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[See inside back cover for statement of objectives of NAHO]
PLANNING FOR LOW-RENT HOUSING

A Non-Technical Guide for Local Authorities

NATIONAL ASSOCIATION OF HOUSING OFFICIALS

CHICAGO ILLINOIS
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Demolition


Contains copy of WPA ruling on demolition projects.

———. Demolition of Unsafe and Insanitary Housing. 850 E. 58th St., Chicago, April 1934 (now being revised).


Management


An early report. Not a model but worth looking at.

Olson, Herman E. *The Minneapolis Property and Housing Survey*. City Planning Commission, Minneapolis, June 19, 1934. mimeo. Same comment as on Milwaukee report.


B. Special Studies


Low-rent housing


Too old to include much material of current use, but a valuable historical source.

**Local Authority Procedure**


**Housing Standards**


Thompson, George N. *Preparation and Revision of Building Codes.* Public Administration Service, 850 E. 58th St., Chicago, 1938 (in preparation).


**Sample Reports and Studies**

**A. General**

Dayton City Plan Board. *Housing Survey, City of Dayton, Ohio.* 1934. 95 pp. Free on request.

An early report. Not a model, but worth looking at.


i) Farm Security (formerly Resettlement) Administration
   Has made income and other economic studies of certain urban centers related to its suburban projects.

j) National Resources Committee
   Has made various studies which have a bearing on future housing needs, such as general studies of urban problems and estimates of future population totals and composition.

B. BIBLIOGRAPHY

At present it is impossible to outline a satisfactory bibliography on planning for housing. Much of the best material has never been published. Other reports were thrown together hurriedly to support a particular project and, although substantively good, are poorly organized.

Anyone wanting a more general bibliography on housing should see the Housing Officials’ Yearbook 1937, published by the Association.

No references are included here to studies of survey techniques and methods.

General

A few readers of this booklet may want to know the best general introductions to housing thought and action in recent years. The following references are to the best material for this purpose:


National Association of Housing Officials. Housing Officials’ Yearbook. 850 E. 58th St., Chicago.
   1936 edition. 244 pp. $2.
   1937 edition. 213 pp. $3.


FOREWORD

THIS booklet is a joint product. It was first outlined in general terms by NAHO’s Committee on Instruction and Research in Housing. Mr. William Stanley Parker, a member of this Committee and now one of the Board of Governors of the Association, filled in the outline and prepared the text. His first drafts were criticized by Mr. Edwin S. Burdell, Chairman, other members of the Committee, and by members of NAHO’s staff. It was reviewed at a roundtable at NAHO’s Annual Meeting in Cleveland last November. The amended draft was tried out in the field by Mr. Hugh Pomeroy, Chief of our Field Service, who made some very valuable additions and substantial amendments. Leading members of the staff of the United States Housing Authority offered useful criticisms of this version. Finally, NAHO’s staff became responsible for the final editing and last-minute changes.

Mr. Walter H. Blucher and others of the American Society of Planning Officials commented upon the original proposal, helped to shape the outline, and made useful suggestions on the later drafts. I am happy to say that Mr. Blucher believes that the end product is “excellent . . . very much needed and exceedingly worth while.”

As its title makes quite clear, this booklet is on planning as a duty of the members and chief administrative officials of local housing authorities. It does not go into the details of collecting, tabulating, editing and mapping information. Inasmuch as nearly all local housing authorities will work very closely with the United States Housing Authority, the requirements of USHA’s Act and program have been pointed out in several sections.

The booklet has been written for immediate and specific application to some of the local authorities’ jobs that are
first in order of time and importance. I believe that it will also promote a sense of balance and perspective on the tasks and responsibilities of local authorities. Naturally enough today, startling differences of opinion exist among different authorities and often among members of the same authority as to the nature and difficulty of their work. To some it is all very easy; there is nothing to it. Houses have been built for thousands of years and the present job is simply to build some more of them, with the aid of public credit and subsidy, for families of low income. To others the local authority’s task is to mark out a discouragingly difficult trail through an uncharted economic wilderness, with technical, financial, legal, administrative, social and political hazards on every hand.

I hope that “Planning for Low-Rent Housing” may destroy these extreme views, paint a sharp picture of some of the major tasks, and show how they may be approached intelligently and confidently. Anyone reading it should realize that local housing authorities can no longer be looked upon as advisory committees whose members need only be filled with good intentions and fine thoughts. Rather they appear in their true colors: as public corporations with extensive powers to engage in a complicated economic undertaking and with supplementary powers to advise and assist the honest private producer of housing. Finally, the reader should see that planning is not a “theoretical” approach to a “practical” job. It is the continuous process of applying foresight to facts from the first general housing survey to the selection of the last tenant.

As in its other publications, NAHO knows that this pamphlet is only a first step in a long process of learning from experience. Criticisms of all kinds will be welcomed.

COLEMAN WOODBURY
Director, NAHO

January 11, 1938

(4) Studies of European housing policy and practice.
(5) Researches in the principles of city growth and structure.
(6) Housing market analyses in certain communities.
(7) Studies of materials and methods of construction and rulings as to their acceptability for projects insured by FHA.
(8) Local minimum standards of housing, planning and construction as approved for FHA-insured mortgages.
(9) Studies of mechanical equipment suitable for low-rent houses.

Much of this material has not yet been prepared for distribution but is available through consultation at local offices or the Washington headquarters of the FHA.

c) Department of Commerce
This department organized and supervised the Real Property Inventory of 64 cities which was made in 1934 and will advise any city that desires to take such an inventory. Census data by tracts or otherwise are available and essential.

d) Department of Labor
Its data on wages, rentals, costs of living, and budgets of working families will be useful.

e) Treasury Department
Its Public Health Service has collected and reported much basic data related to housing.

f) Federal Home Loan Bank Board
Various surveys of housing conditions and city growth have been made. The agencies under the direction of the Board, including the HOLC, have had much experience and are directly concerned with conditions and prospects in many areas in which local housing authorities also will be working.

g) Works Progress Administration
The Division of Social Research is preparing technical manuals on various types of social surveys done with relief labor. Records of actual studies in particular localities should be found in local or state offices.

h) Central Housing Committee
This is a coordinating agency for the federal government agencies in housing. Its subcommittees have made useful researches and compilations. Usually these do not deal with local communities.
cials of the latter may have some first-hand ideas about living habits of prospective tenants that would be useful in project development.

2. The State

Any information available will most probably be in the hands of the state housing board, if one exists. If there is a state planning board, it may have made general studies having some bearing on the local problems. State relief agencies may have information on incomes of the lowest income groups, rentals and distressed areas.

3. The Federal Government

Several federal agencies are concerned to a greater or lesser degree in housing. The following are the ones most likely to be of assistance, in some cases with collected data, and in others with assistance in techniques and methods.

a) United States Housing Authority

This is the national authority established under the terms of the United States Housing Act of 1937 (Wagner-Steagall Act). It is the agency through which federal aid for low-rent public housing will be secured in the form of loans and subsidies. It will determine the conditions and the physical standards under which aid will be given. Naturally it is the principal federal agency to which the local housing authority should turn. It will have available the result of the experience gained in the design and construction of the housing projects built under the PWA Housing Division from 1933 to 1937.

b) Federal Housing Administration

This agency has made many studies of local housing conditions in connection with the development of its policies in insuring mortgages on housing properties, and has instructed its State Directors and Chief Underwriters to cooperate in every way possible with local housing authorities in making available any information that they may have. Early consultation with the local representatives of FHA may save much expensive duplication of effort and delay. Material such as the following may thus be found immediately available:

1. Data maps of the 64 cities which were covered by the Real Property Inventory of 1934, showing housing conditions as found in that survey.
2. A technique for rent and vacancy surveys to be used in following up general real property surveys.
Appendices

A. EXISTING SOURCES OF INFORMATION

Before undertaking the basic surveys outlined in this pamphlet, the housing authority should canvass the following agencies to learn what studies they may have made that bear upon housing and what facts they have at hand.

1. THE MUNICIPALITY

The problems before a local housing authority are local problems and the housing authority should turn first to the departments of the city government and to other local agencies for such information as they may have as to housing conditions and needs in the city. Working arrangements will have to be developed with these municipal departments, and their cooperation and that of other local agencies will be most desirable. The city planning board will be the department most likely to have made general surveys related to housing, and close cooperation between the planning board and the housing authority is vital to the work of both agencies. The tax assessor will have information as to types of buildings and assessed values. The building commissioner (or corresponding officer) and the health department will have valuable information as to the physical conditions of dwellings in areas of unfit housing and on demolition accomplishments and needs.

The board of education, the juvenile court and the departments of sociology and economics of local colleges and universities are more than likely to have valuable sets of facts on population trends, delinquency areas, and poverty stricken districts.

Local councils of social service agencies and welfare federations will be likely to have accurate and direct knowledge of actual housing conditions, overcrowding and related social conditions. In some cities housing councils or associations and other citizen groups interested in housing have made valuable studies.

Research departments of utility companies will usually be found to have information of value on population trends and other factors.

Real estate boards may have vacancy data and surveys of market activity in various types of housing. The Sanborn Insurance Atlases and the Hopkins Maps (where available) give the nature and location of buildings.

Personnel departments of large industrial and commercial employers and labor unions are often good sources of information on incomes. Offi-
Planning for Low-Rent Housing
A Non-Technical Guide for Local Authorities

I. GENERAL OUTLINE

A. Scope of the Pamphlet

The purpose of this pamphlet is to indicate the problems facing a local housing authority, the things it must know, the surveys and other procedures necessary to enable it to know these things and to carry on its work.

The pamphlet will not attempt to explain the technical details of the various operations involved. These may be the subject of another pamphlet designed to aid the technical staff of the housing authority in carrying on the field work of the various surveys, in recording and analyzing the data.

B. Functions of a Housing Authority

The duties of a housing authority are defined in the statute under which it is created. A housing authority should first of all make a careful analysis of the enactments under which it has been established, in order to have a clear understanding of its responsibilities and its limitations. In general, its chief duty is to secure adequate housing accommodations (1) by bringing about the removal of existing unfit housing; (2) by rehabilitating or causing the rehabilitation of old dwellings that are structurally sound, adequately provided with light and air and properly located for dwelling purposes, but which have become obsolete or lack necessary sanitary or other facilities; and (3) by building and managing new housing units for the low income

VI. SUMMARY

A housing authority must progress towards its objective by means of a series of equally important steps. It needs first a sound foundation of facts as recorded in a series of community surveys. It must then analyze the facts intelligently and from this analysis arrive at definite conclusions as to the action it can take under its legal authority and should take in accord with its official responsibility in the proper housing of the citizens of its community. These conclusions must be carried through to definite designs for new housing or the rehabilitation of existing housing, and be made real by their sound construction and competent management.

The problem is a continuing one and the housing authority must develop a long-range program, but take one step at a time. The authority must not neglect to develop a community understanding of its program. It cannot hope to succeed in its work without public support which will have to be manifested in public appropriations and in other ways. Its publicity must be based on facts and a well considered program. It must be intelligently handled in order to gain support and not opposition.
families who are not and can not be served adequately by private enterprise.¹

These are the general objective and the three broad operating methods of a housing authority. The extent to which one or another of these methods will dominate the others and the procedures needed to achieve results will be determined by local conditions. Only by a thorough analysis of local facts can sound progress be made. No one can impose a solution. It must be developed by the application of skilled technical abilities, common sense and sober judgment to the social, economic and physical facts of the community. There will, therefore, be two broad divisions in the work: one, the duties of the members of the housing authority; and the other, the duties of the administrative and technical staff.

The members of the housing authority should determine policies. To do so wisely they must become familiar with the surveys needed to disclose the basic elements of housing problems; reasonable minimum housing requirements for the different rental, economic and social groups to be housed; the larger plans for the growth of the community; typical housing as provided in other comparable communities; and the other elements outlined below.

To make steady progress a housing authority will need a staff² trained in the technique of housing investigations, whose duties it will be to make the necessary surveys, to analyze the data and to develop the technical solutions of problems.

¹ Although these are the specific duties of most housing authorities, they should also give attention to encouraging private enterprise more fully to provide housing for those families capable of paying an economic rent, thus extending private operations to the lowest practicable rental range so as to serve the largest possible percentage of the total housing market.

² Local conditions will determine how much of this staff should be on the housing authority's payroll and how much may be in the employ of the city planning department or commission or other public agency but available for work with the authority. The size of this staff also will vary from one stage of the authority's program to another.

depend upon the ability of the manager to meet these varied and often delicate responsibilities.

This is one of the most important matters with which the housing authority has to deal. References to publications on it are given in the appended Bibliography. It is impracticable here to do more than emphasize its importance.

V. COOPERATION WITH OTHER AGENCIES

Responsibility for demolishing unfit housing, revising building codes and zoning laws (if necessary), making various city planning studies related to new housing projects and supervising the use of major recreation areas and facilities in or near a project, should lie with various other municipal agencies. The housing authority should cooperate wholeheartedly with these agencies in order fully to accomplish its official duty.

The rehabilitation of depreciated housing areas often may be best carried on through local private enterprise. The housing authority should seek to bring this about wherever it is possible. Where, however, cooperation of local property owners is found impracticable the housing authority should seek ways to develop projects of this sort under its own powers.

Limited-dividend and cooperative housing developments, particularly in their early stages, should be helped by an alert and sympathetic local authority. These semi-public agencies can serve a genuine housing need. Often their proposed projects bog down because their sponsors lack the special information and skill that a good local authority should make every effort to develop among its membership and on its staff. A helping hand from the authority to a newly born limited-dividend or cooperative enterprise often will make the difference between failure and a fair chance at success.
recent development. It is based partially upon experience in other countries.

A supply of competent housing project managers soon will be needed. The PWA Housing Division has employed some; local authorities working under the United States Housing Act will require more. A course of training was organized in 1935 by the National Association of Housing Officials, in cooperation with the Housing Division of PWA and the Resettlement Administration. A local authority would do well to ask the Association and the United States Housing Authority about competent and available candidates. It is important that a manager be engaged well in advance of the completion of the project. As already noted, appointment of a manager to the authority’s staff while a project is in its preliminary stages brings to bear on the various decisions concerning the site plan, recreation facilities, and the planning and equipment of the housing units, the judgment of a person experienced in the practical administration of such properties. The manager’s ability and experience will also be needed in helping displaced families to find new homes.

The selection of tenants for a public housing project is, of itself, an operation involving new and delicate problems. The day-to-day relationship of the manager with the tenants in collecting rents, taking care of repairs, collecting wastes, settling disputes between tenants, administering recreation rooms and play spaces and assisting in cases of illness, requires native ability, training, experience and tact. The efficient administration and maintenance of the property also requires business competence. To develop among the tenants desirable relationships, social activities that spring from the initiative of the tenants rather than of the management and that result in a healthy neighborhood spirit, a keen sense of social values and a friendly personality is necessary. The success of the project will largely

the problems presented in terms of buildings to be demolished, buildings to be rehabilitated, and vacant or cleared areas to be provided with new housing.

C. What the Housing Authority Must Know

To know how to proceed and how to lay out a definite program of effective work the members of an authority must know the answers to the following questions and others related to them:

1. What are the general physical conditions of housing in the community?

2. How much of their incomes can families pay for rent and what rentals represent the dividing line between private and public housing enterprise in the community; i.e., that line below which adequate housing can be provided only by the housing authority itself?

3. How many families are there in the community whose incomes are such that the amounts they can safely pay for rent are below this dividing line between private and public housing enterprise?

4. What is the relation of housing to crime, delinquency and disease and to the costs of fire, police, health and other municipal services?

5. What trends in the local population are affecting housing conditions? Is the population increasing or decreasing? Is it to any extent moving out of certain sections and into others? Why?

6. What are the conditions of the housing market? Is there a surplus or a shortage of housing units?

7. Where are the business and industrial centers of employment in relation to the needs and the opportunities for decent housing?

8. What sections of the city or outlying suburban area will be best suited for housing for a long time to come?
9. When and how can land be secured for low-rent housing at reasonable prices?

Only a series of competently made surveys recording the essential physical, social and economic facts, plus their intelligent analysis, can make possible reliable answers to these questions. The four major steps in the process of securing the facts and using them to outline a specific housing program are summarized in the following paragraphs and are more fully developed in succeeding sections of this pamphlet.

1. Basic Surveys and Conclusions

The surveys needed and the types of conclusions to be reached are outlined below in Section II–A. Some of them need to be made only once, but many need to be repeated regularly if the facts are to be of the greatest usefulness. An accurate snapshot of housing conditions is worth having; a moving picture of changes over a period of time is much more valuable.

Some of the surveys may have been made already by some other agency. A first step should be to review all existing studies in the hands of municipal, state, and federal authorities and non-public agencies. These authorities and agencies and the types of information they may have available are listed in Appendix A.

2. Design of Projects

The basic factors involved in selecting a site and developing a design are outlined in Section III below. This work calls upon various techniques, requiring the highest technical ability available, to develop the design, to produce the plans and specifications, and to supervise construction. Except in a few of the largest metropolitan communities the budget of a housing authority probably will not permit including such skills in the permanent staff nor will the rou-

8. Securing Estimates from Contractors

Good bidding practice should be followed so that the housing authority may be assured of fair and intelligent bids from competent bidders. It will be the duty of the architect to advise the housing authority in this matter because it involves primarily the technique of his profession.

Before bids are invited, all legal formalities must be completed for securing the necessary funds, both federal and non-federal, except the final contracts that are dependent upon cost limitations. The advice of the corporation counsel or independent legal counsel of the housing authority should be sought.

9. Award of Contracts

The selected bid should be reported to the United States Housing Authority for approval before final acceptance and signing of contract. In this and other similar matters, the regulations established by the United States Housing Authority will control and should be kept constantly in mind.

The foregoing description of the progressive steps in the development of a project, although drafted with a new construction project primarily in mind, applies as well to a project involving the rehabilitation of a depreciated area. The project will start with an already built-up area instead of an unoccupied site or a site to be cleared, but the series of major decisions, as to the use of land, the ultimate nature of the physical improvements, and the development of the documents recording these decisions, will remain the same as outlined under the nine headings of (C).

IV. Management

Competent management of whatever housing projects are developed will be one of the principal concerns of a housing authority. This is a special technique of relatively
demolition may be done as a WPA project. Consideration should also be given to the length of time necessary to secure title to all the properties, whether assembled by private agreements or taken by eminent domain, the former being habitually a time-consuming process where many and varied ownerships are involved. As a matter of fact, both procedures will be found to take more time than is usually estimated as necessary.

7. Final Working Drawings and Specifications

The preparation of the final documents on which competitive estimates can be obtained is the duty of the technicians. Ample time should be allowed for this, particularly because many problems must be met and solved that will involve new factors and policies not found ordinarily in private construction work. The size of the operation generally magnifies the importance of every economy of material and labor, in relation to both first cost and upkeep. Many special investigations and studies will be desirable in order to secure the full benefit of the experience of other similar projects.

Members of the housing authority should familiarize themselves with the general character of the documents needed. Their completion will require final decisions on many materials and types of equipment which, although needing the experienced judgment of the technicians, must also be passed upon, understood and approved by the members of the housing authority as matters of general policy, social fitness, first cost and maintenance cost.

Before proceeding to secure estimates it would be advisable to submit the final drawings and final revised estimates of cost to the state housing board, if necessary, and to the United States Housing Authority for final approval. These agencies, because of their wide and intimate contacts with similar work elsewhere, often will be able to make useful suggestions.

tine duties of the staff require them. As a result, private practitioners will be employed in addition to the staff of the housing authority.

While most of the detailed work involved in designing a project is the responsibility of the technicians, many questions of policy must be settled on such matters as the types of housing units to be used; the number of rooms per unit; the types of utilities to be used for heat, light and cooking; various selections of materials; the social rooms needed, the extent and character of recreation facilities to be provided; the landscaping of the open spaces of the site. All of these questions must be understood, passed upon and answers made by the members of the housing authority from the point of view of general policy, social fitness, first cost and maintenance costs.

Whether the project be one of rehabilitating a group of old structures or designing an entirely new project, the same series of steps will be involved as outlined more in detail below in Section III.

3. Management

This most important element in the work of the housing authority is a new and complex problem needing special treatment. Its nature, importance and sources of more complete information are briefly indicated in Section IV.

4. Cooperation with Other Agencies

Existing material available in the hands of other agencies is outlined in Appendix A. During the development of the work of the housing authority, constructive cooperation with certain other public agencies and with private enterprise in this field will be needed. Examples are outlined briefly in Section V.
D. **Housing Authority Budget**

It will be futile for a city administration to create a housing authority unless it recognizes the difficulties, the magnitude and importance of the problems it must face and unless it provides an adequate appropriation for administrative, technical and clerical services. The amount will naturally vary according to the size of the community and the complexity of its problems. In the smaller communities it will be wise to secure guidance through the employment of consultants, limiting the permanent staff to a minimum personnel of an administrative and clerical rather than of a technical character. In the larger communities the magnitude of the problem will often warrant a staff large enough to include technical assistants in one or more branches of the work. Even in these cities it may be wise to rely on part-time consultant service to supplement staff activities and to aid in the development of broad policies. Suggestions as to staff requirements and recommended personnel standards will be found in “Administrative Personnel for Local Housing Authorities,” a first report by NAHO’s Committee on Personnel Standards.

The United States Housing Authority will require technically competent presentation of facts. The local housing authority must be in a position to meet these requirements.

**II. BASIC SURVEYS AND CONCLUSIONS**

A. **Facts To Be Found**

Before undertaking the design and construction of a housing project, the essential facts about housing conditions and needs must be found and presented in easily understood form. Without complete data carefully collected, competently presented, and intelligently analyzed, a housing authority will be unable to arrive at dependable and convincing conclusions. This means making various surveys, many of which have become well standardized by practice, out and rehousing themselves. It may be possible to secure the use of city-owned trucks to assist in moving, or otherwise to provide assistance to the end that as little cash outlay as possible shall be required.

Well in advance of the time of moving, the authority should assemble information as to all available dwelling accommodations at rents comparable to those being paid, with information as to the character and condition of the accommodations, and should provide the families to be displaced with this information. If a housing shortage exists in the city, the problem of rehousing may be very difficult. The housing shortage may well be so acute that it will be virtually impossible to clear areas of substandard housing until additional housing accommodations shall have been provided by the construction of a low-rent housing project on a vacant site, or by such other additions to the city’s total housing as will make available additional housing accommodations for the lower income groups.

6. **Site Acquisition**

Upon approval and allocation by USHA the site should be definitely selected, options secured or actual title obtained by purchase at a price consistent with a sound appraisal. USHA should be satisfied as to the reasonableness of the appraisal. Under some circumstances, options might be secured earlier in the process, but no substantial payments for land should be made until the United States Housing Authority has approved plans, including estimates of land costs, and has entered into contracts with the local authority.

If the site is to be cleared of buildings, much time can be saved by awarding contracts or making other arrangements for demolition so that the work can be completed by the time the drawings have been finished, contractors’ estimates received and a contract awarded. In many localities
housing units have been submitted to and approved by the United States Housing Authority. According to the procedure established by the United States Housing Authority, the first approval and allocation of a loan and contributions will be subject to the selection of a good site, decisions on the size and nature of the housing units, and the completion of promising site and typical unit plans.

4. Equivalent Demolition

As pointed out above (p. 24) the United States Housing Act now requires demolition, effective closing or compulsory repair of unfit housing units substantially equal in number to the number of newly constructed units in projects aided by USHA. This “equivalent demolition” may be on the site to be rebuilt or it may be elsewhere. It may be deferred by USHA if a housing shortage exists in the locality.

These provisions of the Act require USHA to be reasonably sure either that “equivalent demolition” has been carried out or that it can be accomplished during or soon after the construction is begun. The language of these provisions of the Act is none too clear; it leaves much to administrative interpretation. USHA’s rulings on this point should be most carefully studied by all local authorities. Here it need only be said that records of demolition already accomplished or under way or definite plans for it in the future should be prepared, as well as preliminary plans and estimates for project construction, to accompany a local authority’s request for preliminary contracts for loans and contributions from USHA.

5. Rehousing of Displaced Families

Whenever the required “equivalent demolition” takes place, the housing authority should assume a definite responsibility for assisting the displaced families in moving with full information available as to the best way to collect and chart the information.

Some of these, when once made, will remain useful for long periods of time. Most of them in a growing community, however, record statistics that are constantly fluctuating, as for instance vacancies, new construction and demolition, population, and cases of crime, delinquency and disease. Such surveys need to be repeated annually (or some every few years) to be dependable and also to show trends or changes as they develop.

The field and office techniques of such surveys are not described here. As pointed out above, these are primarily the duty of the staff of the housing authority and will be the subject of a separate pamphlet. Examples of typical surveys will be found in the Bibliography (Appendix B).

The necessary basic studies fall into four general groups:

1. City Structure and City Plan
2. Housing Standards
3. Substandard Housing Areas
4. Housing Needs and Market

This division of the subject recognizes that an intelligent housing program must be based on a broad understanding of the physical structure of the city and must harmonize with comprehensive plans for city development. Two facts demand this recognition. A housing project becomes a part of the physical structure of the city. It is also an accomplishment in city development by a public authority.

The subject division also recognizes that the primary work of a housing authority must be in definite response to a need that is demonstrated by the conditions in existing areas of substandard housing. The authority’s projects must be designed definitely to serve that part of the population of the community that can not be provided with adequate housing by private enterprise. Only this approach will assure that the housing authority’s program will be justifiable un-
der present legislation, that housing projects developed by
an authority will satisfactorily accomplish the purposes for
which they are undertaken and will have the stability neces-
sary for successful, long-term operation. Not only state en-
abling legislation but the United States Housing Act of
1937, which creates and empowers the United States Hous-
ing Authority, recognizes these facts. The federal Act
(Sec. 2) defines families of low income as those "... who
cannot afford to pay enough to cause private enterprise in
their locality or metropolitan area to build an adequate sup-
ply of decent, safe, and sanitary dwellings for their use."
The same section says that low-rent housing "... means
decent, safe, and sanitary dwellings within the reach of
families of low income, and developed and administered
to promote serviceability, efficiency, economy, and stabil-
ity. . . ."

While the surveys are listed individually, since each re-
sults in a specific and necessary type of information, it will
be found that one field operation may be able to produce
data listed under more than one heading. Such combina-
tions will be discussed in the pamphlet on survey tech-
niques.

1. CITY STRUCTURE AND CITY PLAN

The subjects included under this heading are designed to
give a picture of the city as a whole, to indicate certain
tendencies of growth and development, and to show plans
for city development. They are all essential for an adequate
approach to housing problems. A competent city planning
department, if it has been provided with the means with
which to do its work, will already have available all or most
of the data listed under these subjects. If this is not the case,
a housing authority should first endeavor to assist the city
planning department in obtaining the funds necessary for
such work. If the city planning department is unable to

would do well to forget them entirely and go directly to the
Act and to USHA's official rulings.

At this stage, in order to permit estimates of cost and run-
ning expenses, it is highly desirable that municipal policies
and commitments with municipal authorities be deter-
mined as to service charges, tax remission or other subsi-
dies, maintenance of streets and play spaces by the munici-
pality or by the project management, installation of and
service charges for sewer and water mains, and the single
metering of water or other utilities for the project. Neogo-
tiations should also have been concluded for buying elec-
tricity and gas for the entire project at wholesale or with
only one or a few meters.

3. ANALYSIS OF PRELIMINARY STUDIES AND ESTIMATES

The site plan that best meets the requirements must now
be selected. Estimates of cost, income and running expenses
must be checked from all available information sources so
that the project may be sent to the United States Housing
Authority with a request for contracts for loan and sub-
sidies under the terms of the United States Housing Act.

If there is a state housing board with control over stand-
ards or procedures, conferences should be held with it be-
fore the final site plan and estimates are determined. If as-
sembly of a group of properties is involved, as it often is,
eminent domain may have to be exercised. In a few states
this can be done only with the consent of the state housing
board, whose approval of the site and the general character
of the development is a condition precedent to granting the
right of eminent domain. The housing authority should, at
the start, familiarize itself with the statutes defining the
powers and duties of the state housing board or otherwise
controlling the operations of local authorities.

Final drawings of a project should not be developed until
after the preliminary drawings of the site plan and of typical
In coverage, population density, cost of buildings, and cost of landscaping and utilities. Comparative estimates of income, maintenance and operation expenses are also essential in sizing up the relative economic advantages of the different schemes.

In making these estimates the PWA housing projects may provide comparative data that will be valuable in arriving at proper unit costs, if proper allowances are made for the abnormal conditions under which they were built.* Variation in unit costs in different sections of the country will be found, due to climatic conditions, cost of living, housing standards and other underlying reasons.

In these and subsequent estimates of project costs, the local authority should never lose sight of the federal Act's triple limitation on the nature and cost of developments financed by USHA. The Act (Section 15, (5)) limits project costs, outside of land, demolition and non-dwelling facilities, to $4,000 per family dwelling unit or $1,000 per room in cities of 500,000 and less. The corresponding figures for larger cities are $5,000 and $1,250. In addition, the average construction cost of dwelling units in authority projects may not be greater than the average cost of units currently produced in the locality by private enterprise operating under building laws applicable to authority housing and under labor standards equal to those set up in the federal Act. Finally, the Act says flatly that projects aided by USHA may "not be of elaborate or expensive design or materials. . . ."

This section of the Act and USHA'S rulings on it ought to be carefully studied and thoroughly understood. Some early unofficial "interpretations" have been very loose and, in some respects, actually misleading. Local authorities

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* Apply to the United States Housing Authority, North Interior Building, Washington, D.C.

Low-rent housing make the necessary data available to the housing authority, the latter should proceed independently and promptly to obtain them. This relationship recognizes the fact that housing is an integral part of city planning.

a) Land Use

This survey should show the actual use of every piece of property in the city, whether business, industrial, residential (including the type; i.e., one-family, detached, or row; double; multiple; or of various types) or a mixture of two or more; also all undeveloped lands, as well as areas actively used for farms, market gardens, or private subsistence gardens. Recreation areas should be shown, whether related to schools or separately developed for recreation, including parks, playgrounds and beaches. If limitations of time, personnel or funds make it impossible to map the use of every individual piece of property in the city, it may be necessary to make a more general type of survey, indicating dominant uses by blocks or other divisions or areas.

The information from the land use survey should be recorded on a series of data maps, dividing the city area into convenient sections. As nearly as possible these sections should correspond to neighborhoods or other natural areas. At least they should be bounded so that they can be combined into such areas. Don't let some draftsman determine the sections arbitrarily. Census tracts, where established, form a valuable basis for comparable statistics. These data maps will be frequently referred to by the staff and by the members of the housing authority to refresh their memories of actual conditions that will have a bearing on almost any subject that may be under discussion.

Some cities may wish to amplify the data to be obtained from land use surveys by including height and frontage of buildings (also floor area of business and industrial buildings), the location of buildings on the lot (particularly setbacks), age and type of construction. The housing author-
ity does not need this more detailed information for the city as a whole, but it is useful for other city planning purposes, and if the survey is made as a result of collaboration between the authority and the city planning department, it will be desirable to secure all the information needed by both.

Although the Land Use survey and the Character of Housing survey (3a, below) are listed separately, because one deals with the basic functional structure of the city and the other with the details of residential properties, they ordinarily will be conducted as one survey. As previously noted, such combinations of operations will be covered in the pamphlet on survey techniques.

b) Population

Federal census data are available, and sometimes local censuses are taken between the federal decennial censuses. To make this information readily useful in studies of various housing areas, it is necessary to plot the latest data (1) on spot maps showing the number of persons in each block or census tract, and (2) on maps showing population density in graded classifications. It is also most useful to analyze the trends of population by census tracts or other available divisions over two or more census periods; to show graphically those areas that have decreased in population, those that have increased, and the percentages of decrease and increase. With the possible exception of areas where large numbers of residential buildings have been displaced by commercial or industrial expansion, decreasing population in a district is the best single index of residential blight.

Constant changes in quantity and distribution are prime characteristics of urban populations. The changes must be clearly understood when planning for the future housing of a community.

In addition to density and movement, the federal census and other similar data, properly broken down, will produce above in (A) "Decisions Controlling Design." It will also be affected by the outdoor recreational facilities to be provided, sometimes for pre-school children only, often for the older children also, according to the facilities of this sort that exist in the vicinity of the site and are available for the use of its children.

Various layouts will doubtless be made, varying in the arrangement of the housing units, the roads and walks, play spaces, distribution of service units, garages, stores, community hall, etc., to whatever extent these various incidental structures are required. In judging proposed site layouts, the authority members might well remember that modern site planning is a relatively undeveloped art in this country. Very few professional men realize its possibilities. Just because an architect or engineer is qualified in other phases of housing is no sign that he is an able site planner. Also, conventional ideas of residential site layout are the products of chance and highly routinized lot-by-lot development, which never allowed anyone to see a residential district as a unit, nor to arrange streets, buildings, utilities and open areas so that they became the setting for normal, stable neighborhood life.

This is not to say that site planning, any more than building design, is a combination of fourth dimensional thinking and black magic. Site plans can and must be judged by the authority members in the light of the family, school and community life that is to be carried on in the neighborhood and the development costs of different layouts. Knowledge of the present and reasonably expectable day-to-day life of the tenant families, some imagination and a lot of common sense are the required qualities.

2. Preliminary Cost and Income Estimates

It will be useful to make preliminary estimates for several different layouts in order to check the comparative results
Obviously the size and character of a given project will determine the skills and experience required for a competent solution of its problems. Smaller developments of group and semi-detached houses usually will present fewer technical problems than large multi-family projects.

Public housing in this country has only just been started. Many policies of design, construction and management are not yet clearly established. Each project should be approached with as much trained competence as is obtainable and with open and inquiring minds. New problems must be solved. New standards need to be devised. New municipal procedures and concepts will have to be developed by the authorities and understood and accepted by the citizens. These solutions, standards and procedures must be developed for the housing problem in each locality in terms of the conditions and needs of that locality. Certain minimum standards of space, arrangement, surroundings and equipment are valid anywhere in the country, but beyond these the extensive variations possible must be decided so as to fit the local situation.

C. Progressive Stages in Project Development

Various decisions to be made will be related to progress in the development of the site plan and the other working drawings of a project. The following paragraphs suggest the principal steps in this process and the decisions that the housing authority should make at each step.

1. Preliminary Studies of Site Plan

Studies of the general layout of a project constitute perhaps the most important single step in the process. The social and economic success of the project will be vitally affected by the soundness of the general conception of the site plan. It must be based upon the general type of housing units, land coverage, and density of population approved by the housing authority as desirable, as outlined facts on family size, nationality and race, value or monthly rental of homes, and the number of gainfully employed persons by sex and industrial groups, which, in comparison with the number of families, is a general index of the prevalence of “supplementary wage earners” among certain income and occupational groups. All these facts under intelligent analysis can be pieced together into a picture of the people who live in different districts, their cultural backgrounds, their economic condition, including probable stability of employment, and general housing needs.

Nothing is more important in housing planning than a constant and keen realization that the end result of the whole process is decent, modern living conditions for people—not “the poor,” nor some shadowy, distant group of “low-income families,” but human beings of flesh and blood who live and work within a few miles of the office of the local authority. Population statistics alone won’t keep this idea alive. Properly used and supplemented, however, they can be the basis and background for a realistic view of the job of housing. More will be said later about the supplementary studies to determine housing needs in more detail.

c) New Housing Construction

Facts should be collected, generally from the building department, as to the number, location, cost and type of new housing units that have been built or remodelled each year, for a considerable period of time if the figures are available. This period should be long enough to show general trends in the development of housing throughout the city. These statistics arranged in tables will tell the general facts, but when spotted on maps will more clearly indicate the way in which the city is growing, to what extent, where new housing areas are being developed and where older sections are being modernized or reconstructed.

These facts, when compared with the records of demolition, the remaining parcels of undeveloped land, and the
depreciated areas needing reconstruction, build up a picture of housing conditions and opportunities. When studied in the light of population growth they become the foundation for a plan of orderly housing development.

d) Business and Industrial Development

The land use maps (a) will show existing properties used for business and for industrial purposes. Trends in the development of these districts should be reviewed to show where the most likely opportunities for reasonably steady, varied employment are and their relation to present and possible future residential districts. In larger cities physical nearness of residential areas to employment centers is less significant than cheap and quick transit facilities. “Walk to work” is an ideal and a good slogan but under existing urban conditions it often cannot be realized.

Local business areas will, of course, be found in all residential areas, sometimes localized on main thoroughfares and sometimes undesirably scattered through the district to the detriment of its residential use. It is not these, but the more centralized business districts and industrial areas that provide the more important aggregations of employment opportunities with which this survey will be concerned. The blight that many industrial areas cast on any closely adjacent residential properties is also a factor to be studied.

e) Transit Facilities; Schools; Recreation Facilities

The desirability of residential neighborhoods is influenced by the transit facilities, schools, and recreation facilities that serve it. These should be mapped for the entire city. The maps should show the areas effectively served by the different facilities in the various sections of the city. Information about these facilities usually is available in the municipal departments having particular jurisdiction. Extensive surveys by the housing authority should not be necessary. Particular phases of each problem may need special study, in of answers to the other questions above, the staff should propose a rough preliminary site plan and, preferably, simple unit plans.

The answers to the questions plus the tentative site and unit plans are the guides or program for project development. With it formulated, architects, engineers and other professional men may be employed full-time. Their work may result in quite material changes in many or even in all parts of the program, particularly in the site and unit plans. In fact, considerable changes probably will be the rule on the authority’s first projects. Unless the authority and its staff, however, have organized their ideas and information into a tentative program, they are not in a position to make the best use of the professional skills of architects, engineers, landscape architects and others.

In respect to some questions, two or three, or even more answers may be made, leaving the final decision until the technical considerations are all presented. Perhaps it is worth noting here that under some circumstances there may be more than one “right” answer to some of these questions even for the same or very similar sites. One may be tried the first time; another later. Variation, intelligently arrived at, should be looked upon as a merit, not as a weakness, in a housing program.

B. Professional Techniques Called For

Designing a housing project involves technical training of several kinds. It is not necessary here to elaborate the precise service each profession or training can contribute. For a large urban project the group working on project design should generally include a city planner, an architect, a landscape architect, civil, mechanical, and electrical engineers, a representative of social service agencies and someone trained in the management of housing properties.
conditions, and desirable neighborhood characteristics. It also requires decisions, in part policy and in part technical, as to types of construction in light of building, site, amortization and operation costs. The amount and kind of essential heating, kitchen and sanitary equipment call for a similar hybrid decision—partly technical and partly policy.

3. Land Coverage and Population Density

What land coverages and population densities are appropriate to the various sites, in view of the city plan, surrounding housing conditions, the general trend in housing standards and the period of amortization?

4. Recreational and Other Community Facilities

What outdoor recreational and other community facilities are appropriate to the various sites in light of public facilities already available in the immediate vicinity?

5. Landscape Treatment

What type of landscape treatment should be adopted?

As already stated, these decisions touch upon many technical points on which the advice of professional technicians referred to in the next section will be needed, but they are also matters involving decisions on broad social, economic and community grounds, decisions which it is primarily the responsibility of the housing authority to make in the best interests of the community as a whole.

All these questions controlling design should be gone into thoroughly by the members of a local authority, their executive and technical directors and other staff members. It is a serious mistake to shove them off upon technical men at the very beginning. The staff of the authority, with or without outside consultants, ought to prepare specific answers to each of the five questions just stated. Each answer should be accompanied by a résumé of the pros and cons. Upon the authority’s approval of a specific site and cooperation with the appropriate department, in connection with a major housing project.

f) Assessed Values

Assessed values, according to the official records, need to be clearly indicated on a special set of maps. These should show the values of both land and buildings and indicate graphically, by graded classifications, the total assessed values of property throughout the city.

After areas of substandard housing have been determined, there should be a more detailed mapping, showing assessed values of each property per square foot. Such maps permit the housing authority to keep clearly in mind the values in the areas being studied and in adjacent areas. They should be analyzed in conjunction with the maps showing the related facts of land use and character of housing. They also disclose those occasional high value properties that may be found in depreciated areas and that tend to increase the cost of land taking where general demolition is necessary. When estimating the probable acquisition cost of a site, consideration should be given to the relation of assessed values to actual values, which varies greatly from city to city.

g) The City Plan

The foregoing surveys cover existing general conditions and should reveal certain tendencies. These are but the foundation for the city’s growth during succeeding years and must be considered in the light of the city’s plans for directing or influencing its physical development. The housing authority should obtain these plans from the city planning department. If such plans do not exist, or if they are inadequate, the housing authority should urge official recognition of their need and immediate steps toward their preparation. The subjects of a city plan that are of
primary importance in the formulation of a housing program are:

1. Zoning. In addition to designating residential, business and industrial districts of various kinds, zoning should determine desirable population densities in residential areas and should require adequate light, air and open space in all new residential developments. Judged by these standards most zoning is woefully weak but a competent zoning plan, in connection with population forecasts, should make it possible to determine the future population pattern of the city. Clearly this affects the location and types of housing projects to be undertaken.

In many cities the areas zoned for business and industry are excessive and many districts might be improved if protected for residential use. Concerned particularly with the housing of the city, an authority should advise with the city planning department on any desirable revisions in the zoning plan to further the rehabilitation of blighted districts and the projection of new residential developments.

2. Major Streets. The city’s thoroughfare pattern not only serves as the arterial system for the city’s vehicular traffic but largely determines the size and character of local neighborhood units. Thus in both ways it bears upon location and design of housing projects. Plans for major street extensions or widenings obviously should be known by the authority.

3. Transit. Present facilities and any plans for revisions in the city’s transit system are important because they determine the connections (costs, frequency, or quality of service) between residential districts on one hand and centers of industrial and commercial employments, markets and recreation on the other.

and nationality movements should be studied in relation to the population groups the new housing is intended to serve.

3. The location of the site in respect to major traffic ways and other natural neighborhood barriers and boundaries.

(b) The availability of each site at a reasonable price; i.e., a price suited to the type of housing needed. A survey of the mortgages held, delinquent taxes and the relation of assessed values to actual values will be useful in this connection. The nature of ownership is also worth study. Census and RPI figures include owner-occupied as against other types of properties. Leading residents, real estate brokers in the district and others usually can give general information on the distribution of ownership. Tax records may give a rough picture. Title records may be consulted but they usually take a lot of time.

In general, widely held, heavily mortgaged areas with high home ownership present the greatest difficulties in land acquisition. Ordinarily, concentrations of tax forfeited or other publicly owned land are evidence of easy acquisition.

(c) The desirability of each site in size, topography, subsurface conditions and general character.

2. Housing Best Suited to Prospective Tenants

What housing units are best suited to the type of families to be housed, to the rentals they can afford to pay, and to the physical characteristics and cost of the various sites that are available? This involves the relative social and economic values of the free-standing single house, semi-detached and row houses, two-family houses, and apartment buildings housing three or more families and their relation to reasonable population densities, transit facilities, traffic
the time of one vacancy study and another the supply of dwellings may increase or decrease and the number of families looking for housing space may also increase or decrease in varying proportions. In outlining its program the local authority ought to know what is causing changes in vacancy percentages in the different districts in which it might operate. For example, two districts might show decreases in vacancies considerably greater than that for all residential quarters of the same class in the city as a whole. In one district, however, the decrease might be due to an influx of population and in the other it may be due to increased voluntary demolition and vandalism. Clearly the action of the authority in respect to these two districts would be entirely different.

Other examples could easily be cited but the general fact need not be labored. A local authority’s picture of the housing market will be incomplete without some detail on the method and amount of different changes in the supply of housing space available for different income groups. The additions could come from new construction, modernization and reopening of temporarily closed residential buildings, and remodeling of non-residential structures into housing units. Decreases could be attributable to voluntary or police-power demolition, fire loss, voluntary boarding-up of buildings for any one of a number of reasons, and extreme vandalism, which leaves only the gutted hulks that can be seen in most low-rent areas. Fortunately, some official report of most of these changes has to be made in nearly all cities. The local authority’s job is to collect this information, put it together so that it means something, and, if necessary, suggest improvements in the methods of collecting and recording it.

*d) General Application*

Probably no other kind of survey or planning study undertaken by a local housing authority will be of as much

implemented by the opinions of such officials as the building commissioner, the city planning department, the health department and the police and fire departments, and of social and welfare agencies dealing with the problems of low income groups, and by the observations of the members and staff of the housing authority. With the substandard areas so fixed, a real property inventory should be made of those areas in order to secure the detailed information essential to dealing adequately with housing problems in them.

This detailed material for the areas of substandard housing is essential in any city as a basis for a clear understanding and presentation of housing conditions. A general impression of conditions may exist in the minds of a housing authority but this will be of little value as an approach to the specific problems, and it will carry little weight with federal housing officials when the local authority applies for a loan and subsidies. They properly will require a record of the facts of the particular area in which action is suggested, compared with data for other sections of the city.

*b) Demolition of Unfit Housing*

The number and location of housing units demolished during recent years should be determined and shown on a special set of maps. These should indicate also which buildings were demolished voluntarily and which as a result of orders by public officials acting under the police power.

From the information collected through the real property inventory, the existing housing units deemed unfit for occupancy will be disclosed. Building, fire and health departments may have lists of unfit buildings against which they are not proceeding because of faulty ordinances, lack of decent houses in which to relocate the families or other reasons. It may be of value to show these on the maps that indicate the units already demolished. Where these are found in large clusters, the general character of the neigh-
borhood is clearly and graphically indicated. This may become an important factor in determining what areas to acquire for clearance.

c) Areas of Crime, Delinquency and Disease

A compilation of residential addresses of offenders and patients collected from various sources and recorded on spot maps should be made in any study of housing and living conditions. They are generally plotted by the block. Significant concentrations of such cases are indices of substandard areas. This is not to say that housing conditions are the cause of disease and delinquency. They are simply one set of influences working in combination with many others.

d) Municipal Income and Costs by Districts

This study is an analysis, by census tracts or other clearly defined districts, of where taxes are collected and where they are spent for various municipal services. The occurrence of disproportionate costs in relation to municipal income tends to indicate substandard areas and may graphically illustrate a situation which is costly to the city and which is in part, at least, attributable to substandard housing. This type of study needs great care in allocating costs and even greater care in appraising the results, but throws interesting light on the municipal economy in general and on conditions affecting housing programs in particular.

e) Family Incomes and Rents Paid

In the lower income groups, the proportion of family income paid for rent increases somewhat as the amount of income decreases. The increase in the lower income classes, however, is not nearly so great as is commonly assumed. Below a certain annual income that varies somewhat from city to city, this proportion will be progressively less able lent demolition.” Vacancy-occupancy figures are essential raw materials out of which these decisions will have to be made.

The amount of vacant housing space also helps to determine the meaning to be given to the results of other housing studies. For example, elsewhere in this pamphlet (page 20) the proportion of rent to income is mentioned as a fact basic to housing planning. Suppose a study of rentals and family income among families of low income were made at a time of acute housing shortage. If the shortage had existed for some time rentals naturally would be high and the proportion of rent to income would also be high. Depending on the length and severity of the shortage the results of this particular study as a basis of future policy might be slightly misleading or they might be viciously bad. Other instances of this kind of interrelationship will turn up often. The practical precaution by local authorities is to make vacancy-occupancy studies a part of their background material and always to consider the possible effects of these market conditions upon the more specialized investigations that may be undertaken from time to time.

b) Movements of Rentals

A closely related but separate series of facts would show the upward and downward movement of rentals over a period of time. Much that has been said about vacancy studies applies here also. They are useful if broken down to reasonably homogeneous districts. They apply directly to housing planning and they affect the meaning of other sets of facts and figures.

c) Changes in Supply and Demand

Reports on vacancy and occupancy indicate roughly the relation of housing supply and demand without much reference to the quality of either. Changes in vacancy percentages, however, do not reveal their own causes. Between
that tearing down existing buildings, when suitable vacancies are lacking, can cause temporarily and possibly permanently much more human misery than it alleviates. Experienced authorities can also testify to the fact that haphazard, ill-considered clearance, however popular it may seem to be to certain special groups, can have a very harmful public reaction. Certain economic and social classes in a locality naturally will be lukewarm or opposed to the authority's efforts. Painstaking educational and publicity effort based on a sensible, carefully built program can minimize both indifference and opposition. This is not enough. Positive and enthusiastic support is necessary. Quite as naturally, much of this should come from the economic and social classes that will benefit most directly from the authority's program. If the authority rushes into an ill-considered clearance undertaking, it can alienate the sympathies and support of exactly those classes and groups that should be its most ardent supporters and advocates.

The United States Housing Act (Secs. 10–11) requires demolition, closing, or compulsory repair of a number of dwelling units substantially equivalent to the number of newly constructed units. Administrative rulings on this requirement ought to be clearly understood by local authorities. In this connection, however, it should be noted that the application of this requirement may be deferred by USHA "... in any locality or metropolitan area where the shortage of decent, safe, or sanitary housing available to families of low income is so acute as to force dangerous overcrowding of such families." This is official recognition of the dangers mentioned above of too hasty clearance measures. Under general conditions existing in many localities today and that probably will become more acute in the immediate future, straight thinking and clear decisions both by local authorities and USHA will be required on this question of deferring the requirements of "equiva-

to procure adequate housing. The housing authority must know at what level of family income the proportion that can be paid for rent, leaving sufficient for the other minimum essentials of life, ceases to obtain housing of minimum standards of decency and safety.

Theoretically, this would require a survey of family incomes, rent-paying ability and rents paid at all economic levels, the standards of housing actually obtainable at the various levels of rents paid and of rents capable of being paid, and, from an analysis of land and construction costs, a determination of the standards of housing theoretically possible at the various levels. Practically, such a study is beyond reasonable possibility for most local housing authorities and is not necessary for a determination of what income groups are to be served by the projects of the authority, what rents they can pay and, consequently, what construction standards and what financial arrangements are necessary to reach those rent levels.

A study of typical family expenditures in different rental ranges and economic groups, however, will give the housing authority a valuable background picture. But the necessary information as to the lower income groups to be served by the authority's projects can be obtained by a study of the situation in the areas of substandard housing in the city, on the simple and generally correct assumption that the income groups whose rent-paying ability can not procure adequate housing are to be found in those areas. The housing authority, therefore, should make a study of family incomes and rents paid in these areas. The schedule should show heat, light and other services sometimes included in rentals paid. It is quite as important to know what is paid for in rentals as to have the correct amounts. Since the size of families has a bearing on rent-paying ability the sample should cover families of differing size and composition. It will probably be more difficult to get data as to income than
as to rents paid, but inquiries directed to large employers
of labor and to social and welfare agencies may assist in
supplementing the information to be secured from actual
canvas, usually by sampling, in the areas under study.

Under many circumstances, a local authority may safely
assume that the average proportion of rent to income shown
by a careful sample will be maintained in new housing. The
authority's job, in other words, is to provide good housing
at the price now being paid for it. By no means is this
always true. Some economic and racial groups at all times
and others occasionally are forced to pay so much rental
that their diets, clothing and other necessities have to be
skimmed below even the level generally held by the income
class as a whole. Rent-paying ability of these families in
authority housing requires special study and determination.

4. HOUSING NEED AND MARKET

Although some of the connections may not be so obvious,
the effective working of a local authority is quite as de-
pendent upon reliable facts upon the quantitative aspects
of housing—that is, the housing market in the popular sense
of the term—as it is upon the physical make-up of the lo-
cality and the city and regional plan. Vacancies, "doubling-
up" and other kinds of overcrowding, net additions and
decreases in the amount of housing space, and changes in
rent levels are significant facts by themselves and influence
almost every other side of housing fact and policy. No au-
thority can develop a sound program without knowing
them and understanding them.

a) Vacancy-Occupancy Facts

The number and percentage of vacant dwelling units
should be found periodically for census tracts or other rela-
tively small districts. Figures for a city or a region as a
whole have very limited usefulness. Broken down by census
tracts or similar areas they will meet most of the local

authorities' planning needs, but occasionally special sample
studies may have to be made to determine whether the va-
cancies in a residential district are fairly evenly divided
among dwellings of different rental classes, or whether they
are centered in the most or least expensive quarters. Proper-
ly drawn census tracts should have a relatively limited
spread of rentals, but some variation, of course, is unavoid-
able.

Even the most carefully collected vacancy figures may be
misleading unless they are used in conjunction with equally
reliable facts on overcrowding in the same areas at the
same time. Most overcrowding is of two kinds: (1) what
might be called simple overcrowding, which is simply oc-
cupancy by families of such small quarters that the result-
ing conditions violate reasonable standards of health, com-
fort and privacy; (2) "doubling up" of families, which is,
of course, the sharing of single quarters by two or more
families who normally would and should occupy separate
living units. Overcrowding studies are much more difficult
to make than simple vacancy surveys. The technical prob-
lems, with which we are not concerned here, are often very
great indeed. In general, sample studies have to be relied
on to a much greater extent than for vacancy surveys.

Vacancy-occupancy studies are essential to local authori-
ties. The resulting facts, in conjunction with many others,
enable authorities to devise general housing plans for their
localities, to advise private and semi-public agencies con-
cerning market conditions, as well as to answer vital ques-
tions on immediate procedure in the production of public,
low-rent housing. No local authority ought even to consider
seriously the insistent question of slum clearance and re-
buiding projects versus building on vacant land without
up-to-date, reliable figures on vacancy and overcrowding
in low-rental districts. No amount of emotional satisfac-
tion in seeing slum buildings come down can offset the fact