone, it expanded faster in terms of old people than in terms of children.

From these different perspectives, the view is the same: whites remaining in the central city in 1960 were likely to be heavy consumers of dwelling units, while nonwhites were likely to consist of larger households generating proportionately less demand for separate units.

Data on white and nonwhite population per dwelling unit confirm these expectations (Table A-3.5). The difference in average population per dwelling unit -- 2.87 for whites and 3.67 for nonwhites -- represents the widest gulf we have found so far in the declining areas of our study regions. Average white household size is well within the range we found in other loss areas, but nonwhite household size is at the upper end of our range. The particularly large nonwhite population expansion, which fell short of filling the population void left by departing whites, also failed to fill the housing void.

Vacancy rates in the Hartford region point to the same conclusion. Hartford had a surplus of housing in relation to the rest of its region;

New York City, in comparison, had a lower vacancy rate than the rest of its region. Yet the absolute gross vacancy level in Hartford was a moderate one (5.1 percent), falling between the levels that prevailed in New York and in Los Angeles in 1960.

According to the indicators of housing utilization, Hartford made real progress in raising housing standards from 1950 to 1960, and, like Los Angeles, is now approaching a situation where clearance and replacement of old units may soon be justifiable in social terms. The net vacancy rate for sound housing units was 4.1 percent in 1960, and the number of units with more than one occupant per room declined significantly since 1950. So far, the old housing is still well utilized, but population pressure on the housing supply is clearly easing in Hartford.

New Construction in Hartford's Declining Areas

Declining sections of Hartford consist primarily of low multifamily structures, with densities of 15 to 20 units per net acre. As in the other cities, the declining areas are centrally located, and some consist of neighborhoods currently being abandoned by distinct ethnic groups remaining from earlier migrations. One large area of decline in Hartford was formerly an Italian section, but Italian residents are now on the move to better housing elsewhere in the region. The value of the central location of declining parts of Hartford, and the significance of their existing densities, will be explored in later chapters dealing with the feasibility of developing new housing in the old areas.

New construction during the 1950's does not depict a promising picture for the future rebuilding of Hartford. Advance tract information from the 1960 Housing Census reported a total of 57,625 housing units in the City of Hartford, an increase of 5,196 over the number of dwelling units counted in the 1950 Census. Within the City of Hartford,

several outlying tracts gained population during this period. If we exclude housing units in these tracts, the net increase in housing units for City areas of population loss totaled 2,656 from 1950 to 1960.¹⁸ Part of this increase reflects the change in Census definition from "dwelling unit" to "housing unit", but the bulk of it represents new private housing.

At typical new construction densities for the old areas, 2,000 new units would use about 40 acres of land. Our estimate of land area now occupied by deteriorated housing in Hartford is 185 acres (Appendix B). Once again, if land cleared of substandard housing in the declining areas is to be absorbed by new construction in a reasonable period of time, new housing will have to be diverted from alternate locations in the region. Whether the pace of new construction in the old areas can be accelerated in this way is the subject of the following chapters.

The Three Study Areas: General Findings

The declining areas of New York, Los Angeles, and Hartford all show signs of life, both in utilizing existing housing and in attracting new housing. We set out in this chapter to look into the question of whether old housing in these areas is still in demand, whether new groups of users have appeared to take the place of former residents leaving the central cities. The old housing is indeed still needed in all three study areas. In the declining parts of New York City, the 1960 situation was essentially one of housing shortage. Only the New Jersey central cities of the region showed signs of under-utilization of the housing stock. Los Angeles and Hartford exhibited more excess capacity in the housing stock of their declining areas, but their vacancy rates were moderate and suggest no massive abandonment of the central city in either region. We shall investigate economic implications of these vacancy levels in Chapter IV, when we analyze information on site acquisition costs in the declining areas. Social

implications are already clear: the old housing is decidedly useful, and has made possible an improvement in living conditions in all three cities during the 1950's.

Although we shall not take on the task of explaining present occupancy characteristics of the declining areas, we can venture some opinions on the reasons for our contrasting findings in New York and in the other regions. Housing condition seems to have little to do with the results. If housing quality were a guide, we should expect to find much higher vacancy levels in New York than in Los Angeles or Hartford. More than 15 percent of the housing units in New York City were classified as deteriorating or dilapidated in the 1960 Housing Census; in Hartford, 9.3 percent of the units were so classified, and in Los Angeles, 8.8 percent.¹⁹ Vacancy rates, as we have seen, were in reverse order: 6.1 percent in Los Angeles, 5.1 percent in Hartford, and 3.0 percent in New York.

A variety of individual factors can operate significantly in determining the extent of demand for centrally located housing. Rent control in New York City plays a part in slowing decentralization, age and income distributions and household characteristics condition the demand for dwelling units, the extent of in-migration of low-income people conditions the size of the market for blighted housing. Yet with all these influences, the structure of the region may also play a part in creating demand for central housing. New York, with its strong central concentration of employment and its lack of vacant land for development near the center, is our chosen example of a region that should theoretically have a center-oriented market for new housing. Inasmuch as old housing is a substitute for new, whatever center-orientation exists may appear in the market for older central housing, as well.

In addition to checking on the utilization of existing housing, we have also taken a look at decentralization tendencies among new migrant groups in the cities. Slight proportional changes in the central concentration of these groups were noticeable in all three areas, but even in this relative sense the dispersal has been very slow. In

absolute numbers, minority groups expanded significantly in the declining areas between 1950 and 1960. If recent trends are a guide to the future, these newcomers will continue to maintain a demand for the old housing in declining areas, but it is possible that the continued dispersal of other residents will create some surplus of old housing. To a limited extent, a surplus has already developed in Los Angeles and Hartford. So far, this surplus is desirable to retain as a vacancy reserve to facilitate normal turnover and mobility in the housing market. Within the near future, however, Los Angeles and Hartford may be in a position to start clearing their old housing. For New York, this time lies further in the future, but the eventual development of a housing surplus can be foreseen even in New York.

As a rough guide to prospects for rebuilding the areas of population loss, we have looked at new residential development of the 1950's. In all three study areas, we have found some new development in declining sections, but our findings do not indicate that a rebirth of these areas is under way. New development does not penetrate the old areas evenly in any region. Even the building boom in New York has bypassed some inlying areas, and the more limited new development in Los Angeles and Hartford is by no means distributed equally among the various declining sections.

The significance of this new construction is that central locations still attract some residential development, even while the general movement of population proceeds outward from the center. Though some parts of the declining areas receive no new housing, these areas on the whole are not stagnant. In the following chapter we shall look more closely into locational patterns of the demand for new housing in each of these regions, to determine the extent to which the generally central location of the old areas constitutes an asset in the housing market. The insights of this phase of the study will help us to judge what market advantages such areas offer for new housing in each of our regions.

FOOTNOTES

1. Philip Roth, Goodbye, Columbus, New York, Meridian Fiction, 1960, p. 90.
2. See "Negro Migration from South Rises," New York Times, December 28, 1961, p. 16, and U. S. Department of Commerce Bureau of the Census, news release CB61-167, December 27, 1961. For a general discussion, see Paul F. Coe, "The Nonwhite Population Surge to our Cities," Land Economics, XXXV, No. 3 (August 1959), 195-210.
3. See U. S. Department of Justice Immigration and Naturalization Service, Report of the Commissioner of Immigration and Naturalization, 1960, Table 13; Max L. Margolis and Alexander Marx, A History of the Jewish People, New York, Meridian Books, 1958, pp. 701, 719.
4. See Oscar Handlin, The Newcomers, Cambridge, Harvard University Press, 1959, p. 141; and Clarence Senior, Strangers -- Then Neighbors, New York, Freedom Books, 1961, p. 22.
5. Paper by Harry P. Sharp presented to Population Association of America, cited in "12 Cities' Suburbs Called 93% White," New York Times, May 7, 1961, p. 80. For an analysis of recent trends and for future projections, see Davis McEntire, Residence and Race, Berkeley, University of California Press, 1960, pp. 21-24.
6. See "Negroes' Housing Is Found To Gain," New York Times, March 23, 1961, p. 26; and City of New York Department of City Planning Newsletter, December 1961, p. 1.

7. Population changes, migration estimates, and natural increase for New York City reported in Department of City Planning Newsletter, September 1961, p. 2.
Growth of Puerto Rican population in Newark and Jersey City reported in "Jersey Drive Set by Puerto Ricans," New York Times, January 22, 1962, p. 25.
8. See "Negroes Shifting from Manhattan to all Boroughs," New York Times, July 9, 1961, p. 1. Suburban increases in Negro population discussed in "Negro Faces Housing Test in Major Shift to Suburbs," May 21, 1961, p. 1.
9. Department of City Planning Newsletter, June 1959, p. 4.
10. John R. White and Edna L. Hebard, The Manhattan Housing Market, Brown, Harris, Stevens, Inc., 1959, p. 70.
11. J. Anthony Panuch, Building a Better New York: Final Report to Mayor Robert F. Wagner, March 1, 1960, p. 75.
12. Ibid., p. 37; U. S. Census of Housing: 1960, Advance Reports, Housing Characteristics: States, HC(A1)-31, New Jersey, and HC(A1)-33, New York, Table 1.
13. Edgar M. Hoover and Raymond Vernon, Anatomy of a Metropolis, Cambridge, Harvard University Press, 1959, p. 203.
14. Los Angeles County Commission on Human Relations, "A Comparative Statistical Analysis of Minority Group Population for Los Angeles County from April, 1950 to July 1, 1959."
15. City of Los Angeles, Population Estimate by Communities, Bulletin 1960-4, October 1, 1960.
16. Ibid.
17. Information made available by City of Los Angeles Department of City Planning for area west of Figueroa Street in Central City Study Area.

18. City of Hartford Commission on the City Plan, "Population and Housing Changes in Hartford from 1950 to 1960 by Census Tract," September 1960.
19. U. S. Census of Housing: 1960, Advance Reports, Housing Characteristics: States, HC(A1)-5, California; HC(A1)-7, Connecticut; HC(A1)-33, New York; Table 1.

CHAPTER III

REBUILDING THE DECLINING AREAS:

LOCATIONAL PREFERENCES IN THE MARKET FOR NEW HOUSING

The declining areas are still too useful to be replaced, both in the regions we have selected for special study and in the large cities included in our brief national survey. Yet changes in population and the utilization of old residential structures may soon open up possibilities for replacing surplus housing, provided that present occupants continue to evacuate the declining sections of cities more quickly than new migrants arrive on the scene. As the old housing is abandoned, can the declining areas attract new private housing to replace it?

We have already noted some new development in areas of population loss within our three study regions, but we want to know whether economic conditions are really favorable for such development, in comparison with alternate opportunities at other locations. Our first concern is with economic conditions that confront the developer within declining areas. We have previously suggested two pre-conditions for rebuilding these areas: (1) the value of cleared land for new housing must be commensurate with its acquisition cost, and (2) the demand for housing sites must be great enough to utilize all cleared land that is not needed for environmental improvements (schools, public works), within a reasonable number of years.

In this chapter and the following one, we shall investigate the first of these pre-conditions. Achieving a balance between re-use value and

site acquisition cost depends upon maintaining a favorable relationship between advantages to the developer of building in declining areas, and costs of development in these locations. This chapter is concerned with the advantages; Chapter IV takes up the question of costs.

Since our objective is to assess the possibility of renewing the declining areas, we are interested in them not as they are now, but as they may be transformed by rebuilding programs. For our purposes, their present physical environment is temporary, and is subject to varying degrees of change in the course of renewal. Only the location of the old areas remains fixed. This location, as we have seen in our three study areas, is a central one within the metropolitan region. Thus the rebuilding problem is closely linked to the question of whether central location is an asset in the housing market. A review of theoretical literature (Appendix C) presents persuasive evidence that the center is less in demand for housing now than it was formerly, and our analysis of three study regions has reinforced this conclusion by documenting the movement of the white middle classes from the center to the suburbs and the incipient decentralization of new minority groups, as well. But all this evidence does not establish that consumers have decisively rejected central locations. We have also found signs of life in the form of new construction in areas of population loss. The suburban exodus could conceivably reflect dissatisfaction with housing and environmental conditions in the center, rather than with central location as such.

Our task is to evaluate the strength of consumer preferences for central housing locations, and its impact upon the economic considerations that influence developers in their choice of sites. The extent of central preference, in conjunction with cost factors that we shall investigate later, will determine whether the economics of new residential development in our study regions facilitates or blocks new construction in the declining areas. Our analytical approach, developed from the survey of theoretical works, is to test the relationship between metropolitan

structure and the demand for central locations. Thus we shall analyze locational preferences against the contrasting structural backgrounds of New York, Los Angeles, and Hartford, to determine whether preference patterns are consistent with our theoretical expectations. To the extent that they are, we can establish a basis for applying our findings to other regions with similar characteristics, as well as a basis for coordinating general metropolitan planning with renewal objectives for centrally located areas.

The theoretical approach developed from our survey of the literature can be summarized briefly. Metropolitan features that have been recognized as salient influences are: (1) the strength of the core, which may be defined in terms of the employment, shopping, recreational, and cultural activities it offers; (2) the transportation system of the region, which determines travel times from various locations to the core; and (3) the proximity to the core of vacant sites that may be competitive with locations in declining areas. These factors in turn are likely to influence the density preferences of consumers, which play a significant role in determining the economic feasibility of housing in central locations.

As these factors operate in theory, central preferences will be strongest in a metropolitan region with a strong core, with substantial travel time savings from inlying locations to the core, and with vacant land relatively inaccessible. In such a region, consumers would theoretically accept high residential densities in order to gain the advantages of living close to the core. As the core weakens, as travel time advantages from inner locations diminish, and as vacant land becomes more accessible, central preferences will weaken and consumers will find less reason to accept high-density housing for the sake of living close to the core.

In reality, many other factors are also involved in the choice of residential locations, and consumers differ considerably in their subjective

evaluation of various factors. Such considerations as the prestige of particular areas, the quality of the environment, social character of the neighborhood, and the local school system all enter into locational decisions in the housing market. Nevertheless, most theoretical works emphasize structural factors within the region as basic organizers of the residential pattern, and regard these other considerations as modifying elements. Such an approach is particularly appropriate for our purposes, since the "environmental" factors can be manipulated to a certain extent through renewal programs, while the structural factors are less changeable. We want to know whether the structural setting is appropriate for rebuilding, provided that environmental conditions are modified appropriately. Our analysis in this chapter therefore follows most recent theoretical works in seeking to relate locational characteristics of new housing to the interaction of a limited number of variables in regional structure with aggregate patterns of taste among consumers in the market for new housing.

We are particularly concerned with the degree of central preference in the new housing market, and its relevance to the rebuilding of declining areas. In addition to estimating the strength of central preferences, we must also determine whether they encompass those declining areas that are not immediately adjacent to the core, but lie somewhat farther away. The "gray area" problem, as Chester Rapkin sees it, is one of "massive deterioration in neighborhoods that lack locational advantages."¹ We shall investigate the extent to which central preferences involve such areas.

Thus, in addition to testing the theoretical model, we hope to enrich it. One purpose is already clear: to determine whether central preference is significant only in areas close to the core, or whether its effects spread over a substantial part of the metropolitan region in an extended gradient. Another objective is to quantify the concept of strong and weak cores, and to measure the degree of central

preference that is associated with cores of varying strengths. Finally, we hope to determine the ways in which locational preferences enter into the market for new housing: to what extent do they affect rents, vacancy rates, and densities? The results will help resolve some of the perplexing questions of urban renewal: To what extent can older areas capitalize on their central locations as an asset in attracting new housing? How strong a core is necessary to stimulate housing demand for inlying sites? How far out does a strong core extend its influence on the housing market?

The method of this analysis is to study locational patterns of new housing in the three regions for manifestations of central preference, and for evidence of the way in which this preference registers in the housing market. To facilitate price comparisons of similar housing units, and to obtain a sample with wide geographic coverage, we shall focus our attention on multifamily rental units rather than single-family homes. The housing characteristics of greatest interest are the general location of new multifamily housing within each region, and three factors of great economic significance in the housing market: the rents in comparable units located in zones of different travel-time to the core, and locational variations in vacancy rates and densities.

Three Regional Structures

Structural features of major interest that have emerged from our survey of theoretical literature are the strength of the downtown core and the proximity of vacant land to the core. New York and Los Angeles represent polar types of regions with respect to core strength: New York is a highly center-oriented region, Los Angeles an extremely decentralized region. Hartford is midway between the two in the strength of its core, but unlike either New York or Los Angeles, it has a plentiful supply of vacant land starting as close as

seven or eight miles (twenty minutes travel time) from downtown. Table III-1 summarizes the main characteristics of each region.

Differences in core strength are clearly defined in terms of employment: the Manhattan central business district contains 37 percent of all jobs in the entire metropolitan region, while downtown Los Angeles provides only 9 percent of the employment in its region. Employment in offices and financial institutions is particularly significant, since income in these fields is high enough to enable large numbers of employees to enter the market for new housing. Downtown employment in these typically core-oriented activities accounts for 61 percent of total employment in offices and financial institutions in the New York region, while downtown Los Angeles employs only 15 percent of the total office and financial force in its region. New construction in the central business district adds a dynamic perspective to this picture of core employment strength: unparalleled office expansion in the Manhattan business area, which accounts for the overwhelming majority of office expansion in the New York region, has produced 44.7 million square feet of new office space since 1947. In Los Angeles, new construction of 2.5 million square feet in and near the core represents only 16 percent of total regional office growth over the same time span. During the same period, 6.5 million square feet of office space (42 percent of the region's total) were developed in the newly developing business area strung out for some 7 1/2 miles along Wilshire Boulevard to the west of the downtown area.

Aside from employment opportunities, the core may influence locational preferences for new housing by means of its shopping and entertainment functions. Retail sales figures are the best available indicators of shopping opportunities in the central business districts. The relative core strength of New York compared with Los Angeles is evident once again, with downtown sales amounting to 13 percent of regional sales in New York and only 4

TABLE III-1

Selected Characteristics of Three Study Areas

	New York	Los Angeles	Hartford
(1) Population, 1960 Census	14,759,429	6,742,696	525,207
(2) Persons entering core area on business day	3,316,000(1956)	679,000(1960)	not available
(3) Total employment in Central Business District	2,475,900(1956)	244,500(1960)	49,480(1960)
(4) Percent of regional employ- ment in CBD	37.0(1956)	9.4(1960)	24.9(1960)
(5) Percent of regional office employment in CBD	61.3(1956)	15(1960 est.)	not available
(6) Square feet of new office space con- structed in CBD, 1947-1960	44.7 million	2.5 million	not available
(7) Percent of regional retail sales in CBD, 1958	13.0	4.2	20.8
(8) Percent of change in CBD retail sales, 1954-1958	+8.0	-5.3	+3.4
(9) Miles from CBD to nearest large tracts vacant buildable land	20	15	7-8

Regional definitions: New York, N. Y. -Northeastern New Jersey Standard Consolidated Area (identical with 1950 Census Standard Metropolitan Area), Los Angeles-Long Beach Standard Metropolitan Statistical Area, Hartford Standard Metropolitan Statistical Area.

Table III-1

Sources: New York: (2) Regional Plan Association, Bulletin 91, "Hub-Bound Travel in the Tri-State Metropolitan Region," April 1959, p. 10; (3), (4), (5) Edgar M. Hoover and Raymond Vernon, Anatomy of a Metropolis, Cambridge, Harvard University Press, 1959, p. 260; (6) John McDonald, "The \$2-Billion Building Boom," Fortune, LXI, No. 2 (February 1960), 119; (7), (8) U. S. Census of Business: 1958, Vol. VII, Central Business District Report, New York, N. Y., Area -- BC58 --CBD55, Tables 1A, 4A, and Retail Trade, BC58-RA1, United States Summary, Table 8.

Los Angeles: (2), (4), (5), (6) Los Angeles Central City Committee and Los Angeles City Planning Department, Economic Survey ("Los Angeles: Centropolis 1980"), December 12, 1960, pp. 19, 26, 30, 38; (3) Los Angeles City Planning Department, using generous CBD definition to include all major employment in and near downtown core; (7), (8) U. S. Census of Business: 1958, Vol. VII, Central Business District Report, Los Angeles-Long Beach, Calif., Area -- BC58 - CBD43, Tables 4A, 5A.

Hartford: (3), (4) Hartford Area Transportation Study, Connecticut Highway Department, using generous CBD definition to include all major employment in and near downtown core; (7), (8) U. S. Census of Business: 1958, Vol. VII, Central Business District Report, Hartford, Conn., Area -- BC58 - CBD35, Tables 4, 5.

percent in Los Angeles, Downtown retailing is still more significant in the Hartford area, where CBD retail sales are 21 percent of regional sales. In recent years, all three downtown areas have failed to keep pace with regional percentage increases in retail sales, but New York and Hartford have registered slight absolute gains downtown while Los Angeles sales have declined 5 percent.

Downtown entertainment and cultural activity varies still more strikingly than retail sales in our three core areas. Little need be said about either the strength or vitality of Manhattan as a cultural center: its significance is international, and its strength has grown recently even in the generally moribund categories of the legitimate theater and movie houses. In the former field, the number of playing weeks in professional theaters has increased by an estimated 30 percent or more in the face of a serious national decline.² Downtown Los Angeles plays a negligible role in the region's entertainment. Restaurants and night clubs are decentralized; musical and theatrical performances are given either in Los Angeles outside the downtown area or in the centers of outlying communities; movie theaters are located primarily outside the downtown core. In Hartford the situation is mixed: the main auditorium for musical and theatrical events is just outside downtown, but restaurants and movie theaters are largely decentralized.

Location of New Housing

Figures III-1 to III-3 represent graphically the locational distribution of new multifamily and single-family dwelling units (excluding public housing) within our study regions for roughly comparable time spans within the period 1956-1960. If consumers were totally indifferent to the location of new units, we might expect to find similarities in the locational distribution of single-family and multifamily units. The economics of land use requires vacant land for the construction of all but the most expensive single-family homes; distant zones where the

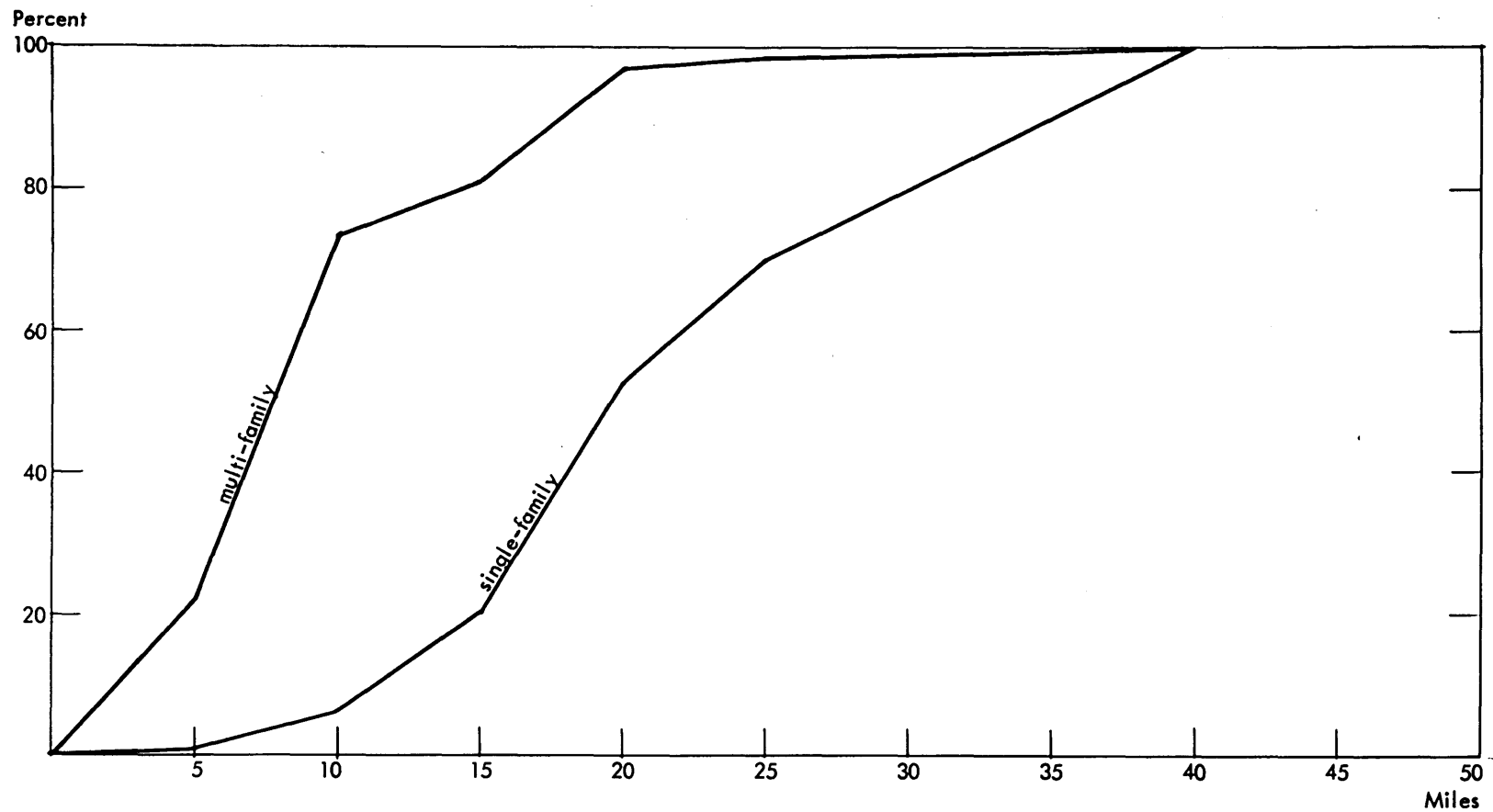


FIGURE III - 1

Cumulative percentage of new single-family and multi-family dwelling units within 5-mile distance zones from center of New York region, 1957-1960

Source: Regional Plan Association, "New Homes in the New Jersey - New York - Connecticut Metropolitan Region," 1957-1960; based on building permit data for counties in the region. Total new single-family units: 158,761; total new multi-family units: 145,921. Public housing excluded.

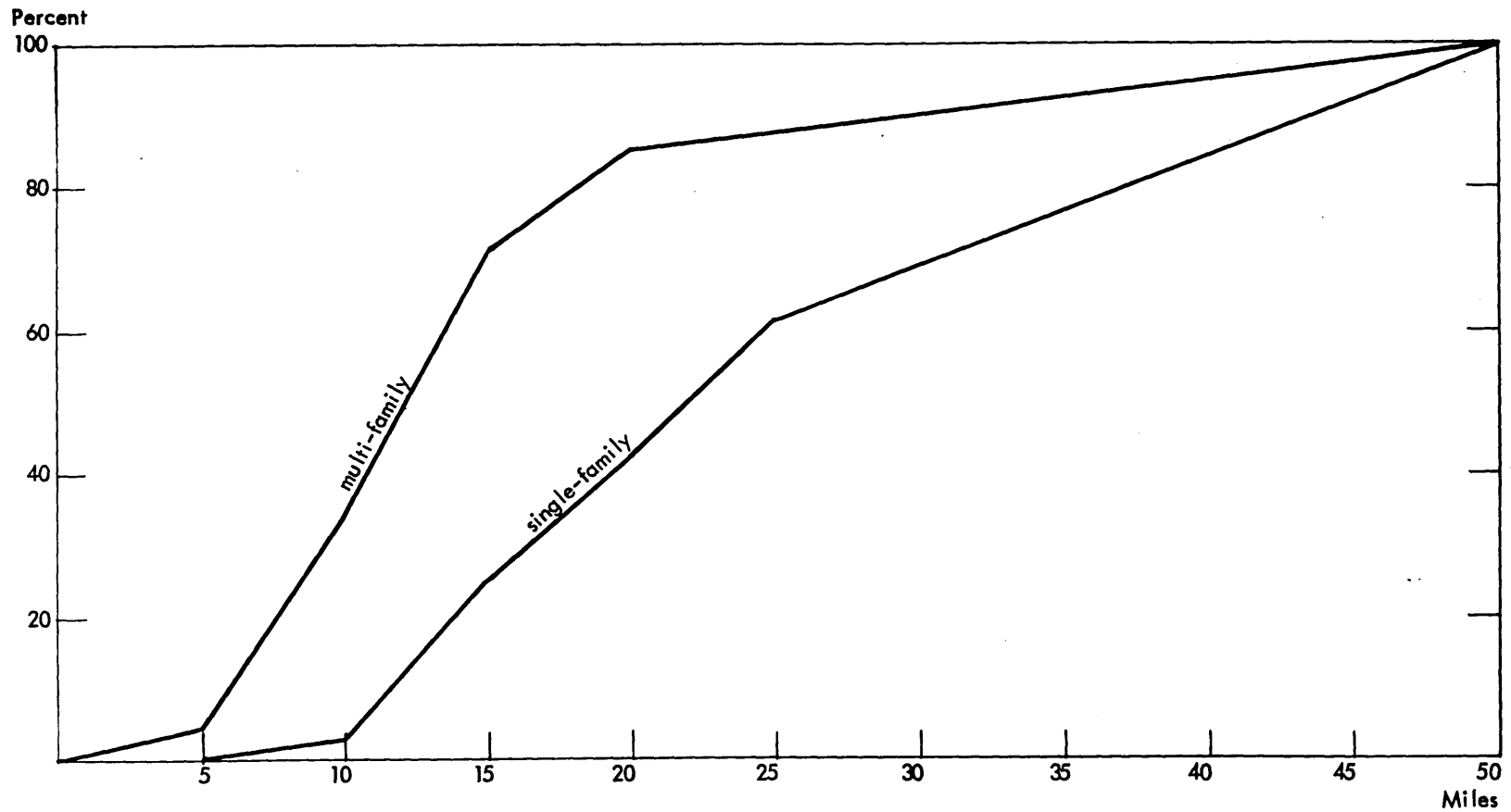


FIGURE III - 2

Cumulative percentage of total increase in single-family and multi-family dwelling units within 5-mile distance zones from center of Los Angeles region, 10/56-4/60

Source: Los Angeles County Regional Planning Commission, distribution of dwelling types in 35 statistical areas of Los Angeles County for October, 1956 and April, 1960; Security First National Bank, Los Angeles, building permit data for Orange County, fourth quarter, 1955 through first quarter, 1959. Total increase: 148,730 single-family units; 128,726 multi-family units.

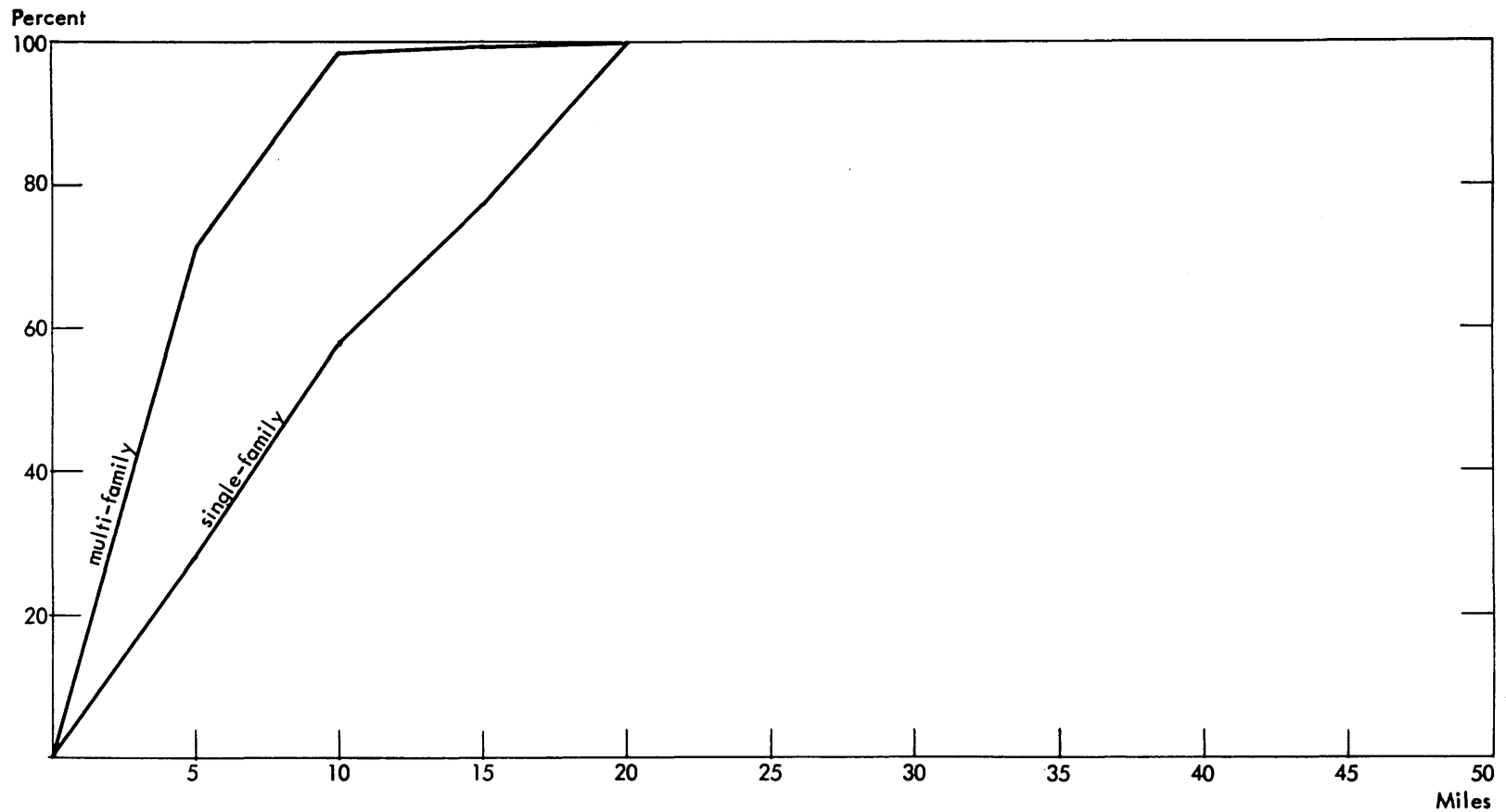


FIGURE III - 3

Cumulative percentage of new single-family and multi-family dwelling units within 5-mile distance zones from center of Hartford region, 1958-1960

Source: Connecticut Public Works Department Housing Division, building permit data for towns in region. Total new single-family units: 10,919; total new multi-family units: 1,590. Public housing excluded.

bulk of single-family housing has been built contain large tracts of vacant land. If locations closer to the center offered no advantages in marketing multifamily units, developers might locate them in the same general areas where single-family subdivisions appear: land costs are typically cheaper in these areas than they are closer to the core, and the newness of such areas provides certain market advantages in itself. Yet we find that in all three study regions new multifamily housing is located significantly closer to the core than new single-family developments. Evidently greater centrality is a normal characteristic of multifamily housing, and in view of the higher costs of this centrality, it would appear to reflect some degree of consumer preference within the rental market. An additional factor, however, may be the developer's desire to remove new multifamily housing from areas where it would be in competition with single-family homes.

In New York, almost 75 percent of the new multifamily housing lies within ten miles of mid-town Manhattan. In Los Angeles, about 35 percent of the new multifamily construction lies within ten miles of the core, but 70 percent lies within the fifteen-mile zone. Part of this difference results from limitations in the Los Angeles data. In Los Angeles, we are dealing with net increases in dwelling units rather than total new units within each statistical area; some new construction close to the core has been countered by the demolition of older units for non-residential building and for the construction of freeways. Nevertheless, the pull toward the center appears to be greater in New York than in Los Angeles: the cumulative curve of multifamily construction rises more steeply over the inner half of the metropolitan region in New York than in Los Angeles. Differentiation between multifamily and single-family locations is also greater in New York, with wider distances separating the two curves.

To understand the shape of the multifamily curves, we must first take into account differences in the transportation systems of the two regions. Forty minutes of peak-hour travel time via the New York City subway system and via rail and bus service to the New Jersey portion of the

region corresponds approximately to ten miles from the core. Forty minutes of peak-hour automobile travel time via the Los Angeles street and freeway network corresponds roughly to fifteen miles from downtown Los Angeles. Thus within forty minutes of travel time, we find very similar proportions of the new multifamily housing in both New York and Los Angeles.

This approach to determining the pull of the center is not complete, however, without some consideration of the increasing costs that developers encounter as they leave outlying vacant land and move closer to the cores of these two regions. Economic analyses presented in the following chapter demonstrate that cost differentials are many times greater as one approaches the center of New York than they are as one approaches the center of Los Angeles. Thus although multifamily housing is distributed similarly with respect to travel time in both New York and Los Angeles, New York developers incur a much higher cost differential to achieve this distribution than do their counterparts in Los Angeles. We may deduce, therefore, that the pull of the center, as reflected in market advantages to the developer, must be substantially greater in New York than in Los Angeles.

The Hartford region exhibits less differentiation than either New York or Los Angeles. Distances separating the multifamily curve from the single-family curve are smaller in Hartford than in either of the other regions. The primary reason for this relative lack of separation is the close proximity of vacant land: single-family homes are feasible on vacant tracts seven or eight miles from downtown. Travel times are quite short in the Hartford region. During peak commuting hours, travel time to points five miles from the core averages some twenty minutes, when weighted according to current proportions of automobile commuters and bus riders. To go five miles farther in most directions requires a total of some twenty-five minutes by car, and the number of bus riders diminishes to negligible proportions.

The pulling power of downtown Hartford appears to be quite substantial, for 70 percent of new multifamily units are located within five miles of downtown Hartford rather than a few miles farther out where extensive single-family development occurs. Since the savings in travel time to the core are relatively small, other factors must explain the apparent market advantages of these inlying locations. One influence of some importance in the Hartford area is not a market advantage but a limitation resulting from public policy: relatively little outlying land is zoned for multi-family housing, and local developers consider the suburban zoning restrictions difficult to change. A more significant market advantage is the network of public bus transportation available within the five-mile limit that thins out significantly beyond it. Still another is the demand for walk-to-work housing near some of the large insurance firms just outside the core.

Rent Differentials and Travel Time

The aggregate locational pattern of new multifamily housing in all three study areas, as it is differentiated from the single-family pattern, suggests that all three cores exercise material pulling power in the market for new multiple housing units. This pulling power must consist of advantages to the developer in renting his units. The most likely market advantages would take the form of higher rents in more central locations; greater ease of renting, which would be reflected in lower vacancy rates in more central locations; or consumer acceptance of higher densities, which would enable developers to economize on development costs in central sites having high land values. We can better gauge the extent of central preferences in the three study areas by examining these different characteristics of the market for new rental housing.

To investigate rent differentials at different locations, we should ideally obtain information on rents in identical housing units that differ only in their location with respect to the core. The approach of this study has been to eliminate major qualitative differences within the housing

sample by including only units built since 1950,³ separating apartments in size categories according to number of bedrooms, adjusting rents to take account of the presence of special features (e. g., air conditioning) or absence of features normally included in new housing in the region (e. g., free parking space in the Hartford area), and by selecting new housing only in neighborhoods that local realtors consider to have "good environments for renting." To eliminate the additional factor of differing transportation systems in the three regions, units were classified according to peak-hour travel time from the core by the dominant means of commuter transportation; subway and commuter railroads in New York, automobile in Los Angeles, and averages of bus and automobile time weighted according to the proportion of bus riders and auto users in different parts of the Hartford area.⁴

The resulting patterns of rents and travel times appear in Figures III-4 to III-6, where efficiency apartments (without separate bedroom), one-bedroom, and two-bedroom units are shown separately. Information for New York and Hartford, drawn from extensive inventories of rents in all units in a large sampling of new developments, is presented in the form of median rents and median travel times to the core for all units, grouped according to ten-minute time zones. The Los Angeles sample consists of rents for individual apartments based largely on advertized vacancies that were subsequently checked in the field. Los Angeles information is presented as a plotting of individual unit rents, since the number of units covered is too small to permit the use of medians as a reliable index.

New Yorkers pay a far greater premium to live close to the core than do residents of either Los Angeles or Hartford. For one- and two-bedroom apartments, New Yorkers pay more than twice as much near the core as they do on the fringe of our sample; for efficiency apartments, they pay more than one and one-half times as much in central locations as they do on the fringe. To determine whether these rent

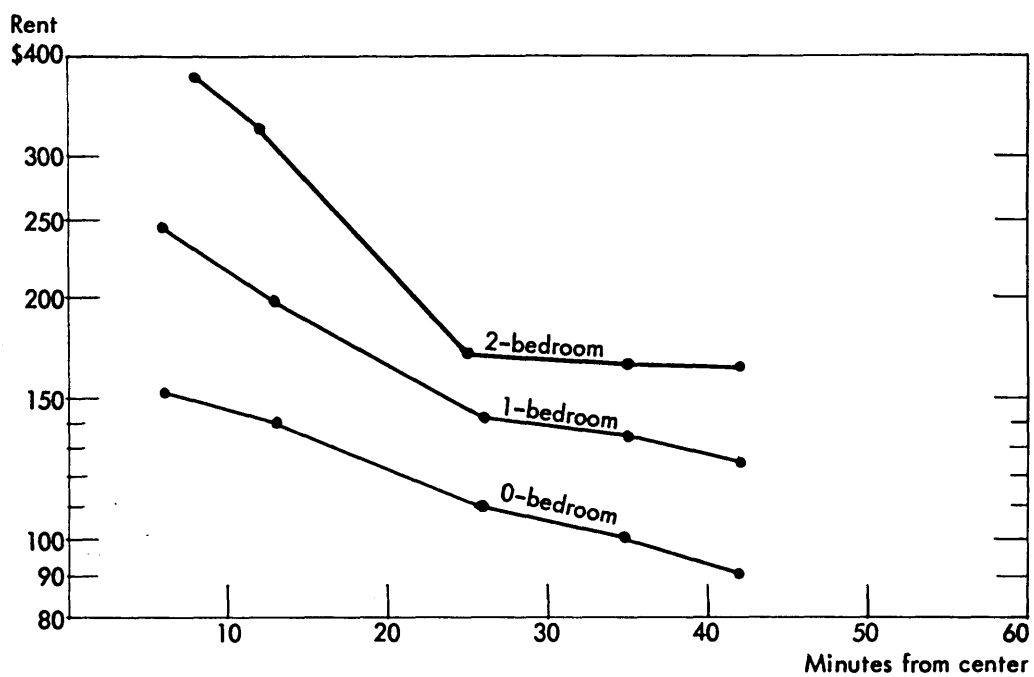
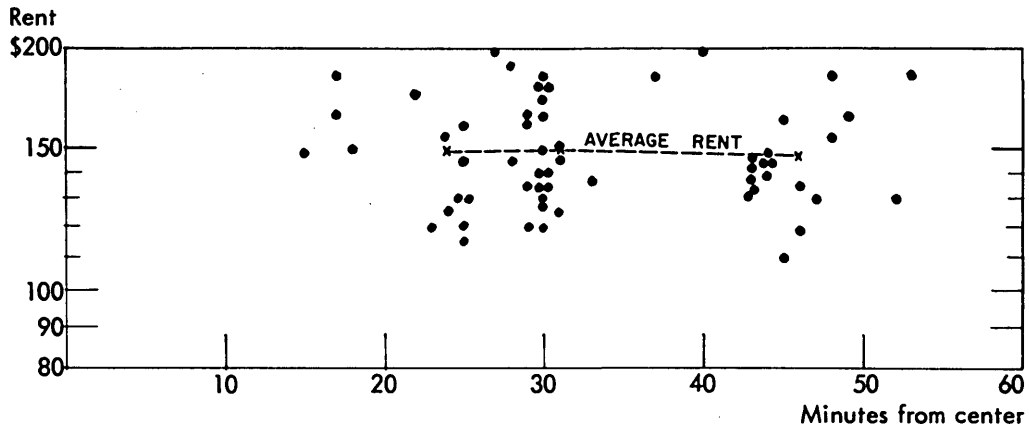
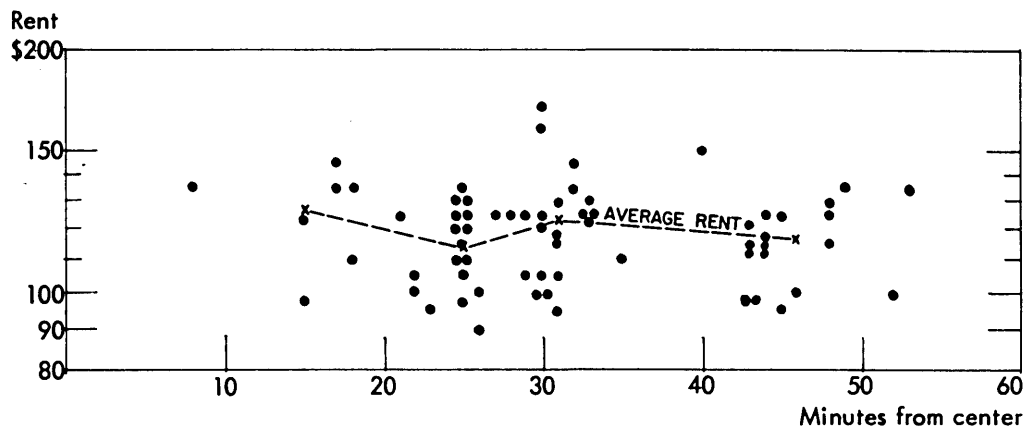


FIGURE III - 4
Monthly rents and travel times from center of New York region

Source: City of New York Department of City Planning, rental inventory of 14,152 dwelling units in 136 apartment developments constructed 1958-1959 in New York City. Data grouped within 10-minute time zones from center, with median rent and median time indicated for each group.



Two-bedroom apartments



One-bedroom apartments

FIGURE III - 5

Distribution of monthly rents and travel times from center of Los Angeles region

Source: Sample of 126 dwelling units in 115 apartment developments of similar construction type completed 1950-1961. Information from: Henry A. Babcock Consulting Engineers, Los Angeles; Federal Housing Administration, Los Angeles; Prudential Insurance Company of America, Los Angeles; William Walters Real Estate, Los Angeles; Los Angeles Times advertisements, April 16, 23, and 30, 1961.

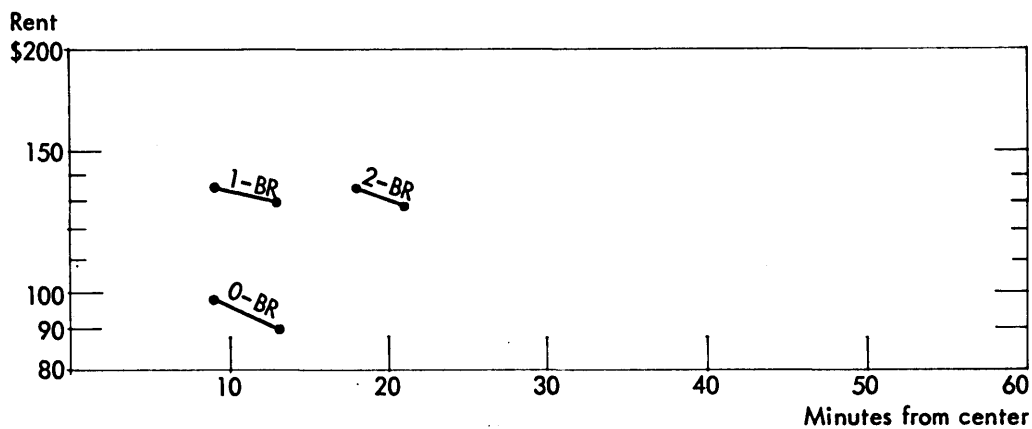


FIGURE III - 6
Monthly rents and travel times from center of Hartford region

Source: Rental inventory of 619 dwelling units in 14 apartment developments constructed 1947-1960. Information from Federal Housing Administration, Hartford; and Rowson Real Estate and Insurance, Hartford. Data grouped within 10-minute time zones from center, with median rent and median time indicated for each group.

differentials between central and outlying locations reflect differences in room size, additional information was obtained on the number of square feet per apartment in a sampling of new two-bedroom apartments constructed between 1955 and 1960. Ten new buildings in the sample were located in the upper East Side of Manhattan, averaging about 12 minutes in travel time to the core; nine were in Queens, averaging about 35 minutes in travel time to the core. Rents per square foot for the Manhattan group averaged \$4.27 per month, compared with an average of \$2.35 in Queens. On the rent curve for two-bedroom apartments in Figure III-4, rents for apartments 12 minutes from the core are twice as high as rents in apartments 35 minutes away. The control sample corresponds closely, with square foot rentals 12 minutes from the core 1.8 times as high as square foot rents 35 minutes away.⁵ (Certain differences in physical equipment and levels of service do exercise limited influence upon these rent differentials, however. We shall discuss these factors more fully in Chapter IV.)

In Los Angeles, no significant locational differences in rent are detectable for either of the two apartment-size categories in our sampling. Hartford rents show a clear tendency to increase near the center -- rent curves for all three apartment sizes tilt upward toward the center -- but the differentials are very slight, amounting to 4 to 6 percent increases for central locations in the relatively narrow time-band covered by our sampling.

These regional differences must be seen in relation to the varying core strengths that we have already discussed. New York, with 37 percent of its employment in the core, displays extreme central preferences in its rent structure. Hartford, with 25 percent of its employment in the core, has some noticeable central preference influencing the housing market despite the small time-savings achieved by inlying housing. Los Angeles, with 9 percent of its employment in the core, has no distinguishable central orientation in its rent struc-

ture, although considerable time savings to downtown are possible from central locations.⁶

In absolute numbers, Los Angeles has five times as many jobs downtown as Hartford. Nevertheless, the small Hartford core acts as a magnet influencing rent levels, while the larger Los Angeles core exerts no such influence. Differences in the overall regional distribution of employment probably account for these contrasting rent patterns. Our Los Angeles housing sample has been drawn from neighborhoods in the western sector of the Los Angeles region, extending out from the core to take in the central Wilshire Boulevard area, Hollywood, Beverly Hills, West Los Angeles, Westwood, and Santa Monica. These districts, and the adjacent Culver City area, contain 350,000 jobs in themselves (compared with 245,000 downtown). If we add employment in nearby non-central areas to this total, the number of jobs outside the core that are readily accessible from the western sector comes to 664,000.⁷ This large number of jobs scattered about the sector and its environs undoubtedly sets up powerful cross-currents in the housing market that negate the influence of downtown jobs on rent levels in this sector. Housing locations anywhere in this sector offer easy access to a large number of jobs; those sites that offer special access advantages to the core can command no higher rents than more outlying locations which offer special access advantages to a number of other employment centers.

Similarly, retail shopping in and near the western sector upsets the pull of downtown shopping. Retail sales within major shopping areas in the western sector totalled 302.7 million dollars in 1958, compared to 365.4 million downtown. Total retail sales in the sector plus nearby San Fernando Valley shopping areas amounted to 436.3 million; the total number of retail stores was 1594, compared with 1460 downtown, including 54 general merchandise stores and 13 department stores, compared with 42 general merchandise and 4 department stores downtown.⁸

The magnetic pull of Hartford's smaller core meets little interference from alternate centers of employment and shopping within the sector where our housing sample is located. The Hartford sample is drawn from neighborhoods situated west of downtown lying predominantly within a one-mile band on either side of Farmington Avenue in Hartford and West Hartford. Within this sector, the pull of downtown dominates both employment and shopping opportunities. Indices of accessibility to total employment and to retail trade (prepared for a regional transportation study using the gravity-model approach) were made available for locations included in our housing sample.⁹ These indices were derived by dividing the region into small zones, obtaining figures for total employment in each zone, dividing the employment in each zone by a function of travel time from the location in question to the employment zone, and summing all results for a particular location. The resulting index reflects general accessibility from a particular location to jobs and shopping everywhere in the region. For locations included in our sample, the general accessibility indices to both total employment and employment in retail trade correspond directly to travel times to the core. In Los Angeles, no general accessibility index was available, but our own knowledge of employment and retailing within the sector included in the housing sample indicates quite clearly that travel time to the core does not correspond to general accessibility to all jobs and all retailing in the region.

The approach of general accessibility to all jobs and shopping in the region (and ideally to entertainment and recreation facilities, as well) is a superior way of gauging access advantages of particular housing locations. An index of this type is not available for most metropolitan areas, however, and considerable time and expense are required to prepare one. The alternate approach used in this study requires measuring the proportion of employment and retailing in the downtown core, rather than gauging the theoretical pulling power of the core by means of the absolute amount of employment and retailing located downtown. We can understand the rental patterns of

Los Angeles and Hartford in terms of the relative weakness of downtown Los Angeles and the relative strength of downtown Hartford. Any judgment based on absolute quantities of core employment and retailing would fail to take account of jobs and retail facilities in non-downtown locations.

Scope of Rent Gradients

The New York region displays strong central preference in its rental pattern. Since the New York housing sample extends over a broad geographic range, its characteristics can help answer the question of whether central preferences affect only a limited area near the core itself, or whether they spread their effects over the housing market in an extended gradient. Figure III-4 illustrates an extended rent gradient for our sampling within the City of New York, although the slope of the gradient rises much more steeply near the core than it does 30 to 40 minutes away. To push the analysis still farther out from the core, two independent samplings of new rental units in Westchester County were also obtained. Their median rents and median travel times (within 10-minute time zones) are plotted in Figure III-7, along with a repetition of the New York City rent gradients for one- and two-bedroom apartments. Although the Westchester units lie several miles beyond the outer edge of the New York City sample, their travel times from mid-town Manhattan via commuter railroad fall within the same range as travel times to housing in outlying parts of the city served by slower subway trains. The Westchester rent curves tilt consistently upward toward the core, furnishing additional evidence of the extended rent gradient in the New York region. As far out as our Westchester sample extends (to the 40-49 minute time zone), greater centrality still appears to bring higher rents.

The level of rents in Westchester is also of some interest in illustrating the unpredictable effect of commuting costs upon the housing

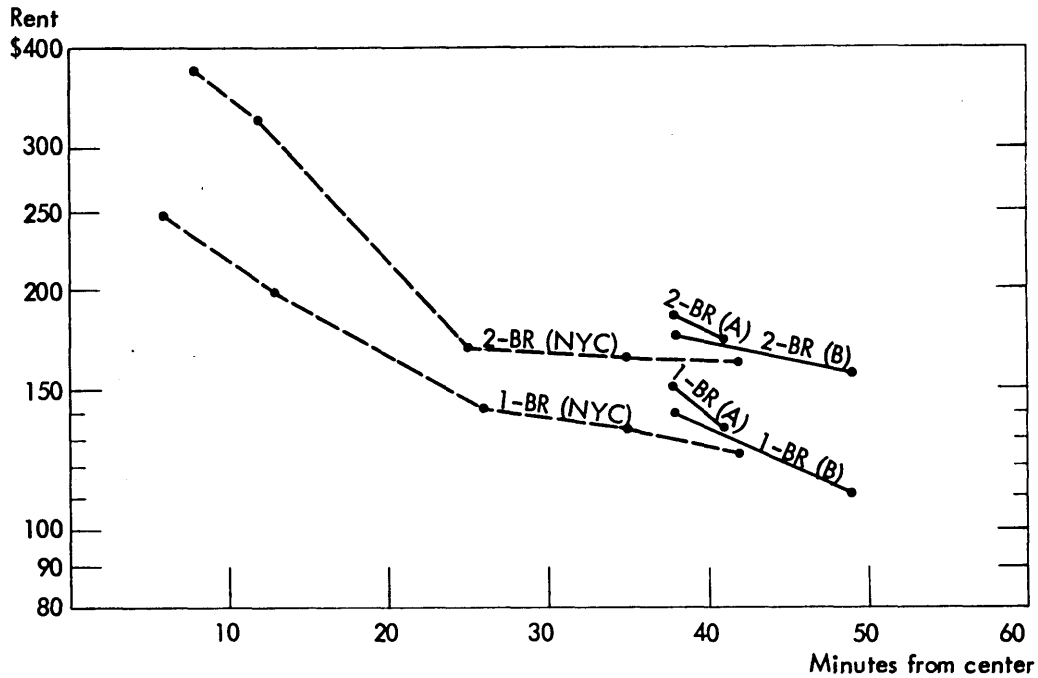


FIGURE III - 7

Monthly rents and travel times from center of New York region,
for apartments in Westchester County and New York City

Sources: Westchester sample A: survey of 600 units in 11 developments completed 1959-1961; information from Federal Housing Administration, New York.

Westchester sample B: survey of 1614 units in garden apartment developments completed 1945-1961, Apartment Owners Advisory Council, White Plains.

New York City: see Figure III-4.

Data grouped within 10-minute time zones from center, with median rent and median time indicated for each group.

market. Although travel times from the core to Westchester are the same as travel times by subway to the upper Bronx and lower Brooklyn, commuting costs are much higher to Westchester: twenty-five dollars or more per month for railfare alone, compared with subway fares of four dollars per month. Thus we might expect to find lower rents in Westchester as compensation for higher travel costs. Yet for dwelling units with comparable travel times (but with slightly lower densities), Westchester rent medians range from five to twenty dollars per month higher than New York City rent levels. As several theoretical works recognize, commuting costs are a highly subjective matter. For Westchester residents, life in the suburbs evidently offers advantages that justify both higher rents and higher commuting costs than they would have to pay in Brooklyn or the Bronx. As a result, Westchester rent gradients are higher than those for comparable travel times in the City, but central preferences operate in both locations.

While the New York rental pattern is an extended gradient rather than merely a peak near the core and a horizontal line farther out, the gradient is nevertheless much steeper near the core than in outlying areas. For one-bedroom units, rents increase by about 13 percent as travel-time diminishes from 42 to 26 minutes. Yet the next time-saving of only 13 minutes (from 26 to 13 minutes median time) brings a rent increase of 40 percent (from \$142 to \$200). Clearly, minutes saved are worth more to the rental market near the core than they are farther away, but the reasons are not at all evident. In terms of metropolitan structure, multifamily units near the outer margin of development may suffer from the potential competition of new single-family housing as a feasible alternative to rental housing. This competition may hold down rents in outlying locations. Closer in, single-family homes decline in importance as a competitive force.

Another structural feature of the New York region that helps explain the steepness of rent gradients near the core is the lack of suitable

environments for new rental housing in areas about 15 to 25 minutes from the core. These are the "gray areas" of decaying housing and unsightly industry in the older parts of Brooklyn and Queens near Manhattan, upper Manhattan, and the lower Bronx. As a result, the next practical alternative to living in a new building 10 to 15 minutes from the core is to move 25 minutes away; the gradient of choices is discontinuous in this part of the range. High rents near the core probably reflect in part the unavailability of close substitutes for housing fifteen minutes or less from the core.

The transportation facilities of the region may also play a distinct role in raising rent levels near the core. New Yorkers who live close to the Manhattan business area find bus lines or even taxis feasible for commuting, while those who live farther away must descend to the far less pleasant subway system. In this sense, transportation choices are somewhat discontinuous as distances from the center of Manhattan increase.

Basic explanations for the rising slope of the rent curve near the center undoubtedly derive largely from subjective consumer preferences, and from the premiums that different groups of consumers will pay in order to save travel time. Probably consumers have sorted themselves out along the rent gradient so that those who live near the center value travel-time savings very highly. Recent interviews with residents of new downtown apartments in several cities have suggested that the downtown occupant places high value on having the activities of the core close at hand. In addition to his trip to work, he makes numerous other trips to core facilities for shopping or entertainment.¹⁰ Time-savings multiply in importance as the number of trips to the core increases for an individual. Whether for actual time-savings on a large number of trips or solely for the psychological satisfaction of having downtown facilities nearby, the New Yorker who lives close to the core pays considerably more in rent to save a few minutes in travel time than does the commuter who lives farther out.

Conversely, he can save much more on his rent bill by moving a few minutes farther away, if he can find a suitable environment, then can the New Yorker who lives thirty minutes from the core.

The Pattern of Vacancy Rates

Our first aggregate analysis of the location of new multifamily housing showed strong central tendencies in all three study areas; yet rental patterns indicate that only in New York can developers reach substantially higher rent levels by building close to the core rather than farther away. Rent differentials resulting from central locations are small in the Hartford area, and apparently non-existent in Los Angeles. Developers must find other types of market advantages in central locations in Los Angeles and Hartford, or they would build a greater proportion of new units on outlying vacant land, in areas where new single-family construction is active. One of these advantages can consist of greater ease in renting new units, which reduces the risk of income loss through high vacancy rates. In the opinion of developers and realtors consulted in all three study areas, new units are a safer investment in good inlying locations than in good outlying locations: they rent more quickly at the start, and long-run vacancy experience is more favorable in central locations. To the extent that information on vacancy rates is available, it confirms these opinions in all three areas.

In Los Angeles, where rent differentials show no central orientation, vacancy rates in comparable buildings decrease consistently as locations become more central. A large sampling of idle electricity meters in apartments of similar quality located in fifteen different areas of the region indicates the following average vacancy rates for 1959 and 1960, arranged according to the distance of each area from the core:¹¹

Miles from core	0-5	6-10	11-15	16-25
Average vacancy rate(percent)	4.4	5.8	7.3	7.7

Comparable vacancy information is not available for New York, but various surveys of new apartments indicate lower vacancy rates in Manhattan than elsewhere in the City. A 1959 survey of all postwar apartments completed in New York City through the end of 1958 indicated a City-wide vacancy rate of 2.9 percent.¹² A different survey of postwar units in Manhattan indicated an average vacancy rate of 1.6 percent from 1952 to 1956.¹³ These results are in accord with the general opinion in real estate circles that Manhattan vacancy rates in new housing are below those in the rest of the City. At the regional scale, little information is at hand to test the equally general opinion that vacancy rates in the City are below those in new housing farther from the center of the region. According to the 1960 Housing Census, vacancy rates for standard rental units (with all plumbing facilities) were 2.0 percent in New York City and 4.0 percent in the rest of the New York State part of the region.¹⁴

Little information is available for the Hartford region. The best approximation of over-all vacancy rates in standard apartments that can be gleaned from advance reports of the 1960 Housing Census is 4.2 percent for towns within five miles of the core, and 4.5 percent for the remainder of the Standard Metropolitan Statistical Area.¹⁵

Densities and Central Preference

Another type of advantage to the developer is consumer tolerance of high densities. This tolerance affects development cost rather than rental income, and its benefits are limited by the increase in construction and operating costs per apartment as the type of structure shifts from walk-up to elevator buildings and from light to heavy construction. Nevertheless, acceptance of high densities adds to the developer's flexibility, permits him to reduce land cost per unit, and within the limits of a particular building type may facilitate economies of scale by allowing more units on a given site without necessitating a shift to a more expensive type of construction.

Density preferences within a housing market undoubtedly have strong bases in local tradition and in prestige associations with different building types, as well as in functional conveniences or inconveniences of living in neighborhoods and structures of different densities. One of our hypotheses in this study is that the same factors that condition central preference -- strength of the core, distance to vacant land, time savings from central locations -- will contribute to consumer acceptance of high densities in central areas. High central densities are complementary to strong central preferences, in theory, and we can expect to find the density patterns of our three study areas consistent with their rental and vacancy patterns.

Figure III-8, which plots average densities and average travel times to the core for buildings grouped by ten-minute time intervals, confirms these expectations in the three study areas. New York densities far exceed those of Hartford and Los Angeles across the entire range covered by our sample. Density levels in New York City entail obvious inconveniences: limited light and air, few ground-level facilities for recreation, auto and subway congestion, parking spaces available only in garage structures at considerable extra cost (more than fifty dollars a month in Manhattan). Normal density standards furnish some perspective on the extent of consumer tolerance of high densities in New York. Maximum recommended densities of the American Public Health Association are 95 dwelling units per net acre in 13-story buildings and 75 in 6-story buildings.¹⁶ Manhattan residents in new 13-story buildings typically live at net densities ranging from 300 to over 500 units per acre. New 6-story buildings in areas from 25 to 50 minutes from the core are generally developed at about 150 dwelling units per acre.

In terms of light and air, these densities are not quite as oppressive as the comparison with standards suggests. Our density statistics apply to single buildings or small developments, most of which pirate

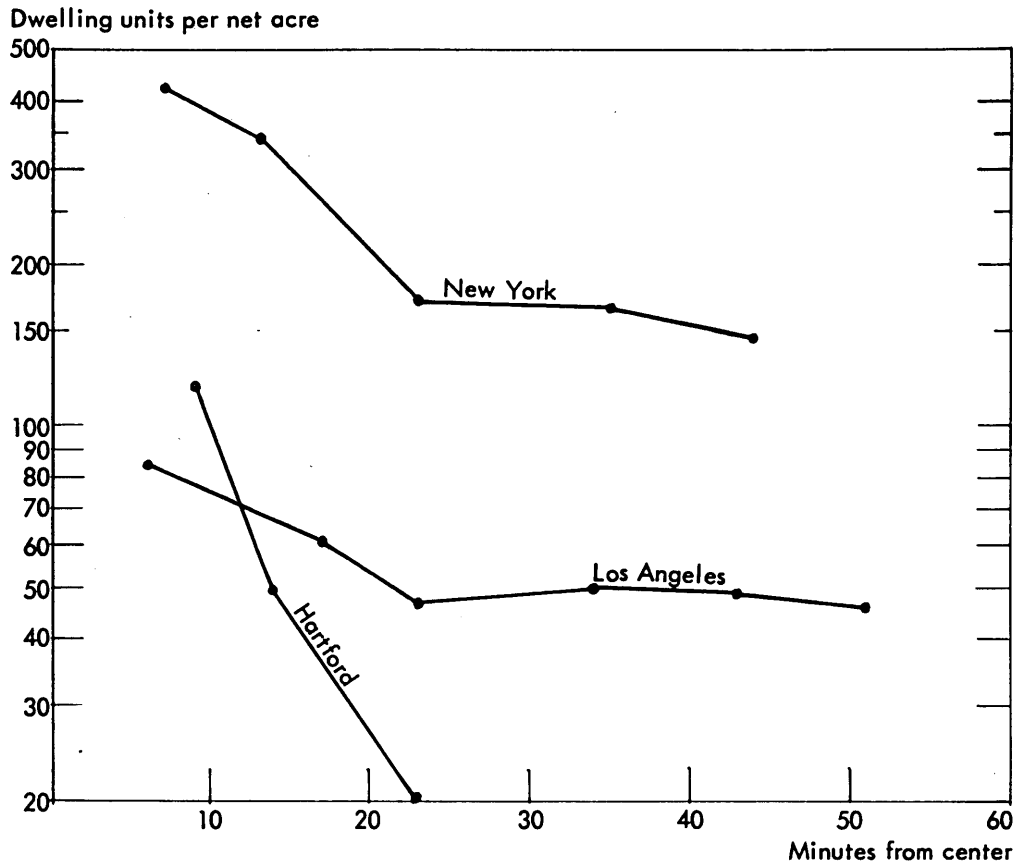


FIGURE III - 8

Dwelling unit densities and travel times from centers of three study regions

Sources: Sample of 37 apartment buildings constructed in New York City 1954-1961, from New York Department of City Planning; sample of 23 apartment developments constructed in Los Angeles region 1958-1961, from Los Angeles County Department of Building and Safety and Prudential Insurance Company; sample of 14 apartment developments constructed in Hartford region 1947-1960, from Federal Housing Administration and Rowson Real Estate and Insurance. Data grouped within 10-minute time zones from center, with average density and average time indicated for each group.

light and air from adjacent streets not counted in their own net acreage or from air space over neighboring buildings. In addition, the high densities of new buildings in central locations partly reflect their high proportion of efficiency and one-bedroom apartments. So far as ground facilities and traffic congestion are concerned, however, these are indeed oppressive densities by any standards other than those that dominate the New York housing market. To find new apartments at lower densities, the New Yorker must increase his commuting costs by moving to outlying areas served by commuter railroads. His rent in these suburban areas, as we have noted, will be slightly more than he would pay for an apartment with comparable travel time via subway in outer Brooklyn or the Bronx. For shorter travel times to the magnetic core of Manhattan, New Yorkers pay a cost in terms of high density as well as high rent.

The downtown core also exerts strong influence on density patterns in the Hartford region. All the new apartment developments over two stories high are located within fifteen minutes of downtown, where densities of new buildings typically range from 35 to 70 dwelling units per net acre. The density curve declines sharply away from downtown, for new housing twenty minutes away lies in the zone where vacant land is readily available and developers find little advantage in exceeding a density of 20 units per acre for garden-type apartments. The steepness of the Hartford curve thus reflects primarily the small size of the region, plus the pull of downtown that induces occupants to accept higher densities in central locations in exchange for savings in travel time.

In Los Angeles, we found no evidence of central orientation in the rent levels of new apartments, but some indication of central preference in the pattern of vacancy rates. A sampling of densities in new multifamily construction reinforces the vacancy pattern in demonstrating some degree of central orientation. This sample

consists entirely of the predominant type of multifamily structure in the Los Angeles area: two-and three-story buildings of frame and stucco construction. Within the limits imposed by this type of building, densities are somewhat higher near the core than in outlying areas, but limitations of the sample conceal an important emerging trend. Tall elevator structures (4 stories and higher) have been uncommon in Los Angeles for some time. A few were built in the 1920's and 30's, primarily in central areas. A recent revision of zoning height limits has triggered construction of tall luxury buildings, with about ten major developments completed or under construction in the western sector since 1955 and many more planned. None of the recent developments are near the downtown core; all within the western sector are in the Beverly Hills and Westwood areas, about 35 to 40 minutes in travel time from the core.

Since these new elevator structures are still exceptional in Los Angeles, they were not included in the relatively small density sample of representative construction. They are significant, however, as an emerging characteristic of new multifamily housing in the region. If they were included in a density curve of all new apartment development, the curve would probably reach a peak in the 35-40 minute time zone, where a small rise in density is evident in the curve of ordinary construction. In an over-all perspective, the density patterns of new housing in Los Angeles suggest limited preference for central sites, with locational preferences currently shifting to a new non-central orientation.

Conclusions

Analysis of locational preferences in the market for new housing within the three study areas confirms the theoretical approach, at least as far as multifamily development is concerned. New York

exhibits clear and substantial central preferences; Hartford has similar tendencies but their effects are undercut by the proximity of vacant land; Los Angeles presents an ambiguous picture suggesting only weak central preferences that have little or no effect on rent levels.

We set out to learn whether consumers have rejected central locations for new housing. The answer depends upon metropolitan characteristics. In New York, with its strong center and lack of accessible vacant land, consumers prefer central locations to the extent of paying sizable rent premiums and living at extremely high densities in new buildings near the core. In Hartford and Los Angeles, where the regional structures are less favorable for the center, consumers prefer central housing to a lesser degree, but they pay slight rent premiums and accept higher densities at central locations in Hartford, and they occupy inlying housing in Los Angeles more fully than outlying units of comparable quality.

What do these findings mean for attracting new housing to the declining areas? In terms of the strategy of renewal planning, they corroborate what has long been recognized on an intuitive basis: strengthening the downtown core is an important means of stimulating market demand for inlying housing. They also underline the importance to the housing market of travel-time differentials between various parts of the region and the downtown core. Transportation systems that change travel-time relationships between central and outlying locations (for trips to the core) can alter the demand for new housing in these locations. New facilities that decrease travel times to vacant land without creating proportional effects in central locations can reduce the attractiveness of inlying areas for new housing.

Analyses of locational preferences in the housing market can furnish useful guides for renewal planning, for housing preference patterns

play a key part in determining maximum feasible cost levels for new development. Urban areas in which central preference is an important factor in the housing market can undertake renewal programs on central sites even if costs to the developer are higher than in more outlying areas. The only relevant standard is that costs must be commensurate with market advantages in a given location. Where central preference is weak or non-existent, the successful renewal of obsolete areas near the core requires keeping development and operating costs competitive with those in outlying locations. The pattern of locational preferences in a housing market establishes the extent of leeway within which developers' costs can rise above levels prevailing in other parts of the region. Without further research into existing cost structures, however, we cannot say whether a given preference pattern permits or obstructs the rebuilding of older areas, or whether contemplated public policies will succeed in reshaping the locational pattern of new housing.

To illustrate the applicability of locational preference analysis to determining the feasibility of renewal, let us return to the rent gradients for New York City. In our initial rental sample, we eliminated housing located in poor environments that might have adverse effects on rent levels. As a result, the sample contained very few units with travel-times of 15-25 minutes to the core; this time zone consists largely of the "gray areas" of New York, with decaying housing and inferior environments. Let us now add our rental information for these units in poor environments to the rest of the rent gradient. The results appear in Figure III-9, where median rents and median times are plotted for the new sample at points A, B, and C.

Not only are these rents below the original gradients at the same location; they are even below rents in more outlying locations. In terms of our approach, the depressed rent levels at these locations reflect their undesirable environment. Renewal programs that

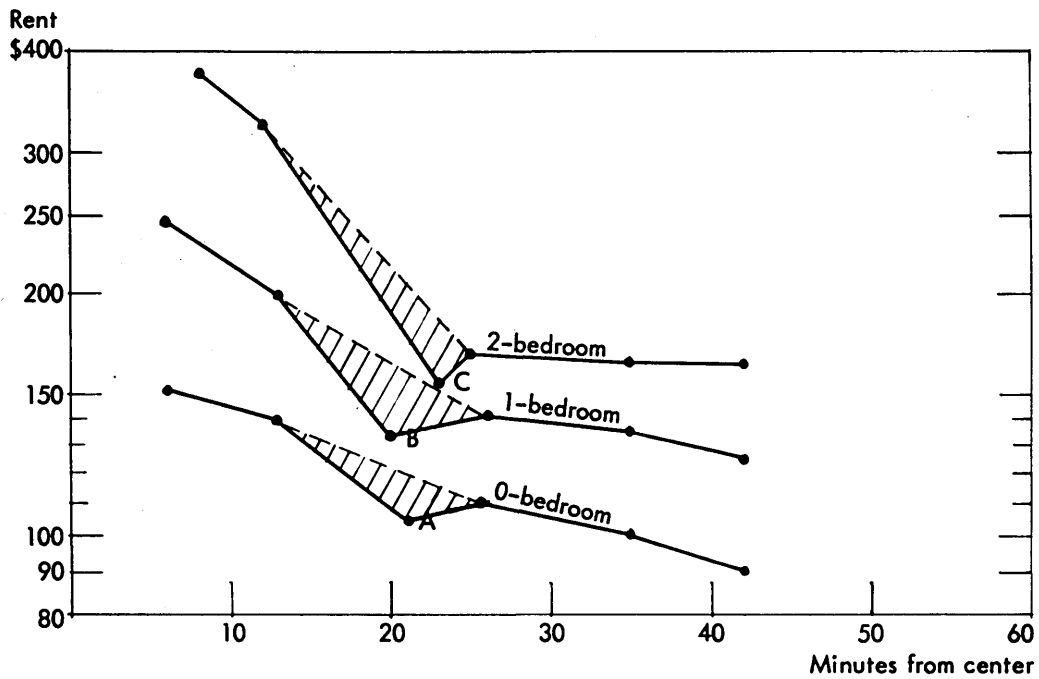


FIGURE III - 9
Monthly rents and travel times from center of New York region,
including poor environments in 15 to 25 minute zone

Source: City of New York Department of City Planning rental inventory of buildings completed 1958-1959; 14,152 dwelling units in 136 apartment developments in "good environments" plus 2,500 units in 15 developments in "poor environments." Median rents and median times of poor environment sample plotted at A, B, and C.

provide new housing in an improved environment should be able to achieve rent levels in the range shown by the shaded areas, raising them toward the extrapolated gradients for good environments. (As we have already implied, major housing programs in these locations may also have the effect of reducing rent levels in more central areas by providing close substitutes for central housing where none now exist.) At the very least, improved environments should be able to raise rents to the level found in the vicinity of 25 minutes from the core. This analysis suggests that development and operating costs in areas within the 15-25 minute zone can safely exceed comparable costs farther from the core, but they should not be far above costs at the 25-minute interval.

For a full analysis of renewal potential, locational patterns of costs as well as preferences should be investigated. Locational preferences can be understood in terms of the metropolitan factors that we have isolated for this analysis. The extent to which cost patterns correspond to locational preferences in the three study regions is the subject of our next chapter.

FOOTNOTES

1. Chester Rapkin, "Trends in the Philadelphia Area," in Philadelphia Housing Association, Ends and Means of Urban Renewal, Philadelphia, 1961, p. 78.
2. Louise P. Lerdaу, "Same Facets of the Region's Consumer Trade and Service Activities," in Robert M. Lichtenberg, One-Tenth of a Nation, Cambridge, Harvard University Press, 1960, p. 234.
3. A few exceptions occur in the Hartford region, where some units built between 1947-1950 were included in the 20-29 minute time zone to supplement a very small sampling of post-1950 development.
4. Sources for New York were City of New York Department of City Planning, New York Transit Authority timetables; for Westchester County, timetables of commuter railroads (average of three fastest times for trains departing between 5:00-6:00p.m.); travel-times were measured from 42nd Street. Los Angeles source: Automobile Club of Southern California, Los Angeles Metropolitan Peak-Hour Driving Study, June 1960; travel-times measured from interchange of Hollywood Freeway and Harbor Freeway. Sources for Hartford were Hartford Area Transportation Study, Connecticut Highway Department; and Wilbur Smith and Associates, Mass. Transportation in the Capitol Region, prepared for the Capitol Region Planning Agency, December, 1960; travel-times measured from corner of Market Street and State Street. Walking rate from subway station in New York and bus line in Hartford to apartment house estimated as 3 miles per hour. New York housing over 3,000 feet from subway station excluded from sample.

5. Source: James Felt and Co., New York.
6. In a study of the downtown housing market in Philadelphia, Rapkin and Grigsby mention that similar new apartments rent for \$40 a room close to downtown and \$35 a room in outlying parts of the Philadelphia area. Core employment in Philadelphia accounts for 20-25 percent of the total for the region, and substantial time savings are possible from central locations. Chester Rapkin and William G. Grigsby, Residential Renewal in the Urban Core, Philadelphia, University of Pennsylvania Press, 1960, pp. 51, 56.
7. California Department of Employment, community labor market surveys as of July 1960, reported September 1960, Nearby districts included in the total are Van Nuys and Inglewood.
8. U. S. Census of Business: 1958, Vol. VII, Central Business District Report, Los Angeles-Long Beach, Calif. Area -- BC58-CBD43, Tables 1A, 7. San Fernando Valley shopping areas included: North Hollywood, Valley Plaza, Van Nuys, Sherman Oaks.
9. Information prepared by Hartford Area Transportation Study, Connecticut Highway Department.
10. Nelson N. Foote et. al., Housing Choices and Housing Constraints, New York, McGraw-Hill, 1960, pp. 439-444.
11. Residential Research Committee of Southern California, Residential Research Report, Fourth Quarter, 1960, p. 43, Source: Los Angeles Department of Water and Power, Southern California Edison Company, City of Pasadena Light Department, Burbank Public Service. Average of quarterly vacancy rates for 1959 and 1960 in 12,400 apartments.
12. State of New York Temporary State Housing Rent Commission, "Report on the Survey of the Rental and Housing Market," January 19, 1961, p. 10.

13. Real Estate Board of New York, cited in preceding report, p. 13.
14. U. S. Census of Housing: 1960, Advance Reports, Housing Characteristics: States, HC(A1)-33, New York, Table 1. Vacant units available for rent with all plumbing facilities as percent of total rental units with all plumbing facilities in New York Standard Metropolitan Statistical Area.
15. U. S. Census of Housing: 1960, Advance Reports, Housing Characteristics: States, HC(A1)-7, Connecticut, Table 1. Vacant units available for rent with all plumbing facilities as percent of total rental units with all plumbing facilities, in Hartford Standard Metropolitan Statistical Area, towns of East Hartford, Hartford, West Hartford, Wethersfield.
16. American Public Health Association Committee on the Hygiene of Housing, Planning the Neighborhood, Chicago, Public Administration Service, 1948, p. 39.

CHAPTER IV

THE ECONOMICS OF NEW HOUSING IN THE DECLINING AREAS

Central locations have important market advantages for new housing in New York, slight advantages in Hartford, and negligible advantages in Los Angeles. Taken alone, these market characteristics neither promote nor retard the construction of new housing in central areas. If development costs were equal throughout a region, consumer locational preferences alone would determine where new housing could earn the greatest return on investment. But development costs vary within urban regions: land costs differ from site to site, and real estate taxes differ in each taxing jurisdiction within a region. Developers have a certain degree of flexibility in coping with cost differences. They can adjust densities to take account of different land costs, and they can vary building types to achieve different construction and operating costs per dwelling unit. The object of these adjustments is always to produce a housing unit that will yield a satisfactory return on investment, a unit whose rental income will exceed yearly costs by an amount sufficient to compensate the equity investor.

Wherever such adjustments succeed in producing a satisfactory return on investments, new housing is feasible. To evaluate the prospects for developing new multifamily housing in the declining parts of our study regions requires bringing together three separate elements that enter into the investor's calculations: cost levels

confronting developers, the rents they can achieve with particular kinds of dwelling units, and their methods for adjusting the housing product to yield a satisfactory return within the limits established by cost factors and market characteristics. Rent information gathered for the preceding chapter serves to establish the rent level component of this investigation. In this chapter, we combine rent data with information on land, development, and operating costs to see whether developers can work out acceptable densities and structural types to produce a satisfactory return on new housing in the declining areas. To understand current cost and market conditions, we look first at areas within each region where construction has been active, then apply our findings to the declining areas.

This analysis produces surprising results. Despite the widespread view that new private development is not economically feasible in the declining "gray areas," we find that all three study regions meet the first requirement for rebuilding. Site costs and re-use values are roughly in line in all three regions -- though the Hartford case is marginal. These results are the more striking because only New York displays clear and strong central preferences in the new housing market. Nevertheless, the balance of land costs and re-use values is clearly favorable for rebuilding the old areas of Los Angeles as well as New York, and favorable with only slight qualifications in Hartford.

New York Development Costs

According to the findings of the New York Metropolitan Region Study, the cost of developing new apartments in most of the built-up sections of New York City -- including the declining areas -- is so high that necessary rents will price such apartments out of the

reach of all but the wealthiest groups. Speaking of these inner areas of the region, Hoover and Vernon observe:

Members of the middle income group who insist upon tolerable structures are effectively excluded; this group could not afford to exploit the access advantages of such locations by rebuilding. Such an operation . . . is too costly except for the very rich.

To demonstrate that this conclusion is incorrect, we shall work through the cost and return analyses that every developer must make, and determine what rent levels are necessary to produce a satisfactory return on investments in the declining areas, and whether such rents are obtainable. At the same time, we shall present a picture of typical multifamily development practice throughout the region, for if new housing is to be truly feasible in the old areas, it must not involve economic disadvantages. New housing must conform to normal investment expectations, and offer returns competitive with those at alternate locations that developers now find attractive.

Several components of development cost are more or less constant throughout the New York region, as well as throughout the Los Angeles and Hartford regions, and therefore exercise little influence in the developer's choice of building locations within the region. Construction costs for comparable apartment structures vary so slightly that developers consider them approximately equal throughout the New York area. Building code requirements within the various legal jurisdictions of the region offer no significant opportunities for structural modifications that might reduce the cost of new apartment buildings in particular locations. Operating costs are also constant throughout the region, depending on building type and level of service rather than location. The major elements that

vary with location are property taxes and land costs; the extent to which they influence the locational pattern of new housing depends upon their importance within the total cost structure for new buildings, and upon the extent to which they vary within the region.

Property Tax Levels

Contrary to the popular impression that real estate taxes are highest in the central city and grade off to significantly lower levels in the suburbs, information for the New York region indicates that tax differences are not major ones, and do not follow a center-oriented pattern. The main problem in comparing tax rates for different communities is to secure reliable estimates of the relationship between assessed value and actual market value of properties. The New York State Board of Equalization and Assessment prepares equalization ratios, reflecting their estimate of the percentage of market value used in local valuations, for the five boroughs of New York City and five other cities in the region. Table IV-1 presents a comparison of estimated tax rates in these communities, derived by multiplying the equalization ratio for each community by its nominal tax rate for 1959.

These rates are somewhat higher than actual rates, since the equalization ratios are based on market values for 1952 and 1957, which have subsequently risen in general. For purposes of comparison, however, they do indicate that central areas suffer from no major tax burden in comparison with outlying sites. Rates in several Westchester cities are higher than those in New York City. Within New York City, differences are minor between Manhattan and the Bronx, Brooklyn, or Queens. If we assume a new dwelling unit with

TABLE IV-1

Property Tax Rates for Communities in New York Region, 1959

Community	Estimated Tax Rate (Percent of full market value)
City of New York:	
Manhattan	3.86
Bronx	3.70
Brooklyn	3.41
Queens	3.11
Richmond	2.73
Westchester County:	
Mount Vernon	4.36
New Rochelle	4.07
Rye	3.78
White Plains	3.35
Yonkers	3.27

Source: New York State Department of Commerce, "Real Property Taxes in Cities of New York State, 1959," M-575-r, based on equalization ratios established by State Board of Equalization and Assessment. Tax rates include city, county, and school-district taxes due in 1959.

a market value of \$10,000 and treat these estimated tax levels as actual rates, Manhattan taxes will be \$75 per year higher than Queens taxes -- a difference that can be overcome by a monthly rent six dollars higher in Manhattan than in Queens. As we know, Manhattan apartments command a rent premium far higher than that needed to wipe out this tax differential. The only tax difference that appears significant in Table IV-1 is the gap between Richmond and the other boroughs of New York City. Despite an apparently favorable tax level, Richmond has been too inaccessible from the core of the region to attract more than a small amount of new multifamily housing. The major alternatives for new apartment locations (within the New York State portion of the region) are Manhattan, Queens, Brooklyn, the Bronx, or Westchester County. Among these alternative locations, tax differences are minor.

To check on the accuracy of this comparison and its applicability to new construction, information was obtained from real estate developers on the proportion of assessed value to development cost for new apartment buildings in areas of recent construction activity.² These ratios, applied to 1959 nominal tax rates, produced the following estimated tax rates:

Manhattan	3.18 percent
Bronx	3.19
Brooklyn	3.20
Queens	3.20
White Plains	3.10

According to this information, gaps between tax levels are still narrower than they appeared in Table IV-1. Within New York City, differences are negligible. The White Plains rate is so close to those in the New York City boroughs that the total tax differential

for a \$10,000 dwelling unit would amount to a maximum of ten dollars. Tax levels, then, seem to constitute no obstacle to rebuilding the inner parts of the New York Region.

Land Costs in the New York Region

Land costs in New York follow the pattern of rents and densities that we observed in Chapter III. Rents and densities are much higher in the center of the New York region than in outlying locations. Land costs for inlying apartment sites reflect the high rent-earning capacity of central land, and are many times higher than costs in other parts of the region. In Manhattan, most land in areas of recent apartment activity sells for prices ranging from twenty to seventy dollars per square foot.³ Prices vary considerably in different Manhattan locations. On Fifth Avenue, prices go as high as one hundred fifty dollars per square foot. Prime sites in Greenwich Village cost sixty dollars per square foot, while less favored Village sites are thirty to forty dollars. Good sites on the Upper East Side bring prices of sixty to seventy dollars per square foot. Other sites, away from the prime locations, cost twenty to thirty dollars per square foot. In all these cases, site acquisition costs involve paying for existing buildings on the land.

In the other boroughs of New York City, land prices seldom exceed ten dollars per square foot for apartment sites. The best locations in Brooklyn, Queens, and the Bronx bring ten dollars, but most apartment sites in these boroughs cost less than five dollars per square foot. Average locations in Brooklyn and the Bronx are three to four dollars per square foot; in Queens, they range from three to five dollars. These sites are also covered with existing buildings,

but typically the densities are much lower than in Manhattan. In some cases, single-family houses occupy the sites, but more often developers must pay for low multifamily structures.

Apartment sites in Westchester County are generally in built-up areas, readily accessible to commuter railroad stations. Here the prices are usually four to five dollars per square foot, but occasionally land sells for as much as eight dollars per square foot in choice locations. Site acquisition for Westchester apartment houses generally requires clearing existing structures of low or moderate density.

Vacant land in the New York region sells at lower prices, but little of it is easily accessible to public transportation. The Bronx has some vacant land near the Westchester County line, far removed from subway connections, selling for one to two dollars per square foot. Vacant land in Brooklyn, equally inaccessible to public transportation, sells for comparable prices. Queens has some vacant land within range of the subway network; prices for this land range from one to three dollars, depending on physical suitability of the land for building. Vacant land in areas outside the City of New York -- Westchester County and the New Jersey counties of Essex and Hudson -- sells for one to three dollars per square foot. In Westchester County, garden apartment developers pay from one to two dollars per square foot for vacant land within driving distance of commuter railroad stations.

These prices, based on recent sales of land to apartment developers, are consistent with development opportunities in locations where new construction has been active. Our objective is to discover whether

development costs are too high to provide a satisfactory return on new housing investments in the inner areas of New York where construction has not been active. As a first step, let us see how land prices in the inactive areas compare with those in the rest of the region.

Many redevelopment projects in New York have been located in areas of Manhattan highly accessible to the core (fifteen minutes or less in travel time) where little unsubsidized housing has appeared in recent years. Land for these projects has cost from twenty to forty dollars per square foot,⁴ a price level corresponding to the lower end of the twenty-to-seventy dollar range we noted previously for areas where new apartment construction has been active. Manhattan locations farther from the core offer lower land prices: site acquisition costs have ranged from nine dollars per square foot for land in Harlem to fifteen dollars per square foot for a site on the Upper West Side near Central Park. Site acquisition costs for public housing projects in Manhattan have been still lower, ranging mostly from seven to eleven dollars per square foot for locations fifteen to twenty minutes from the core.⁵ With the exception of highly accessible locations near the core, land prices in the inactive areas of Manhattan are clearly lower than typical prices in active construction areas. Whether they are low enough to match the earning capacity of this land remains to be seen.

Land costs in the declining areas of other boroughs are below Manhattan levels. Redevelopment sites near the commercial core of downtown Brooklyn, some twenty-five minutes from 42nd Street in Manhattan, have cost from six to nine dollars per square foot, but advance acquisition estimates for one prime site indicate a cost of twenty-four dollars per square foot. Away from this secondary

commercial core, public housing site costs are indicative of price levels in the declining areas. Land costs for most housing projects outside Manhattan have ranged from three to seven dollars per square foot, for built-up sites near public transportation and accessible to the core in twenty to thirty-five minutes. These prices are somewhat higher than the three-to-four dollar range that we have found in typical active areas in Brooklyn and the Bronx, and the corresponding three-to-five dollar prices in Queens. Some additional market advantage would therefore seem to be necessary to attract investment to these more expensive locations.

Figure IV-1 brings together information on land prices for redevelopment and housing project sites, excluding housing projects built on vacant land. Land prices in these old areas decline as travel time from the core increases, but prices vary considerably for any given degree of accessibility. In addition to travel time from the core, the density of previous development is a major factor influencing cost levels. Figure IV-2 presents public housing land costs per square foot as a function of dwelling units per acre on the site before clearance, using only those project sites that were predominantly residential before acquisition. The obvious relationship between density and acquisition cost calls attention to existing density as a critical factor influencing the redevelopment potential of declining areas. In Manhattan, public housing sites were previously developed at densities between one hundred and two hundred dwelling units per acre of total project area. Projects in the Bronx, Brooklyn, and Queens generally use sites that had been developed at densities of between twenty and one hundred dwelling units per acre. To the extent that high acquisition costs block the rebuilding of old areas in Manhattan, the high density of previous development plays a role in inhibiting

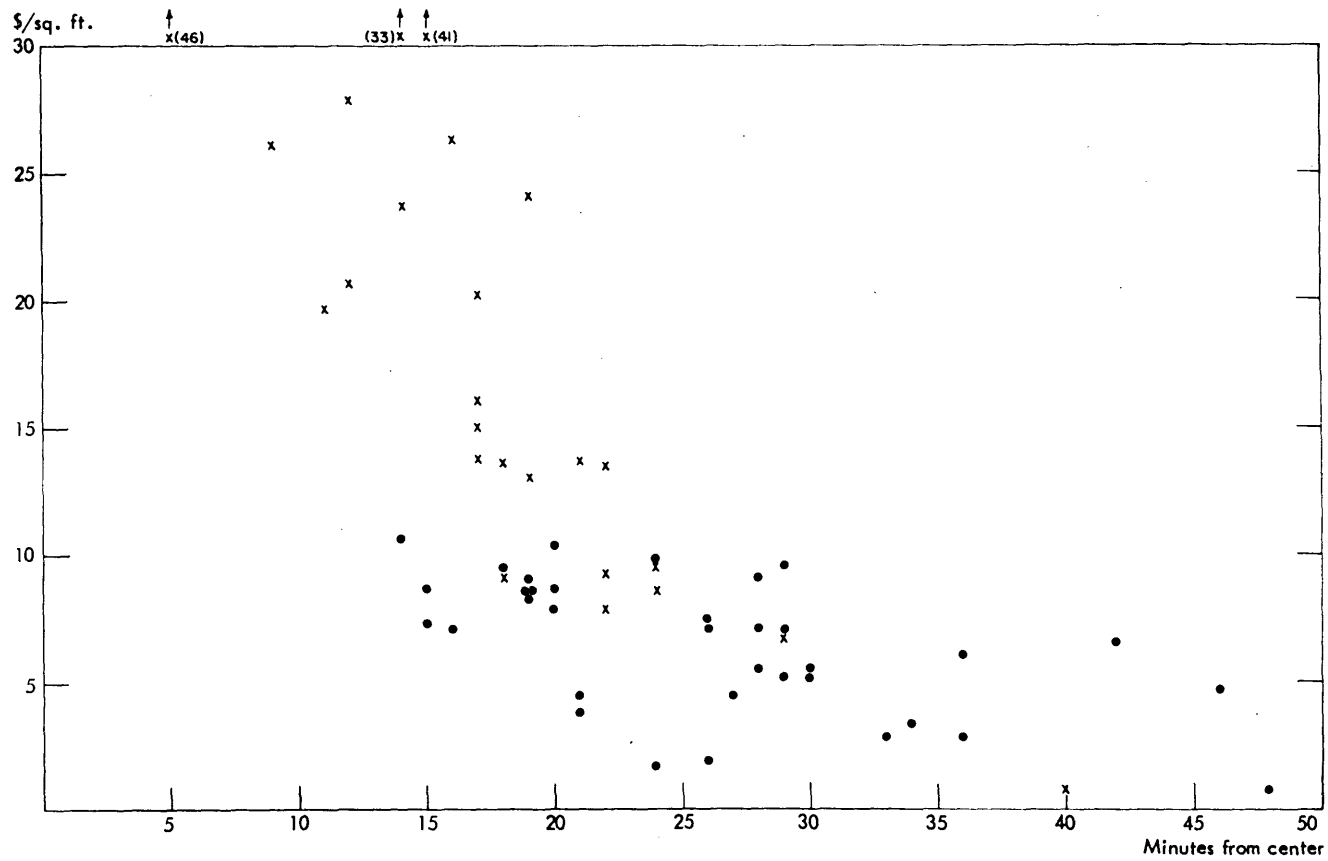


FIGURE IV - 1
 Site acquisition costs and travel times from center of New York City
 Public housing project: • Urban renewal project: x
 All are post-1950 projects requiring site clearance.

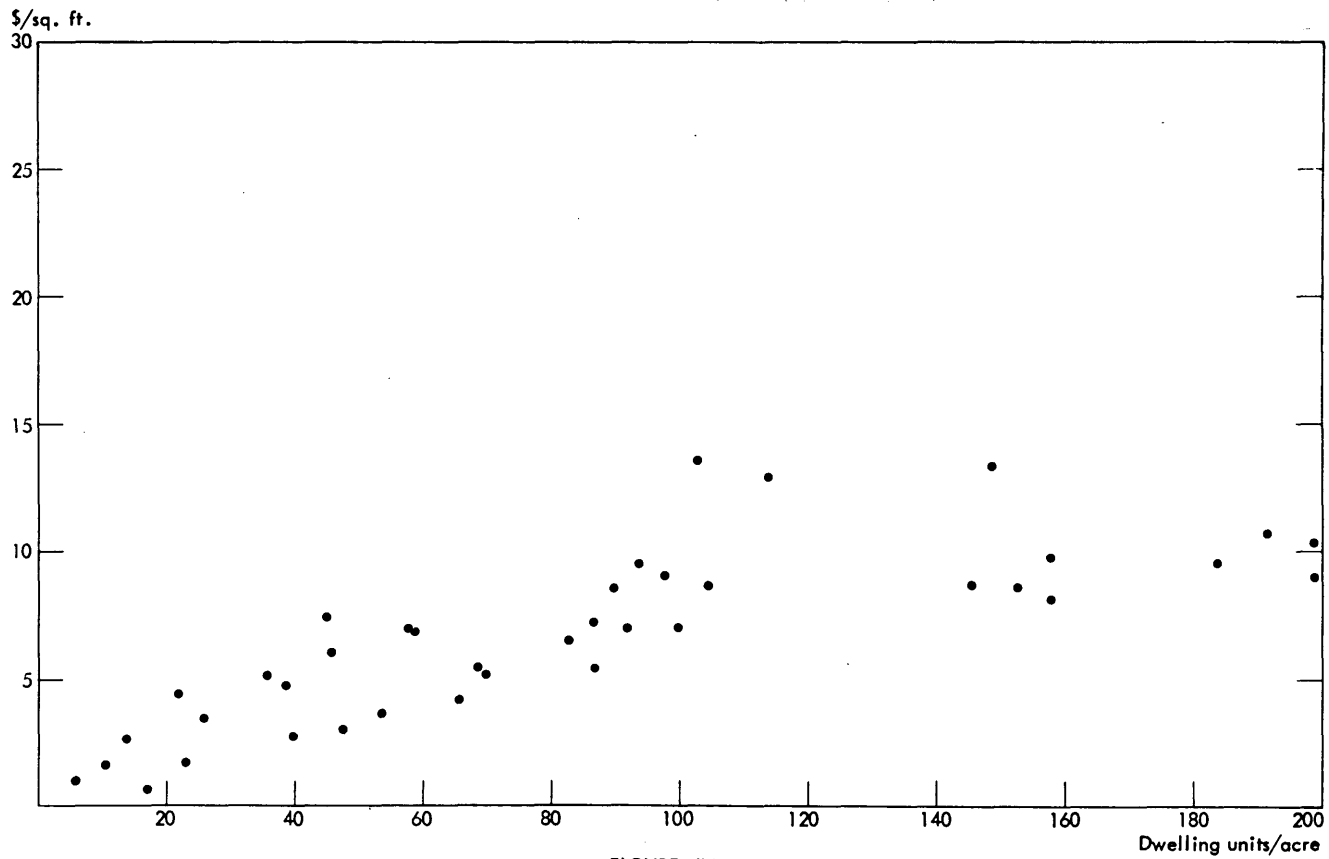


FIGURE IV - 2
 Site acquisition costs and prior density of development, New York City
 public housing projects (post-1950) in residential areas

current change. In other regions, where the declining areas have never been developed at very high densities, site acquisition costs are not likely to reach Manhattan levels.

The Adjustment of Cost Factors

How significant are the differences in land prices within the New York region? On a square foot basis, land costs for apartment sites in Manhattan are often twenty times as high as those in the outer boroughs. Sixty dollars per square foot is a typical price for Manhattan luxury apartment sites, while apartment land in outer Brooklyn and the Bronx sells for as little as three dollars per square foot. But the costs that matter for apartment developers are not prices per square foot; they are development costs per unit and yearly operating outlays. We have noted in Chapter III that new apartments are developed at much higher densities in the center of the New York region than in outlying areas. Thus the land cost per dwelling unit need not be twenty times higher on sixty-dollar land than it is on three-dollar land. By reducing the amount of land per unit in central locations, the developer can hold down the land cost per unit even where land prices per square foot are high.

The developer's ability to adjust costs in this way is limited by a number of factors. If he could build central housing at twenty times the density of outlying housing, he could equalize land costs per unit, but high densities bring extra costs of their own. Tall buildings mean heavy and expensive construction, with much unproductive interior space given to corridors and elevator shafts, and a need for such expensive service features as extra elevators and underground parking levels. High densities thus raise unit construction and

operating costs at the same time that they reduce unit land costs. In addition, consumers may prove unwilling to accept high densities if they entail loss of light and air, and zoning laws set an upper limit on both density and land coverage. As a result, New York developers do not build in Manhattan at twenty times the densities they use in Brooklyn; they build at about three times the Brooklyn densities -- 400 to 500 dwelling units per acre on expensive Manhattan land, compared with 150 on cheap land in the other boroughs.

This higher density reflects not only taller building types and fuller land coverage, but also a high proportion of small dwelling units. As table IV-2 indicates, efficiency apartments constitute only a small proportion of new dwelling units in outlying locations, but account for a major share of new units in the center of the region. Two-bedroom apartments, on the other hand, represent one-fourth of all new units in outlying areas, but shrink to half that proportion in the center.

Of the two methods for increasing density, taller structures make possible major density increases, while shifts in apartment size distribution allow only small supplementary gains. Thus increases in density typically bring about the higher unit construction and operating costs that are characteristic of tall buildings. As a result, the problem of selecting an optimum density is one of balancing economies in unit land cost against increased unit construction and service costs.

In adjusting development costs, the objective is not to minimize unit cost but to achieve a satisfactory return per unit investment. Part of the cost adjustment, therefore, may represent a strategy for

TABLE IV-2

Size Distribution of New Apartments by Travel Time
from Core, New York City, 1958-1959

Minutes from core:	0-9		10-19		20-29		30-39		40-49	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Efficiency (0- bedroom) apart- ments	750	44.0	1443	33.4	439	21.0	1013	21.8	215	15.5
1-bedroom	686	40.3	2074	48.0	1033	49.5	2259	48.6	798	57.5
2-bedroom	203	11.9	728	16.8	496	23.8	1187	25.5	348	25.1
3-bedroom or larger	65	3.8	78	1.8	119	5.7	191	4.1	27	1.9
Total	1704	100.0	4323	100.0	2087	100.0	4650	100.0	1388	100.0

Source: Rental inventory used in Chapter III, Figure III-4. Travel time calculations described in Chapter III, footnote 4.

increasing unit rent rather than merely holding down costs. To achieve higher rents, developers may provide such special construction features as outdoor balconies, central air conditioning, and decorative lobbies and exteriors. Special service features -- door-men, elevator operators, superior property maintenance -- also represent ways of attaining higher rents. Construction and service costs play a dual role in the cost adjustment process: they are partially determined by the choice of density, but they are also determined in part by independent decisions to vary the levels of facilities and services in order to achieve desired rent levels. As this type of variation suggests, developers may overcome high land costs not merely by raising densities to economize on development costs, but also by producing a superior product that can command a rent premium.

Examples of Cost Adjustment

In studying the cost adjustment process, we must take account of all these factors -- density, construction cost, operating cost -- as variables that are manipulated to produce an acceptable investment "package." In Table IV-3, a number of examples are given to illustrate the ways in which New York developers adjust costs in a variety of locations with differing land prices within the region. Columns 1 through 5 describe costs and their adjustment in areas where apartment construction has recently been active. On the basis of these current methods of development, feasible development alternatives have been prepared for hypothetical locations in the declining areas; these alternatives are presented in columns 6 through 8. Information on current cost levels and development practice in different parts of the region is derived from a series of

TABLE IV-3

New York Region: Financial Calculations for One-Bedroom Apartments

	1	2	3	4	5	6	7	8
Location:	Manhattan	Manhattan	Queens	Brooklyn- Bronx	White Plains (Westchester)	New York Declining Area	New York Declining Area	New York Declining Area
Travel time from downtown	5-9 min.	10-19 min.	25-34 min.	35-39 min.	40-44 min.	15-24 min.	15-24 min.	15-24 min.
Land cost per sq. ft.	60.00	20.00	10.00	3.50	4.50	5.00+	9.00	4.50+
Building type	15-story el.	12-story el.	6-story el.	6-story el.	6-story el.	6-story el.	6-story el.	3-story
D. U. per acre	500	350	160	150	120	150	150	50
Sq. ft. per d. u.	87	124	272	290	363	290	290	871
Land cost per d. u.	5220	2480	2720	1015	1634	1500	2610	4000
Construction cost per d. u.	16000	13000	10000	8500	9000	9000	9000	8000
Total investment per d. u.	21220	15480	12720	9515	10634	10500	11610	12000
Equity share (1/3)	7073	5160	4240	3172	3545	3500	1161*	1200*
Mortgage (2/3, 6%, 20 years)	14147	10320	8480	6343	7089	7000	10449*	10800*
Yearly operating cost	660	420	350	350	350	350	350	300
Tax rate	.0318	.0318	.0320	.0319	.0310	.0319	.0319	.0319
Yearly taxes	675	492	407	303	330	335	370	382
Total yearly cost	1335	912	757	653	680	685	720	682
Yearly rent (Monthly rent)	3600 (300)	2520 (210)	2100 (175)	1680 (140)	1800 (150)	1800 (150)	1680 (140)	1680 (140)
Cash surplus over cost Less yearly interest and amortization (8.5% of mortgage)	2265 <u>1202</u>	1608 <u>877</u>	1343 <u>720</u>	1027 <u>539</u>	1120 <u>603</u>	1115 <u>595</u>	960 <u>758*</u>	998 <u>783*</u>
Net cash return	1063	731	623	488	517	520	202	215
Return on equity	15.0%	14.2%	14.7%	14.6%	14.6%	14.9%	17.4%	17.9%

* FHA Financing: 90% mortgage, 30 years, 7 1/4% yearly interest and amortization.

interviews with New York realtors and public officials, and from published cost analyses of recent apartment buildings.⁶

Assumptions for these case examples reflect conservative estimates of typical current conditions. Financing terms are those that a builder could secure from conservative banking institutions. In actual practice, a developer may secure a mortgage covering considerably more than two-thirds of development cost, as we assume here. In practice, property taxes may be somewhat lower than those presented in the table: our assumption is that New York City assessments are 75 percent (and White Plains assessments 62 percent) of full development cost, including full site acquisition cost. In reality, land assessments are often somewhat lower.

Discussions with realtors indicated that a yearly return of approximately 15 percent on equity investment, after payment of interest and amortization, is necessary to attract risk capital into most apartment developments in the New York area. The case examples all produce returns of about 15 percent, according to our assumptions. The conservative nature of these assumptions with respect to financing and property taxes probably results in an understatement of the return on equity. No specific allowance has been made for vacancies, however, so that the indicated rates of return are not likely to differ greatly from realistic conditions.⁷

Column 4 describes the basic New York apartment house: six stories, undistinguished in appearance, with minimum physical features (no balconies, plain lobbies, red brick facing) and minimum service. This type of building, found in large numbers in Brooklyn, the Bronx, and Queens, provides the cheapest new apartments available in the

area. Rents are typically forty dollars per room, with three and a half rental rooms normal for a one-bedroom apartment. This type of structure is a reasonable investment on land costing three to four dollars per square foot. At a characteristic density of 150 dwelling units per net acre, the land cost per unit is a little over one thousand dollars. Developers sometimes pay somewhat more for land per unit to build this type of structure for the same general rent level. Fifteen hundred dollars per unit for land is the upper limit, and at this cost rents may have to go up slightly.

Land for apartment houses sells for as much as ten dollars per square foot in the best parts of the Bronx (Riverdale) and Queens (Forest Hills, Main Street-Flushing). Column 3 illustrates how developers adjust their costs to build in these locations. Building height typically remains at six stories, but density increases slightly. The dwelling unit itself is a more expensive product, with an outdoor balcony and perhaps central air conditioning. By virtue of superior physical equipment, a location more accessible to Manhattan, and desirable neighborhood associations, the apartment can command fifty dollars a room, or \$175 per month for the unit. Under these circumstances, the developer can afford to pay more than \$2500 per unit for his land.

Within Manhattan, but away from key prestige locations, land prices of twenty dollars per square foot require a more decided shift to higher density. Typical densities here are about 350 dwelling units per acre, in buildings twelve stories high. These are fully fireproof buildings, with concrete floors, in contrast to the lighter semi-fireproof construction permitted in six-story structures. Unit construction costs rise substantially, but part of the increase reflects

higher standards, including more expensive exterior finish and more elaborate lobbies. Service costs also rise, reflecting a higher level of service, with a doorman and parking attendant on the payroll. In recognition of superior location and the level of physical plant and service, rents rise to sixty dollars per room, or \$210 per month for a one-bedroom apartment. Unit land costs, at \$2500, remain about the same as in the best Queens locations.

To create a suitable investment in Manhattan prestige locations, the builder must improve his product still more, while he raises density higher. On the sixty-dollar land in column one, developers build at densities of about 500 dwelling units per net acre, using buildings fifteen stories or higher. Rooms are larger, kitchen equipment is more elaborate, and the level of service is still higher. Rents in these luxury buildings are \$85 per room, \$300 per month for a one-bedroom unit. Land cost per unit is over \$5000 at this location; Manhattan developers often pay \$6000 or \$7000 per unit for luxury apartment sites.

At the other extreme of the region in terms of location are suburban sites for apartment houses. Land in White Plains, more than forty minutes from 42nd Street in Manhattan by commuter railroad, sells for four to five dollars per square foot in locations suitable for apartment houses. These locations are generally within walking distance of the railroad station. Here the developer's response is to provide a building very similar to the basic 6-story apartment house of Brooklyn and Queens, with slightly more expensive features and somewhat lower density. One-bedroom apartments in Westchester bring rents of \$150 per month, ten dollars more than apartments in outer Brooklyn or the Bronx, but this small differential is enough to permit

slightly higher expenditures for land and construction in Westchester. Land cost per unit in this White Plains example is \$1600.

In presenting these case examples, we have adopted the perspective of the individual builder confronted with a set of costs that he must combine in attempting to work out a satisfactory investment. From a broader perspective, the cost and rent combinations that developers achieve in different locations are not merely the way of overcoming a given level of land costs: they are also the justification for the level of land costs. Sixty dollars per square foot constitutes a market price for luxury apartment land in Manhattan only because reasonable investments can be worked out at this price level. If they could not, land would not sell for apartments at this price.

Apartment land in New York generally contains existing structures that must be cleared, however. To the extent that these structures produce income, they constitute an independent standard governing the value of the site in its present use. Land sales for apartment re-use are feasible only if the site has a re-use value to the developer greater than the value of land and buildings in present use. In the land markets of the various sections of New York where apartment construction is active, re-use value, supported by the investment possibilities we have described, clearly exceeds present value of land and buildings on a sufficient number of sites to provide a steady supply of marketable land.

Investment Possibilities in the Declining Areas

We have looked into current methods of adjusting development costs to market rents in a variety of New York locations. What can be done

in the declining areas? According to our analysis in Chapter III, accessibility to the core is a potent market factor in the New York region. As a result, the locational advantages of the older areas with respect to core access should enable them to command higher rents than more outlying areas, provided that their environment is upgraded from its present condition. Let us assume that new one-bedroom apartments approximately twenty minutes from midtown Manhattan bring in rents ten dollars higher per month than comparable apartments thirty-five minutes away in Brooklyn and the Bronx.

Under these conditions, calculations in column 6 indicate that developers can pay more than five dollars per square foot for land, a price within the three-to-seven dollar range that we have found to be typical of land costs in the declining areas outside Manhattan. The land cost per dwelling unit in this case is \$1500, a price consistent with present practice in developing six-story apartment houses in the outer boroughs of New York City. In this calculation, density has been held to the same level of 150 dwelling units per net acre that prevails in more outlying locations. Thus the cost of land constitutes no significant obstacle to rebuilding the older areas outside Manhattan. Economic conditions are sufficiently favorable to permit new apartment developments comparable to those in the outlying parts of Brooklyn and the Bronx, provided that the environment is reclaimed so that it exercises no depressing influence on rent levels. Further, the rent levels we assume here are far below the luxury category.

Some sites in the older areas will involve clearance costs higher than three to seven dollars per square foot. Public housing sites in Harlem have cost about nine dollars per square foot, while sites elsewhere in Manhattan have cost as much as eleven dollars per square foot for

public housing and fifteen dollars per square foot for urban renewal projects. If these sites are suitable for apartments with rents of \$175 or \$210 per month, as in columns two and three, land costs of ten dollars and twenty dollars per square foot will be consistent with development opportunities, but even at lower rents these land costs do not rule out new development. All our examples so far assume conventional financing at conservative terms. If we substitute the type of financing available for mortgages insured by the Federal Housing Administration, which would be available in official urban renewal project areas (under the FHA section 220 rental housing program), developers can pay higher land prices even if rents remain at the moderate levels prevailing in outlying New York City locations.

Under FHA financing, mortgages cover 90 percent of total development cost, and the mortgage term is thirty years or longer. Conventional financing, as we have defined it, provides for loans of two-thirds of development cost, with a mortgage term of twenty years. Even if we assume a rent of only \$140 per month, nine dollars per square foot is a feasible land price for six-story apartment buildings at a density of 150 dwelling units per acre, under the FHA financing terms used in column 7. As a result, the Harlem land price of nine dollars per square foot is not excessive for typical New York six-story apartment houses, within the framework of an urban renewal project that will improve the environment and make available FHA financing. If rents higher than \$140 can be obtained, land prices higher than nine dollars per square foot, and equal to those of public housing sites in Manhattan, are feasible for new construction.

Rebuilding the declining areas may call for some construction at

densities lower than 150 units per acre. With FHA financing, three-story walk-up buildings are feasible on land selling for \$4.50 per square foot. Column 8 presents calculations for a development of this type, with one-bedroom apartments renting once again for only \$140 per month. Land prices in the declining areas of Brooklyn, the Bronx, and Queens are thus compatible even with densities of 50 units per net acre, with the aid of FHA mortgages. This density would not be feasible for Manhattan, however, unless subsidies were available.

So far as typical New York developments are concerned, our calculations demonstrate clearly that the declining areas present no major economic difficulties. Outside Manhattan, new developments comparable to current construction in outer Brooklyn and the Bronx -- and with the same general rent levels -- are economically feasible with conventional financing. In Manhattan's older areas, the same types of development are economically feasible through FHA financing. The requirements for such new developments in the declining areas are that the environment must be improved so that it does not depress rent levels below those in more outlying locations, and development densities must approximate those now current in more outlying locations. With FHA financing, developers have sufficient leeway so that either of these requirements may be relaxed to some extent in the declining areas of the Bronx, Brooklyn, and Queens.

Los Angeles Cost Components

In Los Angeles, as in New York, the only cost components that vary significantly with location are property taxes and land costs. Construction and operating costs are constant throughout the region for comparable structures and comparable levels of service. Building

codes within the region do not differ sufficiently for any community to offer large savings in construction cost by permitting cheaper structural designs. Limited savings are possible in a few cases. Beverly Hills permits frame and stucco construction to a height of four stories, while the City of Los Angeles requires heavier construction when a building exceeds three stories. Code differences of this order, while important for some locational decisions, constitute no major cost disadvantages in the centrally located declining areas.

Property taxes follow no clear-cut geographic pattern, but the central city rate is somewhat higher than rates in a number of outlying communities that serve as alternative locations for new multifamily housing. We have reliable tax information for Los Angeles County, which contains the bulk of all new multifamily housing in the region. According to informed estimates, assessment practice within the County is to evaluate residential property at approximately 25 percent of full value. Effective tax rates therefore equal one-fourth the nominal rates. Table IV-4 presents effective tax rates for communities in Los Angeles County; these rates are a composite of county, city, school, and special taxes for 1960-61.

Average tax rates for communities grouped according to distance from downtown Los Angeles show no consistent variation with respect to location. The average rates hover around two percent, except for communities between 25 and 35 miles away from the core, where the rates are higher. On the average, property taxes are no higher in central locations than in outlying areas, but the averages conceal some important differences among individual communities. The City of Los Angeles, with its tax rate of 2.02 percent, compares unfavorably with several outlying communities where developers have recently

TABLE IV-4

Property Tax Rates for Communities in Los Angeles County, 1960-61
(Estimated percentages of full market value)

Miles from core: <u>0-5</u>	<u>6-10</u>	<u>11-15</u>	<u>16-20</u>	<u>21-25</u>	<u>26-30</u>	<u>31-35</u>	<u>36-40</u>
Vernon 1.76	Beverly Hills 1.27	Pasadena 1.65	El Segundo 1.51	Long Beach 1.57	Pomona 2.17	La Verne 2.32	Avalon 1.95
Los Angeles 2.02	Commerce 1.55	Burbank 1.68	Santa Monica 1.66	Glendora 2.20	Claremont 2.35		
	Glendale 1.74	Gardena 1.84	Monica 1.66	Lakewood 1.92	San Dimas 2.32		
	Montebello 1.76	Arcadia 1.90	Signal Hill 1.81	San Fernando 1.93			
	South Gate 1.84	Downey 1.98	Duarte 1.99	Rolling Hills Est. 2.00			
	Huntington Park 1.88	Rosemead 2.00	Sierra Madre 2.09	Palos Verdes Est. 2.03			
	Maywood 1.92	San Marino 2.02	Monrovia 2.13	La Puente 2.09			
	Alhambra 2.01	Temple City 2.02	Bradbury 2.16	Rolling Hills 2.17			
	Monterey Park 2.02	Compton 2.05	Lawndale 2.16	Azusa 2.19			
	Inglewood 2.02	So. El Monte 2.06	Irwindale 2.25	W. Covina 2.22			
	San Gabriel 2.03	Torrance 2.08	Hermosa Beach 2.29	Walnut 2.26			
	Lynnwood 2.03	El Monte 2.13	Dairy Valley 2.31	Redondo Beach 2.28			
	Bell South 2.06	City of Industry 2.14	Baldwin Park 2.35	Covina 2.36			
	Pasadena 2.07	Paramount 2.25	Miranda Hills 2.36				
	Culver City 2.11	Norwalk 2.28	Hills 2.36				
	Pico Rivera 2.36	Hawthorne 2.29	Manhattan Beach 2.41				
		Bellflower 2.32	Beach 2.41				
		Whittier 2.33	Artesia 2.41				
		Santa Fe Springs 2.45					
Average: 1.89	Average: 1.92	Average: 2.08	Average: 1.99	Average: 2.09	Average: 2.23	Average: 2.34	Average: 1.95

Source: Los Angeles County Assessor, Listing of tax rates for different communities in Los Angeles County, S-74, 10/60. County assessments are approximately 25 percent of full market value; tax rates shown are therefore 25 percent of nominal tax rates.

been locating new multifamily housing: Beverly Hills (1.27 percent), Long Beach (1.57 percent), Pasadena (1.65 percent), Santa Monica (1.66 percent), Burbank (1.68 percent), and Glendale (1.74 percent). For a dwelling unit with a development cost of ten thousand dollars, yearly property taxes in the City of Los Angeles would exceed those in Santa Monica by thirty-six dollars, or three dollars per month on the rent bill. In a region such as New York, where central locations have considerable value in the rental market, this difference would be negligible. In Los Angeles, where centrality apparently has little effect on rent levels, the tax difference is worth noting. We shall test its significance for housing in the declining areas when we analyze case examples of housing investments in the Los Angeles region.

Land Costs

In the New York region, land costs for apartment sites are many times higher in central locations than in outlying areas, following the general pattern of rent levels. The Los Angeles region contrasts sharply on both counts. We have already noted the lack of any clear rental pattern related to distance from the core in Los Angeles; land costs also seem to have very little to do with distance from the center. Figure IV-3 presents the estimated range of land prices that apartment developers currently pay for sites in desirable neighborhoods lying in the western sector of the region, the same sector that we have used for our rental sampling.⁸ As in New York, these sites all involve some clearance of existing structures. The general pattern of land prices in this sector of Los Angeles is remarkably flat. Except for a slight dip near the core, in a relatively low prestige area, and a marked rise around Beverly Hills and Westwood (33 to

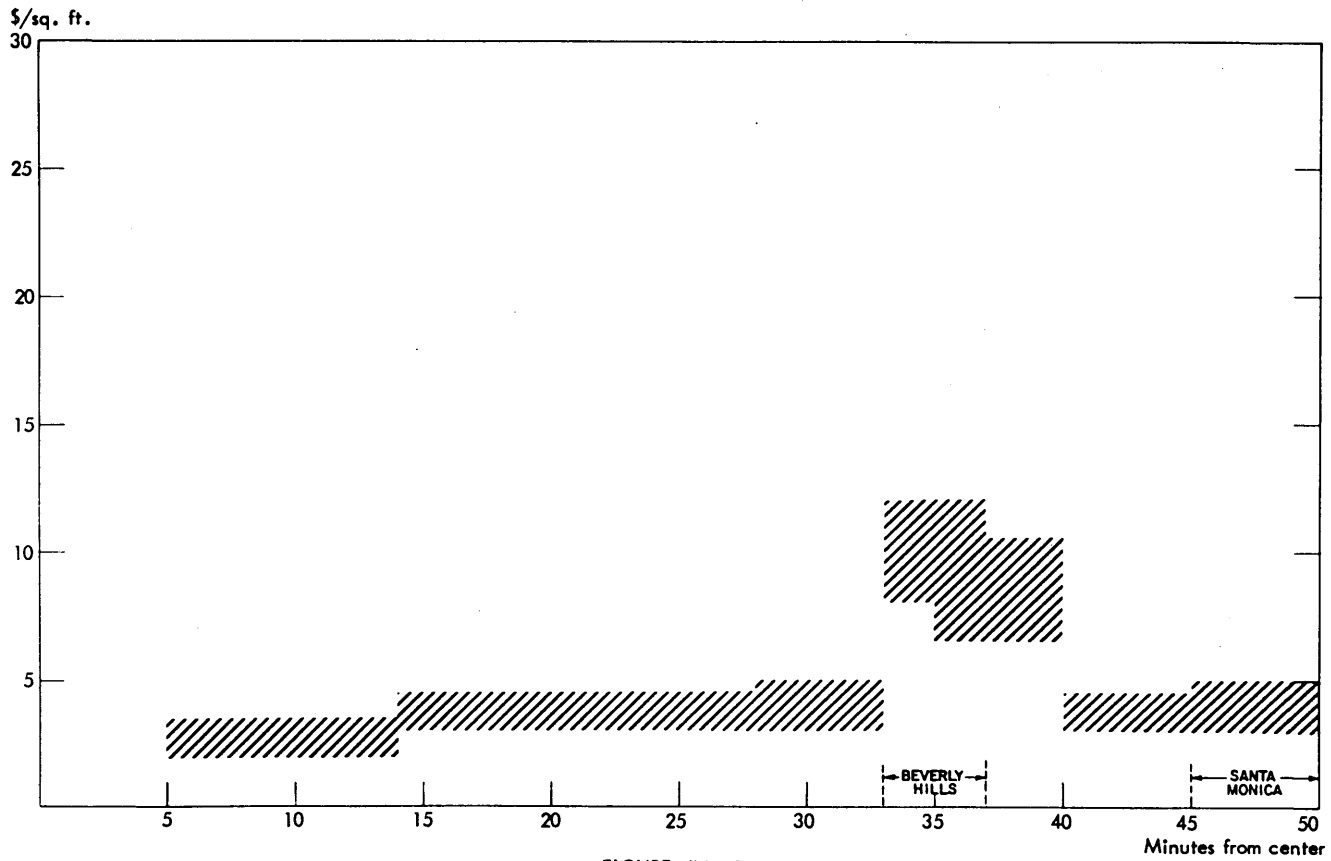


FIGURE IV - 3
 Site acquisition costs for new apartment developments, western sector of
 Los Angeles region, 1959-1960, and travel times from center

40 minutes from the core), all prices fall within the narrow range of three to five dollars per square foot.

These price estimates represent typical sites for new apartment construction in Los Angeles. They do not include such special sites as land on Wilshire Boulevard itself, or land with value for commercial development. Characteristically, these sites are on residential side streets, and require the clearance of old one- or two-family houses. Since the prices are derived from recent land sales for apartment development, they necessarily reflect land costs in areas that developers consider satisfactory for new multifamily construction. As a result, these estimates neglect areas where land has not recently been marketed for apartment development. Except for a few isolated sales, we know very little about land prices in the inactive older areas of Los Angeles. According to the limited available information, and in the opinion of well-informed appraisers, land costs for comparable sites in the declining areas are lower than those we have cited in the Wilshire sector. In most cases, the old areas of Los Angeles are not encumbered with high density structures, but only with single-family and duplex houses, so that there is little reason to expect higher prices in these areas than in the neighborhoods now being rebuilt along Wilshire Boulevard.

Two current urban renewal projects in Los Angeles furnish some insight into the cost of acquiring large tracts of land, rather than searching out small parcels at reasonable prices. The huge Bunker Hill project, covering 136 acres immediately adjacent to the central business district, is expected to cost an average of \$8.78 per square foot for real estate purchases and acquisition expenses, according to current appraisals. This land has considerable commercial value.

The project plan calls primarily for office and retail development, plus some 3000 dwelling units in apartment towers. The appropriate comparison here is with land adjacent to the central business district of another city: in New York, land costs are over forty dollars per square foot for renewal projects with comparable locations.

A second renewal area near downtown, but with less value for commercial development, is likely to be more representative of the costs of clearing sizable sections of the declining areas. This is the Temple Project, occupying 183 acres about five minutes from downtown. Current appraisals indicate a probable gross project cost (including land acquisition, clearance, relocation, site improvements, and overhead) of \$4.33 per square foot. Land acquisition alone is probably in the vicinity of three dollars per square foot, a price within the range shown in Figure IV-5 for land slightly farther from the core.⁹

Cost Adjustments in Los Angeles

With land prices relatively constant for apartment developments throughout the area, the task of adjusting costs to produce satisfactory investment possibilities is much simpler in Los Angeles than it is in New York. Nevertheless, some adjustments are necessary, as the case examples in Table IV-5 indicate. Once again, information on current practice provides us with a basis for judging how developers can manipulate densities, construction costs, and operating costs in locations within the declining areas. This information on current development techniques is derived from a combination of interviews and published studies of apartment development and operating costs in Los Angeles.¹⁰

TABLE IV-5

Los Angeles Region: Financial Calculations for One-Bedroom Apartments

	1	2	3	4	5	6	7	8	9
Location:	Los Angeles	Los Angeles	Los Angeles	Los Angeles W. Hollywood	Beverly Hills	West Los Angeles	Santa Monica	San Fernando Valley	Los Angeles Declining Area
Travel time from downtown	5-9 min.	10-19 min.	20-29 min.	30-34 min.	33-37 min.	40-44 min.	45-49 min.	50+ min.	5-35 min.
Land cost per sq. ft.	3.00	3.50	3.00	4.00	8.00	3.00	3.50	1.50	5.00
Building type	2-story	2-story	2-story	2-story	3-story	2-story	2-story	2-story	2-story
D. U. per acre	65	60	55	50	65	40	50	45	50
Sq. ft. per d. u.	670	726	792	871	670	1089	871	968	871
Land cost per d. u.	2010	2541	2376	3484	5360	3267	3049	1452	4355
Construction cost per d. u.	7500	7500	7500	7500	10000	7500	7500	7500	7500
Total investment per d. u.	9510	10041	9876	10984	15360	10767	10549	8952	11855
Equity share (1/3)	3170	3347	3292	3661	5120	1077*	3516	2984	1186*
Mortgage (2/3, 6.25%, 20 years)	6340	6694	6584	7323	10240	9690*	7023	5968	10669*
Yearly operating cost	265	265	265	265	330	265	265	265	265
Tax rate	.0202	.0202	.0202	.0202	.0127	.0202	.0166	.0202	.0202
Yearly taxes	192	203	199	222	195	217	175	181	239
Total yearly cost	457	468	464	487	525	482	440	446	504
Yearly rent	1500	1560	1500	1680	2400	1380	1560	1440	1500
(Monthly rent)	(125)	(130)	(125)	(140)	(200)	(115)	(130)	(120)	(125)
Cash surplus over cost	1043	1092	1036	1193	1875	898	1120	994	996
Less yearly interest and amortization (8.8% of mortgage)	558	589	579	644	901	703*	618	525	774*
Net cash return	485	503	457	549	974	195	502	469	222
Return on equity	15.3%	15.0%	13.9%	15.0%	19.0%	18.1%	14.3%	15.7%	18.7%

* FHA Financing: 90% mortgage, 30 years, 7 1/4% yearly interest and amortization.

Rents for new apartments are lower in Los Angeles than in New York, and the range of variation is much narrower. Typical one-bedroom units in Los Angeles generally rent for between \$120 and \$140 per month, while New York rents start at \$140 for one-bedroom apartments and go as high as \$250. Thus the range of typical cost adjustments must be smaller in Los Angeles, and the costs lower. Construction costs are markedly lower in Los Angeles, since the mild climate permits light exterior walls, and central heating facilities are unnecessary. Individual electric heaters are installed in each apartment, so that each tenant pays for his own heating costs. As a result, Los Angeles operating costs are also relatively low. Financing costs, on the other hand, are slightly higher in Los Angeles than in New York, with six and one-quarter percent representing a typical interest rate for 20-year conventional mortgage loans.

Small variations in density constitute the main method of adjusting costs in Los Angeles. The most common type of apartment structure in Los Angeles is a two-story building of frame and stucco construction. Development densities for this type of structure vary from about 40 to 70 dwelling units per net acre, depending in part upon the size distribution of units within the building, as well as upon ground coverage. Within the limits that are feasible for this type of structure, developers find it advantageous to build at the maximum densities that consumers and the zoning laws will tolerate. In near-central locations, land prices alone do not require very high densities, but developers commonly build at the upper end of the normal range. Column 1 of Table IV-5 depicts an example of development near downtown, where a return above 15 percent is feasible by building on three-dollar land at 65 units per acre. In locations successively farther away, as shown in columns 2 and 3, densities are slightly

lower while land costs vary from \$3.00 to \$3.50, and rents vary from \$125 to \$130. In prime locations of West Hollywood (column 4), where rents of \$140 per month can be obtained, lower densities are typical, despite land costs of \$4.00 per square foot.

In all these cases, developers consider a return of fifteen percent sufficient to justify investments in new housing. Developers of luxury housing, where rents are \$200 and higher for one-bedroom units, expect a higher return -- about 20 percent or more -- in view of the greater risks involved in building for the relatively small Los Angeles high-rent market. In Beverly Hills, where land costs are more than twice as high as those prevailing in the rest of the region, developers can operate successfully only by providing a luxury product, with more expensive finish and interior equipment, and a swimming pool on the grounds. Thus in column 5, we have higher unit construction costs, and a three-story building to provide high density with lower land coverage. The lower property taxes of Beverly Hills are also a factor permitting this type of development on land costing \$8.00 per square foot.

In the Sawtelle area of West Los Angeles, developers have recently placed new units on the market at rents below the typical range, by using FHA financing. Column 6 demonstrates the way this financing operates; the mortgage terms are identical with FHA terms in New York. By reducing the proportion of equity and the yearly level of interest and amortization below the terms of conventional mortgages, FHA financing permits lower rents for a given level of land costs in this case. Alternately, FHA financing would permit higher land costs for a given rent level. This type of financing requires compliance with FHA development standards, which permit maximum densities

of 40 units per net acre (50 units per acre on corner lots).

Still farther from the Los Angeles core, Santa Monica presents conditions similar to those in the inner parts of the region, with comparable rent levels and land costs, but a lower tax rate. The typical cost adjustment, appearing in column 7, is quite similar to those we have already described, but the density is lower than that in column 2, where land costs and rents are the same.

Even on vacant land, Los Angeles developers do not reduce densities much below the levels prevailing on sites that must be cleared of prior development. Vacant land zoned for apartments, with utilities available, sells for \$1.50 to \$2.00 per square foot in desirable San Fernando Valley locations. As column 8 indicates, developers produce housing at the lower end of the typical ranges of both density and rent -- 45 units per acre at \$120 per month -- in this outlying location.

Possibilities for the Declining Areas

The calculations in Table IV-5 illustrate the typical land costs that developers currently pay in Los Angeles. Costs up to \$3.50 per square foot, or up to \$3000 per unit, are feasible for ordinary apartment developments. Our limited information on land costs suggests that acquisition prices in the declining areas are not likely to exceed these levels. Where acquisition costs are higher, FHA financing can permit development at current rents and densities up to a cost of \$5.00 per square foot. Calculations in column 9 assume a density of 50 dwelling units per net acre, and a rent of \$125 per month for a one-bedroom unit. At this rent, which represents the lower end

of the usual range, developers can earn over 18 percent on their equity by using FHA financing.

So far as we can determine, rebuilding the declining areas of Los Angeles poses no major economic problems for the developer, despite the weakness of central preference in the market for new housing. As in New York, public subsidies will be needed to improve community facilities and the general environment of the older areas. But in Los Angeles, even more clearly than in New York, land prices in the older areas are fully consistent with development costs and with market rents, provided that developers are permitted to build the type of structures that they now use elsewhere in the region, at densities that are typical of current practice.

Hartford Cost Components

The costs that vary with location are identical in Hartford and our other regions: they are land costs and taxes, while construction and operating costs for comparable buildings and levels of service are virtually equal throughout the region. Of the two costs that vary significantly, property tax levels are difficult to compare accurately, because of the vagaries of assessment in the City of Hartford. Table IV-6 presents effective 1959 property tax rates for towns in the Hartford region for which estimates are available. The equalization ratio for the City of Hartford is uncertain, and revaluation of properties is now in process. The effective tax rate for Hartford in Table IV-6 follows estimates of current Hartford renewal studies in assuming assessments at two-thirds of development cost. The effective rate of 3.11 percent for the central city indicates a sizable disadvantage in relation to effective rates elsewhere in the region, but some

TABLE IV-6

Property Tax Rates for Communities in Hartford Region, 1959
(Estimated percentages of full market value)

Miles from Core:	<u>0-5</u>	<u>6-10</u>	<u>11-15</u>		
East Hartford	1.63	South Windsor	1.71	Windsor Locks	1.58
West Hartford	2.15	Bloomfield	2.27	Avon	1.62
Wethersfield	2.15	Newington	2.34	East Windsor	2.07
Hartford	3.11	Glastonbury	2.45	Simsbury	2.15
		Rocky Hill	2.52	Vernon	2.46
		Manchester	2.78		
Average:	2.48	Average:	2.35	Average:	1.98

Source:

Capitol Region Planning Agency, "1959 Tax Rates for Towns in CRPA Region." Equalization ratios from State of Connecticut, Assessor's Report to the Tax Commissioner (Fiscal Year ending Feb. 1959) for all communities except the City of Hartford. Equalization ratio for Hartford estimated as 2/3 of full value in Rogers, Taliaferro, and Lamb, Renewal Program for Downtown Hartford, Connecticut, prepared for City of Hartford, 1960, pp. III-31, III-37. Above information covers 15 of the 21 cities and towns in the Hartford Standard Metropolitan Statistical Area, omitting Canton, Cromwell, Enfield, Farmington, Suffield, Windsor.

developers believe the actual Hartford rate for new housing is only slightly above that of West Hartford.

If our estimated effective rates are realistic, property taxes on a ten-thousand dollar dwelling unit will be almost one hundred dollars more per year in Hartford than in Wethersfield or West Hartford, two alternate locations for new apartments in the center of the region. We shall investigate the effects of this differential upon housing investments when we develop case examples for the Hartford region. Aside from the tax rate in the City of Hartford, however, central locations do not involve higher taxes than outlying sites. All but a few towns in the outer five-mile rings of the region had higher effective rates in 1959 than the core cities of Wethersfield, West Hartford, and East Hartford. Property taxes are thus unlikely to create special burdens for developers of new housing in the centrally located areas outside of Hartford, but we shall have to look more closely into the effect of taxes on the feasibility of rebuilding Hartford's declining areas.

Land Costs in the Hartford Region

Acquisition costs for apartment sites in the Hartford region are clearly higher in central locations than in outlying areas, but the differences are small in comparison with those we have noted in New York.¹¹ Land in desirable locations near downtown Hartford has recently been sold for apartment development at about \$2.50 per square foot. Sites ten to twenty minutes away from downtown, in Hartford and West Hartford, have been priced generally between \$1.50 and \$2.50 per square foot. In these near-central locations, building sites must first be cleared of existing structures. Farther

out, vacant land zoned for apartments sells for fifty cents to one dollar per square foot. Figure IV-4 presents a compilation of sales prices for a number of apartment sites in the sector extending westward from downtown Hartford where our rental information in Chapter III has been obtained.

The density of prior development is an important factor affecting these prices. Apartment builders have been able to assemble good sites in the central areas by buying spacious single-family homes on large lots. The mansions of the late 19th century, built to generous density standards, provide sites for current apartment development. Where the old mansions have not been converted to profitable rooming houses, a house standing on 20,000 square feet of land may sell for \$30,000, or \$1.50 per square foot of land. Close to downtown, the price will be about \$2.50 per square foot for a comparable building on a large lot. These are feasible prices for new apartment development; they represent actual recent sales to developers. Prices are low enough for the developers, however, in part because the once-gracious homes of another generation, built at relatively low densities, are a major source of land for new construction.

The other declining sections of Hartford, in contrast, consist largely of housing built initially for a middle-income market, at significantly higher development densities. In these areas, some three-family homes on lots 50 feet wide and 125 feet deep currently sell for \$25,000 to \$30,000, or approximately four to five dollars per square foot of land. Other sites in these areas sell for three to four dollars per square foot. We may overlook the difficulties of site assembly, on the assumption that programs for renewing the old areas would involve public acquisition of land through condemnation proceedings,

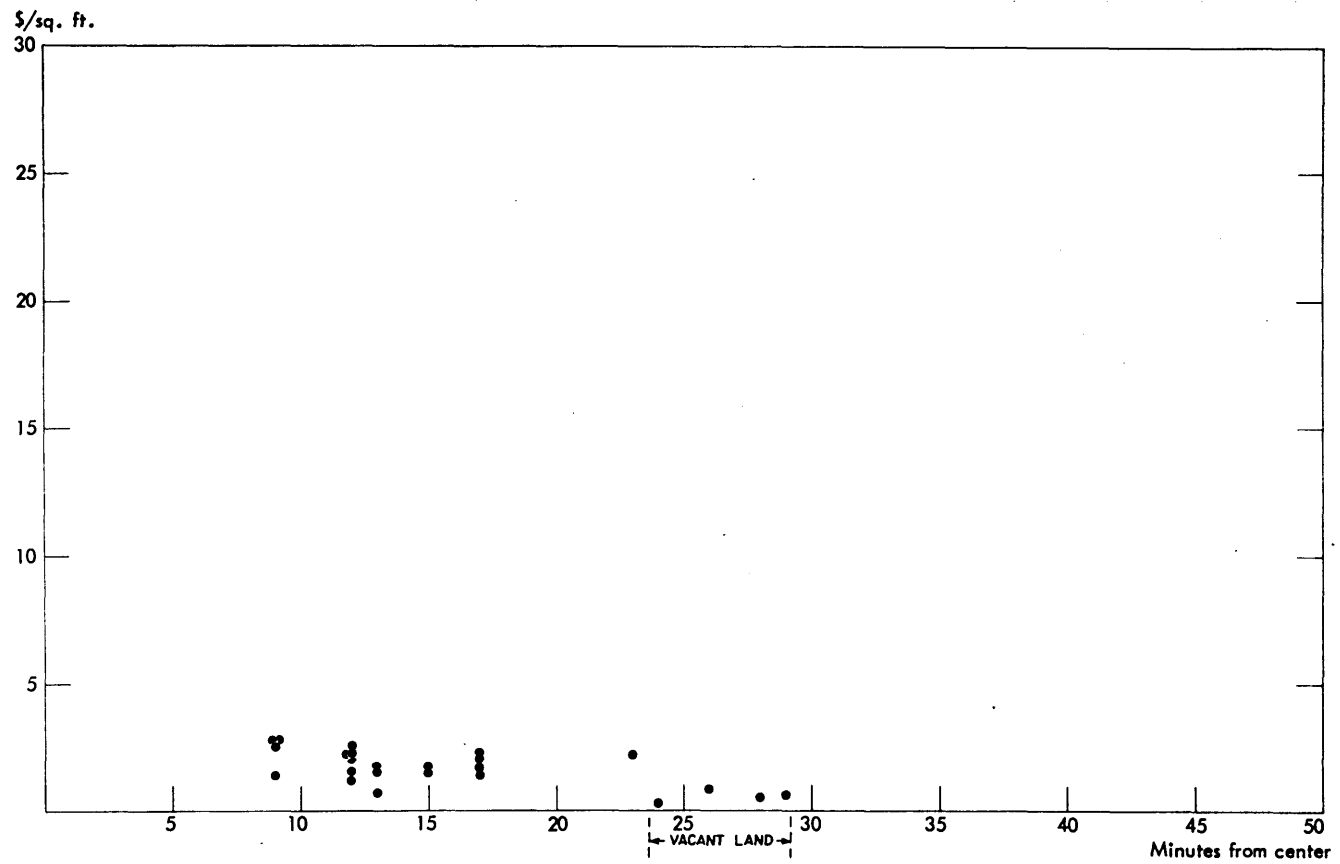


FIGURE IV - 4
 Site acquisition costs for new apartment developments, western sector of
 Hartford region, 1959-1960, and travel times from center

but the land cost would be approximately the same under either public or private acquisition. In typical locations within the declining areas ten to fifteen minutes from downtown, three to five dollars per square foot seems a reasonable land price to assume in investigating prospects for attracting new development. In less densely developed parts of the old areas, however, land prices will be lower.

Cost Adjustments in Hartford

Once again, our method for evaluating the significance of differences in property taxes and land prices is to look into the nature of current cost adjustments in areas where new construction is active, and apply adjustment techniques to the declining areas that are consistent with current practice in active locations. Information on current cost levels and densities is derived from interviews with FHA officials and local realtors.¹²

The range of rents in new apartments is relatively narrow in the Hartford region, but it reflects a central orientation in the housing market. For one-bedroom apartments in our rental sample, rents range from \$125 to \$147 per month in locations less than ten minutes from the core. Comparable apartments ten to twenty minutes from the core rent for \$120 to \$138 per month; our sample included no one-bedroom apartments more than twenty minutes from downtown Hartford. On the basis of this rental information, plus information on rents for two-bedroom apartments farther than twenty minutes from the core, we may estimate rents for new one-bedroom apartments as \$140 close to the core, \$130 from ten to twenty minutes away, and \$120 more than twenty minutes away. This pattern of higher rents in more central locations helps overcome (and helps

create) higher land prices in central locations, but developers must also make some adjustments in density to compensate for differences in land price.

The range of typical densities is somewhat greater in Hartford than in Los Angeles, and it exhibits a decidedly central orientation. Apartment buildings less than ten minutes from the core are mainly four-story elevator structures, with densities of about seventy units per net acre; one recent building near downtown is ten stories high, with a density of 225 dwelling units per acre. Most new buildings ten to fifteen minutes from the core are three-story walk-up structures, with densities of fifty to sixty units per acre. Farther out, two-story walk-ups predominate, with densities typically about twenty units to the acre. These density differences reflect not only changes in structural type, but also differing size distribution of apartments. As Table IV-7 indicates, efficiency and one-bedroom apartments constitute the only units close to the core in our sample, while two-bedroom units are the only type that appear more than twenty minutes from the core. This extreme specialization in unit types undoubtedly reflects both a desire to reduce costs in central locations, and an adaptation to the nature of the market in outlying areas.

Table IV-8 presents a series of examples illustrating typical cost adjustments within the Hartford region. As in New York and Los Angeles, a return of fifteen percent on investment is generally considered the test of feasibility for new apartment development. Construction and operating costs are slightly lower than those in New York, but considerably higher than those in the warm climate of Los Angeles. If we take the vacant outlying site represented in column 3 as our starting point, we can see how developers adjust unit costs as

TABLE IV-7
 Size Distribution of New Apartments by Travel Time
 from Core, Hartford, 1950-1960

	Minutes from core: 0-9		10-19		20-29	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Efficiency (0- bedroom) apartments	135	49.3	46	17.5	0	0
1-bedroom	139	50.7	156	59.3	0	0
2-bedroom	0	0	61	23.2	82	100.0
Total	274	100.0	263	100.0	82	100.0

Source: Rental inventory used in Chapter III, Figure III-6.
 Travel time calculations described in Chapter
 III, footnote 4.

TABLE IV-8

129. Location	Hartford Region: Financial Calculations for One-Bedroom Apartments				
	1 Hartford	2 Hartford	3 West Hartford	4 Hartford Declining Area	5 Hartford Declining Area
Travel time from downtown	5-9 min.	10-15 min.	20-29 min.	10-15 min.	10-15 min.
Land cost per sq. ft.	2.50	1.75	.50	4.00	2.00
Building type	4-story el.	3-story	2-story	3-story	2-story
D. U. per acre	70	50	20	50	35
Sq. Ft. per d. u.	622	871	2178	871	1245
Land cost per d. u.	1555	1524	1089	3484	2490
Construction cost per d. u.	8300	7600	7900	7600	7900
Total investment per d. u.	9855	9124	8989	11084	10390
Equity share (1/3)	3285	3041	2996	1108*	1039*
Mortgage (2/3, 6%, 20 years)	6570	6083	5993	9976*	9361*
Yearly operating cost	330	300	300	300	300
Tax rate	.0311	.0311	.0215	.0311	.0311
Yearly taxes	306	284	193	345	323
Total yearly cost	636	584	493	645	623
Yearly rent (Monthly rent)	1680 (140)	1560 (130)	1440 (120)	1560 (130)	1500 (125)
Cash surplus over cost	1044	976	947	915	877
Less yearly interest and amortization (8.5% of mortgage)	558	517	509	723*	679*
Net cash return	486	459	438	192	198
Return on equity	14.8%	15.1%	14.6%	17.3%	19.1%

* FHA Financing: 90% mortgage, 30 years, 7.25% yearly interest and amortization.

land prices and taxes rise. Total development cost per unit is \$8989 in column 3, with a land cost of fifty cents per square foot, a tax rate of .0215, and a monthly rent of \$120.

In column 2, ten to fifteen minutes from the core, the land price rises sharply to \$1.75 per square foot and the tax rate jumps to .0311. The adjustment is a particularly favorable one, bringing both an increase in density and a lower unit construction cost. Generally, higher density implies higher unit construction cost, as we have noted in discussing cost adjustments in New York. When the structural type is limited to walk-up buildings, however, an extra story lowers rather than raises unit costs. Thus the adjustment in column 2 permits developers to hold total unit development costs to \$9124, an increase of only \$135 over the development cost in column 3, despite the greatly increased land price. The higher rent available in this location (\$120 per year) effectively counters the modest development cost increase, as well as the tax increase of \$91 per year, so that a return of fifteen percent is still possible.

Site costs still closer to the core rise to \$2.50 per square foot (column 1), but the tax rate remains the same. Here the density adjustment succeeds in keeping land costs per unit to approximately the same level as in column 2, but construction and operating costs rise. The increase in building height to four stories marks a switch from walk-up to elevator structures, with a resulting need for extra mechanical equipment as well as a loss of interior space for elevator shafts. The rise in development costs exerts a two-fold effect by also increasing the taxable value of the property; thus taxes rise slightly, even though the rate remains the same. Yearly operating costs also increase, but the rise of \$120 in annual rent covers the

combined cost increases, so that return on equity remains around fifteen percent.

Prospects for Declining Sections of Hartford

The problem of rebuilding the old areas of Hartford is one of coping with higher land costs than we find in the areas where apartment developers are now operating. This is a problem unlike those we have encountered in New York and Los Angeles, where land costs in the declining areas were in line with costs in comparable active areas. In Hartford, land costs in many older areas are likely to exceed even those in more accessible locations, where new apartments can command higher rents. Land prices in good locations less than ten minutes from the core, where rent levels reach a peak for the Hartford area, are about \$2.50 per square foot. We estimate land costs in areas ten to fifteen minutes from the core as approximately three to five dollars per square foot.

Column 4 presents one workable approach for developing new apartments in these locations. We assume a moderate rent level consistent with the access advantages of the declining areas, using the same rent as in column 2. We assume further that consumers will accept the same density that they now accept in areas of comparable accessibility. Thus the adjustment is that of column 2, utilizing three-story walk-up structures at a density of fifty units per net acre. In this case, however, we make use of FHA financing, with its lower equity requirement, and lower yearly carrying charges than conventional mortgages. Under these circumstances, developers can afford to pay land prices of \$4.00 per square foot -- the middle of our estimated price range -- and still earn a reasonable return on investment. To

the extent that our assumptions prove unworkable, land costs will have to be subsidized. If rents of \$130 per month are not available, or if three-story walk-up buildings fall out of favor, \$4.00 per square foot is too high a land cost to permit a normal return on investment.

Taller elevator buildings could be substituted, using FHA financing, but the pattern of current density preferences in Hartford suggests that such buildings are marketable mainly in locations offering special site or access advantages not likely to be found in most declining areas.

If two-story buildings are used, together with FHA financing, column 5 indicates that land prices of \$2.00 per square foot can be compatible with market opportunities in the 'gray areas.' Here we assume a density of thirty-five dwelling units per acre, rather than the twenty-per-acre now found in more outlying locations, but this increase in density appears reasonable in view of the access advantages of inner locations in Hartford. This price level for land would, of course, require a write-down from the estimated acquisition cost of three dollars or more per square foot.

Conclusions

If we have estimated these site acquisition costs accurately for Hartford, FHA financing can just barely enable developers to pay the necessary price for land in the declining areas. In parts of these areas, prices will undoubtedly be lower than our estimated range; here the developer will have a little leeway in adjusting his costs to market rents. Elsewhere in the older areas, some subsidy may be necessary to make new development feasible, but large write-downs of land cost will not be required so long as development is limited to three-story walk-up buildings. If plans for rebuilding call for

lower densities than those now prevailing in central locations, land prices will be out of line with re-use possibilities. This last condition, however, would impose a strain on the economics of "gray area" development in any of our regions: if developers cannot build the type of structures in the declining areas that they now use in comparable locations, at densities typical of current practice, they will have difficulty earning a normal return.

Where public policy aims at facilitating the same type of new development within the declining areas that now takes place elsewhere in the region, the main task is to raise environmental standards to the level of presently desirable locations. If the environment is improved to this extent and FHA financing is made available, land prices in the declining areas are roughly compatible with current types of development and current rents in comparable locations within all three study areas.

Our exploration of development costs and their adjustment in the light of varying market circumstances has helped identify a number of critical factors affecting the first pre-condition for rebuilding: a balance between site costs and re-use values. In the following chapter, we shall test each study area for the second pre-condition: a sufficient scale of demand to permit replacing deteriorated housing within a reasonable number of years. We can then apply our findings on both counts to a formulation of the general requirements for rebuilding declining areas, and to the problem of developing appropriate public policies to accomplish this rebuilding.

FOOTNOTES

1. Hoover and Vernon, op. cit., p. 175.
2. Information from Abram Barkan, James Felt and Co.; William Lese, Pease and Elliman; Jacob Perlow; Frederick Rose, David Rose and Associates.
3. Land cost information from interviews with Walter Lampe, Chief Appraiser, Federal Housing Administration, New York, and with the following New York realtors: Abram Barkan, James Felt and Co.; Jacob Perlow; Frederick Rose, David Rose and Associates. Further information on land costs derived from report by Peter Stone for New York Metropolitan Region Study, November 1957, on file at Regional Plan Association.
4. Land prices in redevelopment areas given in City of New York Committee on Slum Clearance, Title I Progress, January 29, 1960, pp. 24-25. Prices include planning and land acquisition costs, converted to square foot costs for gross project area. Travel times from the core have been calculated on the basis described in Chapter III, footnote 4.
5. Land prices for public housing projects given in New York City Housing Authority, Project Statistics, December 31, 1960; prices used are land costs per square foot of private property, for projects completed after 1950. Information on the character of each site prior to acquisition was obtained separately from the Housing Authority; land that was predominantly vacant is excluded from this discussion of land costs.
6. In addition to interview sources cited above in footnote 3, information has been made available by Charles Abrams, and by Frank Kristof of the New York Housing and Redevelopment Board. Published cost estimates appear in "How A Builder Figures," Fortune, LXI, No. 2 (February 1960), 243-246; New York City Planning Commission, Urban Renewal: A Report on the West Side Urban Renewal Study, 1958; and the following reports of the New York City Committee on Slum Clearance: Lincoln Square (1956), Hammels-

Rockaway (1956), Penn Station South (1957), Riverside-Amsterdam (1958), Soundview (1959). Tax rates are those cited on p. 92; information on rents and densities from sources cited in Chapter III.

7. A further source of profit for the developer that we exclude from this investment framework consists of income tax advantages resulting from deductions during the construction period and from depreciation allowances after the building is completed. For a discussion of tax advantages in apartment development, see Daniel M. Friedenbergl, "The Coming Bust in the Real Estate Boom," Harpers, CCXXII, No. 1333 (June 1961), 29-40.
8. Land cost estimates have been obtained for apartment sites in the sector of Los Angeles surrounding Wilshire Boulevard, extending the full length of the Boulevard, from downtown Los Angeles to the Pacific coast at Santa Monica. Sites for which prices were obtained lie predominantly within a one-mile belt on either side of Wilshire Boulevard; all estimates are based on recent sales to apartment developers. Sources were interviews with Claude Cunningham, Assistant Chief, Land Division, Los Angeles County Assessor; R. Douglas Burrows, Vice-President and Chief Appraiser, Security First National Bank; Charles Shattuck and Kurt Shelger, Appraisers; Robert Filley, Vice-President, Western Real Estate Research Corporation; Nelson Smith, Prudential Insurance Co.; Hal Wiseman, Norman Construction Co.
9. Information on Bunker Hill and Temple Projects from Los Angeles Community Redevelopment Agency.
10. Interview sources are those cited in footnote 8. Additional information from Federal Housing Administration, Los Angeles, and the following published studies: Henry A. Babcock, Report on the Economic Phases of the Bunker Hill Renewal Project, Los Angeles, California, Community Redevelopment Agency of the City of Los Angeles, May 15, 1956; and Stanford Research Institute (James H. Forbes, Jr., Frederick P. Lyte, Emil L. de Graeve), Feasibility of a Residential Rental Development in the Bunker Hill Urban Renewal Project, Community Redevelopment Agency of the City of Los Angeles, May, 1957.
11. Land cost information for the Hartford region consists of prices paid in recent transactions, and prices asked in recent sales offerings, for sites in the same general locations used for the rental survey in Chapter III. Most of these locations are in a

sector extending west of downtown Hartford in a one-mile band on either side of Farmington Avenue in Hartford and West Hartford. Information on sales prices and offerings from John Rowlson, Rowlson Real Estate and Insurance, Hartford; and Robert Weisberg, Suburban Associates, Bloomfield.

12. Sources are Federal Housing Administration, Hartford (John B. Maylott, Director); Robert Stone, Goldberg and Stone, Manchester; John Rowlson, Rowlson Real Estate and Insurance, Hartford.

CHAPTER V

THE REGIONAL FRAMEWORK FOR REBUILDING OLD AREAS

New York, Los Angeles, and Hartford meet the first pre-condition for rebuilding their declining areas; potential re-use values of "gray area" land for new housing are roughly in line with site acquisition costs in all three cities, though Hartford is something of a borderline case. So far, we have said nothing about the quantity of new development that may be feasible, or the rate at which cleared sites can be put to new uses. These additional considerations enter into the second pre-condition for a rebuilding program. As we define it, the second requirement is that the demand for new housing sites must be great enough to utilize all cleared land not needed for environmental improvements (schools, community facilities), within a reasonable number of years.

New York and Los Angeles pass the second test, but Hartford does not. Why is Hartford the weak member of the trio on both counts? How do such dissimilar cities as New York and Los Angeles both meet the full set of pre-conditions for rebuilding? Which factors seem to exert the strongest influence upon the feasibility of attracting new housing into the old areas? By combining an analysis of possible rebuilding rates with our earlier analysis of land costs and re-use values, we shall draw into focus some of the most important factors governing the feasibility of rebuilding programs.

Under present conditions, three factors are of outstanding importance: the degree of central preference in the housing market, the relationship between the density of previous development on the site and the

density of new development, and the size of the market for new multi-family housing. Future shifts in metropolitan structure are likely to alter both land costs and demand characteristics, but the key issue ahead is whether large migrations of low-income people will continue to populate the aging neighborhoods. A continuing flow of low-income newcomers will argue for the retention of old housing on social grounds, at the same time that it gives continued economic value to this housing.

Land Utilization Rates for New Construction

The rate at which new housing can absorb cleared sites in the older neighborhoods depends upon how much multifamily housing can be attracted into such areas in the future, and the development density of this housing. In the previous chapter, we have demonstrated the economic feasibility of building typical non-luxury apartment houses without major public subsidy in the declining areas of all three cities. For New York, let us assume that the type of new residential construction predominating in Manhattan requires special sites close to the central business district, or in areas of particularly high prestige. This Manhattan luxury housing, with its high rents, seems an unlikely candidate for the old neighborhoods in upper Manhattan and in the inlying parts of the Bronx, Brooklyn, and Queens.

The market from which these declining areas can draw is the medium-rent apartment house sector, which is currently locating in various parts of the Bronx, Brooklyn, and Queens. For this market, the older areas can offer the attraction of a location closer to the center of the region -- a factor of great importance in New York rental housing. If cleared sites could offer good surrounding environments, new housing there could probably earn rents above prevailing levels farther away where new apartment houses are currently being developed. But our calculations in the preceding chapter assumed only that new housing in areas to be rebuilt would command the same rents as those in the cheapest new apartments in the region, or forty dollars per room per month. With FHA mortgage aids, developers can pay

full land costs for these inner sites and offer locational advantages at attractive rents.

Thus the basis for our estimates of New York land utilization rates is the amount of new private construction in the Bronx, Brooklyn, and Queens -- the new housing that can conceivably be attracted to the inner areas. (We shall exclude new multifamily housing in suburban areas, on the assumption that suburban locations are a necessary feature of such housing.) In the past decade, these boroughs had a varying volume of new housing construction. The early part of the decade was not a time of great development, owing in part to material shortages during the Korean War. By the end of this period, construction rose to boom levels. We shall exclude the boom of the late 1950's by counting only housing completions from 1951 through 1960, thus omitting the many starts in 1959 and 1960. In the first part of this decade, Queens still had considerable vacant land available, with a resulting high rate of new construction despite the Korean War. To discount the vacant land factor, for Queens we shall take note only of the slower 1956-1960 rate of completions.

The ten-year total completions, including Queens projected from the 1956-1960 volume, were 108,524 new dwelling units in private multifamily structures.¹ At current development densities, this housing would require 724 acres of net residential land for the ten-year period, or 72 acres per year. If development were at the somewhat lower densities now prevailing in urban renewal project areas -- densities which would be feasible without subsidies in the many older areas where land costs are seven dollars or less per square foot -- the land utilization rate would be 109 acres per year.

New York also has a large public housing program to consider. In the case of public housing, new Manhattan developments are likely candidates for utilizing sites cleared in the older neighborhoods, and of course public housing now built in various parts of the Bronx,

Brooklyn, and Queens could also go into such areas. The 1951-1960 volume of public housing construction was 70,306 units, occupying 865 acres of land at current public housing densities, or 87 acres per year. New York City Housing Authority plans call for an accelerated rate of construction in the coming years,² but we shall assume that construction in excess of the 1951-1960 rate will go to vacant outlying sites.

Thus the combined rate of land utilization of private housing and public housing at current densities is 159 acres per year. If private housing were developed at typical urban renewal densities, the rate would be 196 acres per year.

Are these rates likely to continue? We have attempted to project reasonable rates by excluding such clearly temporary phenomena as the 1959-1960 boom, and the 1951-1955 Queens construction wave on vacant land. Further, we have totally excluded the boom in Manhattan luxury housing. Public housing construction seems quite likely to continue at rates at least as high as those of the 1950's. The market for private moderate-rent multifamily housing consists primarily of small families; we have previously noted that only 25 to 30 percent of the new private units in the outer boroughs have more than one bedroom (Table IV-2). Population projections for the region foresee a continued increase in the age categories likely to constitute single people, young married couples with no children or one pre-school child, and older couples whose children have left home.³

In the absence of a careful housing market study, we see no reason to assume a sharp decline in apartment construction for New York City. Aside from a recession, the major factor that could cause a reversal would be a continuing shift of preferences to favor single-family homes, but such a shift would be likely to work gradual rather than sudden changes. And our 1951-1960 rates reflect the period of greatest suburbanization that the United States has ever experienced.

Time Required for Rebuilding in New York

At present, old housing in New York is so heavily utilized that a program to replace all deteriorated housing would create a serious housing shortage. The 1960 Housing Census reported only 53,000 non-seasonal non-dilapidated units vacant and available for rent or sale. In contrast, 147,000 housing units were classified as either dilapidated, or deteriorating and lacking in plumbing facilities -- in either case, unlikely to be suitable for rehabilitation, and a prime target for clearance. Additional vacancies in the region outside New York City add another 78,000 units to the reserve of sound units for relocation, but the combined reserve is still smaller than the stock of deteriorated housing in the City alone, and there are many additional deteriorated units in the rest of the region.

New construction will replace deteriorated units with housing priced too high for low-income groups. If we could be sure that replacement units would bring about a filtering of other housing to lower cost levels, rebuilding might work no hardship even in the absence of a large vacancy reserve. But as the housing market has operated until now, new housing barely keeps pace with an expanding demand resulting from new household formation. Since we project a volume of new housing consistent with recent experience, new development is likely to create only a small surplus for filtering down to lower levels. Thus the lack of a suitable vacancy reserve should exercise a powerful constraint upon any effort to remove worn-out housing from the scene.

If the old housing were to become increasingly vacant, the ability to rebuild cleared sites with new housing need not exercise such a constraint. Our estimate of the land area occupied by deteriorated housing is 1145 acres. At the combined land utilization rate for private and public housing that could conceivably be attracted to cleared sites in the old areas, 7.2 years would be required to rebuild these 1145 acres at current development densities (see Appendix B).

If the private housing were built at typical densities for urban renewal projects, less than six years would be required.

An alternate objective for New York might be the replacement of all old-law tenement houses. These are structures built before 1901, with physical characteristics that make successful rehabilitation extremely difficult. We estimate that old-law tenements occupy 1552 acres of land. Absorption of these sites would require 9.8 years at current building densities, or 7.9 years if private housing were to follow urban renewal densities.

If we take account of the current rate of deterioration of old housing, an additional 27 acres of land would require clearance during each year of a program designed to eliminate all deteriorated structures. Calculations in Appendix B indicate that replacement at current densities would require an extension of the rebuilding program from 7.2 to 8.5 years.

How realistic are these time estimates? It is clear that drastic measures would be necessary to divert all new private multifamily housing from the Bronx, Brooklyn, and Queens to designated clearance sites. In addition to such incentives as FHA financing aids and environmental improvements, measures would have to be taken to restrict or prohibit new apartment construction outside the declining neighborhoods. Not the least of the problems would be persuading private developers of moderate-rent apartments to build in Negro and Puerto Rican enclaves. Realistically, only a portion of this new building could be attracted to the sites that had just been cleared of deteriorated housing.

In addition, the scale of clearance would have to extend beyond land occupied solely by substandard housing. To carve out suitable building sites might require demolishing some adjoining structures. On the other hand, new residential development would not be expected to

utilize all land that had been cleared. Some areas would be better suited to non-residential development -- industry, commerce, institutions. Even in residential areas, a good deal of land would be needed for new schools and other community facilities.

Several points are clear from this discussion:

1. The present utilization of old housing in New York is a far more serious constraint for a rebuilding program than the ability to utilize cleared sites.
2. A large potential demand for cleared land exists in the volume of current moderate-rent private housing as well as the volume of public housing.
3. An energetic program to rebuild cleared sites need not require an astronomical time-span to complete the job.
4. Even a partially successful program could initiate a program of rebuilding through gradual replacement in those sections of the City where environmental deficiencies are least serious.

Land Utilization Rate in Los Angeles

With a larger vacancy reserve, Los Angeles is probably better equipped to begin rebuilding its deteriorated housing in the near future. Although we do not know the cost levels of vacant housing, some 46,000 non-dilapidated permanent units were vacant and available in the City of Los Angeles in 1960, and another 66,000 in the rest of the region. Substandard units -- dilapidated, or deteriorating and lacking plumbing facilities -- totalled 24,800 in the City of Los Angeles. We estimate the land occupied by these units as 2755 acres (Appendix B). How long will it take to rebuild them?

These substandard units are located primarily in the central sections of Los Angeles. Most are within five miles of the core, some are five-to-ten miles away, and a sprinkling are farther removed. The potential

market for housing sites in these locations is a limited one. In contrast to New York, centrality plays only a minor role in the Los Angeles housing market, registering chiefly in the form of lower vacancy rates in more central locations. With environmental improvements, we assume that the inner areas can offer only average advantages for new residential development, and cannot hope to divert very much housing that now goes to prestige areas farther away. Our assumption is that the potential market consists of new multifamily housing now locating elsewhere in the central areas, within a radius of ten miles from the downtown core. In terms of land costs and likely returns, this type of development is economically feasible without public subsidies on land in the declining areas.

From 1950 to 1960, multifamily units increased by 98,000 within this zone. The volume of new construction was probably somewhat higher, since a number of units were lost to freeway construction and other public works. But let us assume a new construction volume of 98,000. At typical Los Angeles density, the land utilization rate was 196 acres per year. All substandard units could be replaced at this rate in 14.0 years. If new construction followed the slightly lower densities prescribed by the Federal Housing Administration, rebuilding would require 11.2 years. The growth rate of substandard housing in the past decade has been negligible. A moderate allowance for clearing newly deteriorated housing would not lengthen these time-spans materially.

The extent of future demand for multifamily housing in Los Angeles is difficult to project without a detailed housing market study. Yet several factors suggest a continuation of the present high volume. The market for this housing, as in New York, consists mainly of single people, young married couples, and older people -- three groups likely to continue increasing in the Los Angeles population. Rents for these units are moderate, so that no volatile luxury market is involved. Further, the rents we calculated for this housing in Chapter IV are at the low end of the typical Los Angeles scale, where

the market is likely to have greatest staying power.

The time required for a rebuilding program in Los Angeles is longer than our estimate for New York, in part because Los Angeles has no public housing program. Still, the time-span is finite in Los Angeles, as in New York. With due allowance for unrealistic elements in the assumptions, it is clear that Los Angeles also has a sizable potential market for cleared sites.

Rebuilding Capacity in Hartford

The very limited demand for new multifamily housing sets a low ceiling on the potential ability of new development to absorb cleared sites in Hartford. Only 13 percent of the new housing units in the metropolitan region from 1958 to 1960 was in multifamily structures, compared with 48 percent in New York and 46 percent in Los Angeles at about the same time.⁴ Further, the City of Hartford can attract only part of this small regional total, for the advantages of central location are not particularly strong in the Hartford housing market.

A careful study of the rental market conducted in 1959 projected an annual average of 3,500 new dwelling units of all types for the Hartford region through 1970.⁵ If we assume the multifamily market as approximately 15 percent of total housing production, new construction will provide some 5,000 multifamily units in the 1960-1970 decade. On the basis of past performance, the City of Hartford seems unlikely to attract much more than half the regional total of new apartments, or 2500 units in ten years. The housing market study estimated approximately this range of activity, consisting of 1,800 moderate rental units in and near downtown Hartford, plus some luxury housing that might compete with high-priced single-family homes. This estimate assumes, as we do, public action to create housing sites in a desirable residential environment.

At current central city densities, the land absorption rate for 2500

new multifamily units in ten years would be only 5 acres of net residential land per year. If construction were at a slightly lower density of 35 units per acre, which would require some land subsidy, 7.1 acres per year could be utilized.

How does this rate compare with the land that could be cleared through a program to eliminate all deteriorated housing? We estimate that some 185 acres of land in the City of Hartford are currently occupied by dilapidated housing and deteriorating housing lacking in plumbing facilities (Appendix B). At the projected absorption rate of 5 acres per year, 37 years would be required to rebuild cleared areas. Even at the higher rate of 7.1 acres per year, 26 years would be required.

At current rates of housing obsolescence for Hartford, land utilization for new apartments could barely keep up with the clearance of newly deteriorated areas. From 1950 to 1960, we estimate a yearly increase of 6.6 acres of land occupied by substandard housing. Thus the present capacity to rebuild housing sites could be utilized entirely to keep pace with growing obsolescence, without making any inroads on the backlog of substandard areas.

Hartford also lacks a suitable vacancy reserve for undertaking a rapid program of replacing deteriorated housing in the old residential neighborhoods. But even if the rate of abandonment were to accelerate, it is clear that the potential for rebuilding clearance sites with new housing is severely limited in Hartford.

Factors Conditioning the Feasibility of Rebuilding

All three study areas meet the first pre-condition for rebuilding -- a balance between site costs and re-use values -- but only New York and Los Angeles have a sufficient potential capacity to rebuild cleared sites in a reasonable period of time. Three sets of characteristics best explain our findings;

1. Metropolitan structural features that condition the degree of central preference in the housing market.
2. The relationship between the density of previous development on clearance sites and the density of new development.
3. The size of the market for new multifamily housing.

Metropolitan Structure

The economic requirements for attracting new housing to "gray area" locations do not call for any particular type of regional structure. We have found some new housing to be economically feasible in the declining areas of such contrasting regions as New York, Los Angeles, and Hartford. Although certain metropolitan elements are powerful organizers of locational demand within the housing market, no particular element is a sine qua non for attracting new housing to the old areas. As we have seen clearly in the case of Los Angeles, housing preferences need not even be centrally oriented in order to generate sufficient re-use value for rebuilding inner locations. The sole general requirement that must be met if any new housing is to be feasible as a private investment is that development and operating costs must be commensurate with market advantages.

Thus the feasibility problem must be approached from the dual perspective of both costs and returns. Metropolitan structure enters into the return side most clearly. A strong downtown core, and a lack of inlying vacant land, promote rental demand for central locations. Taken alone, a strong downtown core appears to exercise the stronger influence. In Hartford, with a moderately strong central business district, inlying housing brings a rent premium despite the availability of large tracts of vacant land within a short drive of the center. In Los Angeles, where vacant land is far removed from the center but the core is relatively weak, the only noticeable sign of central orientation appears in residential vacancy rates, which are lower in central than in outlying locations.

Densities Before and After Rebuilding

On the cost side, the major variables that we have noted within each region are tax rates and land costs. The influence of tax differentials in retarding new housing development in central areas has probably been overrated; we have found present central city tax rates generally compatible with the economic requirements of new housing. Land costs are by far the more significant variable. The question of prior density is important because of its relation to land costs.

Current land costs, as we have seen, depend very much upon the density of previous development. Where past development has been at high density, as in Manhattan, land costs are high enough so that some special market compensations must be available if developers are to be attracted. In Los Angeles, the low density of prior development facilitates "gray area" site acquisition at prices that are fully compatible with normal rental returns, even though rents are no higher in central areas than in more outlying locations. In Hartford, differences in prior densities between areas where rebuilding is now active and the less active locations largely account for land cost differentials that will make renewal of the declining areas difficult, unless some subsidies are available.

Although the density of previous development is a critical factor influencing land acquisition costs, high densities and high land prices can be overcome in several ways. One typical cost adjustment that we have encountered is to build new housing at high densities where land costs are high. This type of adjustment has its limitations, since unit construction costs rise as densities increase, but it contributes significantly to the private developer's ability to build in high-cost locations. The feasibility of high-density construction as a development tactic is also limited by the degree of consumer acceptance of multi-story living -- a factor we shall consider in connection with the size of the multifamily market.

High land costs can also be overcome by reducing other costs. Thus, FHA mortgage financing, with generous loan commitments at interest rates below those prevailing in the conventional mortgage market, can provide an economic basis for new housing in some high-cost locations in New York and Hartford. Other measures to reduce development and operating costs -- tax reductions, easing of building code requirements -- could conceivably help developers work out an acceptable investment package in locations where land costs are high.

Densities of the past thus influence new development densities, but with some room for modification. This influence takes the practical form of setting minimum density ranges for new development, which developers cannot easily undercut without some form of subsidy. To the extent that low density is marketable, the developer can use a generous amount of high-cost land and recoup his investment through high rents. But the market thins out when prices become very high. If \$3-per-square-foot land is used for single-family homes on small lots, a single lot would cost the purchaser some \$15,000, pricing the finished home well beyond the mass market.

Under present cost conditions, land cleared of housing built at multi-family densities must generally be re-used for multifamily housing, but moderate density reductions may be possible. With FHA financing, but without further subsidy, new development in New York can bring densities down from 200 to 150 units per acre in some areas, and from 80 to 50 per acre in others.

Density increases, on the other hand, greatly facilitate the economics of rebuilding. New development is easy in most of Los Angeles, because densities of 50 or more units per acre replace old housing at 8 to 10 units per acre.

Only a sharp downward break with densities of the past creates severe economic problems. When the declining areas of cities are vacated to

a greater extent than they are now, land costs may well fall to levels that will permit drastic density reductions. In the meantime, programs to replace old housing will have to confront the powerful influence of the past, working through high land costs.

Size of the Multifamily Market

We have already noted in this chapter the strong connection between the size of the market for new multifamily housing and the rate at which cleared sites can be utilized. In the last few years, multifamily housing has accounted for 48 percent of all new private housing in the New York metropolitan region, 46 percent in Los Angeles, and only 13 percent in Hartford, with consequences that we have already seen for the potential rate of rebuilding.

Nationally, multifamily units have been accounting for about 20 percent of total private housing starts in recent years. From 1958 through 1960, the multifamily proportion has ranged from 18 to 21 percent; in the first seven months of 1961, this proportion has gone up to 25 percent.⁶ Multifamily demand is by no means constant, however. In the early 1950's, the multifamily share ranged from 9 to 15 percent nationally.

Future volumes of multifamily construction are likely to depend upon many factors that are national rather than local in character. The most significant recent analysis of the national market for rental housing calls particular attention to the high price of renting an apartment, in comparison with the cost of owning a home, and to opportunities for broadening the rental market through changing this price relationship.⁷ Many measures would have to be applied at the national level to be effective; equalizing tax treatment for renters and homeowners, making FHA financing as attractive for apartment developments as it is for single-family homes.

Yet even if the national multifamily construction rate is at a high

level, one can easily imagine regions in which the demand for multifamily housing will be far below the national proportion. Small metropolitan areas, with vacant land readily accessible to downtown, with employment centers distributed throughout the region, may be weak both in central preference and in multifamily demand. If such regions have declining areas consisting of old housing developed at moderate or high densities sometime in the past, acquisition costs may represent a serious obstacle to rebuilding. Land prices of two to five dollars per square foot are far too high for most single-family housing; yet areas of old multifamily structures are currently unlikely to be available at lower prices. If we assume that single-family housing is the only feasible residential re-use for loss areas in such a region, two alternatives are open. Land prices would have to be heavily subsidized, or rebuilding could be postponed until the old structures are practically worthless.

In regions with considerable multifamily activity, the situation is different. We have already noted in Chapter I that many regions besides New York and Los Angeles have had sizable volumes of apartment construction recently: Chicago, Philadelphia, Washington, San Francisco, San Diego, Miami, Minneapolis, Atlanta, and Seattle. Here the rebuilding of central areas will depend upon the ability to attract a sufficient portion of the total into areas slated for rebuilding. Metropolitan structure is important in this connection, for the degree of central preference in the new housing market will have much to do with the location of new developments.

The centralized character of the New York multifamily market is clear from all our analyses; outlying sites on vacant land can hardly compete with inner locations in New York City. Inlying locations within the City are unlikely to attract much new housing so long as their environments remain inferior, but we argue that with environmental improvements they can capitalize on their locational assets. Neither Los Angeles nor Hartford can exercise comparable power in pulling the

region's new multifamily housing into inner locations, so that environmental upgrading is likely to work smaller changes in their patterns of new housing. Thus the potential rate of rebuilding is slower in Los Angeles than in New York -- despite a large multifamily volume -- while the City of Hartford probably cannot capture more than half the limited multifamily development in its region.

Regional Characteristics in the Future

The analyses in this study place heavy emphasis on current conditions. What can we expect in the future? Metropolitan regions have been changing rapidly in the last few decades, and consumer preferences have also been shifting. Future changes will undoubtedly influence the economic conditions we have described, but the direction of influence depends upon the particular patterns of change that may emerge.

We can foresee several possibilities that would affect locational preferences. Further decentralization of jobs and services is likely to reduce preferences for inlying locations. If new housing is to be feasible, development and operating costs will have to fall correspondingly. Job decentralization will probably have the additional effect of promoting the abandonment of old inlying housing. To the extent that it does, acquisition costs are likely to drop, but we cannot tell whether they will fall sufficiently to remain in line with a slipping demand for new housing in central locations.

Changes in metropolitan transportation may trigger large shifts in central preferences. The abandonment of commuter railroad lines serving the suburbs is likely to increase preferences for central locations, provided that in-town transportation does not deteriorate and that the location pattern of employment remains stable. Curtailment of public transportation service to the older areas is likely to produce an opposite effect by depriving these areas of current access advantages to the core. Highway programs that provide

relatively greater access benefits for outlying land than for the aging central areas are also likely to shift consumer preferences away from inner locations. Once again, the net effect is difficult to forecast, since this type of shift may also speed the abandonment of existing housing.

Changes in density preference may also have a dual result, affecting both old housing and new housing. If consumers insist on increasingly lower densities for new housing, development and operating costs in the declining areas must fall to levels that will enable developers to provide lower density structures, if rebuilding is to be feasible. But if consumer rejection of high densities operates in the market for old housing as well as new, clearance sites may come on the market at prices below current levels.

On the cost side, the key question for the future is whether old structures will decline in value soon enough to match any decrease in central preference or any increasing rejection of high densities. Here the basic factors are the extent of demand for low-cost housing and the supply that becomes available. A drop in the migration of low-income groups to the cities would curtail demand, and thus accelerate the process of abandonment as earlier occupants raise their incomes and move to better housing.

We foresee a continuing high level of demand for low-cost housing in most large cities for the next decade or two. If this expectation is correct, the cost of clearance sites will depend upon the operation of the housing market in expanding the amount of satisfactory housing available to residents of the old areas. The rate at which suburban housing filters down to low-income population groups is crucial in this respect. In a broader sense, this question revolves around the ability of the private housing industry -- or of public housing alternatives -- to offer acceptable rehousing possibilities to present occupants of deteriorating structures. If the housing industry fails this test, the old housing will remain an economic asset, and

rebuilding will be difficult.

Other cost factors can also impede rebuilding. Tax differentials within a metropolitan region may widen in the future. We found property taxes in the central cities of our three study regions close enough to those in outlying locations so that they do not deter new construction in centrally located areas. If the central cities lose a major part of their property tax base through decentralization, and if alternate taxes are not devised, tax levels may take on greater significance. If, on the other hand, suburban tax levels rise quickly as a result of increasing governmental costs for schools and public works, the differentials may not widen greatly. Much will depend upon changes in local tax structure, and upon the ability of political and legal mechanisms to equalize tax burdens.

Clearly, the effects of future changes in metropolitan regions cannot be predicted by partial analysis. Decisions to build new housing will reflect the total structure of costs and returns in the old neighborhoods and elsewhere in the region. Careful observation of the housing market will be necessary to determine the effects of changing conditions as they unfold. The most predictable effects are those that might arise from an expansion of housing supply, particularly the supply of units at price levels that low-income groups can afford. Change in this direction is likely to mean an accelerated abandonment of poor housing, and a lowering of its acquisition cost. Changes that affect preferences for multifamily housing and central locations will have more complex results, since they may have an impact on the demand for old housing as well as new construction.

The complexity of these last effects -- the differing impact of shifting preferences upon new construction and old housing -- is at the root of the rebuilding problem. If preferences that dominate the market for new housing were reflected in the market for old housing, widespread changes in taste would result in the abandonment of old units that failed

to meet contemporary standards. But the problem of rebuilding is that the old units are not abandoned quickly, and they retain enough value so that clearance is expensive. The economic difficulties of replacing old housing thus reflect a division in the housing market between the demand for new and old housing.

Most large cities have a dual housing market. A large part of the population can exercise its choices freely over a wide range of housing possibilities. If prevailing taste among this group shifts from multi-family to single-family housing, as it has recently, a majority can leave their apartments and find suitable homes, whether new or purchased from earlier occupants.

Another sizable part of the population does not have the income that would allow so free a choice. The low-income group, regardless of its preferences, must occupy the cheapest units on the market. We have every reason to suppose that low-income groups now occupying the discarded housing of the old neighborhoods actually share the same general preference patterns of middle-income groups living in better housing in superior surroundings. Because they do not have the means to satisfy these preferences, large numbers of them continue to live in housing that neither they nor other groups want any longer. But their forced occupancy gives value to this housing, so that clearance and replacement are difficult. At the same time, the old neighborhoods serve a useful social purpose in providing housing for low-income groups, although not the type of housing that many present occupants would freely choose. Regardless of the quality of the housing, however, a strong community life often develops in these areas, so that their premature clearance creates genuine hardships and social dislocations for people forced to move.

This duality in the housing market could be reduced by a rise in the incomes of lower economic groups relative to the cost of housing, or by an expansion of the supply and variety of low-cost housing. As long

as the dual market persists, rebuilding the aging residential areas will be difficult economically -- though possible in many cases -- and unadvisable socially, except on a limited and gradual basis.

FOOTNOTES

1. For sources and details of land utilization calculations for New York, Los Angeles, and Hartford, see Appendix B.
2. "City Planning Billion in Housing for 250,000 Within Few Years," New York Times, April 7, 1961, p. 19.
3. Edgar M. Hoover, "Demographic Projections for the Region as a Whole," in Barbara R. Berman, Benjamin Chinitz, and Edgar M. Hoover, Projection of a Metropolis; Technical Supplement to the New York Metropolitan Region Study, Cambridge, Harvard University Press, 1961, pp. 57-75.
4. See Figures III-1 to III-3.
5. Real Estate Research Corporation, Rental Housing Market Analysis; Downtown Hartford, prepared for Department of Housing, City of Hartford, 1959.
6. U.S. Housing and Home Finance Agency, Housing Statistics, Historical Supplement, October 1961, p. 12; Housing Statistics, October 1961, p. 7.
7. Louis Winnick, Rental Housing; Opportunities for Private Investment, New York, McGraw-Hill, 1958.

CHAPTER VI

REQUIREMENTS FOR PUBLIC ACTION

PART 1: MAJOR POLICY ALTERNATIVES

The rebuilding of cities is now a matter of general public concern. City governments have deliberately begun to take a hand in shaping the future of old residential areas, but the development of public policies for the rebuilding process is a difficult task. Results of this study provide a sharp definition of some major issues involved in the choice of appropriate objectives for public policy, and a number of guidelines for achieving particular goals.

Population and housing characteristics demonstrate quite clearly that old housing is still well utilized in the large cities, and that recent population shifts out of the declining areas have improved housing conditions materially for low-income groups.

If public policies are to serve the general welfare, should structures be cleared and replaced as long as they have a useful function? The declining areas of most large cities serve the important social purpose of providing housing for low-income people, and current migration flows into the cities suggest a continuing heavy demand for low-income housing for at least the next decade or two. Under present conditions, the large-scale clearance of aging neighborhoods will deprive low-income people of valuable housing resources, as well as causing severe social problems in the forced uprooting of residents.

Despite the evident need for old housing, many cities have cleared large residential areas for urban redevelopment projects. The search for additional real estate taxes, the political value of physical symbols of progress, aesthetic objections to decaying neighborhoods, and the application of current housing standards to structures built fifty or more years ago have all justified such clearance programs. But the adverse social consequences of harnessing rebuilding policies to these limited approaches have become increasingly evident, and policy changes are clearly in order.

If public policy accepts the objective of clearing only surplus housing, what can be done with the declining areas? Major alternatives are:

1. Leave these areas untouched until they are virtually abandoned, then acquire the properties at reduced prices, clear them, and rebuild the cleared sites for new purposes.
2. Rebuild these areas gradually, replacing the old housing in small parcels as vacancy rates rise.

The first alternative raises serious problems of maintaining public services during the lengthy period of abandonment and dislocating remaining residents after utilization falls to a low level. The second is more difficult to achieve, but avoids both these problems. Gradual rebuilding also offers opportunities for promoting greater variety within an area than is likely with a massive clearance and rebuilding at one time.

A choice between the two depends once again upon public objectives. The main social issue that is raised here concerns freedom of residential choice. I suggest the maximizing of individual choice as a suitable goal in making this decision. Although neither alternative would force occupants of the old housing to leave in the near future, the first would eventually displace those that remained, and past experience suggests that a large number will remain even when

occupancy has declined for many years. In addition, a gradual rebuilding will offer some residents a chance to find new housing without leaving the community, and will widen the choices available to non-residents who are in the market for new housing.

If these are the objectives -- to limit clearance to structures that are no longer useful, and to maximize residential choices for the individual -- gradual rebuilding is a suitable technique. But how can public policies start this process? Public action can help create the pre-conditions for a gradual rebuilding, and public action is vital to accomplish the final conditions for a transformation of the older areas. We shall take a closer look at both types of action in this chapter.

The three cities we have studied in detail have all initiated public programs to rebuild some of their older areas. In New York, new and interesting policies have been developed to bring about a planned rebuilding. In Los Angeles, certain basic policies are still being formulated for dealing with the aging neighborhoods. In Hartford, where the pre-conditions for rebuilding are lacking, public policies face particularly difficult obstacles. We shall review the current situations in all three cities, to see what help our research can offer for coping with realistic problems.

Urban Renewal and Low-Cost Housing

Public policy for rebuilding old areas of the city must recognize a large and continuing demand for low-cost housing. Renewal policies should thus reflect general policies concerned with housing for low-income people. In the past decade, huge migrations of low-income groups from rural areas to the cities have kept steady pressure behind this demand. The greatest of these migrations, the movement of Negroes from the rural South to the urban North, reached peak levels in the 1950's. Yet the Negro population remaining in the

South, an obvious source of future migrants, also grew to record levels by 1960. With large migrations likely to continue, and with high birth rates among recent low-income arrivals, the pressure for low-priced housing is not likely to subside quickly.

One important job for public action is to help ensure an adequate supply of low-cost housing to meet the needs of people who are unable to afford either new housing or old housing in good condition. In the 1950's, population losses in the large central cities helped make possible a general improvement in living conditions, with a reduction in overcrowding and a wider choice of vacant units in sound condition. But programs of large-scale clearance in the old residential areas would reverse this favorable trend, unless they were supplemented by other means of expanding the supply of housing within reach of low-income groups. Whatever the goals of public activity in the old residential areas, they should take account of the need for keeping a large supply of low-priced housing on the market.

It is obvious to observers of urban renewal practice in the United States that policy-makers have often been insensitive to this consideration. Projects to clear old housing and develop high-cost apartments provide tangible symbols of civic progress, augment the property tax base, and enhance the appearance of formerly run-down sections. Such projects are also justified by pointing out the poor physical condition of the old housing, and by urging the social objective of bringing "middle-class leadership" back to central areas. These narrow approaches to urban renewal should be modified to take account of total housing needs in the community.

A recent study of capital requirements for urban renewal illustrates this fault in renewal policy in its review of the program of a representative medium-sized city. The renewal program for Case City (New Haven, apparently), based on an application of architectural

standards to various parts of the city, calls for the redevelopment or rehabilitation of areas where two-thirds of the population now live. The low-income groups now occupying these areas cannot afford the costs of new or rehabilitated housing, and would have to be relocated elsewhere. Without a substantial low-income housing program, "Case City would be faced with the prospect of replacing the population of those areas where two-thirds of the city's people now live with a market drawn from the stable areas where one-fifth of the city's population lives, plus some suburban returnees."¹ The authors note that such a program is possible only if incomes rise for a large part of the population, and if a substantial proportion of disposable income goes for housing expenditures.

Renewal programs of this kind would have highly destructive effects if they were put into effect in the near future. Fortunately, such programs have moved slowly in the past, so that they have not destroyed enough low-cost housing to affect the general improvement from 1950 to 1960, although they have certainly retarded improvement in New York. Despite the limited progress of most renewal programs to date, however, they have had many unfortunate effects. The very act of clearing an area and scattering its occupants often destroys valuable and unique social ties that have developed over many years.

As early as 1937, George Orwell found disturbing evidence that slum clearance in English cities disrupted many cherished features of personal and communal life. "When you walk through the smoke-dim slums of Manchester, " he noted, "you think that nothing is needed except to tear down these abominations and build decent housing in their place. But the trouble is that in destroying the slum you destroy other things as well."²

Current renewal policies have barely caught up with Orwell's insights. A 1959 advisory report to the Mayor of New York examined City renewal practices of the 1950's and characterized relocation

experience in very much the same way:

Forcing people to leave their old neighborhoods is probably the major source of bitterness and opposition to slum clearance. Slums, after all, are neighborhoods and communities. They teem with people who like the place in which they live for simple but deep-rooted reasons.³

Many careful studies have documented and detailed the intricate network of personal and social relationships that are often found in low-income communities.⁴ If anything is to be learned from the bitter experience of large-scale clearance projects (some of which is chronicled in these studies), it is that any necessary rebuilding of such communities should be carried out slowly, and that displaced occupants should be offered relocation housing within remaining portions of the same community.

Put differently, recent experience with clearance projects argues for a policy that will maximize the individual's opportunity to choose his community, his housing, and the time when he wishes to move. Cities with active renewal and public works programs have disrupted the lives of many thousands of their residents in the last decade. Urban renewal projects since 1949 have encompassed areas containing 230,000 families, almost all with low-incomes, and the majority nonwhites with particularly difficult problems in finding good housing.⁵ In the face of this massive use of public power to interfere with residential choices, the reaction of an elderly woman in New York to a proposal to change the name of Third Avenue exemplifies an increasingly common public attitude: "They should leave this city alone! They should keep their cotton-pickin' fingers off!"⁶

Major Alternatives for Rebuilding Policies

Two guidelines for the scale of rebuilding programs are clear so far:

1. Our analysis of recent migration and housing trends indicates a need for limiting the total scope of re-

building to the number of surplus low-cost dwelling units, in order to avoid removing needed housing from the market.

2. Numerous sociological analyses indicate the desirability of avoiding a forced displacement of low-income people from communities where they have strong ties. Thus the scale of rebuilding neighborhoods where community life is strong (i. e., non-transient areas) should ideally be limited according to the amount of locally available relocation housing for people who wish to stay in the area. As the occupants gradually abandon the old housing in such an area, rebuilding can proceed in a series of stages.

These guidelines allow a first approximation to public rebuilding policies -- suggesting a slow rate of rebuilding under present conditions in most big cities -- but the major policy alternatives for the old neighborhoods involve more complex considerations. These alternatives are (a) to postpone rebuilding until the areas are virtually abandoned, or (b) to maintain a steady rebuilding process, replacing the old structures as they deteriorate or become vacant.

The first of these alternatives, waiting for abandonment, is sure to be a process drawn out over several decades, with a great likelihood that much of the housing will still be occupied as long as it is available. We have some examples of gradual abandonment of neighborhoods that once served as reception areas for the great waves of European immigrants at the turn of the century. The West End of Boston reached its population peak around 1910, when over 32,000 people lived there. The area declined steadily in succeeding decades, as the foreign-born population and their children moved on to newer locations. By 1950, population had fallen below 17,000, but the housing vacancy rate was only 5 percent. In 1950, a large part of

this area was earmarked for an urban redevelopment project. Official project designation came in 1952, and the impending clearance of the area was publicized repeatedly until the actual land taking in April, 1958. Large-scale abandonment began, but the majority of units were still occupied at the time of land acquisition, when the vacancy rate reached a peak of 38 percent.⁷

The Lower East Side of Manhattan had a similar process of decline, but without the threat of clearance. The area filled with immigrant Jews and Italians, reaching a population peak of 541,000 in 1910. As these occupants moved on to better housing, no further immigrant waves replaced them, with the exception of a small influx of Puerto Ricans. Population reached a low of 205,000 in 1940 and held at about the same level in 1950. During this long period of abandonment, the number of dwelling units shrank from a high of 108,000 to a low of 71,000 -- a proportionately smaller reduction for housing than for population -- and the vacancy rate never exceeded 30 percent.⁸

After the process of abandonment is well advanced, what types of people remain in an area? Those who remain have special reasons to do so. Grebler describes the Jews who stayed on the Lower East Side as "the poor, the orthodox, the servers of cultural needs, some of those having businesses in the area, and the aged."⁹ Firey, in his study of the North End of Boston, maintains that long-term residents of this area were those who wished to identify with Italian culture and the Italian community.¹⁰ An analysis of occupants in a redevelopment area in Indianapolis characterizes the most persistent residents as the "indolent," the "adjusted poor," and the "social outcasts."¹¹ A long process of self-selection is at work here. When a majority of the population leaves an area, people who remain clearly have some special attachment to the place. Having chosen deliberately to remain, they are likely to be most severely affected by forced relocation.

Thus, even at the end of a long waiting period, rebuilding an old neighborhood will still involve a considerable amount of forced uprooting and the destruction of remaining community life among a particularly vulnerable part of the population.

This pattern of decline would also entail serious problems during the long process of abandonment. When population is thinning out while the physical equipment of the area remains intact, service costs would be high in relation to the number of people deriving any benefit from local facilities. As Raymond Vernon has pointed out (Appendix C), streets and utilities would have to be maintained at previous levels for a dwindling population; police and fire protection could not be cut back; school structures would have to be maintained for small enrollments. Capital investments in modern facilities or environmental improvements would be difficult to justify against other claims for public funds, since the life of these facilities would be geared to the uncertain life expectancy of the old housing. Declining areas would probably receive minimum service and no new investment, despite the needs of remaining low-income people.

Gradual Rebuilding

The alternate approach is a process of continuous rebuilding, keeping pace with the gradual abandonment of old housing. Such a program would be difficult to manage, but the potential gains are significant. The pattern of change is evolutionary: new residents enter in small numbers each time a handful of new buildings is completed. This influx would prevent any problem of underutilization. Services and new facilities would be related to new housing as well as old. At no stage would it be necessary to force large numbers of residents out of the area. Rebuilding would proceed by small increments, with each stage depending first upon the voluntary abandonment of old housing units.

Individual choices of residential location would remain unrestricted for low-income residents, and would be expanded for people in the market for new housing. At each stage, some low-income people would be displaced, even though clearance would be limited to deteriorated and predominantly vacant structures. Those displaced would have an opportunity to relocate in other housing within the same area, since an adequate local vacancy reserve would be one cornerstone of the gradual rebuilding policy. The availability of some new housing within the community would widen residential choices for residents of the area with rising incomes who might want better housing in the same locale, and for outside people who would have an additional area in which to find some new housing. Finally, gradual rebuilding would promote internal variety in an area, rather than the homogeneity of a large-scale clearance project rebuilt all at once.

If new housing is to be attracted into the declining residential areas, their physical setting will have to be improved significantly, with the provision of new community facilities and a high level of public services. These environmental changes would also benefit occupants of the old housing. By making the area more desirable generally, environmental upgrading might slow the process of abandonment and might encourage rehabilitation of older structures. From a social point of view, these are desirable side effects, providing an improved environment for low-income people and prolonging the useful life of existing structures. To the municipal tax assessor, such benefits may bring small joy if they slow the process of new development. His perspective, however, should not be decisive.

Environmental improvements, coupled with a steady process of rebuilding, may also raise the cost of site acquisition in the older areas. To the extent that a rise in price reflects increased utilization of the old structures, no conflicts with public objectives will arise, since rebuilding is not to be attempted while areas are still heavily utilized.

But site prices may rise because of speculative rebuilding values in an area where new development is active. If price increases threaten to block new development, or to force up new densities to undesirable levels, the municipality may be able to forestall price inflation by a policy of advance property acquisition before rebuilding and environmental improvement are well under way. Early property acquisition need not influence the timing of clearance: buildings could be leased for operation, or could be operated by the city until they are ready for replacement. Alternately, the city might obtain long-term options to buy properties at current prices before making major public investments in an area.

In some circumstances, gradual rebuilding may be inconsistent with desired directions of change. Some old residential areas may be better suited for non-residential functions in the future. Such transitions from residence to industry or large institutions, for example, may involve a general realignment of the street pattern, the provision of different utility systems, and a radically different land pattern. In such cases, rebuilding in small stages may be virtually impossible because of the sheer magnitude of physical change and reorganization. Some types of new development -- heavy industry, truck terminals -- may have a deteriorating effect on the environment for remaining residents rather than aiding in the provision of good residential services.

These severe constraints on gradual rebuilding are not likely to be typical. Where residential areas are to remain residential in the future, slow rebuilding will indeed create more complex physical planning problems than complete clearance. But the advantages of gradual rebuilding are considerable in bypassing the problems of slow decline and eventual dislocation of the remaining community.

Creating the Conditions for Gradual Rebuilding

Policies to achieve a gradual rebuilding of the old residential areas

consist of two separate phases: creating the pre-conditions for rebuilding, and accomplishing the actual transformation of old areas. We have learned a great deal about the pre-conditions and the critical points at which public action can influence them. Less information is available about the final conditions for rebuilding, but the general nature of the problem is clear, and we shall review some current renewal plans that aim at a gradual rebuilding process.

Two basic lines of attack are open to public action designed to strengthen the pre-conditions for attracting new development into the old residential areas: increase consumer preferences for these locations, and reduce development and operating costs for the developer. The relationships that we have noted between metropolitan structure and locational preferences in the housing market point the way for the first approach. To raise consumer demand, public action can be taken to strengthen the downtown core in terms of employment, service, and recreational facilities; increase the access advantages of the old areas to downtown or to other activity centers; remove competitive vacant land from the market; and of course, improve the local environment in declining areas.

Specific action to accomplish these objectives could take many different forms, depending upon local circumstances and the nature of city and metropolitan planning programs within each region. Downtown renewal programs, changes in the transportation system, the acquisition or regulation of vacant land, all constitute approaches to manipulating the functional structure of the region. Any of these actions will have highly significant side effects, and none are likely to be undertaken solely to promote rebuilding in the declining areas. But these are illustrations of the ways in which planning programs can conceivably increase consumer demand for housing sites in the areas to be rebuilt.

Where costs and returns for new housing are out of line in the declining areas, the other line of approach is to lower costs. Direct financial subsidies are an obvious method: tax abatements and low-interest loans, for example. Less direct methods involve devaluing slum properties, by such techniques as enforcing building and occupancy code requirements to the point where deteriorated housing becomes less profitable to the owner, or formulating tax policies for the same purpose. All these methods are highly complex and generate many side effects; they cannot be undertaken without careful study of the housing market and analysis of the likely results of contemplated action. In a housing market where low-rent units are scarce, code enforcement measures may result in a transfer of maintenance costs from owners to tenants through rent increases. Where low-cost units are in large supply and vacancies are growing, prudent policy may simply involve waiting for vacancy rates to rise high enough to turn prices downward. Measures to expand the supply of superior low-cost housing, such as well-conceived public housing programs, are also likely to help devalue deteriorated structures in the declining areas.

An aspect of the abandonment of declining areas that appeared very clearly in our three regional analyses is the slowness of minority group dispersal from central locations. Where continued occupancy of the old housing represents the free choice of individuals who wish to remain in their communities, such decisions should be respected. To a certain extent, however, decisions to remain in the old areas result from discrimination in the private housing market, or from fear of discrimination. The elimination of such artificial barriers to free choice of residence is an objective that needs no further justification. Fair housing legislation and other steps to open the suburban market to all groups in the population will widen the range of choice for minority families, and will probably also speed the vacating of substandard housing in the older areas.

The total demand for multifamily housing in a region is a critical factor in meeting the pre-conditions for a gradual rebuilding of old residential neighborhoods. As we have already noted, action at the national level may be more significant than any local measures in broadening the market for multifamily homes. Nevertheless, the same local actions that promote demand for the old inlying areas are likely to promote an acceptance of multifamily densities as one condition of living near the center of the region. Local programs to reduce development and operating costs in rebuilding areas may also make possible a reduction in rents to levels competitive with the cost of owning a single-family home. Finally, local experiments with design innovations in multifamily structures may stimulate increased interest in this type of housing.

Municipal governments exert considerable power over the pattern of new apartment construction through the regulation of maximum densities in zoning legislation. Density regulations for areas to be rebuilt must steer a course between two conflicting objectives. In order to make new buildings feasible on expensive cleared sites, density regulations should permit fairly intensive development. But in order to use the limited multifamily market as an effective force in rebuilding many old areas, maximum densities should not go so high as to exhaust the total potential for new apartments in just a few locations. Both criteria must enter into the choice of appropriate densities, for zoning itself is a tool for rebuilding and may reduce current land prices by controlling maximum development densities. The choice of densities should therefore reflect a careful consideration of the general demand for space for multifamily housing in a region and the supply of feasible sites, as well as the economics of new development and the preferences of occupants of new housing.

Final Conditions for Rebuilding

In areas that meet the pre-conditions for rebuilding, attracting new development will require still further public action. Developers of new housing usually avoid the declining areas where deteriorated old housing is concentrated, although this is not inevitably the case. A major task for public action is to remove whatever stigma keeps new development out of the aging neighborhoods. Most current efforts in this direction emphasize the selective clearance of badly blighted properties, the provision of new community facilities (schools, parks, playgrounds), traffic improvements, redesigning of streets to enhance their appearance, and occasionally the development of a modern shopping plaza. An important feature in all these current plans is the rehabilitation of much of the older housing.

Although most of these deliberate programs for rebuilding residential areas are too new to permit an evaluation of results, several general considerations are already clear:

1. Old residential areas differ markedly in their ability to attract new private housing, with important consequences for public programs. Some areas have special advantages for new housing: good accessibility to a center of activity, proximity to prestige locations, attractive views, or other special site characteristics. In such areas, little public action may be necessary to spur private rebuilding of cleared sites. Later in this chapter, we shall discuss such an area in Los Angeles, where the sole public expenditure required to set off a wave of rehabilitation and rebuilding was the administrative overhead for a series of building inspections and code enforcement orders.

In contrast, some areas are so lacking in attractions that private building seems unlikely, even with environmental improvements. In such areas, private developers may

have to receive special financial incentives, or perhaps some form of public housing is the only feasible type of new development. A successful rebuilding program is likely to encompass both extremes among old neighborhoods, as well as many in between. To cope with such a broad range of rebuilding areas will require more than mere reliance on private development: special inducements will have to be offered in some areas, and varying degrees and types of subsidy may be required in others. New York already has such a varied tool kit available; we shall discuss it at greater length later in this chapter.

2. One way to regard these differences is in terms of the differing multiplier effect of public investment in generating private investment in different areas. From the point of view of municipal finance, this relationship will be an important one, but a socially responsible rebuilding program will seek goals other than maximizing this multiplier effect. Investments in public facilities and the community environment are more than techniques to attract new development; they are also means for providing good services and surroundings for residents of the older buildings.
3. Residential areas will also differ with respect to the amount of clearance and rehabilitation that is justified at any stage of a rebuilding program. Although the rate of rebuilding would be geared to the availability of vacant units within the area, the physical characteristics of structures will affect the types of treatment used in the rebuilding program. Certain types of structures, such as the brownstones in New York, are particularly suited to rehabilitation. Others may be of a structural

type unsuitable for modern needs (old-law tenements), or may be uneconomical to rehabilitate because of poor condition or absence of necessary facilities.

4. The use of rehabilitation may have to be sharply limited in low-income areas, for rehabilitated rental units may well be too expensive for most low-income families. Under these circumstances, where rehabilitation would mean removing units from the low-cost inventory, government-induced rehabilitation should move no faster than the growth of vacant relocation units in the area, or the rise of incomes in the community. Present rebuilding programs generally call for extensive rehabilitation of older units, but these programs often envision a substantial amount of relocation out of the area. In many areas, however, moderate rehabilitation may be within the means of present occupants.

5. The public cost of gradually rebuilding old residential areas is sometimes lower than the cost of urban renewal clearance projects and sometimes in the same general range, but public investments are largely for community facilities rather than for land write-downs. Information has been compiled for eleven renewal projects that emphasize the conservation and rehabilitation of existing structures rather than large-scale clearance; all are located in cities over 100,000 in population (Table VI-1). Net project costs per net acre of land (excluding streets) range from \$19,000 for the Mack-Concord Conservation Area #1 in Detroit to \$268,000 for the Harlem Park Project #2 in Baltimore.

In many cities, costs for these projects are considerably lower than the average costs per acre for clearance projects, but costs for the two types of programs show

Selected Characteristics of Conservation-Rehabilitation Projects

City and Project	Net Project Cost (Thousands of Dollars)	Size of Project (Acres Excluding Streets)	Net Project Cost Per Net Acre (Thousands of Dollars)	Net Project Cost Per Net Acre for Clearance Projects (Thousands of Dollars)	
				Average Cost	No. of Projects
Atlanta: University Center	7,806	101.4	77.0	24.8	4
Baltimore: Harlem Park No.2	5,871	21.9	268.1	269.8	11
Chicago: Illinois Institute of Technology	2,961	27.9	106.1	202.4	22
Columbus: Market Mohawk	7,384	67.0	110.2	77.9	1
Denver: Whittier School	1,101	7.8	141.2	49.1	2
Detroit: Mack-Concord Conservation No. 1	3,895	205.0	19.0	110.1	8
Nashville: East Nashville	20,270	359.5	56.4	212.3	1
New Haven: Dixwell	11,285	187.1	60.3	297.0	2
	23,052	169.5	136.0		
Oakland: West Oakland General Neighborhood Renewal Plan	26,400	671.0	39.3	Not available	
Philadelphia: East Poplar Numbers 1, 4, 5, 6	1,651	8.1	203.8	211.6	16

Source: U. S. Housing and Home Finance Agency, Urban Renewal Administration, Urban Renewal Project Characteristics, June 30, 1961, Characteristics Directory of Projects as of June 30, 1961; Detroit information in part from Maurice Frank Parkins, Neighborhood Conservation: A Pilot Study, Detroit, Detroit City Plan Commission in Cooperation with Housing and Home Finance Agency, 1958; New Haven information from New Haven Redevelopment Agency; Oakland information from Redevelopment Agency of the City of Oakland, Information Bulletin No. 3, "A General Neighborhood Renewal Plan for West Oakland," (no date).

Clearance projects exclude projects in areas classified as predominantly open before renewal; averages are weighted according to area of project.

no consistent relationship. There are important differences, however, in the composition of the local government share of project costs. Cities tend to have greater expenditures on site improvements and supporting facilities for non-clearance projects, and to have greater cash expenditures (i.e., for land acquisition and write-down) in clearance projects.¹²

Thus the cost of gradually rebuilding old residential areas should not be regarded as separate from local expenditures on public works and community facilities. Rebuilding these areas within the framework of the federal urban renewal program will mean federal subsidies of two-thirds (or three-fourths) of the cost of public works benefiting project areas. The capacity of cities to spend on the order of \$30,000 to \$70,000 per acre (typical local shares of the cost range shown in Table VI-1) will have to be determined individually, but considerable sums may be available out of normal public works allocations.

PART 2: NEW YORK, LOS ANGELES, AND HARTFORD

Renewal Policies in New York

Of our three study areas, New York has made the most use of urban renewal programs in recent years, and offers the richest case material for an evaluation of public policy. We shall limit our discussion here to renewal in the City of New York, where the bulk of the decaying residential areas are concentrated, and where the most interesting programs in the region have developed. At first, government-sponsored renewal projects based on the Housing Act of 1949 were concentrated in and around central Manhattan, but the sphere of operations was soon extended to upper Manhattan (the upper West Side, Harlem), areas of Brooklyn close to Manhattan, and a scattering of projects in outer Queens and the Bronx. The Housing and Redevelopment Board, which now administers urban renewal programs in New York, has already undertaken new developments in typical older residential locations of Manhattan, the Bronx, and Brooklyn, and has begun to plan still further incursions into such areas.

New York is no model of enlightened public policy working toward socially desirable objectives. We have already observed the severe shortage of low-cost housing in New York. Despite this shortage, redevelopment projects started between 1950 and 1960 demolished 22,000 low-cost dwelling units. Even this volume of destruction is only a small part of the total clearance resulting from all forms of public action including highway construction. Total public demolition currently displaces 15,000 families per year, and City projections assume no easing of this pace in the next few years.¹³

Yet New York presses on with a huge renewal program that has aroused considerable public opposition and has already brought on two Congressional investigations. This program is currently being modified in the direction of greater emphasis on conservation and rehabilitation projects, but much clearance is still contemplated. One indicator of desperate citizen reactions to City policies can be seen in a recent proposal to enact legislation forbidding the demolition of all rent-controlled housing in sound condition.¹⁴

Nevertheless, New York is a valuable case study in the use of public programs for rebuilding old residential areas. Little governmental effort is needed to raise demand for inlying sites or to lower acquisition costs. These factors are currently in a favorable relationship with one another, and the large current volume of apartment construction provides a potential basis for re-using cleared sites. The current office-building boom in Manhattan seems to assure the maintenance of a strong core -- an important factor promoting central housing preferences -- without requiring direct governmental action. Improvements in the subway system, currently under way in Manhattan via the lengthening of stations and the acquisition of new equipment, will also help maintain the central orientation of New York's housing market. Other government action is likely to promote the voluntary abandonment of deteriorated housing: the City Housing Authority has announced plans to build 57,000 new public housing units during the next few years, while City and State anti-bias legislation continues to widen the private housing market for minority groups now concentrated in the old neighborhoods.

With economic pre-conditions already favorable, the main current emphasis in New York's approach to the declining areas is turned toward the problem of improving their social and physical environment. In areas where existing buildings still have a useful life ahead, City efforts have involved code enforcement, improvements

in streets and street-lighting, new community facilities, and a host of social services: English classes for adults, nursery schools, public health programs, and casework guidance.¹⁵ But where plans call for rebuilding with some new private construction, the problem is one of attracting middle-income families into neighborhoods surrounded by low-income people living in blighted housing. Presumably this problem will ease once an initial middle-income development helps diversify the character of the neighborhood, but the current task is to trigger the initial population change. New housing and new community facilities can accomplish physical change in the immediate environment, but blighted surroundings jeopardize the chances of attracting an influx of middle-income people to occupy the new housing.

A currently emerging policy in New York seeks to overcome the reluctance of middle-income families to move to new apartments amid the aging areas by offering privately built housing at "bargain" rents.¹⁶ The mechanism for this policy is a series of financial incentives to developers of rental or cooperative housing, authorized by the New York State Mitchell-Lama law. State or City loans are available to developers for terms up to fifty years at 4 to 4 1/2 percent interest, covering up to 90 percent of development cost. In addition, the City grants abatements up to 50 percent in real estate taxes. (This program may also be combined with land write-downs in federally aided renewal areas.) The result is a substantial reduction in yearly financing and operating costs, and a smaller equity share in new development, in comparison with conventional financing and normal assessments. Rents are established by prior agreement between the sponsor and the City or State supervising agency. Under this program, rental units have come on the market for \$25 to \$30 per room; new apartments in conventionally financed private buildings rent for \$40 per room or more. Mitchell-Lama cooperatives also offer advantageous prices to the consumer: down payments are generally \$400 to \$600 per room, with monthly carrying charges of \$18 to \$25 per room.

The Mitchell-Lama program has been in operation since 1946, but only recently has it become a tool used specifically to induce new construction for a middle-income market in the old and declining areas. The policy switch has taken the form of turning down applications of sponsors who propose new developments in areas where unsubsidized private construction is active. The rationale on the part of New York City officials is to avoid a situation in which new middle-income apartments in choice locations undercut the market for comparably priced units in the neglected areas. An additional objective of this policy is to safeguard the tax base of the City by preventing subsidized incursions into areas where fully tax-paying property would otherwise develop.

Results of this policy are not yet evident. Two different phases of the program will be interesting to watch. First is the question of whether the low rents of Mitchell-Lama developments will succeed in attracting an initial contingent of middle-income residents to a few bright islands set among a sea of obsolescent housing. The first new developments are sizable islands, however. An early venture in the Williamsburg section of Brooklyn, where the first units are expected to open in 1963, will occupy 24 acres. Another development still in the early planning stage is expected to use some 38 acres of land in the Brownsville area of Brooklyn.

If the scale of these initial developments is suitable for attracting the desired rental market, the second phase of the strategy must still be tested. Will the introduction of middle-income elements into the population trigger later unsubsidized private development, or will rents have to be held below normal market levels in order to continue rebuilding these areas? The problem at this stage will be to devise further changes in the environment that will allow the old areas to command rents consistent with their locational advantages, if the objective is to attract conventional private housing.

Gradual Rebuilding in New York

The large scale of these particular Mitchell-Lama developments is not really appropriate for the gradual rebuilding of old neighborhoods in accordance with the social objectives that we recommend. Clearing land for a site of 25 or 30 acres will inevitably mean sweeping away a considerable amount of housing, including some that is neither surplus nor deteriorated. A gradual approach would require clearing smaller plots on a highly selective basis, and introducing new buildings among old ones on the same street. An urban renewal project currently in progress on the West Side of Manhattan is closer to our model of gradual rebuilding, and involves a number of interesting implementation techniques.

The West Side renewal area, however, does not conform to our general goals of replacing surplus, substandard housing in declining areas, for the area is not a declining one and its housing is overutilized.¹⁷ From 1950 to 1956, the population climbed from 33,000 to 39,000, owing mainly to a large influx of Puerto Rican migrants and a smaller exodus of white non-Puerto Rican residents. By 1956, 20 percent of all living quarters were overcrowded (more than 1.5 persons per room), and with the conversion of many furnished rooms into family housing units, a third of all units lacked adequate bathroom facilities. We would not recommend any clearance in such an area while the housing is so heavily utilized, but the West Side program is nevertheless useful to observe as an illustration of how gradual rebuilding might be accomplished in a more suitable area.

In this renewal area, sites cleared for new buildings are small, ranging from 7,200 square feet to 40,000 square feet. Over the four stages of the program, some entire street fronts are to be rebuilt, but at any one stage the new buildings are mainly non-contiguous. In the early stages, new development thus adjoins old buildings, some of which are in poor condition. Part of the program for attracting new

development into this area is the eventual rehabilitation of most of the older structures that are to be retained. For some time, however, new buildings will have old and even substandard neighbors. Despite this potential drawback, developer interest in the project has been high, and both rehabilitation and new construction are already under way.

Another feature of the strategy for attracting new development is the addition of new community facilities. These include a new elementary school and playground, a new playground for an existing school, and various walkways and small open spaces.

In addition to physical improvements in the neighborhood, New York has an impressive set of tools in its varied programs for stimulating new building. Plans for the West Side anticipate either conventional financing or FHA Section 220 mortgages for some new buildings, and Mitchell-Lama financing for others. Rehabilitation can be undertaken through conventional or FHA financing. In addition, some low-income public housing is to be built in the area. At the end of the second stage, the ratio of new private housing units to new public units is expected to be 2.5 to 1, with private housing rising to a higher proportion in the remaining stages.

New York has still other programs for new private housing, involving various degrees of tax abatement and financing assistance, and dependent upon a profit limitation of 6 percent. In the field of public housing, there are City programs for low and middle-income projects, as well as state and federal low-income programs.¹⁸ Other cities that wish to sponsor extensive rebuilding programs will have to develop similarly diversified tools, to fit the highly individual character of different sites and different neighborhoods.

Although many of these programs involve some public subsidy, the land cost-land value relationship is basically satisfactory for new

private housing in the West Side renewal area. No federally aided land write-downs are contemplated, and a considerable amount of new housing is expected under conventional or FHA financing, with no tax abatement or other City subsidy. Despite land costs as high as \$16 per square foot, new apartments to rent at only \$45 per room are feasible through FHA financing. One reason why actual site costs are not excessive for new development is that the densities follow normal levels for new construction in New York, rather than the somewhat lower levels prevailing in large-scale urban renewal projects. We shall take up this point in more detail below. Density for the total project area will remain about the same before and after rebuilding.

If the timing of various stages follows the suggested schedule of two and one-half years per stage, the rebuilding of this area will be far from gradual. Nevertheless, with more time allotted per stage, this plan could serve as a model for the gradual approach. Only the first two stages are worked out in detail. At the end of the second stage, about one-third of all the living quarters in the area will be replaced with either new or rehabilitated housing.

Rehabilitation and clearance will both require the relocation of some former residents, but new public housing will be included within the area, and a number of families are expected to have incomes high enough for rehabilitated or new units. Of 2,600 families to be relocated, about 1,300 will be in the low-income category. With only 500 new public housing units in the area, at least 800 families will have to be relocated elsewhere.

With some modifications, this type of plan would be suitable for the gradual rebuilding of an old residential area. The most important change would be to postpone any clearance or rehabilitation until more vacancies are available in the area. Then, with slower staging and perhaps with more public housing, the community could start a steady rebuilding process.

The Double Standard in Urban Renewal

Urban renewal in New York has also raised serious questions about the purposes of public aid used for channeling private development into otherwise inactive parts of the City. Is the sole purpose to stimulate the rebuilding of stagnant areas, or is there an additional objective of promoting higher quality housing developments than private builders provide elsewhere in the City? Our economic analyses in Chapter IV assumed that rebuilding of the declining areas would generally involve structural types and development densities similar to those currently in use elsewhere in the region. So far as densities are concerned, urban renewal in New York has departed considerably from normal development practice. Private housing developments in and near central Manhattan are usually built at densities of 300 to 500 dwelling units per net acre. Densities in large-scale Manhattan urban renewal projects have been less than half as high, ranging from 100 to 150 dwelling units per net acre. In the other boroughs of New York, where typical densities of private development are about 150 units per acre, urban renewal densities vary mainly between 50 and 100 units per net acre.¹⁹

From the point of view of public policy, a double standard is clearly involved here. Maximum densities of private development are controlled by zoning regulations. Thus the developer who builds at densities of 500 units per acre has governmental approval to do so. Yet when public subsidies are made available for urban renewal projects, maximum densities are set at levels far below usual practice. This is a costly procedure, requiring substantial subsidies to permit a normal profit when expensive land is to be utilized according to standards more generous than those dictated by economy alone. The costliness of this approach results in large part from the inconsistency between zoning standards and renewal standards. Normal development densities, as regulated by zoning, strongly influence the value of land in areas where rebuilding is active or anticipated.

Values resulting from expectations of normal development potential will almost certainly exceed values for re-use at lower densities. If the gap is to be bridged at all, it will require a subsidy.

A large part of New York's expenditures on urban renewal have gone to purchase nothing more than reduced development densities in renewal areas. The Washington Square Southeast project is a particularly striking example. Located on the fringe of Greenwich Village, where private construction has accounted for a great deal of rebuilding in recent years, the project involved a land acquisition cost of \$33 per square foot.²⁰ Typical land costs for privately developed housing nearby are between \$30 and \$40 per square foot. While unsubsidized developments nearby are built at densities exceeding 300 units per net acre, the Washington Square project has a density of 138 units per acre. Project rent levels are about the same as those in new buildings nearby. Net project costs were 15.4 million dollars for a site of 14.5 acres, or over one million dollars per acre. Without public site assembly, new building might not have been possible at this location, but the site could conceivably have been assembled and sold at cost for development at typical densities. Instead, the area was subsidized to the extent of one million dollars per acre to achieve a lower density.

If this lower density constitutes a public purpose of sufficient importance to justify such an expenditure, why is the public purpose not compelling enough to warrant a gradual reduction of zoning limits to comparable densities for all new development? New York has recently adopted a new zoning ordinance incorporating sweeping downward revisions in permitted densities, but the new law still allows densities of 400 units per acre or more in many parts of Manhattan. Under these circumstances, vast renewal expenditures for lower densities seem questionable.

To the extent that renewal subsidies serve other objectives, they have stronger justification. Most New York City projects differ from Washington Square Southeast in that they are not located in areas where private development has been active. Thus they serve the purpose of initiating rebuilding in otherwise stagnant areas, and they may generate later unsubsidized building. Reduced densities in these projects may help to set processes of population change into effect. A project currently contemplated for the Brownsville area of Brooklyn would offer densities below those of private development as an inducement to attract middle-income people into what is now a low-prestige, lower class neighborhood. This strategy is similar to that of offering low rents through the Mitchell-Lama program as a means of transforming the social environment, so that private developers can eventually operate in these areas without special subsidy.

But the difficult question of double standards remains. If one objective of public policy is to change the standards of private development in the direction of lower densities, urban renewal is a costly tool to use for this purpose. We do not know whether it can even be a particularly effective tool. Urban renewal projects may perhaps serve as demonstrations of superior development standards, but unless public taste comes to demand similar standards in all new housing, the demonstration effect will be negligible. Zoning can be a much more powerful tool for changing development standards. New York has made an effort to reduce private development densities through its new zoning law, but maximum permitted densities still exceed those used in renewal projects. As long as this difference persists, the City is in effect attempting to reach higher standards through renewal than it is through zoning.

This situation of double standards is a costly one, and suggests a need for clarifying the objectives of rebuilding and coordinating

the various means of achieving these objectives. Reducing the density of new construction may be a highly desirable goal. Our calculations in Chapter IV indicated that with FHA financing, new housing can be built in the older parts of the Bronx, Brooklyn, and Queens at densities as low as 50 units per acre. Under present cost conditions, land write-downs are not necessary to permit moderate density construction in the old residential areas. But if zoning regulations allow higher densities, special incentives will probably be necessary to attract new development at densities below the prevailing level.

If the density reductions embodied in New York's new zoning law represent a first step toward bringing zoning and renewal policy in line, the double standard problem will diminish in importance. Zoning measures should be tied more closely to rebuilding objectives in still another respect, however. We have already discussed the prospects for diverting new apartment construction in New York from outlying parts of the City into the declining residential areas. We found that a rapid rebuilding rate would be possible if new development could be drawn into the older neighborhoods. To do so on a broad scale would surely require the use of zoning restrictions to curb outlying multifamily building, as well as the use of environmental improvements to make the old areas more attractive.

Zoning is but one example of public measures that should be coordinated with rebuilding programs. Tax policies and capital investment programs are other obvious spheres of public activity that can aid or hinder the rebuilding of declining areas. New York is far advanced in the measures it has devised to promote the rebuilding of its older sections, but many loose ends of public policy must still be tied together if this rebuilding is to succeed.

Our major quarrel with New York's programs, however, is not with techniques but with basic policies. Despite some attempt at gradual

rebuilding on the upper West Side, and in a few other areas now in the planning stage, the City still appears committed to a large-scale project approach, even while the housing shortage persists. From our point of view, this policy is bound to create serious problems for dislocated low-income families, while it continues taking needed low-cost housing off the market.

The Setting for Renewal in Los Angeles

Los Angeles is in a favorable position for starting a rebuilding program. Vacancy reserves in the City of Los Angeles are at an ample level generally, and with an estimated vacancy rate of 4.7 percent in the declining areas, the supply of low-cost housing is probably loose enough to permit a start on the gradual rebuilding of these areas in the near future. We have expressed some reservations about the timeliness of large-scale clearance in Los Angeles, but the vacancy reserve exceeds the supply of deteriorated housing by a sizable margin in both the City and the region, so that a careful replacement of surplus housing can safely begin.

We have already discovered that economic conditions are highly favorable for rebuilding the older areas of Los Angeles. Although the demand for new housing exhibits little centrality, development and operating costs in central areas are entirely consistent with current rent levels so long as the environment is satisfactory. Site acquisition costs are low; blighted areas in the Los Angeles region consist primarily of single-family homes, with only a handful of row houses or tenements. Even land assembly is no problem. Typical lot dimensions are 50 to 60 feet of frontage, and a depth of 120 or 125 feet. Apartment developers ordinarily require no more than a single lot of this size for a new structure with eight to ten units. Where the surrounding environment is unfavorable, however, each developer would probably need some assurance that others would rehabilitate or rebuild nearby property. Finally, the size of the rental market is no obstacle, with multifamily structures

accounting for almost half the new dwelling units built in the region since 1957.

Under these circumstances, public action to create a favorable economic setting for rebuilding seems hardly necessary. Nevertheless, government programs presently contemplated for other purposes are likely to have the incidental effect of promoting greater demand for housing in central areas. These programs include a number of measures designed to strengthen the central business district through more intensive internal development and through the conversion of surrounding land to business uses, as well as a proposed mass transit rail system.²¹ The mass transit system, as currently proposed, would start with a twelve-mile route from downtown Los Angeles along Wilshire Boulevard to the new Century City development in the west, and an eleven-mile route to El Monte in the east. Improved accessibility to downtown along these two corridors is likely to strengthen demand for housing sites in inner areas adjacent to the transit routes, particularly if plans for expanding downtown activity are successful.

The first renewal projects in Los Angeles have been close to downtown, but even the limited experience in these prime locations illustrates the favorable economic conditions that facilitate urban renewal in this region. Land acquisition is currently under way for the Bunker Hill project, an area of 136 acres adjacent to the central business district and slated to be cleared primarily for business expansion. Advance appraisals indicate an average cost of \$8.78 per square foot for land purchases and acquisition expenses.²² Estimated returns from the resale of land average \$7.23 per square foot, so that the land subsidy will amount to only \$1.55 per square foot, or about \$68,000 per acre. Other project expenses -- relocation, site improvements, overhead -- will constitute additional subsidies, but the combined net project cost or total subsidy is expected to be only \$164,000 per acre. This is no gray area location, but choice commercial land. Comparable renewal projects near the commercial area of Manhattan (Columbus Circle, Lincoln Square,

Pennsylvania Station South) have required total subsidies in the vicinity of one million dollars per acre.

Another Los Angeles project planned for the near future is the Temple area about five minutes northwest of the central business district, intended for clearance and residential re-use. With an anticipated gross project cost -- including land acquisition, site improvements, and all other expenditures -- of only \$4.45 per square foot, or \$189,000 per acre, subsidies are expected to be still smaller than in the Bunker Hill project. According to current resale estimates, the net project cost will be \$63,000 per acre. Again, New York clearance projects with comparable locations have required subsidies many times as great. The West Park, New York University-Bellevue, Cooper Square, and Washington Square Southeast projects are all residential areas quite close to the business center of Manhattan; subsidies for these projects range from \$600,000 to one million dollars per acre.

One small renewal project in Los Angeles has already been completed without any subsidy: the Ann project, formerly a residential area near downtown, has been cleared and put to industrial re-use without benefit of land write-down.

Although none of these initial projects have penetrated into the old residential areas away from downtown, fifteen other areas that have been officially designated for renewal study are scattered throughout the City of Los Angeles, and several outlying communities in the region have also initiated renewal programs. The first project in Santa Monica also presents an economic picture highly favorable for renewal, but it is by no means in a typical declining area. The Ocean Park project will use a choice site near the business center of Santa Monica, with an excellent view of the Pacific Ocean. Real estate purchases and acquisition expenses for this site are expected to average \$6.32 per square foot, and land resale value is appraised at \$4.97 per square

foot, for a mixture of new residential and commercial development.²³ Thus the land subsidy will amount to only \$1.35 per square foot, or \$59,000 per acre.

Official renewal efforts have not yet begun to cope with rebuilding typical old residential neighborhoods. As a result, special policies have not yet been devised to take account of the special problems in such areas. The limited renewal experience in this region suggests, however, that public rebuilding programs will hardly require subsidies for reducing land costs. The role of government in Los Angeles renewal is now largely one of assembling tracts of land on a scale suitable for rebuilding, investing in public improvements for renewal areas, and taking charge of relocation. Our study of the economics of renewal in Los Angeles suggests that this role need not change when public renewal programs begin to operate in the declining residential areas.

Mixing New and Old Housing in Residential Rebuilding

Rebuilding an area in small stages requires mixing new and old housing in a fine-grained pattern. To some observers of real estate practice, this pattern seems impossible to achieve when the old housing is in poor condition. Yet the upper West Side of New York is well on the way to achieving such a mixture, even before many of the old buildings are rehabilitated. Los Angeles also has an area where public action has induced new development side by side with substandard old housing. In Los Angeles, however, developers of new housing had assurances that building and occupancy codes would be enforced to bring the neighboring old structures at least up to code standards.

Los Angeles has had an active code enforcement program operating largely outside the official urban renewal project areas.²⁴

One of the areas recently chosen for intensive code enforcement was the Sawtelle section of West Los Angeles located near several high prestige areas of recent growth: Brentwood, Beverly Hills, and Santa Monica. Before the code enforcement program started, housing in the Sawtelle area consisted primarily of deteriorating single-family homes built in the late nineteenth century. Each property owner was given a list of repairs that would be necessary to bring his building up to code standards, with a thirty-day time limit to start work. These notices confronted each owner with the alternatives of making repairs, having the City make repairs and assess their cost against the property, or selling the property. If rehabilitation costs were expected to exceed fifty percent of the replacement cost of the building, the City was to start demolition proceedings in the event of non-compliance.

The Federal Housing Administration in Los Angeles agreed to insure loans for new development in the Sawtelle area, and would-be developers soon appeared on the scene with offers to buy many of the properties. The net result of this code enforcement program was a wave of new apartment construction, as well as the rehabilitation of many original structures. The number of buildings demolished, however, was almost as great as the number repaired: 386 were demolished, and 397 repaired.²⁵

This project differed from normal urban renewal approaches in a number of important respects. The City made no physical improvements in the area, and gave no relocation assistance. Land subsidies were not involved: total costs to the City were the administrative expenses necessary to carry out code enforcement procedures. What was accomplished? Social gains were dubious, with a large number of former residents leaving the area to make way for new construction. The physical transition of the area is impressive, however. Experience in the Sawtelle neighborhood illustrates the favorable economic conditions that can facilitate rebuilding in Los Angeles, as well as the possibility

of mixing new and old housing even in an area that has long been bypassed by new development.

Other blighted areas in Los Angeles may not respond quite as easily to code enforcement treatment. In less favorable locations, developers may be unwilling to bid for properties even when the owners are under some duress. In minority areas, the market for new apartments may be less certain. When the surrounding neighborhoods are deteriorating, a larger scale of action may be necessary in order to attract new housing, and major public investments in local facilities may be a prerequisite for private housing investments. In short, later attempts to rebuild blighted areas may have to incorporate approaches similar to those in New York, but the basic economic conditions are likely to be highly favorable in any case.

Old Housing and Minority Groups

Recent policy discussions within the federal housing agencies in Los Angeles have touched on another aspect of the declining areas that we have mentioned many times before: the extent to which old housing is an asset for some groups in the population. Minorities in the Los Angeles region -- Negroes, Mexicans, Japanese -- cannot enter freely into the housing market, despite the fact that many minority families have adequate incomes to purchase new houses.²⁶ The nonwhite population (primarily Negroes and Orientals) constitutes about 9 percent of total population in the region; yet according to estimates of the Federal Housing Administration, only 1.9 percent of all new dwelling units constructed in the region between 1950 and 1956 were occupied by nonwhites. In the San Fernando Valley, a major boom area for new single-family home developments since World War II, population has soared from 155,000 in 1940 to 840,000 in 1960; yet aside from one segregated district in Pacoima with a Negro population of about 4,000, approximately eighteen Negro

families lived in the Valley in 1960.

Minority population groups are now heavily concentrated in central areas of the region, and efforts to break down barriers of prejudice in the housing market are unlikely to produce sudden changes. The rate of decentralization among Negroes and, to a lesser extent, Mexicans and Japanese is likely to be slow for some time to come. In view of these unfortunate social characteristics of the suburban housing market, the Federal Housing Administration and Housing and Home Finance Agency offices in Los Angeles have been reconsidering their policies toward central areas inhabited by minority groups.²⁷ Financing for home repairs has generally been difficult to obtain in these areas, and FHA assistance has only recently become available in a few older areas. A position that has been advanced in these policy discussions is that minority groups potentially constitute a great force for rehabilitating the inner areas, provided that financing is available on favorable terms comparable to those applying to new housing. A reshaping of government policies to stimulate the flow of mortgage funds into these areas would, according to this view, represent a highly effective means of permitting minority groups to improve their housing conditions. Such a policy is likely to create opportunities for better housing for minorities long before the suburbs are open to them.

From this point of view, the old housing represents a highly desirable social asset. Whether rehabilitated or in its present condition, it provides living accommodations for groups unable (in part unwilling) to compete freely in the market for new housing. Economic calculations alone would reveal nothing of this special value that old housing has for minority groups. In Los Angeles, site acquisition costs are moderate and re-use values are high, but much of the old housing has a far greater social value than its acquisition cost would suggest. The Los Angeles situation calls attention once again to the danger of establishing public policy solely on economic terms.

Declining areas are generally ambiguous in terms of their economic value, but public policy decisions should reflect an appraisal of the extent to which these areas are social as well as economic assets.

So far as Los Angeles is concerned, implementing policies for rebuilding the older areas -- with new as well as rehabilitated housing -- will call for approaches broader than those now in use in the region. To attract private investment in rehabilitation, public action will probably have to provide the same background conditions that we have suggested are necessary to secure new housing. These conditions include a scale of operations large enough to upgrade the surrounding environment, and adequate public investment to provide facilities and services as part of this upgrading. Operations to improve blighted Los Angeles neighborhoods will almost certainly have to combine elements of the three separate Los Angeles programs that we have discussed: urban renewal projects, code enforcement, and favorable terms for financing home improvements. The tasks of public policy in the region, therefore, are to formulate clear objectives for the older areas, and to weave together these separate techniques into an appropriate program for each area.

Renewal Policies in Hartford

Vacancy rates in Hartford have risen to the point where limited rebuilding could probably be started without depleting the supply of low-cost housing, but Hartford has problems of economic feasibility. A look at the choices confronting policy-makers in Hartford will illustrate some of the difficulties in cities that do not meet the pre-conditions for rebuilding. Our previous analysis of Hartford indicated a somewhat ambiguous situation with respect to the land cost-land value balance in the old residential areas. Although the multifamily housing market displays some centrality in terms of rents as well as densities, land costs in the declining areas are slightly high in relation to likely rental returns. In many cases the gap can be

bridged by FHA financing, but slight land subsidies may be required under some circumstances. The second pre-condition -- a sufficient demand for housing sites in the older areas -- is more clearly lacking, since the total market for new multifamily housing is small in Hartford.

Recent renewal activities in Hartford will probably promote the pre-conditions by strengthening central preferences in the housing market. Five years ago, the decision of a major insurance company (Connecticut General) to move its headquarters from downtown Hartford to suburban Bloomfield gave an air of instability to downtown. Since then, an active renewal program has helped to shore up the existing situation and to stimulate business expansion in the central business district. Two renewal projects are currently in execution; one will provide a site for the new Phoenix Mutual headquarters building as well as other office activity, while the other is expected to be used for a mixture of business and light industry adjacent to the central business district. Four more projects are currently in planning, all in or near downtown. One will create space for a convention hall, another is for retail expansion, a third for a combination of luxury apartments and offices, and the remaining project is to build moderate-rental apartments overlooking the Connecticut River near downtown.

This program is likely to enhance the pulling power of downtown materially, both in a functional sense and in terms of improved appearance. The four projects within the central business district will rebuild more than 25 acres of downtown land with modern structures; two nearby projects will convert almost 100 acres to new uses. Central activity will increase, and the mixture of new uses will add variety to the core.

While these developments are likely to increase the attraction of downtown, other government action may have the effect of diverting the housing market effects of this attraction from the inner areas to

outlying vacant land. Concurrently with the downtown renewal projects, a major highway program has been under way in the Hartford region. Several new expressways now under construction or planned for the near future will improve access from many outlying locations to downtown Hartford. Since abundant vacant land is available only seven or eight miles from the core, much of the demand for housing sites readily accessible to downtown may be filled by new developments on open land rather than in the declining areas. Zoning restrictions in suburban communities will play a key role here, for a shortage of land zoned for multifamily housing may shift development to alternate sites in the inner areas. Nevertheless, the availability of open sites within short driving times from central Hartford is likely to make single-family homes a most attractive alternative to rental housing, even when access to downtown is a prime consideration.

In contrast to Los Angeles, urban renewal in Hartford involves high land costs and substantial subsidies. Site acquisition costs for three downtown clearance projects planned for the near future are expected to range from \$17 to \$24 per square foot, with total subsidies at levels comparable to those in New York: \$780,000 to \$946,000 per acre.²⁸ These are not sites in typical old residential areas, however. We have previously estimated typical site costs in the old neighborhoods of Hartford as ranging from three to five dollars per square foot. Two clearance projects in areas near the core fall roughly within this range. Acquisition costs for the Riverview Project, a mixed residential-industrial area, are expected to be about \$5.20 per square foot. Gross project costs for the Windsor Street development, currently under way in another mixed-use area, are estimated as \$4.40 per square foot. Gross project cost includes relocation expenses, public improvements, demolition, and overhead; land acquisition costs alone are probably between three and four dollars per square foot.

As we have previously noted, land costs of three to five dollars per square foot are slightly higher than site costs in locations where private rebuilding is currently in progress. Developers of new housing in the old-mansion territory of Asylum Hill rarely pay more than \$2.50 per square foot for apartment sites. Resale value of land in the Riverview project, intended for moderate rental (i. e., non-luxury) apartment buildings, is estimated as two dollars per square foot. Although the advantages of FHA financing can help close the gap between acquisition costs and re-use values in urban renewal areas, some subsidies will probably be necessary. In New York, land subsidies are likely to be needed in the older areas only if developers are required to build housing at densities lower than normal. In Los Angeles, land subsidies are likely to be unimportant. But in Hartford, present land costs are out of line with re-use values, and some subsidy will be needed if private rebuilding is to be feasible. The Riverview project re-use value is not a result of lowering normal densities, but simply reflects current market prices for apartment land elsewhere in the City of Hartford.

At current levels, the land subsidy in Hartford need not be very high. The gap between cost and resale price in Riverview is about \$3 per square foot, or some \$130,000 per acre. The net project cost anticipated for Riverview is \$204,000 per acre, but 8 of the 24 acres in the project area are to be turned into a public park rather than sold as part of the apartment development. With some land subsidy needed in addition to expenditures for relocation and public improvements, rebuilding the old residential areas will be more expensive in Hartford than in Los Angeles.

Size of the Multifamily Market in Hartford

In addition to the imbalance between site costs and re-use values, Hartford faces a serious obstacle to rebuilding in the limited size

of the market for new apartments. We have previously estimated the land utilization rate for new multifamily development as 5 to 7 acres per year in the City of Hartford. The Windsor Street renewal area in Hartford, currently being cleared, alone covers more than 70 acres of land just outside the central business district. This project was originally intended for multifamily residential development, but difficulties in marketing the land for this purpose led to a change in plans in favor of new business and industrial development. According to the housing market study and our crude estimates, some ten years of accumulated new multifamily housing would be required to take over this 70-acre central site.

What can Hartford do to rebuild its declining areas, given the limitations of high acquisition costs and small demand for multifamily housing? Several general strategies seem worth considering. One is to spread the new construction rather than concentrate it in a few large clearance areas -- a policy which we urge on its social merits, in any case. New development can be parcelled out to various areas, injecting some new life into each one. Even so, the potential rebuilding rate is so slow that 37 years would be required just to absorb sites cleared of housing that is now deteriorated.

An alternate strategy would call for attempts to broaden the multifamily housing market. One method for broadening the rental market is to provide types of multifamily housing that are new to the region. The housing market study that we have previously cited suggests luxury apartments as one type of new housing that may extend the market by competing with upper levels of the single-family home market. This is the strategy of the proposed Bushnell Plaza renewal project, which will offer expensive apartments on a highly desirable site overlooking Bushnell Park close to the heart of downtown. Other possibilities are to experiment with row houses, town houses, or other forms of new housing that can be built at moderately high densities. Still another approach would be to broaden

the market by producing multifamily housing at rents below current levels. Counterparts of the New York Mitchell-Lama program might be devised for this purpose, if subsidies are to be provided, or construction and financing methods might be manipulated so as to minimize production costs.

Another strategy would work at reducing acquisition costs of land in the declining areas, using measures that we have already mentioned in this chapter: speed the depopulation of the older areas, enforce housing codes or alter tax policies to chip away at operating profits in deteriorated housing.

Hartford may well represent a common situation among relatively small cities with vacant land available for development nearby. The inner parts of the city were developed at moderately high densities in the past, but tastes in the housing market have now changed. As the older parts wear out, private development cannot absorb the sites at current acquisition costs. Apartment developers can afford to pay almost as much for the land as present property is worth, but the total demand for apartments is too small to permit rebuilding more than a few acres a year, even if subsidies are available to close the gap between site costs and re-use values. The major housing demand is for new single-family homes, but developers cannot pay anything close to current land prices in the old residential areas for single-family sites.

If the public interest requires a general rebuilding of the old residential areas in the near future, public strategy seems to call for efforts to broaden the multifamily market, to develop a market for housing with densities intermediate between single-family homes and apartment buildings, to take measures to reduce land acquisition costs, or to reduce other production or operating costs for the developer. Otherwise, rebuilding will require large subsidies. With acquisition prices of \$3 to \$5 per square foot, clearing an acre will cost between

\$130,000 and \$270,000 for land purchases alone, in addition to relocation and demolition expenses and environmental improvements. If the land is used for single-family homes, resale value will probably not exceed \$10,000 per acre. Clearance for single-family re-use is not financially impossible: net project costs per acre for converting a Hartford neighborhood to single-family use will be far lower than typical net project costs per acre for the many New York City projects located near the business area of Manhattan. But where the demand for building sites is limited, as in Hartford, rebuilding programs must be weighed against inevitable land subsidies, as well as against other social and economic considerations.

General Policy Implications

Our review of renewal experience in New York, Los Angeles, and Hartford raises a number of major issues that are involved in formulating public policies. First is the question of when to replace existing housing, and how much to replace. Decisions of this kind should depend upon the extent to which old housing is a social or economic asset in the market. Economic value is likely to enter into rebuilding decisions via the influence of acquisition cost, but social value is not so readily apparent. We have noted in Los Angeles that although site acquisition costs are reasonable for new apartment development, much of the old housing represents a scarce resource for minority groups. Elsewhere, the vacancy rate may be a good indicator of the need for retaining low-cost housing.

We urge that vacancy rates be determined on a local basis, and that rebuilding operations should not begin in a neighborhood until the utilization of the housing stock falls off sufficiently to create surplus housing. This principle would be a desirable regulator of the timing of rebuilding, with each new increment of rebuilding dependent upon the prior abandonment of other housing in the area. The economics of rebuilding do not necessarily dictate such a policy, but renewal programs that claim to have social goals cannot afford to rest on

economic criteria alone.

Is a policy of gradual rebuilding feasible? Cities will find themselves confronting very different sets of policy choices, depending upon whether or not they meet the pre-conditions for rebuilding.

If the pre-conditions are weak or missing, public strategy can proceed along the lines we have suggested to increase demand for housing sites in the old areas, or to reduce their acquisition cost. A major vehicle for increasing demand is the physical planning program of the metropolitan region, particularly plans for the downtown core, the transportation system, and competitive vacant sites. Reducing acquisition costs implies devaluing the old housing through providing alternative and superior low-cost housing, strict enforcement of building and occupancy codes, or tax policies designed to reduce the profitability of deteriorated housing. Alternately, land costs may be reduced through subsidies, or rebuilding may be attempted for non-residential purposes.

If the economic background is favorable for rebuilding -- as we have found it in New York and Los Angeles -- the task of public policy is quite different. In this case, strategies must be devised to accomplish the actual rebuilding of declining areas, and public action must be shaped to attract new development into the old areas. Much experimentation will be necessary, but the techniques now in use for the upper West Side area in New York are probably a reasonable model. Components of this model are the improvement of the physical setting through public works and rehabilitation, the staging of limited clearance, and a battery of alternative housing programs to fit different situations. Housing alternatives should encompass different methods of financing, different degrees of public assistance, and possibilities for public as well as private construction -- all of which are represented in New York programs.

A successful rebuilding program also involves coordinating rebuilding objectives with other spheres of public action, particularly with zoning and other regulation of private building outside renewal areas. Here, too, general coordination is necessary between rebuilding activities and the general apparatus of physical planning, including public works programming, highway construction, and over-all regional development. Even when the pre-conditions for rebuilding are present, regional growth must be directed so that the older areas become logical locations for new development.

The distinction between an economic situation favorable for rebuilding and an unfavorable one is not sufficiently appreciated in recent discussions of urban renewal. Where the old areas of a city are stagnant, observers generally assume that economic costs and benefits are out of line for new development, or that the demand for housing sites is very limited. Hence the frequent view that the root of the "gray area" problem lies in acquisition costs that are too high for the level of demand. We know that this is not always the case. Even when costs and returns are in line, however, the old residential areas may remain inactive. Difficulties of site assembly, problems with the scale of operations, effects of the surrounding environment, insufficient governmental commitments to improve old areas, perhaps lack of entrepreneurial vigor, may prevent the conversion of a favorable economic situation into an actual rebuilding program.

For many cities with characteristics similar to either the New York or the Los Angeles patterns that we have described, the problems of rebuilding declining areas may result much more from failure to capitalize upon an existing economic situation than from disparities in the economics of new development. For such cities, rebuilding strategies will have to focus increasingly on detailed techniques for transforming the physical environment so that neglected locations can achieve their economic potential.

FOOTNOTES

1. John W. Dyckman and Reginald R. Isaacs, Capital Requirements for Urban Development and Renewal, New York, McGraw-Hill, 1961, p. 88.
2. George Orwell, The Road to Wigan Pier, New York, Berkley Publishing Corp., 1961 (first published 1937), p. 69.
3. J. Anthony Panuch, Relocation in New York City: Special Report to Mayor Robert F. Wagner, December 15, 1959, p. 18.
4. See, for example, Elinor G. Black, Manhattantown Two Years Later, New York, Women's City Club of New York, Inc., April 1956; Marc Fried and Peggy Gleicher, "Some Sources of Residential Satisfaction in an Urban 'Slum,'" Journal of the American Institute of Planners, XXVII, No. 4 (November 1961), 305-315; Herbert J. Gans, The Urban Villagers, Glencoe, Free Press, forthcoming; Sidney Goldstein and Basil G. Zimmer, Residential Displacement and Resettlement of the Aged, Providence, Rhode Island Division on Aging, 1960; Peter Marris, Family and Social Change in an African City, Chicago, Northwestern University Press, 1962; J. M. Mogey, Family and Neighbourhood, London, Oxford University Press, 1956; John R. Seeley, "The Slum: Its Nature, Use, and Users," Journal of the American Institute of Planners, XXV, No. 1 (February 1959), 7-14; Peter Townsend, The Family Life of Old People, London, Routledge and Kegan Paul, 1957; United Community Services of Metropolitan Boston, Housing Preferences of Older People, Follow-up Study No. 2: West End Couples, January 1962; Charles Vereker and John Barron Mays, Urban Redevelopment and Social Change, Liverpool, Liverpool University Press, 1961; Michael Young and Peter Wilmott, Family and Kinship in East London, Glencoe, Free Press, 1957.

5. U. S. Housing and Home Finance Agency, Urban Renewal Administration, Urban Renewal Project Characteristics, June 30, 1961, Table 3.
6. "Elegant Name Proposed for Third Avenue," New York Times, July 12, 1961, p. 33.
7. Information on the West End from U. S. Censuses of Population: 1910 and 1950, Boston tracts H-1, H-2, H-3, H-4; Gordon Gottsche, "Relocation: Goals, Implementation, and Evaluation of the Process with Reference to the West End Redevelopment Project in Boston, Massachusetts," unpublished master's dissertation, Massachusetts Institute of Technology Department of City and Regional Planning, 1960.
8. Information on the Lower East Side from Leo Grebler, Housing Market Behavior in a Declining Area, New York, Columbia University Press, 1952.
9. Ibid., p. 143.
10. Walter Firey, Land Use in Central Boston, Cambridge, Harvard University Press, 1947, Chapter V, pp. 170-225.
11. John R. Seeley, op. cit.
12. See U. S. Housing and Home Finance Agency, Urban Renewal Administration, op. cit., Characteristics Directory of Projects as of June 30, 1961.
13. See City of New York Committee on Slum Clearance, Title I Progress, January 29, 1960, p. 25; J. Anthony Panuch, Relocation in New York City: Special Report to Mayor Robert F. Wagner, December 15, 1959, p. 24; "30,000 Families Face Relocation," New York Times, June 26, 1961, p. 17.
14. Harris L. Present, "To Halt Destruction of Buildings," Letter to the Editor, New York Times, February 9, 1962, p. 28. For a general review of urban renewal in New York, see "Title I and Slum Clearance: A Decade of Controversy," New York Times, June 29, 1959, p. 1 and succeeding articles on June 30, July 1, and July 2, 1959.

15. See J. Anthony Panuch, Building a Better New York: Final Report to Mayor Robert F. Wagner, March 1, 1960, pp. 68-69; and Gertrude Samuels, "To Brighten the 'Gray Areas,'" New York Times Magazine, October 22, 1961, pp. 48, 72, 74.
16. Much of the following discussion is based on an interview with Mr. Louis Winnick, Director, Planning and Program Research Division, City of New York Housing and Redevelopment Board, March 10, 1961. See also policy recommendations in John R. White and Edna L. Hebard, The Manhattan Housing Market, New York, Brown, Harris, Stevens, Inc., 1959, pp. 103-104.
17. Information on West Side renewal area from New York City Planning Commission, Urban Renewal: A Report on the West Side Urban Renewal Study to Mayor Robert F. Wagner and the Board of Estimate of the City of New York, and to the Urban Renewal Administration, New York, 1958. Plan proposals cited are those of Plan A.
18. See J. Anthony Panuch, Building a Better New York, pp. 47-48, 59.
19. City of New York Committee on Slum Clearance, op. cit., p. 25.
20. Ibid.
21. For a summary of central business district proposals, see Los Angeles Central City Committee and Los Angeles City Planning Department, Economic Survey ("Los Angeles: Centropolis 1980"), December 12, 1960, p. 36. Mass transit proposals are described in Daniel, Mann, Johnson, and Mendenhall, Los Angeles Metropolitan Transit Authority Rapid Transit Program, June 27, 1960. The full program described in this report was subsequently modified to an initial proposal for a single transit line; this immediate program is described in the Los Angeles Times, August 13, 1961, Section C.
22. Information on Los Angeles renewal projects from Community Redevelopment Agency of the City of Los Angeles; financial estimates as of April 1961.
23. Information on Ocean Park Project from Redevelopment Agency of the City of Santa Monica; financial estimates are those of February 1, 1961.

24. For a description of the code enforcement program, see City of Los Angeles Department of Building and Safety, Conservation: A New Concept of Building Law Enforcement, 1958.
25. Information from an interview with Mr. Fred Hoppe, Conservation Bureau, City of Los Angeles Department of Building and Safety, April 26, 1961.
26. Information on minority housing from Fred E. Case, "The Housing Status of Minority Families: Los Angeles, 1956," University of California at Los Angeles Real Estate Research Program, January, 1958; Los Angeles County Commission on Human Relations, Statement of John A. Buggs, Executive Secretary, January 16, 1960; Remi Nadeau, Los Angeles: From Mission to Modern City, New York, Longmans, Green, 1960, p. 247.
27. Information from an interview with Mr. Arnold A. Wilken, Area Representative, Housing and Home Finance Agency, Los Angeles, May 4, 1961.
28. Financial data for Hartford urban renewal projects from Rogers, Taliaferro, and Lamb, Renewal Program for Downtown Hartford, Connecticut, 1960; and U. S. Housing and Home Finance Agency, Urban Renewal Administration, Urban Renewal Project Characteristics, December 31, 1960.

APPENDIX A

POPULATION AND HOUSING STATISTICS FOR
NEW YORK, LOS ANGELES, AND HARTFORD REGIONS

TABLE A-1

New York Metropolitan Region

1. Population Change, 1950-1960

	<u>Population</u> 1950	<u>Population</u> 1960	<u>Percent</u> <u>Change</u> 1950-1960
New York-Northeastern New Jersey Standard Consolidated Area	12,911,994	14,759,429	+14.3
Central Cities: New York, Newark, Jersey City	8,629,750	8,463,305	- 1.9
Remainder of Standard Consolidated Area	4,282,244	6,296,124	+47.0

2. Racial Components of Change in Central
City Areas of Population Loss, 1950-1960

	Change in White Population 1950-1960		Change in Nonwhite Population, 1950-1960	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Manhattan	-284,777	-18.3	+ 22,957	+ 5.7
Bronx	- 26,462	- 1.8	+ 68,916	+69.2
Brooklyn	-110,856	- 4.0	+168,403	+79.0
Newark	- 97,260	-26.8	+ 63,704	+84.2
Jersey City	- 39,224	-16.4	+ 16,308	+77.8
Total	-558,579	- 9.2	+340,288	+41.9

Source: Calculated from U. S. Census of Population: 1950, Vol. II, Characteristics of the Population, Part 32, New York Tables 33, 41; and Part 30, New Jersey, Table 33; U. S. Census of Population: 1960, General Population Characteristics, New York, Final Report PC(1)-34B, Tables 20, 27; and New Jersey, Final Report PC(1)-32B Table 20.

TABLE A-1

New York Metropolitan Region

3. Distribution of Negro Population, 1950 and 1960

	Total Population		Negro Population		Percent of Total Regional Negro Population	
	1950	1960	1950	1960	1950	1960
New York-Northeastern New Jersey Standard Consolidated Area	12,911,994	14,759,429	1,013,424	1,557,069	100.0	100.0
Manhattan	1,960,101	1,698,281	384,482	397,101	37.9	25.5
New York City outside Manhattan	5,931,856	6,083,703	363,126	690,830	35.8	44.4
Newark	438,776	405,220	74,965	138,035	7.4	8.9
Jersey City	299,017	276,101	20,758	36,692	2.0	2.4
Total Central Cities: New York, Newark, Jersey City	8,629,750	8,463,305	843,331	1,262,658	83.2	81.1

Source: U. S. Census of Population: 1950, Vol. II, Characteristics of the Population, Part 32, New York, Tables 33, 34, 42; and Part 30, New Jersey, Tables 33, 34, U. S. Census of Population: 1960, General Population Characteristics, New York, Final Report PC(1)-34B, Tables 21, 28; and New Jersey, Final Report PC(1)-32B, Table 21.

TABLE A-1
New York Metropolitan Region

4. Distribution of Puerto Rican Students in Public Schools, by Boroughs of New York City, 1956 and 1960

	Number of Students		Percent of Total	
	1956	1960	1956	1960
Manhattan	48,952	56,154	43.4	36.9
Bronx	30,417	43,943	27.0	28.9
Brooklyn	30,078	47,457	26.7	31.2
Queens	2,846	3,932	2.5	2.6
Richmond	448	525	0.4	0.3

Source: J. Cayce Morrison, The Puerto Rican Study: 1953-1957, New York, City of New York Board of Education, 1958, p. 171; City of New York Board of Education, Bureau of Educational Program Research and Statistics, "Special Census of School Population, October 31, 1960," Publication No. 167, March 1961, Table 2. Puerto Rican students defined as born in Puerto Rico, or born on mainland with one or both parents born in Puerto Rico. Special schools excluded from above tabulation.

TABLE A-1

New York Metropolitan Region

5. Age Characteristics and Race, 1950 and 1960

	1950		1960		1950		1960	
	Percent of Population Under 18		Percent of Population Under 18		Percent of Population 65 and Over		Percent of Population 65 and Over	
	<u>White</u>	<u>Non- White</u>	<u>White</u>	<u>Non- White</u>	<u>White</u>	<u>Non- White</u>	<u>White</u>	<u>Non- White</u>
New York- Northeastern New Jersey Standard Con- solidated Area	25.1	27.5	30.4	34.9	8.0	3.8	10.1	4.7
Manhattan	18.4	23.6	20.6	29.1	10.0	4.0	14.2	6.4
Bronx	25.0	31.0	27.3	36.7	7.6	3.0	11.6	4.0
Brooklyn	25.7	31.1	28.5	38.1	7.8	3.1	10.9	3.5
Newark	25.0	30.2	27.6	39.1	7.9	3.3	11.8	3.7
Jersey City	25.9	33.4	29.2	41.7	7.6	3.7	10.9	3.8

Source: Calculated from U. S. Census of Population: 1950, Vol. II, Characteristics of the Population, Part 32, New York, Tables 33, 41; and Part 30, New Jersey, Table 33; U. S. Census of Population: 1960, General Population Characteristics, New York, Final Report PC(1)-34B, Tables 20, 27; and New Jersey, Final Report PC(1)-32B, Table 20.

TABLE A-1

New York Metropolitan Region

6. Occupancy Characteristics and Race in Central Cities, 1960

	White Population		Nonwhite Population	
	Occupied Housing Units	Population Per Housing Unit	Occupied Housing Units	Population Per Housing Unit
New York City	2,301,891	2.88	352,554	3.24
Newark	88,612	3.00	39,160	3.56
Jersey City	78,339	3.05	10,213	3.65

Source: Calculated from U. S. Census of Housing: 1960, Advance Reports, Housing Characteristics: States, HC(A1)-33, New York, Table 1, and HC(A1)-31, New Jersey, Table 1; U. S. Census of Population: 1960, General Population Characteristics, New York, Final Report PC(1)-34B, Table 20, and New Jersey, Final Report PC(1)-32B, Table 20.

TABLE A-1

New York Metropolitan Region

7. Population and Dwelling Units in New York City Areas of Population Loss, 1950-1960

	Non-Institutional Population		Total Dwelling Units		Non-Institutional Population Per Dwelling Unit	
	1950	1960	1950	1960	1950	1960
Manhattan	1,945,466	1,694,644	635,944	645,393	3.06	2.63
Bronx	1,442,907	1,420,989	432,259	474,030	3.34	3.00
Brooklyn	2,728,814	2,625,068	814,134	878,815	3.35	2.99

Source: U. S. Census of Population: 1950, Vol. II, Characteristics of the Population, Part 32, New York, Table 34. U. S. Census of Population: 1960, General Population Characteristics, New York, Final Report PC(1)-34B, Table 28.

U. S. Census of Housing: 1950, Vol. I, General Characteristics, Part 4: Michigan - New York, New York, Table 1.

J. Anthony Panuch, Building a Better New York: Final Report to Mayor Robert F. Wagner, March 1, 1960, "Changes in the Housing Supply of New York City by Borough," p. 36; compiled by New York City Department of City Planning from Department of Buildings data.

TABLE A-1

New York Metropolitan Region

8. Housing Vacancies in Central Cities
and Metropolitan Area, 1960

	Total Non-Seasonal Housing Units	Percent Vacant
Total of New York, Jersey City, Newark, Patterson-Clifton-Passaic Standard Metropolitan Statistical Areas	4,671,740	3.3
New York City	2,735,272	3.0
Newark	134,727	5.2
Jersey City	91,802	3.5
Remainder of 4 Combined Standard Metropolitan Statistical Areas	1,709,939	3.7

Source: Calculated from U. S. Census of Housing: 1960, Advance Reports, Housing Characteristics: States, HC(A1)-31, New Jersey, Table 1, and HC(A1)-33, New York, Table 1. The New York - Northeastern New Jersey Standard Consolidated Area consists of the Standard Metropolitan Statistical Areas of New York, Jersey City, Newark, and Paterson-Clifton-Passaic, plus Middlesex County, New Jersey and Somerset County, New Jersey. Middlesex and Somerset Counties are omitted from this table.

TABLE A-1

New York Metropolitan Region

9. Central City Housing Utilization, 1950 and 1960

	Percent of (Non-Seasonal) Units Vacant and Available, in Sound Condition		Number and Percent of (Non-Seasonal) Units With More Than 1 Occupant Per Room			
	1950	1960	1950		1960	
			Number	Percent	Number	Percent
Manhattan	0.8	2.5	99,846	16.5	92,386	13.3
Bronx	1.0	1.5	90,811	21.6	70,926	15.3
Brooklyn	1.0	1.7	138,369	17.6	110,053	12.9
Newark	0.7	4.1	18,216	15.1	16,600	13.0
Jersey City	0.5	2.5	12,418	14.8	10,077	11.4

Source: Calculated from U. S. Census of Housing: 1950, Vol. I, General Characteristics, Part 1, U. S. Summary, Tables 27, 29, and Part 4, Michigan-New York, New York Tables 17, 19; U. S. Census of Housing: 1960, Advance Reports, Housing Characteristics: States, HC(A1)-31, New Jersey, Table 1; U. S. Census of Housing: 1960, Vol. III, City Blocks, Series HC(3), Numbers 96, 249, 252, Table 1; New York Department of City Planning Newsletter, December 1961, p. 2.

Information for Manhattan, Brooklyn, and the Bronx for 1960 covers all housing units, including seasonal. Vacant units are those classified as year-round, non-dilapidated, available for rent or sale.

TABLE A-1

New York Metropolitan Region

10. New Dwelling Units Authorized by Building Permits
in Central City Declining Areas, 1951-1960

	Number of Dwelling Units	
	Private Housing	Public Housing
Manhattan	52,219	23,009
Bronx	33,419	16,913
Brooklyn	50,081	19,821
Newark	4,513	7,754
Jersey City	2,091	1,396
Total	142,323	68,893

Source: U. S. Department of Labor, Bureau of Labor Statistics, "New Dwelling Units Authorized by Local Building Permits," Annual Summaries, 1951-1957; U. S. Bureau of the Census, Construction Reports: Building Permits, C40-8, "New Dwelling Units Authorized by Local Building Permits," Annual Summaries, 1958-1960.

TABLE A-2

Los Angeles Metropolitan Region

1. Population Change, 1950-1960

	<u>Population</u> <u>1950</u>	<u>Population</u> <u>1960</u>	<u>Percent</u> <u>Change</u> <u>1950-1960</u>
Los Angeles-Long Beach Standard Metropolitan Statistical Area	4,367,911	6,742,696	+54.4
City of Los Angeles	1,970,358	2,479,015	+25.8
Remainder of Standard Metropolitan Statistical Area	2,397,553	4,263,681	+77.8

2. Racial Components of Change in Central
City Population, 1950-1960

	Change in White Population 1950-1960		Change in Nonwhite Population, 1950-1960	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
City of Los Angeles	+303,035	+17.2	+205,622	+97.2

Source: Calculated from U. S. Census of Population: 1950, Vol. II, Characteristics of the Population, Part 5, California, Table 33; U. S. Census of Population: 1960, General Population Characteristics, California, Final Report PC(1)-6B, Table 20.

TABLE A-2

Los Angeles Metropolitan Region

3. Distribution of Negro Population, 1950 and 1960

	Total Population		Negro Population		Percent of Total Regional Negro Population	
	1950	1960	1950	1960	1950	1960
Los Angeles - Long Beach Standard Metropolitan Statistical Area	4,367,911	6,742,696	218,770	464,717	100.0	100.0
City of Los Angeles	1,970,358	2,479,015	171,209	334,916	78.3	72.1

Source: U. S. Census of Population: 1950, Vol. II, Characteristics of the Population, Part 5, California, Table 34; U. S. Census of Population: 1960, General Population Characteristics, California, Final Report PC(1)-6B, Table 21.

4. Distribution of Japanese Population, 1950 and 1960

	Total Population		Japanese Population		Percent of Total Regional Japanese Population	
	1950	1960	1950	1960	1950	1960
Los Angeles - Long Beach Standard Metropolitan Statistical Area	4,367,911	6,742,696	37,947	81,204	100.0	100.0
City of Los Angeles	1,970,358	2,479,015	25,502	51,468	67.2	63.4

Source: U. S. Census of Population: 1950, Vol. II, Characteristics of the Population, Part 5, California, Table 47; U. S. Census of Population: 1960, General Population Characteristics, California, Final Report PC(1)-6B, Table 21.

TABLE A-2

Los Angeles Metropolitan Region

5. Age Characteristics and Race, 1950 and 1960

	1950		1960		1950		1960	
	Percent of Population Under 18		Percent of Population Under 18		Percent of Population 65 and Over		Percent of Population 65 and Over	
	<u>White</u>	<u>Non-White</u>	<u>White</u>	<u>Non-White</u>	<u>White</u>	<u>Non-White</u>	<u>White</u>	<u>Non-White</u>
Los Angeles - Long Beach Standard Metropolitan Statistical Area	26.1	27.6	33.4	37.9	9.4	4.7	9.3	4.6
City of Los Angeles	23.1	26.3	29.5	35.8	10.2	4.6	11.3	4.9

Source: Calculated from U. S. Census of Population: 1950, Vol. II, Characteristics of the Population, Part 5, California, Table 33; U. S. Census of Population: 1960, General Population Characteristics, California, Final Report PC(1)-6B, Table 20.

6. Occupancy Characteristics and Race in Central City, 1960

	White Population		Nonwhite Population	
	Occupied Housing Units	Population Per Housing Unit	Occupied Housing Units	Population Per Housing Unit
City of Los Angeles	746,065	2.76	129,945	3.21

Source: Calculated from U. S. Census of Housing: 1960, Advance Reports, Housing Characteristics: States, HC(A1)-5, California, Table 1, U. S. Census of Population: 1960 General Population Characteristics, California, Final Report PC(1)-6B, Table 20.

TABLE A-2

Los Angeles Metropolitan Region

7. Population and Dwelling Units in Areas of Population Loss, 1950-1960

	Population		Total Dwelling Units		Population Per Dwelling Unit	
	1950	1960	1950	1960	1950	1960
Central Area	129,578	92,656	56,896	45,760	2.28	2.02
East Area	238,653	213,341	66,641	62,944	3.58	3.39
North East Area	162,654	159,044	57,285	58,070	2.84	2.74
Total	530,885	465,041	180,822	166,774	2.93	2.79

Source: Los Angeles County Regional Planning Commission, based on data from U. S. Censuses of 1950 and 1960. 1950 dwelling units from U. S. Census of Housing: 1950; 1960 dwelling units derived from 1950 data, adding new construction and conversions, subtracting demolitions and mergers through April 1960. Central statistical area includes the Downtown, University, and Westlake sections of the City of Los Angeles. East statistical area includes the Boyle Heights, Central and Wholesale Industry sections of the City of Los Angeles, and the unincorporated areas of Belvedere, City Terrace, and East Los Angeles in Los Angeles County. North East statistical area includes the El Sereno, Elysian Park, Highland Park, Lincoln Heights and Silver Lake (southern part) sections of the City of Los Angeles.

TABLE A-2

Los Angeles Metropolitan Region

8. Housing Vacancies in Central City
and Metropolitan Area, 1960

	Total Non-Seasonal Housing Units	Percent Vacant
Los Angeles-Long Beach Standard Metropolitan Statistical Area	2,358,405	6.1
City of Los Angeles	933,354	6.1
Remainder of SMSA	1,425,051	6.1

Source: Calculated from U. S. Census of Housing: 1960, Advance Reports, Housing Characteristics: States, HC(A1)-5, California, Table 1.

9. Central City Housing Utilization, 1950 and 1960

	Percent of Non-Seasonal Units Vacant and Available, in Sound Condition		Number and Percent of Non-Seasonal Units With More Than 1 Occupant Per Room			
	1950	1960	1950		1960	
			Number	Percent	Number	Percent
City of Los Angeles	2.7	4.9	68,822	10.0	72,007	8.2

Source: Calculated from U. S. Census of Housing: 1950, Vol. I, General Characteristics, Part 1, U. S. Summary, Tables 27, 29; U. S. Census of Housing: 1960, Advance Reports, Housing Characteristics: States, HC(A1)-5, California, Table 1; U. S. Census of Housing: 1960, Vol. III, City Blocks, Series HC(3), Number 178, Table 1.

Vacant units are those classified as year-round, non-dilapidated, available for rent, or sale.

TABLE A-3

Hartford Metropolitan Region

1. Population Change, 1950-1960

	<u>Population</u> <u>1950</u>	<u>Population</u> <u>1960</u>	<u>Percent</u> <u>Change</u> <u>1950-1960</u>
Hartford Standard Metropolitan Statistical Area	406,534	525,207	+29.2
City of Hartford	177,397	162,178	- 8.6
Remainder of Standard Metropolitan Statistical Area	229,137	363,029	+58.4

2. Racial Components of Change in Central
City Population, 1950-1960

	Change in White Population 1950-1960		Change in Nonwhite Population, 1950-1960	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
City of Hartford	- 27,580	-16.8	+12,361	+96.6

Source: Calculated from U. S. Census of Population: 1950, Vol. II, Characteristics of the Population, Part 7, Connecticut, Table 33; and U. S. Census of Population: 1960, General Population Characteristics, Connecticut, Final Report PC(1)-8B, Table 20.

TABLE A-3

Hartford Metropolitan Region

3. Distribution of Negro Population, 1950 and 1960

	Total Population		Negro Population		Percent of Total Regional Negro Population	
	1950	1960	1950	1960	1950	1960
Hartford Standard Metropolitan Statistical Area	406,534	525,207	14,233	28,689	100.0	100.0
City of Hartford	177,397	162,178	12,654	24,855	88.9	86.6

Source: U. S. Census of Population: 1950, Vol. II, Characteristics of the Population, Part 7, Connecticut, Table 34; U. S. Census of Population: 1960, General Population Characteristics, Connecticut, Final Report PC(1)-8B, Tables 20, 21. Negro population of Standard Metropolitan Statistical Area unavailable for 1950; Negro population shown is that of 1950 Standard Metropolitan Area, which covers all significant centers of Negro population in the region.

TABLE A-3

Hartford Metropolitan Region

4. Age Characteristics and Race, 1950 and 1960

	1950		1960		1950		1960	
	Percent of Population Under 18		Percent of Population Under 18		Percent of Population 65 and Over		Percent of Population 65 and Over	
	<u>White</u>	<u>Non-White</u>	<u>White</u>	<u>Non-White</u>	<u>White</u>	<u>Non-White</u>	<u>White</u>	<u>Non-White</u>
Hartford Standard Metropolitan Statistical Area	26.5	32.2	34.9	40.3	8.5	4.4	9.8	3.9
City of Hartford	23.9	32.6	26.6	42.3	8.8	4.2	12.3	3.7

Source: Calculated from U. S. Census of Population: 1950, Vol. II, Characteristics of the Population, Part 7, Connecticut, Table 33; U. S. Census of Population: 1960, General Population Characteristics, Connecticut, Final Report PC(1)-8B, Table 20. 1950 information is for Hartford Standard Metropolitan Area; 1960 information for Hartford Standard Metropolitan Statistical Area, which covers 1950 Standard Metropolitan Area plus towns of Canton, Cromwell, East Windsor, Enfield, Suffield, Vernon, and Windsor Locks.

TABLE A-3

Hartford Metropolitan Region

5. Occupancy Characteristics and Race in Central City, 1960

	White Population		Nonwhite Population	
	Occupied Housing Units	Population Per Housing Unit	Occupied Housing Units	Population Per Housing Unit
City of Hartford	47,783	2.87	6,852	3.67

Source: Calculated from U. S. Census of Housing: 1960, Advance Reports, Housing Characteristics: States, HC(A1)-7, Connecticut, Table 1; U. S. Census of Population: 1960, General Population Characteristics, Connecticut, Final Report PC(1)-8B, Table 20.

6. Housing Vacancies in Central City and Metropolitan Area, 1960

	Total Non-Seasonal Housing Units	Percent Vacant
Hartford Standard Metro- politan Statistical Area	163,454	3.9
City of Hartford	57,545	5.1
Remainder of SMSA	105,909	3.3

Source: Calculated from U. S. Census of Housing: 1960, Advance Reports, Housing Characteristics: States, HC(A1)-7, Connecticut, Table 1.

TABLE A-3

Hartford Metropolitan Region

7. Central City Housing Utilization, 1950 and 1960

	Percent of Non-Seasonal Units Vacant and Available in Sound Condition		Number and Percent of Non-Seasonal Units With More Than 1 Occupant Per Room			
	1950	1960	1950		1960	
			Number	Percent	Number	Percent
City of Hartford	1.4	4.1	6,852	13.4	5,053	9.2

Source: Calculated from U. S. Census of Housing: 1950, Vol. I, General Characteristics, Part 1, U. S. Summary, Tables 27, 29; U. S. Census of Housing: 1960, Advance Reports, Housing Characteristics: States, HC(A1)-7, Connecticut, Table 1; U. S. Census of Housing: 1960, Vol. III, City Blocks, Series HC(3), Number 96, Table 1.

Vacant units are those classified as year-round, non-dilapidated, available for rent or sale.

APPENDIX B

RATES OF LAND UTILIZATION FOR NEW MULTIFAMILY
HOUSING IN NEW YORK, LOS ANGELES, AND HARTFORD

NEW YORK

We assume that new moderate-priced multifamily housing currently built in the Bronx, Brooklyn, and Queens constitutes the potential supply of new private construction that might be attracted into the central declining areas. The 1951-1960 construction rates in these boroughs are our basis for estimating land consumption rates. In Queens, however, the 1951-1955 rate was unusually high because considerable vacant land was still available at that time. We shall therefore project the 1956-1960 rate for Queens to a ten-year period, in order to use data reflecting more typical construction volumes in built-up areas.

New dwelling units completed in private multifamily structures, 1951-1960 (source: New York Department of City Planning):

Bronx	16,650
Brooklyn	32,534
Queens	59,340
(1956-60 rate)	_____
Total	108,524 units

At a typical new development density of 150 dwelling units per net acre, the 1951-1960 private construction volume in these boroughs would cover 723.5 acres in 10 years, or 72 acres per year. If developments in the declining areas follow the somewhat lower densities of urban renewal projects, they will be built at about 100 units per acre. At this density, the 1951-1960 construction volume would use 1,085.3 acres in 10 years, or 109 acres per year.

Public housing built anywhere in the City can conceivably be channeled into the declining areas as part of a rebuilding program. We shall take account of public housing construction in Manhattan, the Bronx,

Brooklyn, and Queens from 1951 to 1960, on the assumption that a similar volume can be located in declining sections of these boroughs in future ten-year periods. The City Housing Authority has announced plans for an accelerated rate of construction, but we shall assume that the surplus over the 1951-1960 rate will be located in other parts of the City.

Public housing completions from 1951-1960 were 21,623 units in Manhattan, and 48,683 units in the Bronx, Brooklyn, and Queens (information from Department of City Planning). Typical densities for public housing are about 100 units per acre in Manhattan and 75 units per acre in the other boroughs. At these densities, the 10-year volume for Manhattan would utilize 216 acres, and the volume in the other boroughs would use a total of 649 acres. In all, public housing would thus require 865 acres, or 87 acres per year.

Private housing at typical densities, plus public housing, would thus utilize 159 acres per year. Private housing at urban renewal densities plus public housing would use 196 acres per year.

If New York were to clear all the deteriorated housing in its declining areas, how much land would be available for rebuilding? Deteriorated housing, as we define it, is not suitable for rehabilitation. In terms of 1960 Census definitions, we shall count units classified as dilapidated, and units classified as deteriorating but lacking in plumbing facilities. We thus assume that deteriorating units with all plumbing facilities can be rehabilitated. On this basis, Manhattan had 80,358 deteriorated units in 1960, while the Bronx, Brooklyn, and Queens had 66,901.

We estimate average densities of deteriorated housing as 200 units per acre in Manhattan and 90 per acre in the other boroughs.¹ At these densities, deteriorated housing would occupy 402 acres in

Manhattan and 743 acres in the other boroughs, for a total of 1,145 acres.

Private housing at current densities, plus public housing, would utilize this land at a rate of 159 acres per year. The time required for absorbing 1,145 acres would thus be 7.2 years.

Private housing at urban renewal densities, plus public housing, would consume land at a rate of 196 acres per year. In this case, 5.5 years would be required to absorb the 1,145 acres.

We must also take into account the rate at which additional existing housing will become deteriorated. Changes in enumeration from the 1950 Census to the 1960 Census create some complications in estimating the rate of deterioration for the 1950's. In 1950, housing condition was classified as either non-dilapidated or dilapidated. In 1960, a three-way classification was used: sound, deteriorating, or dilapidated. Although the definition of dilapidated condition did not change, enumerators seem to have classified many doubtful cases as deteriorating in 1960. Consequently, the 1960 deteriorating category includes some housing that was classified as either dilapidated or non-dilapidated in 1950.

To approximate constant definitions of condition, we shall equate dilapidated housing of 1950 with dilapidated housing of 1960 plus that portion of 1960 deteriorating housing that is lacking in one or more plumbing facilities. On this basis, the number of units suitable for clearance grew by 25,521 in Manhattan from 1950 to 1960, and by 12,740 in the Bronx, Brooklyn, and Queens. At densities of 200 per acre in Manhattan and 90 per acre in the other boroughs, the amount of land occupied by deteriorated housing grew by 269.2 acres in ten years, or 27 acres per year.

If newly deteriorated housing is replaced by private development at current densities, plus public housing, the over-all land utilization rate of 159 acres per year must be reduced by 27 acres per year to take account of continuing deterioration. The residual rate of 132 acres per year would absorb the 1,145 acres of land occupied by deteriorated housing in 1960 in 8.5 years.

The higher rate of land utilization resulting from private housing developed at urban renewal densities, plus public housing, would have to be reduced from 196 acres per year to 169. At this rate, the 1,145 acres of clearance land in 1960 would be absorbed in 6.2 years.

An alternate objective for New York might be to replace all old-law tenements. These structures were all built prior to 1901, and have a number of obsolete physical features that make rehabilitation impractical. As of 1958, Manhattan and the other three boroughs with which we are concerned had 387,954 old-law tenements.² We estimate the average density of these structures as 250 units per net acre. At this density, old-law tenements occupied 1,552 acres in 1958.

At the low rate of rebuilding -- 159 acres per year -- the time required to absorb these 1,552 acres would be 9.8 years. At the high rate -- 196 acres per year -- 7.9 years would be required.

We may thus summarize the time necessary to rebuild cleared sites in New York, if all new private multifamily housing is diverted from the outer boroughs into clearance areas, and if public housing construction at 1951-1960 rates is also located in these areas:

	Time to rebuild all deteriorated housing, including future deterioration	Time to rebuild all old-law tenements
Low rate of land utilization (private plus public housing, private at current densities)	8.5 years	9.8 years
High rate of land utilization (private plus public housing, private at urban renewal densities)	6.2 years	7.9 years

LOS ANGELES

We assume that new private housing currently built in the older areas within ten miles of downtown Los Angeles constitutes the development that could conceivably be attracted into the declining areas, which also lie within this ten-mile band. From 1950 to 1960, the net increase within this zone was 98,042 multifamily dwelling units (source: Los Angeles County Regional Planning Commission, net increases for 35 statistical areas within the County). Total new construction was probably greater, since some units were lost to highway construction, but we shall accept this figure.

At the typical construction density of 50 units per acre for this part of the City, new building would absorb 1,961 acres in 10 years, or 196 acres per year.

According to the 1960 Housing Census, the City of Los Angeles had 24,800 housing units that were either dilapidated or deteriorating and lacking in plumbing facilities. The rate of increase of deterioration was negligible from 1950 to 1960, in terms of the basis for comparison that we have already explained for New York. For the near

future, at least, we may confine our attention to the housing that is already deteriorated. At typical densities of eight to ten units per acre for old housing, the 24,800 deteriorated units occupied approximately 2,755 acres in 1960.

With new private housing utilizing 196 acres per year, and with no public housing construction program under way, the total time required for rebuilding 2,755 acres of cleared land would be 14.0 years.

HARTFORD

On the basis of a housing market study of Hartford³ and our own projections, we estimate the potential demand for multifamily housing within the central Hartford area as 2,500 units in ten years. At the typical current density of 50 units per acre in central locations, this volume of new development would utilize 50 acres in 10 years, or 5 acres per year. If the density is reduced to 35 units per acre, the land consumption rate will be 71.4 acres in 10 years, or 7.1 acres per year.

According to the 1960 Housing Census, the City of Hartford had 3,235 housing units that were either dilapidated or deteriorating and lacking in plumbing facilities. We estimate the average density of this old housing as 15 to 20 units per acre. Thus the deteriorated units occupy about 185 acres.

At the low rate of land consumption (5 acres per year), 36 years would be required to rebuild these 185 acres; at the higher rate of 7.1 acres per year, 26.1 years would be required.

From 1950 to 1960, the amount of deteriorated housing in Hartford increased by 1,126 units. At a density of 15 to 20 units per acre, this increase would represent an increment of 66 acres in 10 years, or 6.6 acres per year.

If this rate of deterioration continues, the low land utilization rate of 5 acres per year would not even permit rebuilding to keep pace with the spread of deterioration. At the high rate of 7.1 acres per year, all but one-half acre per year would have to be devoted to coping with the increase in deterioration,

FOOTNOTES

1. See City of New York Department of City Planning Newsletter, January 1958, p. 4, for the range of residential densities within the different boroughs as of 1955-56. A study of renewal prospects for part of the West Side of Manhattan gives information on densities for different types of structures within the area; these structural types are also to be found at similar densities in deteriorated areas elsewhere in New York. The average density for walk-up tenements (primarily old-law tenements built prior to 1901) is 240 dwelling units per net acre. For all brownstone structures, including those converted to rooming houses, the average density is 224 dwelling units per net acre. For brownstones that have not been converted to rooming houses -- a housing type more representative of the outer boroughs -- the average density is 139 dwelling units per net acre in the West Side study area.

Source: New York City Planning Commission, Urban Renewal: A Report on the West Side Urban Renewal Study to Mayor Robert F. Wagner and the Board of Estimate of the City of New York, and to the Urban Renewal Administration, New York, 1958.
2. City of New York Department of City Planning Newsletter, October 1958, p. 1. The average density of all old-law tenements reported in the West Side renewal study is 246 units per net acre; those used for single-room occupancy had an average density of 619 units per acre. A study by the Regional Plan Association lists densities of 350 to 400 units per acre as typical for old-law tenements: Regional Plan Association, Bulletin Number 87, "People, Jobs and Land in the New Jersey-New York-Connecticut Metropolitan Region 1955-1975," June 1957, p. 38.

3. Real Estate Research Corporation, Rental Housing Market Analysis: Downtown Hartford, prepared for Department of Housing, City of Hartford, 1959.

APPENDIX C

URBAN STRUCTURE AND THE LOCATION OF NEW HOUSING:

A REVIEW OF THEORETICAL WORKS

Studies of urban economics and city form have advanced many theoretical statements seeking to explain the location of urban activities. Theoretical approaches have long recognized accessibility as a factor influencing both the location of new housing and the land rent of different sites for residential use. We shall examine several theories based primarily on accessibility, as well as two comprehensive models of the urban land market that relate accessibility to other factors shaping the residential pattern. We shall also review studies that have identified changing urban patterns and dynamic characteristics of urban structure, with particular emphasis on the shifting residential patterns that have created the areas of residential decline in the centers of growing regions. Our purpose is to identify the major structural features underpinning the pattern of housing locations, and to observe their role in forming the areas of decline.

Accessibility and the Location of New Housing

Urban growth in the nineteenth century was a favorable setting in which to view the effects of accessibility on housing locations. Successive changes in transportation systems, from the horse-car to the electric transit line, extended the area within commuting range of the center by a series of finite jumps. Homer Hoyt analyzed the significance of these transportation changes for the development of Chicago:

The time and expense required to go from the center of the city outward or upward, and not physical extension, determines the effective supply of urban land,

... Accessible building space in Chicago in 1833 was the ground and the layer of air above the ground to a height of about 50 feet, within walking distance over dirt roads to the main channel of the Chicago River. Outward extension began with plank roads and street railway lines. Omnibuses and horse cars which traveled at a rate of 6 miles an hour instead of a walking pace of

3 miles an hour doubled the radius of settlement. Cable cars in the eighties, with a speed of 12 miles an hour, doubled the radius again along trunk lines. Suburban steam railroads and elevated electric lines, traveling at from 25 to 30 miles an hour, again doubled the radius of settlement along their routes.¹

Transportation improvements had observable effects on both the configuration of the city and the density of settlement at different distances from the center. As Hoyt noted in a subsequent study of American urban growth, most cities had a compact circular form before 1880, when stagecoaches and horse-car lines were the chief means of internal transportation.² Central preferences were strong during this period, and the housing market was confined to a small area surrounding the core. With the coming of cable-cars, elevated steam railways, and electric surface transit, axial growth extended out from the previously developed area in bands along the new transit lines. Before 1880, urban growth meant substantial increases in density in the central area, with only limited growth at the periphery. Subsequently, densities rose more slowly near the core (in part because business development replaced residences), and at an accelerated rate farther away, while the limits of settlement pushed out to new locations. Figure C-1 illustrates population densities by one-mile zones from the center of Chicago for 1860, 1880, and 1900.

Hoyt's analyses focus on the center of the city as the destination most influential in shaping the housing pattern. Economic activity was of course highly centralized in the nineteenth century city, but even at that time the core was not the sole location of jobs or of retail activity. Hoyt assumes the dominance of downtown as an employment center: "The practical limit to the supply of urban land is set . . . by the amount which is accessible to people working at a certain strategic spot."³ The center has become increasingly less strategic in most American cities. Hoyt's view of accessibility as a factor shaping the housing market is widely accepted, but the extent to which recent trends have

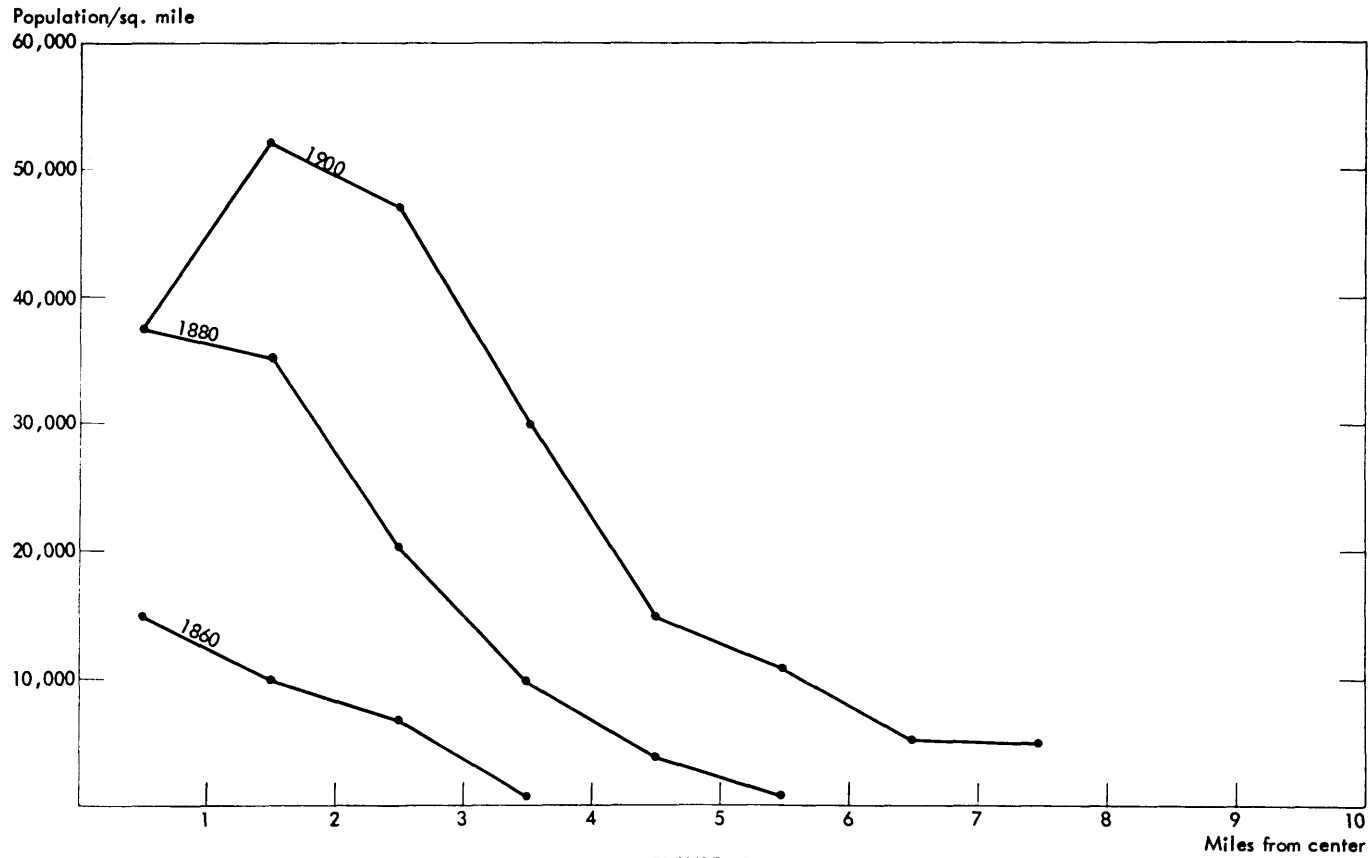


FIGURE C - 1
 Population density by distance from center of Chicago, 1860-1900
 Source: Hoyt, *One Hundred Years of Land Values in Chicago*, p. 484.
 Population increase 1860-1880: 394,092; 1880-1900: 1,195,277.

diluted the significance of access to the center is largely unknown. Recent analyses of density as a function of distance from the core confirm that the center is still a powerful organizing force in the housing market, but its potency varies significantly in different cities.⁴ Instead of assuming the dominance of the center, we have used the extent of employment concentration in the core as a variable in our research. By analyzing cities with contrasting degrees of core employment concentration, we have been able to determine the importance of access to the center under conditions of dispersed as well as centralized job locations.

Accessibility and Land Value

Theories of land rent also recognize the significance of accessibility to the center. Richard M. Hurd adapted the agricultural theories of Ricardo to urban land, attributing land values to differences in accessibility between sites at the margin of settlement and those more favorable located:

The dependence of value in land on economic rent is clearly seen in the origin of any city, utility in land arising when the first buildings are erected, but not value in land, as is evidenced by the fact that the first settlers are commonly allowed to build their houses wherever they please and enclose whatever land they need, as occurred in New York and many other cities. As a city grows, more remote and hence inferior locations must be utilized and the difference in desirability between the two grades produces economic rent in locations of the first grade, but not in those of the second. As land of a still more remote and inferior grade comes into use, ground rent is forced still higher in land of the first grade, rises in land of the second grade, but not in the third grade, and so on.⁵

In Hurd's formulation, accessibility affects rents only in so far as different sites offer different degrees of access to the center, with the most remote settled areas constituting the base for his scheme of land values. Thus, given a site with some particular degree of accessibility, we cannot determine anything about its value unless we know how it compares in accessibility with other sites in the same urban

area. Access advantages rather than access characteristics per se are the basis of land values according to this hypothesis. While empirical testing is difficult, some confirmation is available in Hoyt's description of the early rise in central land values when Chicago's peripheral growth began in the 1830's.⁶

Later theories of land value incorporate Hurd's insights into the significance of access differences for the land market, while refining the concept of accessibility. In the work of R. M. Haig, land values reflect savings in transportation costs:

The term accessibility ... really means ease of contact -- contact with relatively little friction. The friction of space may be overcome by means of transportation; but transportation involves costs. Rent appears as the charge which the owner of a relatively accessible site can impose because of the saving in transportation costs which the use of his site makes possible. The activities which can "stand" high rents are those in which large savings in transportation costs may be realized by locating on central sites where accessibility is great. The complementary character of these two things -- site rents and transportation costs -- is imperfectly recognized

... Site rents and transportation costs are vitally connected through their relationship to the friction of space. Transportation is the means of reducing that friction, at the cost of time and money. Site rentals are charges which can be made for sites where accessibility may be had with comparatively low transportation costs. While transportation overcomes friction, site rentals plus transportation costs represent the social cost of what friction remains.

Here, too, relative accessibility is the key to rent levels. Site rents reflect cost savings in comparison with alternate locations. In evaluating the desirability of central locations for new housing, Haig would take account of other possible sites and their access characteristics. A location fifteen minutes from the core of a large metropolitan region may offer time savings of thirty minutes in comparison with alternate sites on open land at the fringe of the developed area. In a smaller region, sites fifteen minutes from the core may be in

competition with open land only five or ten minutes farther away. If Hurd and Haig are correct, the size of the region, or the distance (or travel-time) from the core to the nearest large supply of vacant land, will have great significance in determining the attractiveness of inner sites for new housing. To test the applicability of this theory, we have analyzed regions that differ in size, using distance from the core to vacant land as one of our variables in urban structure.

Subjective Evaluation of Accessibility

In Haig's writings, the costs of overcoming friction are largely an objective matter of the time and expense necessary to go from one place to another. Thus improvements in the transportation system reduce the costs of overcoming friction by shortening travel time and reducing financial expenses for the consumer. But subjective elements also enter into the costs of friction, as Haig points out in his discussion of accessibility as a factor in the housing market:

If the economic activity seeking a site happens to be housing, is not the problem worked out in this fashion? In choosing a residence purely as a consumption proposition, one buys accessibility precisely as one buys clothes or food. He considers how much he wants the contacts furnished by the central location, weighing the "costs of friction" involved -- the various possible combinations of site rent, time value, and transportation costs: he compares this want with his other desires and resources, and he fits it into his scale of consumption, and buys.⁸

Haig's intellectual successors in the literature of urban location theory have developed the subjective element still more explicitly. Ratcliff points out the element of personal evaluation that determines the significance of objective access characteristics in shaping a structure of land values:

Space costs are inherent in our physical world. This disutility of distance is the joint product of the activities involved, the distance, the available means of

overcoming the distance, and the importance of the contact to the persons or activity concerned. No matter why people want to be near something or somebody, their preference is expressed in terms of value and becomes an economic force.⁹

Walter Firey has interpreted land use patterns in Boston by referring the evaluation of accessibility not merely to personal preferences, but to social systems and their cultural origin. In Firey's interpretation, "the very impeditiveness of space itself does not reside in it as a physical phenomenon but rather in the costfulness which it imposes upon social systems that have to deal with it." Since social systems reflect cultural values, Firey sees the cultural component as central to locational processes. In terms of this cultural component, "land gains its impeditive character, by which particular social systems cannot function unless they find suitable locations."¹⁰

The personal value of accessibility to consumers is one of the main topics of this study. By observing housing patterns against a background of contrasting metropolitan structures, we have attempted to learn how the value of accessibility differs in response to structural factors. At the same time, we must recognize that the physical characteristics of the region do not account entirely for the patterns that emerge, and that a different population within the region might respond differently to the same structural features. Our findings can be applied to other regions only with considerable caution, but the analytical technique should be applicable without major modification, and the results can serve as guidelines covering the general scope and direction of structural effects on locational preferences for new housing.

Access Requirements as Part of a Movement System

In the work of Mitchell and Rapkin,¹¹ communication requirements between different activities form the basis of locational patterns within urban regions, but their requirements are more complex than a

need for access to a single destination. Each activity has a "packet of movement systems" associated with it. If the activity is a residence, it serves as the base for many trips. To understand the choice of a residential location, we need to know the destinations of all these trips. If they are scattered, accessibility cannot be achieved by spatial proximity, but must result from a location offering good transportation to many dispersed places. Trips to shopping, to entertainment, to schools, and to jobs are all part of the movement system for a family. Housing locations thus reflect a need for access to a variety of destinations, rather than access to the downtown core alone.

This viewpoint provides an approach to analysis, rather than a theoretical model that would explain how a particular location is chosen when the objective is to have access to many activities. One useful part of the approach, the concept of linkage, offers some insight into the resolution of varying access needs. For certain types of movements, physical proximity is required. A linkage is a relationship between activities characterized by frequent interaction requiring proximity in space. Mitchell and Rapkin illustrate linkages between business establishments, but the concept would be applicable to a home-school relationship for young children. Where such linkages exist, the locational choice will be near linked activities, but need not be near other activities where access requirements can be met without proximity.

Mitchell and Rapkin go beyond a static approach to consider the role of movement in changing the locational pattern of activities. Here again we have only a framework for investigation, but several points are useful for understanding changing residential patterns. Changes in the internal structure of an establishment alter its movement requirements. In the case of a family, movement requirements that correspond to the ages of its members will presumably have much to do with changes in location over time.

Still other ways in which movement requirements bring about new locational choices are through shifts in the location of trip destinations, and changes in the street system and other movement channels. The dispersal of employment from the core, and the development of new highways are obvious illustrations of the ways in which these factors have altered movement requirements and have contributed to the outward spread of housing in recent years.

Mitchell and Rapkin treat the subject of access requirements in considerable depth, and go far beyond earlier analysts in suggesting approaches to the dynamics of locational change. Nevertheless, they continue to focus on accessibility needs as the major consideration influencing locational choices.

Density and Access in Locational Models

Two recent works, in contrast, view the process of locational choice as a balancing of access requirements and the demand for space. These works present comprehensive (though static) theoretical models of locational forces in the urban land market, drawing elements from earlier writings but combining them more systematically.

William Alonso has devised a model covering both business and residential locations.¹² The driving force in his residential theory is the individual consumer's weighing of commuting costs against the advantages of cheaper land. By assumption, all employment is located in the center of the city, where land costs are highest. When a consumer considers different locations, he realizes that commuting costs (in time and money) increase as he moves away from the center. To prepare a series of alternatives that will each yield him equal satisfaction, he decides by how much the price of land must be reduced as he moves away from the center, in order to compensate him for the extra commuting cost. In making this decision, he considers commuting costs in subjective terms and decides on appropriate land price reductions in terms of how much satisfaction he derives from buying a larger

site to redress the increased commuting cost.

By means of this evaluation of alternate satisfactions, the consumer develops a schedule of prices that he will bid for land at different distances from the center to maintain the same level of satisfaction at all locations. An individual will have a series of these "bid rent curves" corresponding to different levels of satisfaction. For any given price level of land, the consumer will choose the location that places him on his curve of highest satisfaction. Individual points of equilibrium are found by a method adapted from the standard solution of consumer equilibrium in economics; market equilibrium involves the simultaneous determination of locations, densities, and land prices by a process of iteration starting with an assumed land price at the center.

Assumptions underlying the determination of bid rent curves are significant. Land and accessibility are both positive goods in the housing market; consumers are assumed to want both central locations and large lots, although individuals each make their own evaluation of these two goods and may want them in different proportions. Empirical evidence in the New York Metropolitan Region Study is consistent with these assumptions in suggesting that accessibility and land area per dwelling unit are substitutes, with reductions in one balanced by gains in the other. Hoover and Vernon have analyzed net residential density, median income, and access time to central Manhattan for a group of communities in the rapidly growing suburban area around New York City. For any given level of median income, communities with better access have higher residential densities (i. e., less residential land per dwelling unit). For any given degree of access, communities with higher median incomes have lower densities. And for any given level of density, communities with higher median incomes tend to have better access. Higher incomes thus appear to buy more land per dwelling unit and better access, but they buy each at a sacrifice of the other. ¹³

In our analysis of housing patterns, we have considered land area per dwelling unit as a substitute for accessibility, so that high densities constitute a sacrifice that the consumer accepts for the sake of access advantages. Consumer acceptance of higher densities in central locations than in outlying sites is evidence of central preferences in the housing market, according to this view. We have gauged central preferences by more obvious indicators, as well: higher rents and lower vacancy rates in central areas. Determining the extent to which high densities, high rents, and low vacancy rates are found simultaneously in highly accessible sites helps test the relationships that Alonso assumes between density and accessibility.

Transportation Advantage and Position Rent

The recent work of Lowdon Wingo, Jr.¹⁴ resembles Alonso's model in many ways, but calls attention to several other structural features that are assumed to influence the location of new housing. Wingo's model involves only residential land, and relies on the journey to work as the basic organizing force. Commuting costs depend upon the organization and technology of transportation, as modified by the individual's own valuation of leisure time lost while traveling to work. These costs of transportation establish a structure of "position rents," which reflect savings in travel time and cost:

Position rent is simply the economic advantage in transportation costs of any location with respect to the most disadvantaged position occupied, that is, the maximum amount that a user would be willing to pay rather than occupy the marginal location.¹⁵

Different levels of position rent imply different amounts of land area per dwelling unit. Assuming that ground space has diminishing marginal utility for the individual, Wingo postulates that the greater the position rent, the less space will be used. Each household has its own valuation of residential land space, as in Alonso's model, although in this case the demand schedule for space is independent of location. The household chooses its optimum location as follows:

As it moves toward the employment site, position rent increases and transportation costs decrease until it finds a position in which the marginal saving in transportation costs is just equal to the marginal value of the residential space given up. Through this process of substituting transportation costs for space costs, locational equilibrium is achieved.¹⁶

The mechanism for finding optimal locations is similar to Alonso's, and Wingo also assumes a substitution effect between accessibility and land area.

Wingo's model recognizes the significance of two metropolitan characteristics that we take as variables in our analysis. Following Hurd, he uses the location of the outer margin of settlement as a determinant of access advantages, and of rental values based on these advantages, at more central locations. Wingo is careful to stipulate that access advantages and rent structures are modified by the consumer's subjective evaluation of the costs of travel.

In the simplest version of Wingo's model, all employment is located at the center. This simplifying assumption is later relaxed, and Wingo demonstrates a method for taking non-central employment locations into account. The effects of a secondary employment node are a reduction of densities and land values near the center of the region, a rise near the new employment node, and an outward shift of the margin of settlement. These conclusions are consistent with our findings in regions with different internal distributions of employment.

Scope of This Study

Both these models, and indeed almost all the literature that we have reviewed, focus on employment location and the journey to work as basic organizers of the housing pattern. The more advanced theories recognize subjective and social factors as they affect consumers' evaluations of travel costs and land area requirements. These factors

are incorporated into the theory by means of individual preference schedules; the models assume little about the nature of these preference schedules other than that access and land area are substitutes for one another, and that both follow the principle of diminishing marginal utility.

Although the journey to work is unquestionably an important market factor, other significant forces also shape the housing pattern. Wingo acknowledges the likely importance of prestige and culture group associations, variations in the quality of local services, and other considerations. He suggests that complex substitution effects may take place among these factors: households may sacrifice nearness to employment for prestige locations, or may pay higher rent to be near a good school. Firey's work and several other studies consider these influences, but most of the theoretical literature that we have reviewed excludes them, concentrating instead on variables related to the journey to work and the demand for ground space. Wingo notes that the patterns that emerge from the operations of these few variables would be optimal only if other features were either generally distributed or had little influence in individual decisions.

To what extent should we recognize such considerations as neighborhood prestige and the quality of local service when we analyze locational preferences for new housing? Our objective has been to study the feasibility of developing new housing as part of a program to rebuild older neighborhoods. Where rebuilding programs are contemplated, many physical characteristics of a neighborhood, and its level of services, are subject to extensive manipulation. It has appeared useful, therefore, to treat these aspects of the local environment as elements that a renewal program can direct satisfactorily so that social and cultural considerations will not obstruct rebuilding. The location of employment, the access characteristics of an area, and its relationship to the outer margin of settlement cannot be controlled as directly,

although they can be affected by public policy over a period of time. We have chosen to regard these structural factors as exogeneous "givens" in our problem. The question is then one of determining the degree to which these structural characteristics promote or hinder the rebuilding of the declining areas in view of the tastes and preferences of the existing population of the region, with the government assumed to have adequate power for reshaping the local environment satisfactorily.

Our inquiry thus follows the general lines of previous theoretical studies. Following Mitchell and Rapkin, we have extended the concept of accessibility to cover more than the journey to work. To do so, we have considered not only the proportion of regional employment located in the core, but also the proportion of retail, entertainment, and cultural facilities. For our purposes, the regional distribution of these facilities constitutes another given aspect of urban structure.

Changing Urban Patterns and the Problem of Declining Areas

Recent patterns of urban growth have called increasing attention to problems of blight and decline in the older parts of cities. In the nineteenth century, urban growth typically meant an increase in population and density throughout the region, with old central areas converted to more intensive uses partly through rebuilding at higher densities. More recently, new construction has bypassed inlying sites in favor of peripheral locations, leaving the older areas to decline in population and density. A number of studies have given special attention to the increasing abandonment of these older areas, and to the factors that inhibit their rebuilding as modern residential neighborhoods.

Homer Hoyt observed the shifting patterns of population and land value that marked the decline of Chicago's blighted areas before 1930.

Population in the zone within two miles of the center grew, but at a decreasing rate, until 1910; from 1910 to 1930, it declined. Population in the zone two to four miles from the center rose until 1910, held steady until 1920, and then declined.¹⁷ These changes were reflected in population density:

The population of Chicago was at first concentrated near the center of the city and the density curve resembled a cone with the sides sloping sharply downward. As population increased and transportation facilities improved, the base of this cone widened and the rate of most rapid population increase passed to successive belts of land, each one in turn farther from the main business district. After 1870 the height of the population pyramid rose only slowly but the base widened rapidly. In the twentieth century the number of people living within the areas that once contained the entire city stopped advancing and began to decline. ... A large crater has appeared near the heart of the city¹⁸

Land values followed the density pattern; Hoyt takes note of "a valley in the land-value curve between the Loop and the outer residential areas."¹⁹ The Loop itself is not part of this picture of decline, however. New construction added a significant amount of floor space to the central business district in the 1920's, and land values rose steadily, although at a lower rate than the rise in total Chicago land values. Thus Chicago in 1933 consisted of live areas in the core and at the fringe, with a declining intermediate area:

The heart wood of the organic Chicago is constantly replacing old tissues with new ones, in marked contrast with the static condition of the belt of dead wood around the Loop known as the "blighted area" which has ceased to grow.²⁰

Studies of other regions have documented similar shifts in population distribution. Hans Blumenfeld has described the phenomenon that Hoyt noted -- that the zone of most rapid population increase moves steadily outward from the core -- as "the tidal wave of metropolitan expansion."²¹ Blumenfeld's historical analysis of Philadelphia

illustrates not only the tidal wave effect, but also the static or declining condition of areas between the core and the wave of expansion. Contrast the growth pattern of 19th century Chicago (Figure C-1) with the pattern of 20th century Philadelphia in Figure C-2. Even after the transit improvements of the 1880's enabled Chicago to burst its earlier commuting-time boundaries, densities continued to increase substantially in all central areas except the core itself (0-1 mile zone), where business expansion helped push out residences. Except for this innermost zone, the Chicago density gradient sloped steeply upward toward the core in 1900, much as in 1880.

In Philadelphia, growth from 1900 to 1920 followed the earlier Chicago pattern, with density decreasing only in the innermost zone and increasing substantially in other zones near the center. From 1920 to 1940, a new pattern emerged, producing sharp cutbacks in density through the 2-3 mile zone, a point of stability in the 3-4 mile zone, and large increases in density spread over the suburban rings starting 4-5 miles from the center. The wartime period of 1940-1950 saw density gains throughout the region, but their magnitude was negligible in most inner zones and the most noticeable upward shifts were once again in the areas more than 5 miles from the core. During this 50-year period, the zone with the greatest percentage increase in population shifted from the 4-5 mile zone from 1900-1910 to the 7-8 mile zone in 1940-1950, moving outward at an average speed of one mile per decade.

The New York Metropolitan Region Study also confirms both the tidal wave pattern and the static or declining character of zones close to the core of the region. Hoover and Vernon modify the growth wave concept to take account of two different and widely separated rings of growth, one marked by single-family construction in the suburbs and the other by apartment development closer to the center.²² Although the wave of apartment construction has injected new life into older

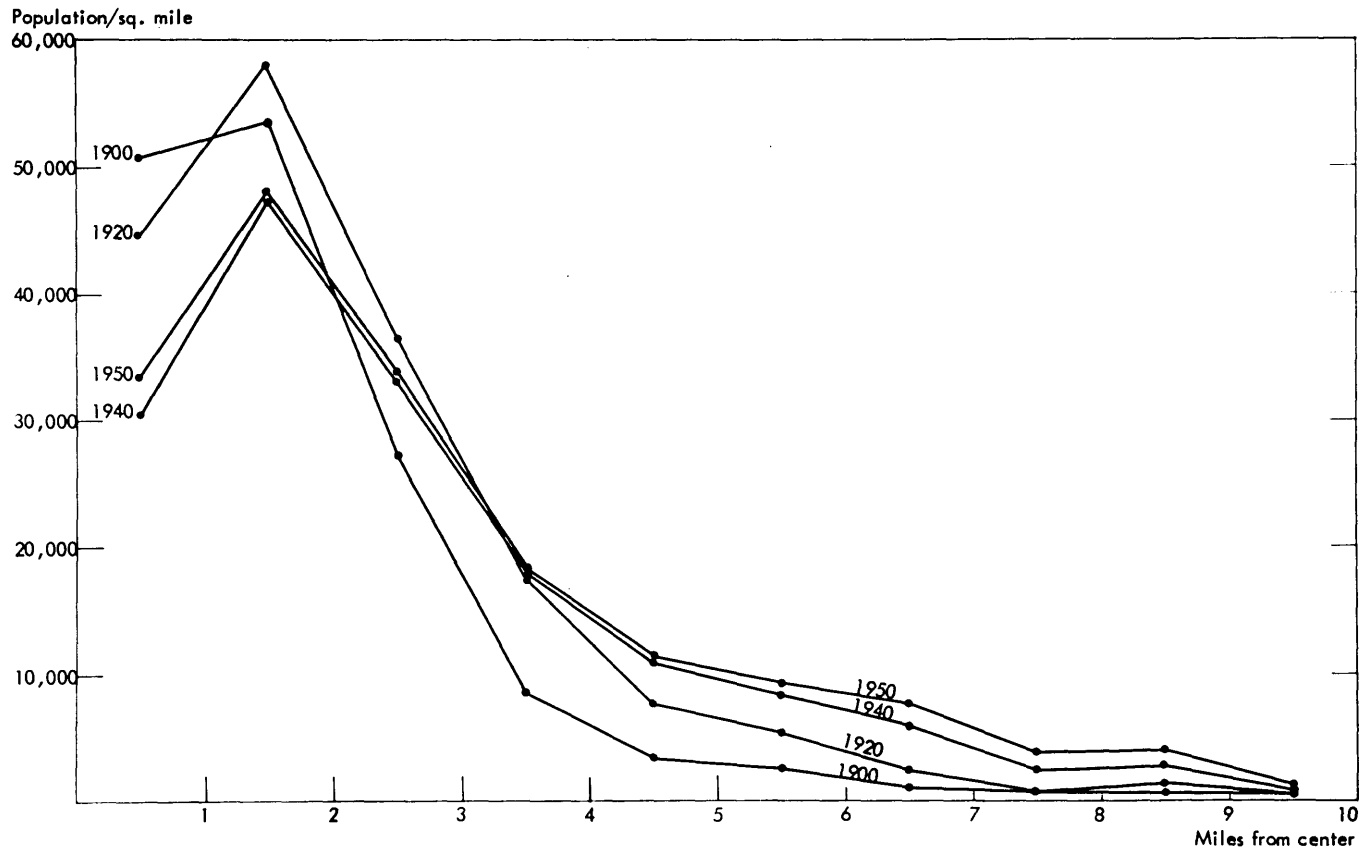


FIGURE C - 2
 Population density by distance from center of Philadelphia, 1900-1950
 Source: Hans Blumenfeld, "The Tidal Wave of Metropolitan Expansion," Table 6, p. 14.

parts of the New York region, density trends approximate those of modern Chicago and Philadelphia. Figure C-3 depicts population densities in 1920, 1940, and 1955, for the suburban New York region (excluding New York City and Nassau County). This plotting of density against travel time to the core via commuter railroad constitutes a good base for historical comparison, since the travel times have remained relatively constant since 1920. Nevertheless, the pull of the center has evidently weakened, particularly since 1940. From 1940 to 1955, population dropped slightly in the nearest time-zone, increased slightly in the next zones, and registered greatest gains in zones far removed from the center. Thus the density curve flattened noticeably from 1940 to 1955. If New York City has been included in this sample, the density curve would have flattened still more strikingly, since the City lost population after 1950.

Other analyses of population distribution within metropolitan regions furnish additional evidence that growth now takes place mainly in outlying locations, while central areas remain static or actually decline.²³ What does this new growth pattern mean? Clearly, the tidal wave effect does not reflect merely the filling of inner areas to some standard capacity and the overflow of excess population into successively more distant rings. Some of the central locations that we have examined have relatively low densities. The first time zone in the New York suburban sample shown in Figure C-3 had a density of about 1,500 persons per square mile in 1940, and yet failed to grow in the next fifteen years. In contrast, parts of Chicago with densities of 20,000 per square mile in 1880 filled to a density of more than 40,000 per square mile in 1900. Since 1950, central areas have not merely been bypassed by new growth: nine of the ten largest cities in 1950 lost population from 1950 to 1960, while their metropolitan areas expanded.²⁴

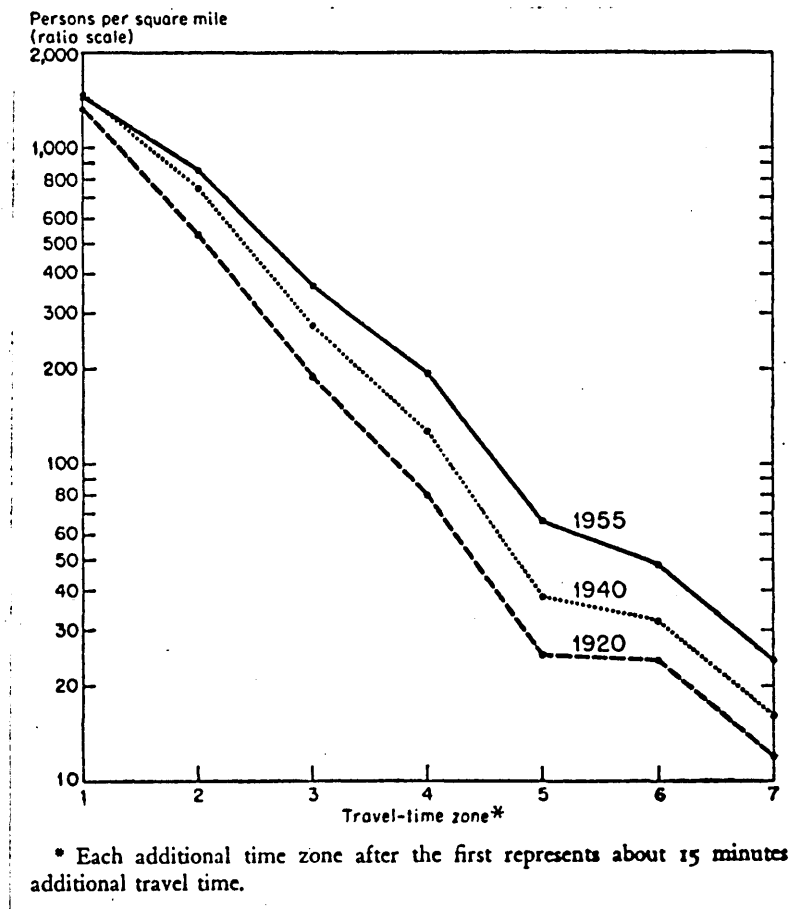


FIGURE C - 3
Relation between population density and approximate travel time
to Manhattan, New York metropolitan region, 1920, 1940, 1955
(New York City and Nassau County excluded)

Source: Hoover and Vernon, Anatomy of a Metropolis, Chart 14, p. 186.

This evidence points consistently in one direction: central locations are less preferred for housing now than they were fifty years ago. The distribution of population within a region reflects a complex interaction of many factors; but the desire for central location, which is one of these factors, has evidently become less important in relation to other considerations.

Reasons for the Population Shift

What are some of these other considerations? Studies of housing patterns take several different approaches. Hoyt explains the abandonment of central Chicago as a combination of objectionable social and physical conditions in the center and the pull of new housing and new facilities in outlying areas. The old housing of central Chicago became a magnet for socially marginal occupants: racial and ethnic minorities, criminal elements. The presence of these groups stimulated old American residents nearby to look elsewhere for housing. Improved transportation facilities made new neighborhoods practical on the outer edge of the city, and the new developments had pulling power of their own:

The attractions of modern buildings and of motion-picture places, banks, and chain stores in these newly settled communities were the centrifugal forces that whirled people from their old abodes into the new bright-light areas. In their wake, between the Loop and the new sections were left the "blighted areas." 25

At the same time, new immigration from Europe dropped sharply, and few newcomers appeared in the city to take up vacancies in the center. As of 1933, Hoyt saw little demand for the blighted areas for any purpose.

The literature describing recent urban change is filled with plausible explanations for the rapid suburban growth since World War II.²⁶ Widespread automobile ownership and the construction of modern highway networks are often singled out for special emphasis. Auto

transportation for workers and truck transport for freight freed many industries from central locations and enabled them to build expansive horizontal plants on outlying sites. As work places decentralized, suburban homes were able to offer increasingly good access to jobs. With the general shift to the automobile, proximity to public transportation has become less important even for residents who require access to downtown: new highways have opened up huge areas of accessible and inexpensive land for housing development. Retail outlets have followed residences out to the suburbs; the large new suburban market has been able to support impressive shopping concentrations within short driving times of residential areas. All these developments, plus easy financing for home purchases, have made suburban living feasible for large numbers of families. The low-density suburban environment in itself has been a great attraction to families with increasing leisure time and with young children.

On the basis of a study of current housing patterns in Philadelphia, Rapkin and Grigsby suggest that the attraction of low-density living is a particularly strong factor influencing the housing choices of families with children, and that the attraction is to single-family houses specifically rather than merely to a suburban environment. Surveys of households in outlying elevator apartment houses, located near excellent school facilities, revealed as low a proportion of families with children as in new apartment houses in central Philadelphia.²⁷ A different survey of 300 households living in high-rent units in the centers of New York, Philadelphia, and Chicago corroborates the rejection of apartment living by families with children: only one-fifth of the households consisted of husband and wife with minor children, although close to half of all nonfarm households in the United States are in this category.²⁸

The limited appeal of apartment living for families with children has several implications for the declining areas. To the extent that the

rejection of apartment units is a new development, it constitutes one force promoting population decline in central locations. But families with children carry particularly heavy weight in population totals. If departing families with children are replaced by childless couples or single adults, total population will decline even though the stock of housing may be fully utilized. In our case studies, we have therefore looked into changes in household size and housing utilization in order to determine what is happening to the demand for housing in the declining areas.

The Alternatives: Peripheral Growth or Redevelopment

In the preceding discussion, we have adopted the viewpoint of the housing consumer in an attempt to understand how the declining areas have reached their present condition. Another useful perspective is that of the housing producer and the market within which he operates. At all stages in the growth of a metropolitan area, developers can build new housing on vacant fringe land or in already built-up areas. In the latter case, they may be able to build on remaining vacant lots or, more typically, they will have to assemble building sites by demolishing existing structures. Peripheral growth, rather than redevelopment, has accounted for most of the growth in the housing supply of metropolitan areas in the last few decades. If the declining areas are to be rebuilt for residential use, the task of the next decades is to divert a larger proportion of new housing construction from peripheral growth to redevelopment.

Studies of urban housing patterns contain a number of interesting views on the prospects of redevelopment as an alternative to peripheral growth. Hoyt's works in the 1930's view redevelopment in terms of the private developer operating without special government assistance. Within this framework the greatest obstacles to redevelopment arise from the small scale at which the individual developer operates, and his difficulties in assembling large sites. Hoyt maintains that obsolete surroundings and

diversified ownership of land in the blighted areas together keep out new housing. Only high-grade apartment developments generate rental returns sufficient to pay the cost of acquiring existing buildings, but potential occupants who can afford the necessary rents will object to living among obsolete surroundings. If the developer could clear a sufficiently large area, he could provide a totally new environment, but diversified land ownership makes the assembly of large tracts difficult and costly. Hoyt notes that redevelopment is occasionally feasible, if existing structures are flimsy or scattered, and if land is cheap and easily assembled. In rare circumstances, developers can build apartment houses in obsolete surroundings:

Such apartments can rise even in the midst of a poor area because the tall building itself, rising from humble surroundings like a feudal castle above the mud huts of the villeins, is a barrier against intrusion. ²⁹

Since the 1930's, the idea of government participation in redevelopment has become increasingly accepted. With the exercise of eminent domain to condemn blighted areas, large sites can be assembled in spite of diversified ownership, and the economic effect of hold-outs can be minimized. At first, several state programs authorized public acquisition of land for rebuilding; since the Housing Act of 1949, federal subsidies have been available to bring site acquisition costs down to feasible resale prices for new building sites.

This growing appreciation of the role of government participation is evident in Walter Firey's 1947 analysis of land use changes in central Boston. One of Firey's main purposes is to demonstrate the significance of non-economic factors in shaping urban development. The history of Boston includes one successful case of renewing an old area that had begun to decline. The revival of Beacon Hill involved primarily the rebuilding of old structures rather than clearance and redevelopment, but Firey considers the method of renewing Beacon Hill applicable to areas requiring redevelopment, as well. This method relied heavily on the intervention of governmental measures

to block commercial and apartment construction from filtering into the neighborhood. Protective zoning, consisting of a low height limit and restriction to exclusively residential use, preserved the existing structures and enabled private developers to buy them at reasonable prices for rehabilitation.

Firey's contribution to this discussion is his recognition of the role of public measures in promoting the rebuilding of older areas. Unlike Hoyt, he sees good future prospects for redevelopment through official promotion of redevelopment corporations, and through aid in the form of assessment and tax adjustments as well as zoning regulations. The most promising basis for stimulating housing demand in central Boston, according to Firey, is the symbolic value of its historic buildings and monuments. Firey holds that, with government assistance, developers can capitalize on the symbolic associations of sites in the older areas of Boston by locating new housing there.

Limits of Peripheral Growth

Subsequent analyses generally accept the idea of government assistance in redevelopment, but few regard historic sites as a significant basis for renewing older areas, largely because the supply of historic sites falls far short of the supply of deteriorated districts in American cities. Two recent works suggest that the outward push of peripheral growth will set up pressures for redevelopment in central areas and thus act as an equilibrating mechanism. Hoyt points out in a 1958 article that the spread of single-family homebuilding has created a situation in which home buyers must travel farther and farther out each year to find a new house. Despite the construction of new highways, travel times between vacant land and the core lengthen as vacant land becomes more remote. In Hoyt's view, travel time to the core has once again become a significant factor promoting central redevelopment rather than peripheral growth. Many families,

particularly those without children or with pre-school children, are willing to live in apartment houses in order to save travel time between home and work. Apartment rentals generate sufficient income so that the builder can afford to pay from \$2 to \$5 a square foot for his site, a price that enables him to clear obsolete one-family structures. ³⁰

The authors of Housing Choices and Housing Constraints also regard peripheral growth as a self-correcting mechanism, but through the effects of rising housing costs in the suburbs rather than through an overly extended journey to work:

The city could hardly compete with the suburbs where vast areas of open land were still available for fringe building. The cost of putting new housing on this undeveloped land is increasing each year. Furthermore, the rapid rise in taxes necessary to provide schools and other community facilities has made the suburban housing burden heavier than many house buyers had anticipated. As suburban land and housing become even more costly, and taxes even higher in the future, attractive city dwellings within a reasonable price range might well exert an appeal which has been lacking in the past. Indeed, it may not be going too far to suggest that the traditional housing situation of scarce and expensive city land, compared with ample and low-cost suburban land, may eventually -- through competition for outlying properties -- equalize if not reverse itself. ³¹

Raymond Vernon also speculates on the possibility that peripheral growth will create a shortage of land in outlying locations and thus stimulate central redevelopment to obtain building sites:

If urban land were to prove an acutely scarce resource at some point in the future ... pressure to recapture the "underused" gray areas for living space might be so strong as to generate vast expenditures to that end. But it is one of the paradoxes of urban growth today that the increase in the supply of urban land is probable outstripping the demand. At the edges of most urban masses, farmers are shrinking their land use, on the whole, faster than developers are taking the land up

Eventually, of course, this will change. Urban land will become scarce again as sheer population growth fills up the empty spaces. But the land promises to grow more plentiful before it grows scarce again. And for several decades, we are likely to see suburban developments making more and more profligate use of the land.³²

Vernon's assertions about the rate of growth of the supply of urban land are not directly testable. Much depends upon future transportation systems and their ability to provide acceptable conditions of access from outlying vacant land to employment centers; the future location of employment centers is thus an additional factor in determining the effective supply of urban land. The other equilibrium concepts are more readily testable, and we have investigated both in our case studies. Hoyt notes an increasing demand for inlying housing as the distance to vacant land increases; we have tested this assumption by analyzing the housing market in regions that differ sharply with respect to the location of vacant land. Hoyt's estimates of land prices that developers can pay for inlying sites have also been tested empirically. The statement cited from Housing Choices and Housing Constraints is based on an assumption that rising land and operating costs in the suburbs are approaching cost levels in more central locations. We have examined the present situation in our study regions to determine how great the cost disparities are at present, and the extent to which they encourage or inhibit redevelopment in the declining areas.

Characteristics of the Declining Areas

Different conceptions of the problems of declining areas emerge from the foregoing analyses of consumer preferences and market factors influencing the location of new housing. These conceptions have contrasting implications for government policies seeking to promote the rebuilding of old areas, and they delineate some of the important issues that our research can help to resolve.

Declining demand and depressed land values characterize Hoyt's conception of Chicago's areas of population loss in 1933. Successive waves of immigrants occupied these areas in the past; with the ending of large-scale immigration after World War I, demand for housing in the blighted areas declined, and the population thinned out. Miles Colean also emphasizes the role of immigration in maintaining old and blighted housing. During the period of mass immigration, Colean explains that owners of obsolete structures saw opportunities for profit in crowding them with newcomers rather than replacing them. Impoverished immigrants created a constant demand for old housing; as a result, old areas that might have been improved were bypassed by new development and left to deteriorate. When the flow of immigration stopped, these areas were far removed from new development, and they had reached a scale where individual efforts at rebuilding could not cope with the problem of blighted surroundings.³³

Hoyt's land value analysis of Chicago showed a relative depression in the blighted areas corresponding to their decline in population. Before 1900, land values resembled a pyramid with its peak at the Loop and steeply sloping sides. From 1900 to 1928, the pyramid shape disappeared: land values in outlying areas rose to levels approximating those in the Loop, and values between the core and the fringe formed valleys on either side of the Loop. In a historical analysis of land values in the old areas (settled before 1873), Hoyt found that their values had increased only slightly after 1890. He suggests that the difference in land values between old and new areas reflects not only the different numbers of occupants, but other characteristics, as well: the thin spread of low-income people in the blighted areas, which fails to overcome their low individual purchasing power by an aggregate concentration; losses in rent collection; and a substantial rate of property deterioration caused by neglect and vandalism.³⁴

If Hoyt's conception is accurate, land values in the declining areas will be low, both because of falling housing demand and because of characteristics of the resident population. If so, acquisition costs of old property may not constitute a serious obstacle to redevelopment. Much of our research has been designed to test whether this image of the declining areas is close to reality in our study regions, and whether land costs are low enough to permit rebuilding cleared sites.

The "Gray Area" Problem: Declining Demand and High Acquisition Prices

The New York Metropolitan Region Study has dramatized the subject of residential decline with an incisive characterization of the "gray areas." Hoover and Vernon see the problem in New York essentially as a situation of declining demand for gray area locations for any purpose:

What is least clear in the [future] prospect is the trend of development in the "gray" areas that comprise most of the less central parts of the core, and their counterparts in the older large cities elsewhere in the region. The aging multifamily housing of those areas suffers most of the drawbacks of congestion and high redevelopment cost that prevail in still more central areas, but lacks their unique access advantage. In terms of access, its appeal is to the subway commuters, a group now beginning to shrink in numbers. Employment opportunities within the gray areas themselves are unlikely to grow. On the other hand, the supply of obsolescent housing is likely to grow at record rates. The increasing fraction of the region's population who work outside the core will generally look farther out for their homes, while the shift of inner-core dwellers into the gray areas may well fall far short of maintaining demand for all of the low-grade housing that will exist there. Renewal projects will accommodate more and more people in the inner core itself, perhaps even at slightly higher densities per square mile if past Manhattan experience is a guide; and those who leave the inner core will have a great deal more freedom to move into the single-family residential neighborhoods beyond the gray areas than they had in the past. ³⁵

Hoover and Vernon foresee some potential for redevelopment in the innermost parts of the gray areas, near the central business district, where special access advantages are available. Farther out, they estimate that redevelopment costs are as high as in central gray area locations, but the high prices do not bring corresponding access advantages. We have investigated these assumptions: Is the demand for central locations a discontinuous one, strong near the core and very much weaker elsewhere in the gray areas, or does it resemble a gradient extending across the gray areas without a precipitous decline as one leaves the central business district? Are site acquisition costs relatively constant within the gray areas, or do they decline with increasing distance from the center?

The Conflict of Market Standards with Social Criteria

In a separate article, Vernon describes the problem of the gray areas not merely as a lack of demand for building sites, but as a demand blocked by high acquisition costs:

One can picture the development of a gray ring around the central portions of some of our major cities -- a ring consisting of structures abandoned by the low-income groups and unwanted by others at the costs involved in converting the area to other purposes.

The obstacle of excessive acquisition costs for re-use purposes arises again in this view. Vernon goes on to raise the question of social costs arising from increasing abandonment of the gray areas:

The social costs of maintaining the ring would be high. The ring would lengthen the journeys-to-work of those whose business lay in the central city. It could needlessly lengthen the mileage of mass transit facilities. Underused though it was, it would still demand fire and police protection, schools, water and sewers. And the eyesore it presented would be a constant source of revulsion to those who passed through it. ³⁶

We have not undertaken an investigation of these social costs, but we have investigated whether the lengthening journey to work acts as a significant private cost and induces consumers to pay rent premiums for locations close to the center.

Chester Rapkin also sees the gray area problem as a conflict arising from the clash of economic standards of the housing market against non-economic social criteria. Vernon sees a lack of effective market demand for gray area locations at prevailing costs; Rapkin sees the high acquisition costs of gray area sites as reflections of a housing market that fails to provide sufficient low-income accommodations. Rapkin phrases the problem of the gray areas as the question, "What shall we do with physical assets that retain economic value long after they cease to serve social purposes judged by other than market criteria?"³⁷ The approach that he suggests is to promote measures that will reduce the economic value of obsolete housing. Basically, the way to lower acquisition costs in the gray areas is to maintain a rate of new housing construction in excess of the rate of net family formation. He cites Philadelphia as a city where these conditions have been achieved; the results have been increased vacancies in lower quality housing and a reduction in site acquisition costs.

The key elements of these conceptions of the gray areas concern the demand for gray area locations and the costs of site acquisition. Some analyses of the problem emphasize the weakness of demand; others emphasize the high costs of redevelopment. Our approach has been to investigate both sides of the problem, in order to determine how wide the gap is between site costs and re-use values. The regions we have chosen to study illustrate different types of metropolitan structure; our analysis has been designed to search out the structural factors that influence demand and cost levels. By identifying these factors and how they operate, we attempt to indicate how metropolitan planning and general public policies may promote the rebuilding of the declining areas.

FOOTNOTES

1. Homer Hoyt, One Hundred Years of Land Values in Chicago, Chicago, University of Chicago Press, 1933, p. 295.
2. Homer Hoyt, The Structure and Growth of Residential Neighborhoods in American Cities, Washington, Federal Housing Administration, 1939, p. 102.
3. One Hundred Years of Land Values in Chicago, p. 295.
4. Some recent analyses of density as a function of distance from the core: Hans Blumenfeld, "The Tidal Wave of Metropolitan Expansion," Journal of the American Institute of Planners, XX, No. 1 (Winter 1954), 3-14; Warren S. Thompson, Growth and Changes in California's Population, Los Angeles, Haynes Foundation, 1955, pp. 263-264; John R. Hamburg and Roger L. Creighton, "Predicting Chicago's Land Use Pattern," Journal of the American Institute of Planners, XXV, No. 2 (May 1959), 67-72; Edgar M. Hoover and Raymond Vernon, Anatomy of a Metropolis, Cambridge, Harvard University Press, 1959, pp. 185-186; Wilbur Smith and Associates, Future Highways and Urban Growth, New Haven, 1961, pp. 16-17.
5. Richard M. Hurd, Principles of City Land Values, New York, The Record and Guide, 1924 (first published 1903), p. 11.
6. One Hundred Years of Land Values in Chicago, pp. 24-25.
7. Robert Murray Haig, "Toward an Understanding of the Metropolis: II. The Assignment of Activities to Areas in Urban Regions," Quarterly Journal of Economics, XL (May 1926), pp. 420-421.
8. Haig, op. cit., p. 423.

9. Richard U. Ratcliff, "Efficiency and the Location of Urban Activities," in Robert Moore Fisher, ed., The Metropolis in Modern Life, Garden City, New York, Doubleday, 1955, p. 125.
10. Walter Firey, Land Use in Central Boston, Cambridge, Harvard University Press, 1947, pp. 324-325.
11. Robert B. Mitchell and Chester Rapkin, Urban Traffic: A Function of Land Use, New York, Columbia University Press, 1954. The following discussion is based primarily on Chapter VII, "The Influence of Movement on Land Use Patterns," pp. 104-133.
12. William Alonso, "A Model of the Urban Land Market: Location and Densities of Dwellings and Businesses," unpublished Ph.D. dissertation, University of Pennsylvania, 1960; summarized in William Alonso, "A Theory of the Urban Land Market," Regional Science Association Papers and Proceedings, VI (1960), 149-157.
13. Hoover and Vernon, op. cit., pp. 169-170.
14. Lowdon Wingo, Jr., Transportation and Urban Land, Washington, Resources for the Future, 1961.
15. Wingo, op. cit., p. 91.
16. Ibid.
17. Homer Hoyt, One Hundred Years of Land Values in Chicago, Figure 81, p. 356.
18. Ibid., p. 353.
19. Ibid., p. 356.
20. Ibid., p. 336.
21. Hans Blumenfeld, "The Tidal Wave of Metropolitan Expansion," Journal of the American Institute of Planners, XX, No. 1 (Winter 1954), 3-14.
22. Hoover and Vernon, op. cit., p. 190.

23. See Amos H. Hawley, The Changing Shape of Metropolitan America, Glencoe, Ill., Free Press, 1956, pp. 14-16; Warren S. Thompson, Growth and Changes in California's Population, Los Angeles, Haynes Foundation, 1955, pp. 263-264; John R. Hamburg and Robert Sharkey, "Chicago's Changing Land Use and Population Structures," Journal of the American Institute of Planners, XXVI, No. 4 (November 1960), 317-323.
24. U. S. Census of Population: 1960, Supplementary Reports, PC(S1)-7, "Rank of Cities of 100,000 or More: 1960," June 16, 1961; PC(S1)-1, "Population of Standard Metropolitan Statistical Areas: 1960 and 1950," April 10, 1961.
25. One Hundred Years of Land Values in Chicago, p. 355.
26. For a general summary, see Nelson L. Foote, Janet Abu-Lughod, Mary Mix Foley, Louis Winnick, Housing Choices and Housing Constraints, New York, McGraw-Hill, 1960, pp. 329-330.
27. Chester Rapkin and William G. Grigsby, Residential Renewal in the Urban Core, Philadelphia, University of Pennsylvania Press, 1960, p. 117.
28. Janet Abu-Lughod, "A Survey of Center-City Residents," in Nelson L. Foote et. al., op. cit., p. 391.
29. Homer Hoyt, The Structure and Growth of Residential Neighborhoods in American Cities, p. 118. For a fuller statement of Hoyt's views, see pp. 116-119, and One Hundred Years of Land Values in Chicago, pp. 361-365.
30. Homer Hoyt, "Expressways and Apartment Sites," Traffic Quarterly, XII, No. 2 (April 1958), 263-268.
31. Nelson L. Foote et. al., op. cit., p. 77.
32. Raymond Vernon, "The Economics and Finances of the Large Metropolis," Daedalus, XC, No. 1 (Winter 1961), 46-47.
33. Miles L. Colean, Renewing Our Cities, New York, Twentieth Century Fund, 1953, pp. 13-15.

34. Homer Hoyt, One Hundred Years of Land Values in Chicago, Figure 87, p. 361; Figure 59, p. 318; and pp. 355-356.
35. Hoover and Vernon, op. cit., pp. 237-238. The core includes Manhattan, the Bronx, Queens, Brooklyn, and Hudson County, New Jersey.
36. Raymond Vernon, "Some Reflections on Urban Decay," Confluence, VII, No. 2 (Summer 1958), 139-140.
37. Chester Rapkin, letter in Journal of Housing, XVII, No. 5 (May 1960), 191.

BIBLIOGRAPHY

- Alonso, William, "A Model of the Urban Land Market: Location and Densities of Dwellings and Businesses," unpublished Ph.D. dissertation, University of Pennsylvania, 1960.
- "A Theory of the Urban Land Market," Regional Science Association Papers and Proceedings, VI (1960), 149-157.
- American Public Health Association Committee on the Hygiene of Housing, Planning the Neighborhood, Chicago, Public Administration Service, 1948.
- Automobile Club of Southern California, Los Angeles Metropolitan Peak-Hour Driving Study, Los Angeles, June 1960.
- Babcock, Henry A., Report on the Economic Phases of the Bunker Hill Renewal Project, Los Angeles, California, Community Redevelopment Agency of the City of Los Angeles, May 15, 1956.
- Berman, Barbara R., Benjamin Chinitz, Edgar M. Hoover, Projection of a Metropolis: Technical Supplement to the New York Metropolitan Region Study, Cambridge, Harvard University Press, 1961.
- Black, Elinor G., Manhattantown Two Years Later, New York, Women's City Club of New York, Inc., April 1956.
- Blumenfeld, Hans, "The Tidal Wave of Metropolitan Expansion," Journal of the American Institute of Planners, XX, No. 1 (Winter 1954), 3-14.
- California Department of Employment, community labor market surveys for Los Angeles area as of July 1960, reported September 1960.
- Capitol Region Planning Agency (Hartford), "1959 Tax Rates for Towns in CRPA Region."
- Case, Fred E., "The Housing Status of Minority Families: Los Angeles, 1956," University of California at Los Angeles Real Estate Research Program, January 1958.
- Coe, Paul F., "The Nonwhite Population Surge to our Cities," Land Economics, XXXV, No. 3 (August 1959), 195-210.
- Colean, Miles L., Renewing Our Cities, New York, Twentieth Century Fund, 1953.
- Daniel, Mann, Johnson, and Mendenhall, Los Angeles Metropolitan Transit Authority Rapid Transit Program, June 27, 1960.

- Derrickson, Gardner F., "Recent Homebuilding Trends in Major Metropolitan Areas," Construction Review, VI, No. 9 (September 1960), 5-10.
- Dyckman, John W. and Reginald R. Isaacs, Capital Requirements for Urban Development and Renewal, New York, McGraw-Hill, 1961.
- Firey, Walter, Land Use in Central Boston, Cambridge, Harvard University Press, 1947.
- Fisher, Robert Moore, ed., The Metropolis in Modern Life, Garden City, New York, Doubleday, 1955.
- Foote, Nelson L., Janet Abu-Lughod, Mary Mix Foley, Louis Winnick, Housing Choices and Housing Constraints, New York, McGraw-Hill, 1960.
- Fried, Marc and Peggy Gleicher, "Some Sources of Residential Satisfaction in an Urban 'Slum,'" Journal of the American Institute of Planners, XXVII, No. 4 (November 1961), 305-315.
- Friedenberg, Daniel M., "The Coming Bust in the Real Estate Boom," Harpers, CCXXII, No. 1333 (June 1961), 29-40.
- Gans, Herbert J., The Urban Villagers, Glencoe, Free Press, forthcoming.
- Goldstein, Sidney and Basil G. Zimmer, Residential Displacement and Resettlement of the Aged, Providence, Rhode Island Division on Aging, 1960.
- Gottsche, Gordon, "Relocation: Goals, Implementation, and Evaluation of the Process with Reference to the West End Redevelopment Project in Boston, Massachusetts," unpublished master's dissertation, Massachusetts Institute of Technology Department of City and Regional Planning, 1960.
- Grebler, Leo, Housing Market Behavior in a Declining Area, New York, Columbia University Press, 1952.
- Haig, Robert Murray, "Toward an Understanding of the Metropolis: II. The Assignment of Activities to Areas in Urban Regions," Quarterly Journal of Economics, XL (May 1926), 402-434.
- Hamburg, John R. and Roger L. Creighton, "Predicting Chicago's Land Use Pattern," Journal of the American Institute of Planners, XXV, No. 2 (May 1959), 67-72.

- Hamburg, John R. and Robert Sharkey, "Chicago's Changing Land Use and Population Structures," Journal of the American Institute of Planners, XXVI, No. 4 (November 1960), 317-323.
- Handlin, Oscar, The Newcomers, Cambridge, Harvard University Press, 1959.
- Hartford Commission on the City Plan, "Population and Housing Changes in Hartford from 1950 to 1960 by Census Tract," September 1960.
- Hawley, Amos H., The Changing Shape of Metropolitan America, Glencoe, Free Press, 1956.
- Hoover, Edgar M. and Raymond Vernon, Anatomy of a Metropolis, Cambridge, Harvard University Press, 1959.
- "How a Bullder Figures," Fortune, LXI, No. 2 (February 1960), 243-246.
- Hoyt, Homer, "Expressways and Apartment Sites," Traffic Quarterly, XII, No. 2 (April 1958), 263-268.
- One Hundred Years of Land Values in Chicago, Chicago, University of Chicago Press, 1933.
- The Structure and Growth of Residential Neighborhoods in American Cities, Washington, Federal Housing Administration, 1939.
- Hurd, Richard M., Principles of City Land Values, New York, The Record and Guide, 1924.
- Lichtenberg, Robert M., One-Tenth of a Nation, Cambridge, Harvard University Press, 1960.
- Los Angeles Central City Committee and Los Angeles City Planning Department, Economic Survey ("Los Angeles: Centropolis 1980"), December 12, 1960.
- Los Angeles (City), Population Estimate by Communities, Bulletin 1960-4, October 1, 1960.
- Los Angeles (City), Department of Building and Safety, Conservation: A New Concept of Building Law Enforcement, 1958.
- Los Angeles County Assessor, listing of tax rates for different communities in Los Angeles County, S-74, October 1960.

Los Angeles County Commission on Human Relations, "A Comparative Statistical Analysis of Minority Group Population for Los Angeles County from April, 1950 to July 1, 1959."

Statement of John A. Buggs, Executive Secretary, January 16, 1960.

Los Angeles Times:

"Rapid Transit: Is It on the Track to Reality?", August 13, 1961, Section C, p. 1.

McDonald, John, "The \$2-Billion Building Boom," Fortune, LXI, No. 2 (February 1960), 119-122.

McEntire, Davis, Residence and Race, Berkeley, University of California Press, 1960.

Margolis, Max L. and Alexander Marx, A History of the Jewish People, New York, Meridian Books, 1958.

Marris, Peter, Family and Social Change in an African City, Chicago, Northwestern University Press, 1962.

Mitchell, Robert B. and Chester Rapkin, Urban Traffic: A Function of Land Use, New York, Columbia University Press, 1954.

Mogey, J. M., Family and Neighbourhood, London, Oxford University Press, 1956.

Morrison, J. Cayce, The Puerto Rican Study: 1953-1957, New York, New York City Board of Education, 1958.

Nadeau, Remi, Los Angeles: From Mission to Modern City, New York, Longmans, Green, 1960.

New York City Board of Education, Bureau of Educational Program Research and Statistics, "Special Census of School Population, October 31, 1960," Publication No. 167, March 1961.

New York City Committee on Slum Clearance, reports on renewal projects: Hammels-Rockaway, 1956; Lincoln Square, 1956; Penn Station South, 1957; Riverside-Amsterdam, 1958; Soundview, 1959.

Title I Progress, January 29, 1960.

New York City Department of City Planning Newsletter, 1958-1961.

New York City Housing Authority, Project Statistics, December 31, 1960.

New York City Planning Commission, Urban Renewal: A Report on the West Side Urban Renewal Study to Mayor Robert F. Wagner and the Board of Estimate of the City of New York, and to the Urban Renewal Administration, New York, 1958.

New York (State) Department of Commerce, "Real Property Taxes in Cities of New York State, 1959," M-575-r,

New York (State) Temporary State Housing Rent Commission, "Report on the Survey of the Rental and Housing Market," January 19, 1961.

New York Times:

"City Planning Billion In Housing For 250,000 Within Few Years," April 7, 1961, p. 19.

"Elegant Name Proposed for Third Avenue," July 12, 1961, p. 33.

"Jersey Drive Set By Puerto Ricans," January 22, 1962, p. 25.

"Negro Faces Housing Test In Major Shift To Suburbs," May 21, 1961, p. 1.

"Negro Migration From South Rises," December 28, 1961, p. 16.

"Negroes' Housing Is Found To Gain," March 23, 1961, p. 26.

"Negroes Shifting From Manhattan To All Boroughs," July 9, 1961, p. 1.

"30,000 Families Face Relocation," June 26, 1961, p. 17.

"Title I and Slum Clearance: A Decade of Controversy," June 29, 1959, p. 1. Rest of series June 30, 1959, p. 1; July 1, 1959, p. 23; July 2, 1959, p. 13.

"12 Cities' Suburbs Called 93% White," May 7, 1961, p. 80.

Samuels, Gertrude, "To Brighten the 'Gray Areas,'" October 22, 1961, pp. 48, 72, 74 (New York Times Magazine).

Oakland Redevelopment Agency, Information Bulletin No. 3, "A General Neighborhood Renewal Plan for West Oakland."

Orwell, George, The Road to Wigan Pier, New York, Berkley Publishing Corp., 1961.

- Panuch, J. Anthony, Building a Better New York: Final Report to Mayor Robert F. Wagner, March 1, 1960.
- Relocation in New York City: Special Report to Mayor Robert F. Wagner, December 15, 1959.
- Parkins, Maurice Frank, Neighborhood Conservation: A Pilot Study, Detroit, Detroit City Plan Commission in Cooperation with Housing and Home Finance Agency, 1958.
- Philadelphia Housing Association, Ends and Means of Urban Renewal, Philadelphia, 1961.
- Present, Harris L., "To Halt Destruction of Buildings," Letter to the Editor, New York Times, February 9, 1962, p. 28.
- Rapkin, Chester, letter in Journal of Housing, XVII, No. 5 (May 1960), 191.
- Rapkin, Chester and William G. Grigsby, Residential Renewal in the Urban Core, Philadelphia, University of Pennsylvania Press, 1960.
- Real Estate Research Corporation, Rental Housing Market Analysis: Downtown Hartford, prepared for Department of Housing, City of Hartford, 1959.
- Regional Plan Association (New York), Bulletin 87, "People, Jobs and Land in the New Jersey-New York-Connecticut Metropolitan Region 1955-1975," June 1957.
- Bulletin 91, "Hub-Bound Travel in the Tri-State Metropolitan Region," April 1959.
- "New Homes in the New Jersey-New York-Connecticut Metropolitan Region," 1957-1960.
- Residential Research Committee of Southern California, Residential Research Report, Fourth Quarter, 1960.
- Rogers, Taliaferro, and Lamb, Renewal Program for Downtown Hartford, Connecticut, prepared for City of Hartford, 1960.
- Roth, Philip, Goodbye, Columbus, New York, Meridian Fiction, 1960.
- Seeley, John R., "The Slum: Its Nature, Use, and Users," Journal of the American Institute of Planners, XXV, No. 1 (February 1959), 7-14.
- Senior, Clarence, Strangers -- Then Neighbors, New York, Freedom Books, 1961.

- Smith, Wilbur and Associates, Future Highways and Urban Growth, New Haven, 1961.
- Mass Transportation in the Capitol Region, prepared for the (Hartford, Conn.) Capitol Region Planning Agency, December 1960.
- Stanford Research Institute (James H. Forbes, Jr., Frederick P. Lyte, Emil L. de Graeve), Feasibility of a Residential Rental Development in the Bunker Hill Urban Renewal Project, Community Redevelopment Agency of the City of Los Angeles, May 1957.
- Stone, Peter, unpublished report on land costs in New York metropolitan region, November 1957, on file at Regional Plan Association.
- Thompson, Warren S., Growth and Changes in California's Population, Los Angeles, Haynes Foundation, 1955.
- Townsend, Peter, The Family Life of Old People, London, Routledge and Kegan Paul, 1957.
- United Community Services of Metropolitan Boston, Housing Preferences of Older People, Follow-up Study No. 2: West End Couples, January 1962.
- U. S. Bureau of the Census, Construction Reports: Building Permits, C40-8, "New Dwelling Units Authorized by Local Building Permits," Annual Summaries, 1958-1960.
- News release CB61-167, "South's Net Nonwhite Out-Migration Nearly 1 1/2 Million," December 27, 1961.
- U. S. Census of Business: 1958, Vol. VII, Central Business District Reports, Hartford, Conn., Area -- BC58-CBD35; Los Angeles-Long Beach, Calif., Area -- BC58-CBD43; New York, N. Y., Area -- BC58-CBD55; U. S. Summary, Retail Trade, BC58-RA1.
- U. S. Census of Housing: 1950, Vol. I, General Characteristics.
- U. S. Census of Housing: 1960, Advance Reports, Housing Characteristics: States, HC(A1) series. Vol. III, City Blocks, HC(3) series.
- U. S. Census of Population: 1950, Vol. II, Characteristics of the Population.

U. S. Bureau of the Census,

U. S. Census of Population: 1960, General Population Characteristics, Final Report PC(1) series.

Supplementary Reports, PC(S1)-1, "Population of Standard Metropolitan Statistical Areas: 1960 and 1950, "April 10, 1961; PC(S1)-7, "Rank of Cities of 100,000 or More: 1960," June 16, 1961.

U. S. Department of Justice Immigration and Naturalization Service, Report of the Commissioner of Immigration and Naturalization, 1960.

U. S. Department of Labor, Bureau of Labor Statistics, "New Dwelling Units Authorized by Local Building Permits," Annual Summaries, 1951-1957.

U. S. Housing and Home Finance Agency, Housing Statistics, October 1961.

Housing Statistics, Historical Supplement, October 1961.

Urban Renewal Administration, Urban Renewal Project Characteristics, December 31, 1960 and June 30, 1961.

Vereker, Charles and John Barron Mays, Urban Redevelopment and Social Change, Liverpool, Liverpool University Press, 1961.

Vernon, Raymond, "The Economics and Finances of the Large Metropolis," Daedalus, XC, No. 1 (Winter 1961), 31-47.

"Some Reflections on Urban Decay," Confluence, VII, No. 2 (Summer 1958), 128-140.

White, John R. and Edna L. Hebard, The Manhattan Housing Market, Brown, Harris, Stevens, Inc., 1959.

Wingo, Lowdon Jr., Transportation and Urban Land, Washington, Resources for the Future, 1961.

Winnick, Louis, Rental Housing: Opportunities for Private Investment, New York, McGraw-Hill, 1958.

Ylvisaker, Paul N., "The Deserted City," Journal of the American Institute of Planners, XXV, No. 1 (February 1959), 1-6.

Young, Michael and Peter Wilmott, Family and Kinship in East London, Glencoe, Free Press, 1957.

Interviews

Hartford:

John Rowlson, Rowlson Real Estate and Insurance, February 1, 1961.

Robert Stone, Goldberg and Stone, Manchester, February 2, 1961.

Robert Weisberg, Suburban Associates, Bloomfield, February 2, 1961.

Los Angeles:

R. Douglas Burrows, Vice-President and Chief Appraiser, Security First National Bank, April 27, 1961.

Claude Cunningham, Assistant Chief, Land Division, Los Angeles County Assessor, May 3, 1961.

Robert Filley, Vice-President, Western Real Estate Research Corporation, April 24, 1961.

Fred Hoppe, Conservation Bureau, Los Angeles City Department of Building and Safety, April 26, 1961.

Charles Shattuck, April 27, 1961.

Kurt Shelger, April 27, 1961.

Nelson Smith, Prudential Insurance Co., May 4, 1961.

Arnold A. Wilken, Area Representative, Housing and Home Finance Agency, May 4, 1961.

Hal Wiseman, Norman Construction Co., May 5, 1961.

New York:

Charles Abrams, May 12, 1961.

Abram Barkan, James Felt and Co., June 12, 1961.

Frank Kristof, New York City Housing and Redevelopment Board, March 15, 1961.

Walter Lampe, Chief Appraiser, Federal Housing Administration, June 15, 1961.

Jacob Perlow, June 15, 1961.

Frederick Rose, David Rose and Associates, June 13, 1961.

Louis Winnick, Director, Planning and Program Research
Division, New York City Housing and Redevelopment
Board, March 10, 1961.

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Publication: "Locational Preferences in the Urban Housing Market," Journal of the American Institute of Planners, XXVII, No. 4 (November 1961), 316-324.