

SITE SELECTION

February 13, 1939

FEDERAL WORKS AGENCY - ~~UNITED STATES~~ HOUSING AUTHORITY

A DISCUSSION OF THE FUNDAMENTAL FACTORS INVOLVED IN
SELECTING SITES FOR USHA-AIDED PROJECTS

HK
470
13
APR
2

BULLETIN NO. 18 ON POLICY AND PROCEDURE

SITE SELECTION

This Bulletin discusses the basic factors which Local Housing Authorities should consider in selecting sites for USHA-aided projects. Thus, the Bulletin discusses site selection and its relationship to city planning, the factors determining the size of the site necessary for a particular project, and also the racial considerations involved in site selection. The general principles governing the determination of whether a vacant or a slum site should be selected for a particular project are likewise outlined. The Bulletin also contains a detailed check list of the various items to be considered in site selection.

The attention of Local Authorities is invited particularly to the advisability of making a careful comparative analysis of several alternative sites before selecting a site for a particular USHA-aided project. The Bulletin explains the items which should be considered in such a comparative analysis. Among them are the comparative costs of street construction and utilities, the comparative transportation costs to the different sites, the possibility of eliminating through traffic, and the presence or absence of natural site boundaries. Such a comparative analysis will indicate whether cheaper land cost for a particular site, or other obvious factors making a particular site initially attractive, will actually result in ultimate economy and ultimate desirability.

FEDERAL WORKS AGENCY

UNITED STATES HOUSING AUTHORITY

Washington

CONTENTS

	Page
Site selection in its relationship to city planning.	1
Zoning	4
Preliminary determination of minimum size of site required	5
Size of site in relation to site density	6
Sectional distribution of housing projects within the city	7
Racial considerations in site selection	7
Study of alternative site possibilities	9
Vacant or slum sites	9
Natural boundaries of the site	10
Exclusion of through streets from the project	11
Comparison of costs of street construction and utilities for various sites	12
Transportation costs	12
Check list of items to be considered in site selection	13
Site selection and publicity	19
Conclusion	20

SITE SELECTION

After a local housing authority has obtained an earmarking of funds, but before a formal application for financial assistance can be considered by the USHA, the local authority must have selected a site or sites for its proposed housing project. Because of the large number of variables which enter into the problem of site selection and because deciding factors will be different in each locality, it is not possible to lay down definite rules to govern this procedure; only general suggestions which may be helpful to the local authority in approaching this very difficult and highly important part of its work may be set forth in this bulletin. But certain fundamentals will be discussed.

In facing this task, the full responsibility must be assumed locally, but the local housing authority may avail itself of the advice and assistance of the USHA advisers who are assigned to its territory and of the members of the USHA staff in Washington.

Site Selection in Its Relationship to City Planning

The problem of site selection should be approached with a full realization of the importance of the relationship of the low-rental housing program to city planning, city building and city rebuilding in the locality concerned. Where such a program is being undertaken with the financial cooperation of the USHA, it must immediately assume more of a long-term aspect than can possibly be assured for the usual type of residential community development. This is apparent because of the policies of the USHA. These policies require:

- (1) that the planning and design of housing projects to which it gives financial assistance shall be such that their useful life shall be at least the term of its loan, which is usually not less than 60 years, with the prospect of a much longer life, and
- (2) that maintenance, including provision for replacements, shall be such that living conditions on the site, insofar as they may be affected by the physical state of the property itself, shall remain unimpaired during this entire period.

Permanency as to character is necessarily an idea inherent in any housing plans based upon these policies.

In the development of American cities in the past, permanency of character for residential areas has not often been attained. The people who, acting individually, have been responsible for the piecemeal and haphazard building of urban residential areas, have either not given sufficient thought to the idea of permanency of character or have naively invested their money, their efforts and their hopes in the belief that such permanency was assured.

There have been expedients applied in the hope of insuring stability of character for at least a reasonably long period for specific residential areas. But they have not been effective in forestalling the apparently inevitable change, which in the vast majority of cases takes the final form of complete deterioration. And the end products of this deterioration are the slums. Among such expedients are deed restrictions of various kinds; but the protection from these is at best transitory and they cannot prevent the creeping mutations in the character of the surrounding community which follow in the footsteps of the passing years. Likewise, the latter-day instrumentality of zoning, essential as it is as a method of protection and stability, cannot be relied upon to hold back, by itself, these inevitable changes.

How, then, may there be for a new housing project assurance as to a continually satisfactory environment and a proper position in the city structure? There is no infallible formula for the attainment of these ends. But this question leads us logically to the main theme of this part of the discussion, which is the essential inseparability of housing planning from city planning. The sad picture of decay and disintegration which almost every city presents should be enough to prove the fact of this inseparability. But the long-term provisions under which housing projects are built with the aid of USHA funds make mandatory the application of this principle.

As has been indicated above, the long-term character of housing projects sponsored by the USHA is to be insured, insofar as the property within the boundaries of the project is concerned, through the design and maintenance policies to be followed. But this internal protection must be supplemented by the protection of initial appropriateness of the position of the site within the city structure. The city planning aspect of site location for low-rental housing (and, in fact, for residential development of any type) is double-edged in its implications: first, there is the effect of the location within the city plan upon the future of the housing project; second, the effect of the project's location upon the city plan. The latter is as important as the former, - from the standpoint of the broader interests of the city, perhaps more important.

City planning implies the visualization of a pattern for the city's structural and functional elements. Among these elements are the system of major highways; the supplementary system of secondary and of local streets; the areas of specialized land use, including areas allotted to

industry, commerce, and residence; the system of local passenger transportation facilities, including street car and rapid transit lines, stations for suburban commuters, and existing or possible bus routes; the railroads and railroad facilities, including passenger stations, freight stations, switching yards, repair shops, etc.; the parks and parkways; the cemeteries; the public and parochial schools; the universities and institutions of higher education; the civic and governmental centers; the permanent stadiums, ball parks, athletic fields, race tracks, and fairgrounds; the playgrounds, swimming pools, and minor recreational system; the libraries; the hospitals, medical centers, and correctional institutions; the waterfront facilities; the airports; the major system of utility mains and utility plants, including water supply, gas works, and sanitary sewage disposal; the permanent plant for such municipal services as garbage and refuse disposal and fire protection; etc.

These are the elements which form the complex physical structure of a city. The pattern as a whole must necessarily change as time goes on; no American city has reached a static condition in its physical development. But the uncontrolled and unguided changes to which our cities have been subject in the past have left a trail of heart-breaking economic and aesthetic loss; and the resulting burden of inconvenience and economic hardship must be borne not only by the present generation but by generations to come. It is the object of city planning to reduce to a minimum this loss and burden through a rational guidance and control of these inevitable changes in the community's structure.

It is obvious that the housing program must be properly fitted into this city pattern, both existing and as projected into the future. Its relationship to all of these constituent elements must be considered. Among the items of most vital importance to housing projects for low-income families, however, is assurance of the continuance of ample opportunities for employment within reasonable distances. The relationship of the site, not only to industrial areas and other fields of employment, but also to the transportation system is therefore very important. The housing authority should take into account any trends affecting employment opportunities such, for example, as the tendency of industries to move to the suburbs along certain favored lines of transportation. Reference will be made in other sections of this bulletin to numerous other items which should be considered during the process of site selection; some of these are inherently associated with city planning.

The local housing authority then, with a full realization of the importance of the relationship between the task with which it is charged and the broader phases of city planning and regional planning, is confronted with the problem of bringing into play such planning instrumentalities as may be available. If there is an active and technically competent city planning commission, so much the better. Its advice and, if

possible, its services should be enlisted. But the housing authority, must itself do sufficient city planning to insure the proper integration of its program with the city structure, particularly if the local planning body is not active or technically competent. In such case, it will do well to stimulate the interest of the local planning body and to encourage it to improve its technical competence. Where no planning agency whatever exists in the community, there is a wonderful opportunity for a group so strategically placed as a housing authority to take the lead in bringing into being an effective movement to establish city and regional planning as an active and permanent force in its locality. Because of the fact that housing and city planning are so closely inter-related, such promotional activity is certainly a legitimate interest of a local housing authority.

If there is an active city or county planning commission, the local housing authority should endeavor to obtain from it definite and official approval for its selection of sites. The timing of the announcement of such approval may be subject, sometimes, to the question of expediency as to when the selection should be made public. Even in communities where the local planning body is not active, or where there is doubt as to its technical competency, the housing authority will strengthen its position and lessen the danger of future attack upon its choice of sites by bringing the official planning agency into its deliberations.

In the city planning aspects of its work, as well as in all other aspects, whether technical, legal, social, economic or financial, the advice and services of the USHA are available to the local housing authority to the extent to which it may wish to make use of them.

Zoning

An adjunct and instrumentality of city planning is zoning. As has been indicated above, the mere zoning of the project or its immediate neighborhood, without relation to the more permanent elements of city planning and without integration with a broad plan of city-wide zoning, can be by itself little more than a temporary protection. Even so, such zoning protection as may be available is necessary for each housing project. The protection of the site through proper zoning should be considered one of the essentials.

Not only should the surrounding areas be so zoned as to insure continued protection for the project, but the site itself must be appropriately zoned for the type of structures which are to be built upon it.

Where there is not an adequate plan of zoning in the community, adequately enforced, there is the opportunity for the local housing authority, as in the field of city planning discussed above, to take the leadership in promoting an effective zoning program by sponsoring a comprehensive zoning ordinance.

Rezoning of adjacent areas for the protection of the project is frequently a requirement written into the contract under which the USHA extends financial assistance to the local housing authority. Rezoning is sometimes difficult to bring about, as is also the elimination of objectionable nonconforming uses under existing zoning. The matter of zoning technique and zoning procedure, including the legal problems involved in the establishment of zoning, is frequently outside of the experience of the local housing authority. A separate bulletin of this series will deal with this subject. On all matters related to zoning protection for housing projects there is available to the local housing authorities the advice of the special city planning consultants of the USHA, as well as of its legal and project planning advisers.

Preliminary Determination of Minimum Size of Site Required

Before beginning its search for a site the local authority should have determined, at least in a general way, the principal characteristics and the approximate size and racial composition of the market for the type of housing which it is proposed to build, and from this information a tentative determination should have been made of the number of residence units which are to be constructed. The services of the USHA advisers, and particularly of its Research Division, are available in this essential preliminary investigation. If the conditions in a given locality call for special consideration of major racial elements in the market and if the needs, customs and preferences of racial groups should properly enter into the question of site selection and occupancy assignment, it would be well to have, at this point, a fairly well-defined idea as to the distribution of the total number of units to be built among the racial groups which are to be served. Racial policy in its relationship to site selection is discussed in another section of this bulletin.

Although the number of units to be built will influence the question of the amount of ground which must be obtained and will establish a minimum limit to the size of the buildable area of the site, this factor will not necessarily fix the maximum size of the site. The advisability in a given case of obtaining presently land for future enlargement of the project will be influenced by the availability and the cheapness of additional suitable land. In certain cases the purchase of more land than may ever be needed for the housing project itself may be desirable for purposes of protection to the project, provided that the cost is not too great. (On the matter of the purchase of excess land, see Bulletin No. 1 on Policy and Procedure.)

There are many cases, particularly in the more congested cities, where there is no single site available at a reasonable cost which is large enough, without overcrowding, for the number of units which it may be desired to build on a single site in the city as a whole or in an approximately defined section of the city. In such cases study should be

given to the possibility of dividing the desired number of units among more than one site, and sites which fulfill the requirements of the project in respects other than size should be sought; but the reduced number of units to be built on any site must not be below the minimum necessary for operating efficiency.

Size of Site in Relation to Site Density

Although the foregoing discussion of the influence of the number of units on the size of the site suggests an aspect of the site selection problem which the local housing authority should have in mind when it begins the search for sites, actual experience shows that among projects which have been approved by the USHA there has been the widest variation in the relationship of the size of site to the number of units. The average condition as to density for a group of 72 of the sites which have been approved is 21 units per net acre. (Net acreage is the area of the developed portion of the site after public thoroughfares have been deducted.) Certain projects with exceptionally high densities, such as those in New York City and Boston, are not included in this group. The range of density in this group of 72 sites is from 39.8 to 5.4 units per net acre. The median figure for this group is 19.7 units per net acre. The principal significance of these figures is that they show the wide range of density and indicate that there can be no rule of thumb whereby the size of the site required for a given number of units can be figured with complaisant exactitude. The existence of this wide range shows that a large degree of individuality has been used in site planning and the provision of open spaces, recreation areas, and types of dwelling and non-dwelling buildings.

The density will be influenced materially by the type of structures which are built. During the development of the plans, but not necessarily at the time of site selection, there must be a decision as to the dwelling types or combination of types. These types may be apartment buildings, either of the walk-up kind or of the multi-story elevator kind, one-story or two-story row houses, flats, "twin" houses, or single detached houses. It is obvious that site density which may be appropriate for one type of housing may not be appropriate for some other type. The fundamental consideration is that density must not be so great as to jeopardize the admittance of sunlight and air, privacy, and other amenities of living for the tenants, or as to be inconsistent with the characteristics of the community and the neighborhood in which the project is located.

In thinking of the matter of site density and of the types of buildings we must not forget the objective of our program, namely, the building of housing for the lowest income groups. We must restrain our enthusiasm for the ideal and accept solutions which, while fulfilling the requirements of good housing for these people, are nevertheless within the limits imposed by the necessity of careful economy both in first cost and

in subsequent operating cost. Under ordinary conditions a decrease in density will increase the cost per unit for land, utilities and site improvements, and, in most cases, the cost of operation thereafter. This is one of the considerations which has caused the widespread adoption of the row house plan of development, frequently in cases where it was the original desire of the local housing authority to fulfill the ideal of the detached house on an individual lot.

Although the economic factors of site density must be carefully considered, there are other factors for the influencing of density and the type of buildings which must not be neglected. Among these are the geographical location of the city, which influence its climate and the habitation customs of its inhabitants, the size of the city, and the location of the site in the city in its relationship to existing densities or densities which may be contemplated by an established city plan or zoning plan. The details of the site plan will finally determine the density. The principles of site planning are discussed in Bulletin No. 11 of this series.

In the matter of appropriate densities, as in other problems of the local housing program, the advice of the local city planning body should be sought at the very beginning of the search for possible sites.

Sectional Distribution of Housing Projects Within the City

In many cases the total market as determined for the community as a whole should not be the sole basis for the determination of the number of units for which a site must be selected. Sectional influences within the community may tend to prevent freedom of movement of families from one part of the community to another. The total market may be divided into geographic segments between which there may be but little hope of interchange of families. Such sectionalization of the market may result from the existence of various employment concentration points, together with transportation difficulties and distance or topographic barriers; or from a determined preference of special groups, racial or otherwise, for certain sections of the community in which they have long been established. The question of site selection, as affected by the number of units to be built, should therefore be studied in its relationship to the geographical distribution of the total market, insofar as such distribution may be considered as being set in a somewhat permanent pattern.

Racial Considerations in Site Selection

The second prerequisite assumption with which the local authority should begin its search for a site is that concerning the racial distribution of the total number of families to be served - that is, if the authority has decided that local conditions indicate that there should be any distribution along racial lines. This subject has been mentioned briefly above. Where it has been decided that a project should be built

to serve families who are predominantly of a given race, care must be exercised in selecting a site which will not do violence to the preferences and established habits of members of that race or to the community life of which they may be a part. The aim of the authority should be the preservation rather than the disruption of community social structures which best fit the desires of the groups concerned.

Particular care should be exercised in site selection to safeguard the interests of minority groups which may be affected. Although it is the responsibility of the local housing authority to decide its own racial policy, certain desirable principles may be suggested for application in this connection. Some of these may be enumerated as follows:

- (1) The development of public housing projects for white occupancy in areas now occupied by Negroes or other minority racial groups is undesirable. This is particularly true where a considerable amount of home ownership or existing community facilities indicate that an integrated community of Negro, Mexican, or other minority composition is established.
- (2) Whenever exceptions are to be made to this general policy, the local authority should demonstrate the circumstances which it believes justify the exception and there should be obtained, if possible, a statement of concurrence in the program from representative spokesmen of the racial group to be displaced.
- (3) Any local program which involves the demolition of a number of houses available to minority racial groups which is considerably greater than the total to be provided for these groups in the new project is undesirable. In many sections of the country the supply of housing available to minority groups - Mexicans and Negroes particularly - is artificially limited by racial restrictions. If houses in which these groups are now living are demolished, houses in other sections of the city evacuated by tenants moving into the new projects are seldom available to these displaced minority groups. In the case of home owners of the minority groups there will generally be great difficulty in acquiring comparable homes elsewhere in the city.
- (4) If it is decided to develop sites which are either inhabited now by members of more than one race or, in the case of vacant sites, are contiguous to neighborhoods which are inhabited by different races, local authorities should plan projects open to the members of these different groups.

Study of Alternative Site Possibilities

Having arrived at a fairly well-defined decision as to the number of units for which a site or sites must be found and bearing in mind the racial implications of the problem, as discussed above, if any should exist, the local authority will do well to examine the possibilities and the suitability of as many different sites as may have a reasonable claim to attention and, by a process of elimination, to narrow its examination to a few which appear to be worthy of a more intensive study. The practice, which occasionally is followed by a local housing authority, of jumping to a conclusion in the selection of a site without having thoroughly explored the possibility of there being a superior alternative, is to be condemned.

It is strongly recommended that a tabulation be prepared to show side by side the characteristics of the various sites which are worthy of consideration. Frequently a site which may receive little attention as a possibility at first will appear in a more favorable light after a detailed comparison with other possible sites. It is to be remembered that in making such comparisons, as elsewhere in the development of the local authority's program, the services of the legal and project planning advisers and of other specialists of the USHA are available. In the following pages some of the additional factors which should be considered in connection with site selection will be discussed. The check list which is included hereafter in this bulletin may be used as a basis for rating alternative site possibilities.

Vacant or Slum Sites

Although the objectives of the U. S. Housing Act of 1937 include slum clearance as well as the building of homes for the lowest income groups, it will be well for the local housing authority to begin its site selection study without a predetermined decision as between a slum-site program and the use of vacant or partly vacant land. The availability of properly placed sites of each type should be explored and the comparative advantages, economic and otherwise, of each type should be examined.

A slum clearance site which may in other respects seem very desirable may, upon investigation, prove to be too expensive to acquire; or the problem of relocating present residents may present serious difficulties. A further analysis of the racial situation may show unexpected complications. As slum sites are generally held by a large number of individual owners, the difficulty of acquisition or the danger of delay may, upon investigation, appear to be serious. Above all, a check of land uses, both existing and trends, in the vicinity of the site under consideration, either with the assistance of the City Planning Commission (if there is one), or as undertaken by the local authority, may show that the site is better suited to other than residential uses or that it is definitely unsuitable for continued use as a residential neighborhood.

On the other hand, a vacant site may at first arouse enthusiasm because of its cheapness or its ease of acquisition, or because of its excellent topography or beautiful surroundings. But a more careful examination may show that it should not be selected because it is not properly located with respect to employment opportunities for the low-income families which would be its tenants; or because school facilities or transit facilities are inadequate and the prospect of such lack being corrected is remote; or because utilities are lacking and cannot be extended to the site without considerable expense to the project or to the city; or because its location within the city structure is such that it should logically be put to other than residential use, such as industry or perhaps a public park; or because the site is more suitable for residential development by private industry for a higher income group.

These are a few of the faults which may appear when the local authority undertakes a careful evaluation of sites to which its attention may in the beginning be hopefully directed. They are cited here in order to emphasize the desirability of making a careful comparative analysis of the merits of a number of sites, before any off-hand decision is made either as to a particular site or as between a slum-site and a vacant land program.

Where the relocation problem would be serious under a slum-site program, and particularly in communities where it may be expected that more than one project will be built, either presently or within the near future, it may be advisable to choose a vacant land site for the first development. If the slum clearance part of the program is deferred until the new housing on the first project is available or nearly available, the relocation difficulties will be alleviated.

Natural Boundaries of the Site

It is well to bear in mind the fact that it is desirable, other things being equal, that a site have natural boundaries, at least on a portion of its periphery. This is both in the interest of the protection of the project and in the interest of a logical future extension of the housing or slum clearance program. Such natural boundary may be a park, a cemetery, the grounds of a large public institution, a river or stream, a ravine or a bluff, a railroad, an important street or highway, or a well-defined boundary of a commercial or light industrial area. In a slum district or blighted area a first project will seldom clean up all of the blight. It is therefore sensible to locate such project in a position from which it can be readily expanded step by step. Should the project be set down in the middle of a slum area which may be considered as appropriate for future reclamation and residential use, the chances of spotty industrial and commercial encroachment are increased. If, on the other hand, the reclamation program should begin with a site adjacent to a natural boundary of this area, the danger of such uncontrolled spotty development would be lessened.

There are, of course, various considerations, including that of cost, which may make it necessary to select a first site without regard to this question of natural boundaries. In such cases it would be well to locate the site so that it may eventually be expanded outwardly to reach some natural boundary. This is especially true for slum clearance sites, but it may sometimes be equally true for a site in open territory. In the case of a site in open territory it is well to remember that population density on the first site should not be established at such a high level that it will tend to make more difficult the later acquisition of the adjacent land.

A somewhat different but related matter is the situation where certain street frontage is too expensive for use for low-rental housing but may to advantage be acquired and leased to private developers for commercial or other uses as a measure of protection to the project, in order to eliminate a "business slum" along its border, or in order to provide for street widening, or in order to insure desired points of access to the project. The introduction of this subject is not to be interpreted as establishing any general policy of the USHA under which the acquisition of land for commercial purposes is authorized. Any such plan must be justified by the special circumstances peculiar to a given project. But it is mentioned here because it may, in certain cases, have a bearing on the question of site boundaries.

Exclusion of Through Streets from the Project

If possible a site should be selected which will permit the exclusion of through traffic from streets within the project. The optimum condition is where there are no streets within the project except those which are necessary for the service of the project itself. It will also be in the interest of safety for children and of quietness if there are no streets which carry heavy traffic on its boundaries. It is especially desirable that the site should not be split by a major traffic artery. It is true, of course, that in some cases other circumstances affecting site selection make the avoidance of this condition impossible. In general, the objections to the inclusion of a major thoroughfare decrease as the size of the project increases.

The closing of even minor streets which may be so located as to encourage the through movement of traffic is also most desirable. This possibility is sometimes complicated by the existence of utilities under the streets which should not be moved. Even so, it is often possible to close the streets and arrange the position of buildings so that the utility lines are left under the project open spaces. The attitude of the city government and the city planning commission on desirable street closing should be determined before a decision on site selection is made.

Comparison of Costs of Street Construction and Utilities for Various Sites

Land values are obviously governed to some degree by the extent of public improvements already built and for which the property owners have been assessed. In comparing prospective sites, it will frequently be desirable to make comparative estimates on the probable cost to the project of street construction or reconstruction and of utility installation. For comparative purposes, such costs must be added to the cost of the land.

For example, it may be found that for a vacant tract the cost of land plus the cost of site improvement items such as street paving, storm and sanitary sewer mains, and water and gas mains, will be more per acre than for a slum-clearance site where such improvements are, for the most part, already built and in usable condition.

Approximate, comparative estimates can be prepared readily and will present the facts in a concrete manner. The figures should obviously not include work which it may be safely assumed will be donated by the municipality. The cost of service roads, utility services, etc., within the project property will generally be much the same for sites of comparable size and therefore may not be particularly significant for the purpose of site comparison.

Such evaluations may be extended to cover differences in costs resulting from varying physiographic conditions, if these differences are significant; - for example, excess grading and foundation costs of one site as compared with another.

Transportation Costs

As we are considering housing for the lowest income groups only, the effect of site selection on the cost of transportation for the tenants is of great importance. Added transportation costs are virtually equivalent to added rents. The USHA is to pay subsidies in connection with these projects over a long term of years in order to reduce rents. It would therefore be illogical to select a site on the merits only of its lower first cost if its location is such that the additional transportation cost to the tenants would in part nullify the advantages of the subsidy. Sometimes there may be an approximate theoretical economic balance between the additional first cost of one site as compared with the additional continuing transportation expense which the selection of another site would impose upon the tenants. Even so, there should be compelling reasons other than first cost for the choosing of the cheaper of two sites if the resulting transportation cost to the tenants is materially increased thereby. Even where there is a theoretical balance of the economic factors it should be remembered that the policies of our present program call for greater consideration being given to the continuing expenses of the tenant than to the first costs of the project.

Consideration should be given to the possibility, however, that a present unfavorable transportation cost condition will tend to change for the better. For example, an outlying site may be justified if it is thought that within a reasonable time industry will move either near to it or beyond it and thus place it in a more favorable position as to transportation to a large field of employment.

In comparing the merits of sites from the standpoint of transportation costs, due consideration may be given to the probability that a certain percentage of the tenants will use automobiles, either individually or in a cooperative way, as their regular means of transportation. This percentage will vary in different parts of the country. There are cities where a large proportion of even the poorest families manage to own some kind of automobile. The future trend in this matter cannot be predicted.

Check List of Items to Be Considered in Site Selection

In the preceding paragraphs there have been discussed some of the factors which the local housing authority should have in mind when it approaches the problem of site selection, including some of the fundamentals of that problem. In the following list are various points which should be considered in the comparative analysis of the sites which are being investigated. The order in which they appear is not to be taken as being indicative of their relative importance. This list is not necessarily all-inclusive, since under local circumstances there may be items not mentioned here which should have an important influence upon site selection. It is suggested that in rating sites the following items be considered:

1. Present and Future Land Uses in the Neighborhood and in the City as a Whole.
 - (a) Effect of present neighboring land uses, such as heavy industry, light industry, commerce, or railroads, upon suitability of the site for residential use.
 - (b) Present zoning of the neighborhood for land use.
 - (c) Discernible trends or reasonable predictions as to changes in land use in the neighborhood and in the city as a whole as such changes may affect the suitability of the site for residential use or the permanency of the residential character of the neighborhood.
 - (d) Effect of any particularly harmful land uses or environmental factors, such as may produce, in an objectionable degree, noise, odors, smoke, dust, flies, mosquitoes, etc.

- (e) Zoning changes which should be obtained for the protection of the project.
- (f) The prospects as to the possibility, from a practical standpoint, of bringing about zoning changes which may be essential for the protection of the site.
- (g) Suitability of the neighborhood for the type of structures (apartments, row houses, etc.) which it may be intended to build.

2. Population Factors.

- (a) Suitability of the site from the racial standpoint.
- (b) Population density of the neighborhood, or prospective density, as it may have a bearing upon the type of housing project proposed.
- (c) Population trends in the city as a whole as they may have a bearing upon the future population of the neighborhood and its continuing stability as a residential district.

3. Accessibility to Employment.

- (a) Accessibility of the site to centers of employment or to fields of scattered employment in which the low-income tenants of the project may be expected to be engaged, either by walkable routes or by transportation facilities which are reasonable both as to cost and as to time of travel.
- (b) Adequacy of the employment opportunities to which the site is easily accessible to meet the needs of the number of families to be tenanted on the site.
- (c) Stability or seasonal character of the employment to which the site is considered accessible.

4. Transportation Facilities.

- (a) Existing transportation facilities within a reasonable distance from the site which can furnish satisfactory service to tenants in going to employment and to commercial or other community centers.

- (b) Prospects for the establishment of needed transportation facilities where adequate facilities do not exist.
- (c) Adequacy of service and schedules of existing transportation facilities or prospects as to obtaining adequate service.
- (d) Cost to tenants of necessary transportation service.

5. School Facilities.

- (a) The distance by walkable routes to grade schools both public and parochial.
- (b) The distance by walkable routes or by transportation routes to junior high schools and to high schools.
- (c) The capacity of appropriately located schools of all grades to absorb the children of the project.
- (d) Where conveniently located schools of adequate capacity do not exist, the prospects as to proper facilities being provided, either through the building or enlargement of schools or through the provision of transportation to existing schools.

6. Recreational and Social Facilities.

- (a) Accessibility to existing parks, playgrounds, or other recreational facilities, with due consideration to whether these facilities will be available to the tenants of the project.
- (b) Prospect as to future public recreational facilities to be available to the tenants.
- (c) Accessibility to religious and social facilities for the tenants.
- (d) Necessity for the construction of supplementary recreational and social facilities as a part of the project if the site under consideration is chosen, and the probable effect upon first cost and operating cost of the project.

7. Accessibility to Stores and Other Commercial Services.

- (a) Accessibility of the site to existing commercial centers or to commercial centers which may be expected to be developed by private enterprise outside of the site.
- (b) Need for the provision of commercial facilities on the site as a part of the project development.

8. Topography and Physiographic Features of the Site.

- (a) Topography of the site as it affects the percentage of buildable area and the possibility of an acceptable site plan, considering its aesthetic aspects, its livability and convenience for the tenants, and its economy of maintenance.
- (b) Topography of the site as it affects cost of building construction and of site improvements.
- (c) Topography of the site as it affects vehicular and pedestrian access to the project and connections with the external thoroughfare system.
- (d) Grading requirements in general.
- (e) Rock excavation to be encountered in grading or in building construction, particularly if cellars are deemed desirable.
- (f) Underground conditions with respect to old mines which may cause "sinks," or with respect to burning coal seams.
- (g) Liability to flooding from rivers, streams or "tidal back up," and present or prospective protective measures against flood.
- (h) Ground water conditions as they may affect cellar dampness or foundation stability and possibilities as to drainage of swampy areas or lowering of ground water level.
- (i) Character of the ground as it affects its bearing capacity for foundations, as, for example, in the case of alluvial deposit requiring piling for adequate support of structures.
- (j) Conditions as to filled ground or old refuse dumps, upon which buildings could not safely be placed without expensive foundation work.

9. Availability and Adequacy of Utilities.

- (a) Water supply and character of the water available (water softening expense, effect of acidity on piping, etc.), including information from qualified engineers as to the adequacy of the supply mains and of the source of supply for the number of families proposed and for fire protection for the project, and including information as to approximate cost to the project, if any, of providing adequate supply mains.
- (b) Sanitary sewage disposal provisions, including information as to measures necessary for disposal, the adequacy of existing mains, and the cost to the project, if any, of providing adequate mains.
- (c) Storm water disposal, including positive information on the adequacy of existing storm sewers and the cost to the project, if any, of providing adequate drainage facilities; also information on the question of the responsibility for taking care of storm water which flows from the site into adjoining streets and properties, and including any legal question arising from the need of diverting storm water from natural channels.
- (d) Electric current supply, including proximity of adequate power lines and any question of cost which may be involved in the extension of service to the project, and including any question of differential rates as they may be affected by the location of the site.
- (e) Gas supply (if the use of gas is to be considered), including proximity and adequacy of the mains from which the supply must be taken and including any question of cost to the project for the extension of the mains to the project boundaries.

10. Community Services.

- (a) Disposal of garbage and refuse, including the responsibility for its performance and the method of disposal as affected by the site location.
- (b) Fire protection, as affected by the site location and by street access, and the possible influence upon insurance rates.

- (c) Police protection, snow removal, street lighting, street tree planting and maintenance, and other municipal services as affected by site location.

11. Relation to the Thoroughfare System and Condition of Streets.

- (a) Accessibility to the site by way of paved streets of the prospects for the building or paving of access streets by the municipality.
- (b) Condition and extent of present improvements on streets within, bounding, or leading to the site which are to remain open, and cost to the project, if any, of their paving or other needed improvement.
- (c) Position of the site in the general street or highway plan of the community as it may affect the character of the project or as it may affect the carrying out of the street or highway plan by the municipality or county.
- (d) Relationship of the site to major thoroughfares which may be objectionable from the standpoint of noise or hazard, either because they pass through or are adjacent to the site.
- (e) The street or highway system in the neighborhood of the site as it may affect the safety or convenience of children in going to schools or commercial centers.
- (f) The possibilities as to the closing of existing streets within the site, taking into account utility lines in existing streets.

12. Possibility of Later Enlargement of the Project.

- (a) Possibility of future acquisition of suitable adjacent vacant or built up land at reasonable cost.
- (b) Adjacent barriers to future extension of the project.

13. Cost of the Site and Acquisition Problems.

- (a) The probable cost of land to be purchased.
- (b) The possibility of the donation of land, either by private owners or by the municipality.

- (c) The prospect of serious acquisition difficulties which may block delay assemblage of the tract.
- (d) The existence of easements for underground or overhead utilities or of mineral rights, water rights, or riparian rights, which may complicate site acquisition or interfere with the project in any way.
- (e) The inclusion within the site of historical land marks or monuments, which it would be to the public interest to preserve, or the destruction or removal of which might cause public resentment.
- (f) The inclusion within the site of a considerable number of good houses, or of stores, churches, industrial plants, or other structures, the destruction of which would be hard to justify.

14. Relocation Problems.

- (a) The racial aspect of the problem of relocating present residents of the site (as discussed hereinbefore).
- (b) The relocation problem caused by the removal of present residents, in its relation to an existing housing shortage.

The preceding discussion of site selection may be supplemented to advantage through the reading of some of the other bulletins of this series, especially Bulletin No. 1 on Excess Land, Bulletin No. 5 on Progressive Steps in the Initiation of a Low-Rent Housing Project, Bulletin No. 11 on Site Planning, and Bulletin No. 14 on Site Engineering Design. An examination of the form provided for the use of local housing authorities in making formal application to the USHA for financial assistance will also be of value at the beginning of the site selection task by indicating the items of information concerning proposed sites which must be presented to the USHA and also the factors of need, market, and racial policy which must justify the selection of sites.

Site Selection and Publicity

The entire procedure of site selection must be conditioned by the necessity of avoiding premature publicity as to sites which are being considered or have been chosen. In the normal case publicity is generally not advisable until a certain stage in the progress of the work has been reached. Sometimes this is not until the taking of options is under way. Premature publicity may result in increased prices and in obstructive measures of various kinds. On the other hand, unnecessary secretiveness

may result in public resentment. Each local housing authority should use due discretion as to the proper time for publicity concerning its choice of site.

Conclusion

The foregoing discussion is intended to bring out emphatically the principle that the proper selection of sites constitutes the foundation upon which a housing program must be built to be successful. The full realization of this fact on the part of the members of local housing authorities and of their responsible technical advisers will go far toward insuring the success of local housing programs.



NATHAN STRAUS,
Administrator.

February 13, 1939.