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DRAFT OF BULLETIN NO. \_\_\_\_ ON POLICY AND PROCEDURE

Manual of Market Analysis for Low-Rent Housing ,  
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This Bulletin, which is being submitted for preliminary comments, is designed as a guide to local housing authorities in the collection and analysis of data pertaining to the need and market for low-rent housing and in the preparation of a Market Report. A Market Report presents the conclusions resulting from the analysis of data and at least a tentative plan for a local USHA-aided program to meet the housing need of low-income families. It serves three primary purposes. First, it brings together from several sources and presents in easily understandable form all of the available data pertinent to the need for low-rent housing in the community. Second, it defines the limits of the need for housing which may be met by the USHA-aided program. Third, within these limits it provides the framework on which may be planned the immediate and future USHA-aided projects.

The advantages of this method of approach to the low-rent housing problem are apparent. The effect of changes in the local situation may be evaluated more easily once the problem has been analyzed and certain benchmarks have been established. Individual projects may be planned with respect to a distribution of units by size, rent to be charged tenants, and subsidy required in relation to the size of the families to be rehoused and their rent-paying abilities. In this way assurance is given that projects built will meet the need and be occupied by the families for which they were intended. By conscious planning the effect of accidental factors is reduced to a minimum and the task of determining exact dwelling unit rentals and income limits in the formulation of the Management Program is greatly simplified.

Federal Works Agency  
United States Housing Authority  
Washington

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## MANUAL OF MARKET ANALYSIS FOR LOW-RENT HOUSING\*

### SCOPE AND CONTENT

This Bulletin, designed as a Manual of Market Analysis for Low-Rent Housing, discusses (I) the purpose of Market Analysis, (II) the minimum data required for analysis of the market for low-rent housing, (III) the form and content of the Market Report, (IV) the manner of submission of the Report, (V) sources of data which may be utilized for market analysis, (VI) general principles governing market analysis, (VII and VIII) suggested techniques which may be followed in making the analysis, (IX) suggestions for the formulation of the immediate program, and (X) the method of preparation of the Market Data Chart.

#### I. PURPOSE OF MARKET ANALYSIS.

The need for and purpose of market analysis as discussed in this Bulletin are based on the following principles and limitations set forth in the United States Housing Act under which the USHA-aided program is carried out:

- (a) The purpose of the program is to remedy the unsafe and insanitary housing conditions and the acute shortage of decent, safe, and sanitary dwellings for families of low income.
- (b) "Low-rent housing" means decent, safe, and sanitary dwellings within the financial reach of families of low income.
- (c) "Families of low income" means families who are in the lowest income group and who cannot afford to pay enough rent to cause private enterprise in their locality or metropolitan area to provide an adequate supply of decent, safe, and sanitary dwellings.
- (d) The dwellings provided by the USHA-aided program are available solely to families whose net income at the time of admission does not exceed five times (six times for families with three or more minor dependents) the rental, including the value or cost of heat, light, water, and cooking fuel.
- (e) The USHA may make annual contributions in order to bring the rental down to the reach of low-income families but such contributions, subject to periodic reexamination, must be strictly limited to the amounts and periods necessary, in the opinion of the Authority, to assure the low-rent character of the dwellings.

These provisions in the Act require answers to the following questions:

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\* This Bulletin is written with particular reference to urban communities.

- (a) What is the extent of unsafe and insanitary housing in the community, i.e., how many families are living in substandard housing?
- (b) What is the rent-paying ability of these families, i.e., what incomes do they receive, how much rent do they pay, and how much would they be required to pay under the USHA-aided program?
- (c) How much income is necessary before a family can afford to pay the rent required by private enterprise for a decent, safe, and sanitary dwelling and what is this rent, i.e., how high an income grade should be planned under the USHA-aided program?
- (d) How low a rental should be planned under the USHA-aided program?
- (e) How many families are there between the limits described in "c" and "d" and at what rentals should dwellings be provided to re-house them?

It is the purpose of market analysis to provide the answers to these questions so that the low-rent housing program may be planned with respect to the number of units of each size and at each rental to be provided, and the income limits to be applied. Such planning, whether the local program contemplates only one or several projects, will facilitate the preparation of applications for financial assistance, the formulation and design of projects after loan contract, and the determination of final rent schedules and income limits during the formulation of the management program. It will give assurance that the project will be tenanted by the families for whom it was intended.

Market analysis, however, is continuous in that it must provide the basis for a constant check on the accomplishments of the program. As additional projects are occupied that portion of the total need which is thus satisfied is checked off. The remainder is compared with the original analysis in order to determine if any adjustments or revisions should be made in future plans. Changes in the general economic level of the community, in the rent and income pattern, may alter the basic market requirements and necessitate a complete new analysis. Such changes may affect not only the plans for future projects but the rent and income relationships of families in projects already occupied as well. Only in this way can the low-rent housing program be made to meet economic and social needs which are essentially dynamic in nature.

As a by-product of market analysis much light will be shed on the nature of the housing problem of families outside the rent and income range of the USHA-aided program. Such families may be forced to live under unsafe and insanitary housing conditions, and thus may fall within the purview of some local housing authorities, although at the present stage of development of housing they are not being reached either by private enterprise or the USHA-aided program

## II. DATA REQUIRED FOR ANALYSIS OF THE MARKET FOR LOW-RENT HOUSING.\*

A. Number of Families Living in Substandard Dwellings by Race, Tenure, Family Size, Income, and Rent. - A comprehensive study of the market requires reliable information as to the number and size of families living in substandard dwellings, the separation of these families by tenure (owner or tenant), race (White, Negro, and other races where important), and a further separation into income classes of different rent-paying abilities. The most desirable form of data on rent-paying ability of tenant families is a cross-tabulation by rent and income. Rent data should represent "gross rent"\*\*\* although rent paid to the landlord (contract or net rent) will be satisfactory if there is available also data on payments for utilities in addition to rent so that contract rent can be adjusted to a "rent plus utilities" basis. For owner families, of course, rent is not pertinent.

In some communities, information as to nationality or geographic location within the community may be essential. This is particularly important in larger cities and in any size of city in which there is a well-defined community pattern and strong neighborhood ties exist. In such a case, the market area is limited, since it would not be valid to assume that tenants from all over the city will be willing to move to a particular location, and it will probably be necessary to analyze the market for each area to be served. Therefore, basic market data will have to be compiled for each such area, or indexes of geographic differences in family size, rent, and income characteristics will have to be available in order to permit an evaluation of these differences for each market area.

A distinction must be made between survey data which are representative of the entire market for low-rent housing and data which refer to a particular group of families with no indication of where they fall in the over-all range. Although the latter type of data may show a sufficient market for an immediate project, only the former type provides the information necessary to plan a long-range program or to determine the place of any individual project in such a program.

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\* The types of data outlined here and the discussion throughout the remainder of this Bulletin are limited to the present need for low-rent housing. No attempt has been made at this time to indicate how such factors as future growth or decline in population, changes in the characteristics of the population and housing conditions, economic stability and fluctuations in income, and relation between market and community planning should be taken into consideration. They will be discussed in a Supplement to be issued at a later date.

\*\* Throughout this Manual the term "gross rent" is used to mean the monthly amount now being paid for shelter plus all utilities actually used (including electricity, gas, or ice when used for refrigeration). For the purpose of market analysis, "gross rent" is compared with "statutory rental value." Although this involves a slight inaccuracy the degree of error is generally too small to necessitate adjustment.

Certain other relevant information may be assembled, but it is practically impossible to correlate such other data for anything except a very crude picture. Wages paid in various industrial plants, commercial establishments or other sources of employment do not show either family income or incomes of persons living in substandard units, although knowledge of existing wage rates may be useful as a background. Racial distinctions are lost in undifferentiated data. The housing problem may be among casual workers or others not covered in such sources of employment. General rent figures do not differentiate standard from substandard. All of these types of data are useful, however, in showing a general rent picture against which the slum problem takes on more meaning.

B. Residential Vacancies. - Information on the extent of vacancies in standard and substandard dwellings by rent is essential in market analysis and in defining the scope of the low-rent housing program. Data on the number of vacant standard dwellings, particularly in the low rent classes, are essential in the precise determination of the upper rent limit of the USHA-aided program.

The number of vacant substandard dwellings and their rental may have a significant bearing on the problem of equivalent elimination and, if few other dwellings are available at reasonably low rent, on the difficulty to be anticipated and the temporary hardship resulting from relocating families whose dwellings are to be demolished by a proposed slum clearance project.

C. Minimum Rent Required for Standard Dwellings Under Private Enterprise. - In order to establish the upper income limit for the USHA-aided program, it is necessary to know the lowest rental for which decent, safe, and sanitary dwellings are obtained under private enterprise. This information should be available by number of rooms in the dwellings so that differences in the rental required for families of different size can be taken into account. Although the distribution of all standard dwellings is not essential, the rentals of standard dwellings which are or might be occupied by families at the top of the low income group is particularly important for the purpose of comparison with the income received by families paying comparable rentals for substandard dwellings.

D. Relief Rent Allowance. - Data should be obtained showing the amount allowed by local welfare agencies, public and private, for rent for their clients. This information preferably should be broken down to show the distribution by amount of the number of families of each size receiving relief allowances for rent plus utilities. If the local relief policy allows for any racial differences information should be obtained for each race separately.





### III. FORM AND CONTENT OF THE MARKET REPORT.

A. The Market for Low-Rent Housing. This section of the Report should contain the results and conclusions of the analysis of the market and should be given in as concise form as possible. Information must be given separately for each racial group in the market.

In order to clarify the meaning of certain terms, attention is called to the following definitions:

"Low income group" means the income range expected to be reached by the public housing program, excluding families with very low and very high incomes.

"Income grade" means the income range within which all families are expected to be rehoused at the same rent level.

"Effective market" is defined as the number of families whose rent would not be increased as a result of rehousing (excluding single persons and any related or nonrelated groups which are excluded for other reasons of eligibility).

By "entire market" is meant the number of families in the effective market plus those additional families in the low income group whose rent would be increased.

In preparing the Market Report it would be desirable to present the various tables for the entire market and for the effective market separately, except for table 2 which calls for a tabulation of the number of families in the effective market and the additional families in the entire market. The following tabular forms are suggested for the presentation of the findings of market analysis.

#### 1. - Summary of Statutory Rents per Dwelling Unit and Income Limits for Admission per Family on the Basis of Which Market Was Estimated

Race \_\_\_\_\_

Number of Bedrooms per Dwelling Unit and Minor Dependents per Family	Income Grade*			
	Minimum	Intermediate	Intermediate	Maximum
	A. Monthly Statutory Rent per Dwelling Unit			
1 bedroom	_____	_____	_____	_____
2 bedrooms	_____	_____	_____	_____
3 bedrooms	_____	_____	_____	_____
etc.	_____	_____	_____	_____
	B. Income Limits for Admission per Family			
No minor dependents	_____	_____	_____	_____
1 or 2 minor dependents	_____	_____	_____	_____
3 or more minor dependents	_____	_____	_____	_____

\*The number of different grades shown here and in subsequent tables will depend on the number of grades of different rent-paying ability into which the entire market was broken down.

2. - Number of Tenant Families of 2 to \_ Persons in the Market  
at Specified Income Grades and Statutory Rents

Income Grade	Statutory Rent*	Effective Market	Number of Families			Total
			Potentially Eligible but Now Paying Less Rent by:			
			\$ .01-2.00	\$2.01-5.00	More Than \$5.00	
Total						

\*The statutory rents to be shown here and in table 4 will be the rent for 2-bedroom units shown in table 1.

### 3. - Occupancy Standards Used in Determining Distribution of Dwelling Units by Size

Family Size	Percent of Families of Each Size Expected to Occupy Units of:					
	1 Bedroom	2 Bedrooms	3 Bedrooms	4 Bedrooms	5 Bedrooms	6 Bedrooms
2 persons	_____	_____	_____	_____	_____	_____
3 persons	_____	_____	_____	_____	_____	_____
4 persons	_____	_____	_____	_____	_____	_____
etc.						

(Note: Refer to Bulletin No. 22 for discussion of maximum and minimum occupancy standards.)

#### 4. - Distribution of Dwelling Units Needed to Rehouse Families in Market at Each Rent Level

Race

	Percent of Families Requiring:					
Income Grade	1 Bedroom	2 Bedrooms	3 Bedrooms	4 Bedrooms	5 Bedrooms	6 Bedrooms
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
Average	_____	_____	_____	_____	_____	_____

5. - Median\* Gross Rent and Annual Income of Families  
in the Low Income Group

	Entire Market in Low Income Group	Effective Market
a. Median gross rent	\$ _____	\$ _____
b. Median income	\$ _____	\$ _____

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\*The term "median" may be defined as the value below which half the cases fall and above which the other half fall. Although it is an "average" it is a "position average" and is not to be confused with the "arithmetic average" which is commonly called the "average."

6. - (Race) Tenant Families of 2 to \_ Persons  
Excluded from the Market:

a. Incomes below the lower limit of the low income group

Number of families \_\_\_\_\_

Percent of all families in  
substandard housing \_\_\_\_\_

b. Incomes above the upper limit of the low income group

Number of families \_\_\_\_\_

Percent of all families in  
substandard housing \_\_\_\_\_

7. - The Market Data Chart. (See Section X of this Manual  
for instructions on how to prepare this chart.)

Table 2 should be accompanied by a bar chart showing the number of eligible families at each rent level. The income limits for each rent level should be indicated. Each bar should be divided to show the number of families now paying as much or more rent and the number paying less rent.

Accompanying Table 4 there should be given conclusions and recommendations as to the percentage of units that should be designed with one or two small bedrooms in which only one person would be expected to sleep. These estimates should be given for each sized unit of two or more bedrooms

and may be applied to the market as a whole or to the market at each different rent level, depending on occupancy standards and whether or not there are any differences in family size and composition at the different levels.

Following this part in the Report there should be given a narrative explanation of how the basic data were broken down into groups of different rent-paying ability, how estimates of the number of eligible families in each group were derived, the reasons for breaking down the market in this way, and any other pertinent explanations which will be of assistance in understanding and interpreting the Report.

B. Basic Market Data. - This section of the Report should contain the factual data on which were based the conclusions presented in the previous section and certain computations made from these data. The following material should be included:

1. Tenant families of each race living in substandard dwellings.
  - a. Tabulation of survey data by family size, annual income, and gross rent.
  - b. Median gross rent for families in each income class and for all families.
  - c. Median annual income.
2. Tabulation of number of tenant occupied, decent, safe and sanitary dwellings under private enterprise by size of dwellings and monthly shelter rent.
3. Tabulation showing number of families receiving local relief allowance for rent plus utilities, by monthly amount and family size.
4. Vacant standard dwellings available from private enterprise.
  - a. Tabulation of number of dwellings by rent and number of rooms.
  - b. Percentage ratio of such dwellings to all dwellings (standard and substandard, vacant and occupied) in the locality.
5. Tabulation showing number of vacant substandard dwellings by rent and number of rooms.

The inclusion of charts wherever possible is recommended since this method of presentation shows pertinent relationships more clearly than tables.

The source of all data and the date to which they apply should be stated. Each item should be accompanied by a complete explanation of how the data were compiled, whether the data represent all cases or only a sample and in case of the latter the percent coverage and the degree to which they may be accepted as reliable and representative. Limitations should be pointed out in order to permit proper use of the information and to avoid reaching invalid conclusions. Opinions should be clearly labeled and the authority for them should be stated.

If survey reports including data for any of the items indicated are already available in the USHA, or from other central sources, this should simply be noted in the Report. Tabulations of such data need not be repeated. If data from a report available only locally are utilized, tabulations of the basic data needed should be incorporated in this Report or a copy of the publication in which they appear should be appended.

C. Tentative Plan for the Low-Rent Housing Program. - This final section of the Report should contain for each race the following:

1. Projects already occupied. - A summary should be given of the number of units, the rentals, and the income limits of PWA Housing Division and USHA-aided projects already occupied by families who were rehoused before the market survey data were compiled and who are not included in the market estimates given in Table 2 of Section A of this Report.
2. The program for the immediate future. - There should be presented here a summary of the number of units in projects definitely contemplated or already formulated but not yet occupied. The number of units, the status of each project (in occupancy, under construction, under loan contract, funds earmarked but not yet under loan contract), the statutory rentals to be charged and the income limits for admission to be established, i.e., the rent and income groups to be served, should be stated.
3. The long-term plan for the USHA-aided program. - A long-term plan for low-rent housing under the USHA-aided program for the next ten years should be presented here. The number of units by size and statutory rent which should be undertaken in order to meet market requirements, and the number of families by size and income who might be expected to occupy these units should be stated. This plan should take into account the number of families in the low-rent housing market who might be expected to be rehoused under private enterprise in standard dwellings now vacant or in new units within their reach. A time schedule of the program, or at least the approximate order in which projects would be formulated, should be indicated.

As the program in the community progresses with the occupancy of additional projects the Market Report should be revised. These revisions should be made particularly in Sections A-2, C-1, and C-2, thus indicating the portion of the housing need which has been satisfied and that remaining for future projects.

#### IV. MANNER OF SUBMISSION OF THE MARKET REPORT TO USHA

A. Time of Submission. - It is preferable that all of the data required for a comprehensive market analysis be compiled and the Market Report prepared at the time of submission of the first Application for Financial Assistance. If the first Application contemplates the development of two or more projects for occupancy by the same racial group, it is essential that the Report be submitted with the Application. In any event, however, the Report must be available at the following times, whichever is first: (1) at the time of development of final plans for the first project, or (2) at the time of submission of a second Application for occupancy by the same racial group.

B. Number of Copies. - Two copies of the complete Market Report and four copies containing only Section A, "The Market for Low-Rent Housing," and Section C, "Tentative Plan for the Low-Rent Housing Program," as outlined in Part III of this Bulletin should be forwarded by the local authority to the appropriate Regional Director of the USHA.

C. Services and Assistance Available from the USHA. - It is expected that there will be close consultation and cooperation between local authorities and the USHA regional staff in the formulation and execution of the market research phase of the local program. The first step in the initiation of this phase of the program should be the examination of data already available and the determination of the proper procedure for obtaining necessary additional information. The services and assistance of the Regional Research Adviser may be utilized in this work.

The Regional Research Adviser and other representatives of the USHA Regional Office will also assist and advise in the analysis of the market data, the evaluation and interpretation of the results of such analysis, and the presentation of conclusions and recommendations in the Market Report.

## V. SOURCES OF DATA REQUIRED FOR MARKET ANALYSIS.

The principal sources of basic data for the analysis of the low-rent housing market are the Real Property Surveys and the Low-Income Housing Area Surveys which have been conducted under the Federal work relief program. The more recent of these surveys give all of the information described in Section II-B of this Bulletin except that pertaining to relief rent allowances. The use of the Real Property Surveys made in 1934-36 is subject to certain limitations. Precise differentiation between substandard and standard dwellings was not made; contract rent (rent paid to the landlord, generally including some utilities) was reported rather than gross rent; rents may have changed considerably since the survey; and income information is completely lacking. In using data from such a survey steps should be taken to obtain additional information to adjust for rent changes and to provide the required income data. The Bureau of Labor Statistics publishes quarterly indexes of changes in rents for 33 cities.

It is anticipated that the 1940 Housing and Population Censuses will provide adequate information on race, tenure, family size, and rent for occupants of substandard as well as standard dwellings and that some income data and complete vacancy data will be available. Much of this information will be released by the end of 1940 and the remainder in 1941. In some communities the status and extent of the low-rent housing program may require certain special surveys to be made before data are available or to fill in certain gaps left by the Censuses. Such problems should be discussed with the USHA regional staff so that plans may be made to obtain Census data as soon as they are available and to make supplementary surveys where necessary.

If the community has not had a Real Property and Low-Income Housing Area Survey and if the local program requires market data before Census data are released, a preliminary survey of slum areas may be conducted, perhaps on an adequate sampling basis. The appropriate procedure to be followed in such a case should be discussed with the USHA regional staff and plans should be made to obtain the necessary information so that it will be available when needed.

Adequate and up-to-date vacancy data may often be obtained through a post office vacancy survey or with the cooperation of the local real estate board. Even where such an arrangement cannot be worked out, fairly complete and reliable information on the extent of vacancies and the rentals of vacant dwellings may be obtained from local real estate operators.

The Bureau of Labor Statistics quarterly indexes of changes in rents for 32 of the 33 cities previously mentioned are combined with other data into quarterly indexes of changes in the cost of living. The WPA study, "Intercity Differences in Costs of Living," conducted in March 1935, covers 59 cities and is revised quarterly by the Bureau of Labor Statistics in 31 of the 59 cities. For the cities to which they apply, these indexes



will serve as a useful check on the minimum rent required for decent, safe, and sanitary dwellings under private enterprise.

The National Health Survey, 1935-36, conducted by the U. S. Public Health Service, covered 83 cities and 23 rural areas and the Study of Consumer Purchases: Urban Series, 1935-36, conducted by the Bureau of Labor Statistics, covered 32 cities. The published reports of these two surveys contain certain general income information which will be useful in studying the income pattern in those communities. The former also presents some information pertaining to housing (overcrowding and lack of toilets) and the latter shows expenditures for housing. The value of these data in the analysis of the low-rent housing market is severely limited, however, by the date of the surveys and the lack of differentiation of the data to apply to substandard dwellings.

It will usually be necessary to obtain directly from the local welfare agencies information pertaining to the relief allowances for rent and utilities and the number of clients for which such allowances are made. If the task of drawing these data from the case records is too great, the welfare agencies should be requested to state the average budgetary allowances for rent and utilities for each family size and to estimate the number of cases given assistance. In the event relief rent allowances are not made on a budgetary basis, the agencies should be requested to furnish data on the amount of rent actually paid by their clients. Supplementing these data it would be advisable to obtain information as to the amount of rent paid by WPA workers and the number of workers on the WPA rolls.

In the absence of or as a supplement to the sources of data already discussed, a search should be made for any reports of housing surveys recently made by local agencies such as the building, health or welfare department, bureau of business research, chamber of commerce, or real estate board. Although such surveys usually do not provide information of the exact nature or in the form required for market analysis, they may be useful in studying the general aspects of the local housing problem and in establishing the proper relationships between the low-rent public housing program and housing under private enterprise.

## VI. GENERAL PRINCIPLES GOVERNING MARKET ANALYSIS.

Before any attempt is made to analyze market data or to estimate the number of families in the effective market, a very careful study should be made of Bulletin No. 24 (Revised), particularly those sections in which are discussed fundamental policy questions of the relationships between income and rent and the objectives of the USHA-aided program as a whole. In addition to these basic policies the factors set forth below should be taken into consideration in analyzing the market.

The market for USHA-aided projects is expected to consist primarily of present tenants. Although the entire low-rent housing program may take owner-occupants of substandard dwellings into consideration, it is anticipated that in its present stages tenants for public housing projects will be selected almost entirely from families who now rent their dwellings.

A particular slum clearance project in any community may throw some owners into the potential market. Also, while it may be desirable, because of a peculiar local market situation, to include some owners, market estimates for the purpose of formulating the present program ordinarily should be based on present tenants only.

If the small differentials recommended in Bulletin No. 24 (Revised) for the rents of units of various size are to be adopted, it may not be necessary to estimate separately the market for each family size. A comparison of rent and income distributions for each size of family as illustrated in tables 4 and 5 will reveal any significant variations by family sizes.

If there are considerable variations by family size, the type of analysis discussed in the following section may easily be made for each family size by using data of the type presented in table 4. However, as a matter of simplicity and expediency it will usually be possible to disregard family size in estimating the market at each income grade simply by using the average rent and income limits as applicable to all dwelling units and family sizes respectively. Most of the errors introduced by following this procedure would be compensated. In such a case the market may be estimated from a tabulation of all family sizes such as shown in table 2. The distribution of family sizes in each income grade would be approximately the same as the distribution in the entire market.

## VII. GENERAL TECHNIQUES TO BE FOLLOWED IN ANALYZING THE MARKET AND IN ESTIMATING THE EFFECTIVE MARKET.

The principles referred to in the preceding Section should be applied in analyzing the market irrespective of the form of the tabular data which must be used in making the analysis. The tabular form in which market data are available will vary in different communities, depending on the type and coverage of the survey from which the data were compiled and the nature of the original tabulations. It is impossible, therefore, to formulate any rigid and detailed techniques to be followed in analyzing the market. Usually it will be desirable to limit the basic analysis of rent-income relationships to data pertaining to nonrelief tenant families occupying substandard dwelling units alone, i.e., not doubled-up with other families. Such families represent a relatively pure group in which normal rent-income relationships would be found unaffected by such factors as receipt of supplementary relief income and doubling-up with other families. After the determination of appropriate income grades and statutory rents to be charged at each grade the number of families in the effective market may be estimated and adjustments may be made to include relief families and doubled-up families.

In this Section an analysis is made based on data available in cities which have had Low Income Housing Area Surveys and recent Real Property Surveys. In the following Section a few additional suggestions are given as to possible techniques which may be followed in other cities where data are not available in this form.\*

### A. Establishing the Range of the Low Income Group to Be Served in a Long-Term Program.

1. The top limit of the low income group. - In setting the top limit of the low income group consideration must be given to the comparative rentals of standard and substandard dwellings, both vacant and occupied, as well as to the distribution in the upper portion of the income range of families now living in substandard dwellings and the rents now being paid by these families. Table 1 illustrates the former type of data and Table 2 the latter.

An examination of the distribution of standard and physically substandard tenant occupied dwelling units in Table 1 shows that the lowest rent class in which the number of standard dwellings exceeds the number of physically substandard is the \$20 to \$25 class. Since these rentals do not include utilities an adjustment must be made to a gross rent basis.

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\* Further suggestions on other techniques will be given in addenda to this Manual as the data for market analysis become more standardized and as future experience indicates other factors which should be taken into consideration.



This may be made by the use of data presented in Table 6. From this Table it is seen that families now paying approximately \$20 contract rent pay in addition about \$2.75 per month for utilities, giving a gross rent of \$22.75 comparable to a \$20 contract rent. At first glance it would appear, therefore, that the local program should stay below the income level at which families can afford to pay \$22.75 gross rent and certainly below a \$25 gross rent.

Examination of the comparative rentals of standard and substandard vacant units appears to bear out this conclusion. Although the number of vacant substandard units in the \$20 to \$25 contract rent class exceeds the number of vacant standard units, in the next rent class, \$25 to \$30, the number of vacant standard units is more than twice the number of vacant substandard units. Further examination of the vacancy ratio of standard units taking into account owner and tenant occupied units would indicate if there is a severe housing shortage at this point in the rent scale. The existence of such a shortage would indicate that private enterprise has not supplied a sufficient number of decent, safe, and sanitary dwellings to provide for the families who can afford to pay no more rent. However, a high vacancy ratio would indicate that the local public housing program should stay well below this point.

Examination of the median gross rentals paid by White nonrelief tenant families of 2 or more persons as presented in Table 2 shows that families in the \$1,200 to \$1,400 income class are now paying a median gross rental of \$23.05. Families in the \$1,000 to \$1,200 income class pay only \$21.25. In view of this evidence it would appear, therefore, that there is some question as to the inability of families of more than \$1,200 and certainly more than \$1,400 to pay the rents required by private enterprise for decent, safe, and sanitary dwellings. Although 19 percent of all families living in substandard dwellings have incomes above \$1,400, the evidence would seem to indicate that such families are occupying substandard dwellings by choice and are not necessarily being forced to live in unsafe, indecent, and insanitary dwellings because of the failure of private enterprise to provide dwellings at rents which they can afford.

On the basis of the evidence presented it is concluded that the top limit for the low income group to be served in a long-term public housing program in this example should be fixed at \$1,200.

2. The lower limit of the low income group. - In order to establish precisely the lower limit of the low income group which should be reached by the local housing program, it would be necessary to examine the practice of local welfare agencies with respect to giving supplementary or complete relief. It is recognized that the lower limit finally established should exclude very few families if local relief is adequate. Table 7 shows that there are only 367 White tenant families of 2 or more persons



receiving relief. These families are now paying a median gross rental of \$16.65. Since the incomes reported by the survey from which these data were compiled did not include income received from relief sources it is impossible to determine, on the basis of survey data, the true income received. However, Table 2 shows only 9 percent of all nonrelief families receiving incomes of less than \$400 whereas 16 percent received incomes of less than \$600. Therefore, it may be concluded that a bottom income limit very much higher than \$400 would exclude a very considerable portion of the low income families who are most in need of rehousing. Final determination of this lower limit in any city would require further study. However, for the purpose of this illustration \$400 is used as the lower limit of the low income group to be served.

B. Determining the Limits of Income Grades in the Low-Income Group.- Bulletin No. 24 (Revised) recommends the division of the low-income group into a number of grades with limits for each grade established so that the range in rent-income ratios within any grade be not more than 7 percent nor less than 5 percent. In order to accomplish this, the ratio of the top to the bottom limit in any grade may not be less than 1.250 nor more than 1.333. It is found that the number of grades necessary for the \$400 to \$1,200 low-income group is 4.

If constant ratios of the top to bottom limits of each grade are to be maintained the range within the grades must be progressively greater at

higher grades. The formula  $r = \sqrt[n]{\frac{t}{b}}$  may be used to determine the

appropriate ratio of the grade limits, where "r" is the ratio of grade limits, "n" is the number of grades, "t" is the top limit of the low-income group, and "b" is the bottom limit of the low-income group. Sub-

stituting the values used in the example we have  $r = \sqrt[4]{\frac{1200}{400}}$ . Solution gives "r" as 1.316.

Applying this ratio to the lower limit of the lowest grade, the top limit is found to be \$400 x 1.316, or \$526. \$526 x 1.316 gives \$692 as the top limit of the second grade. Similar computations give 911 and 1,200 as the limits of the other two grades. Rounding these limits to multiples of \$25, the grades and income limits are established as follows:

<u>Grade</u>	<u>Income Limits</u>
A	\$400-525
B	526-700
C	701-900
D	901-1200

This procedure gives ranges for the various grades so that irrespective of the rents set for any grade the range of rent-income ratios in each grade will be relatively the same.





C. Setting Rents for the Various Income Grades and Estimating the Effective Market. - The number of income grades and the top and lower limit for each grade having been established, the next step is the setting of rents for each income grade. Before such rents can be set it is necessary to make some preliminary analysis of the relationship between rent and income in the low-income group. Table 2 shows the median gross rent now paid by families in each income class. This ranges from \$18.25 for families in the \$400 to \$600 class to \$21.25 for families in the \$1,000 to \$1,200 class. The median gross rent now paid by all families in the low income group, \$400 to \$1,200, is found to be \$19.39. The median income is \$774. The median rent-income ratio for the entire low-income group is found to be 30 percent.

In order to obtain a better understanding of the fundamental problem of rehousing the families in the low income group at rents which they can afford it is desirable to analyze the market by determining what rents would be established for each income grade under three different plans. The first step is the division of the number of families in the group into the number in each income grade. By interpolation within the \$200-income classes used in Table 2 the following table is derived.

Number of White Nonrelief Tenant Families  
of 2 or More Persons Living in Substandard Dwellings,  
by Income Grade and Gross Rent

Monthly Gross Rent	Total	Annual Income Grade			
		A \$400-525	B \$526-700	C \$701-900	D \$901-1200
Total	6,952	535	1,827	2,260	2,330
Under \$5	5	1	2	1	1
\$ 5-10	178	19	59	63	37
10-15	1,140	118	372	397	253
15-20	2,454	201	714	826	713
20-25	1,878	123	428	589	738
25-30	887	52	187	271	377
30-40	369	20	60	102	187
40 and over	41	1	5	11	24
Median	19.39	\$18.22	\$18.37	\$19.05	\$21.09
Mid-point of income Grade		\$462.50	\$612.50	\$800	\$1,050

The distribution of families by income and rent as shown in this table is used throughout the remainder of this analysis.

If rents are set in accordance with Plan 1, the statutory rent for each income grade would be the median gross rent now paid by families in that grade. The above table shows these rents as \$18.22, \$18.37, \$19.05, and \$21.09 for grades A, B, C, and D respectively. The next step in the analysis is to estimate the number of families in the effective market, that is, the number now paying as much or more than the rents established. Since these rentals represent the median, exactly one-half of the families in each grade fall in the effective market and would have their rents decreased if rehoused at these rents. The other half in each grade would be potentially eligible but would have their rents increased if rehoused. The number of families in the effective market in each grade, the percent of the total market which is represented by the effective market, and the rent-income ratios at the mid-point, the top limit and the lower limit of each grade under this plan are shown in the table, Summary of Results of Market Analysis in a Typical City, accompanying the chart at the end of this Section.

Under Plan 2 an analysis is made of the market if statutory rents were set for each grade at the minimum which could be obtained under the law, that is, at 20 percent of the top income limit of each grade. From the Summary Table it is seen that 97 percent of all families in grade A would be in the effective market. Ninety percent of the families in grade B, 80 percent in grade C, and 57 percent in grade D would be in the effective market. The total effective market for all grades would represent 76 percent of the entire market for all grades as compared with 50 percent under Plan 1. The effective market under Plan 2 is larger than under Plan 1 simply because of the fact that under Plan 2 rents would be set at a constant minimum percentage of income for all grades. Since families in the lower income grade are now paying a much greater percentage of their income for rent, a greater percentage of families would receive the benefit of a reduction in rent if Plan 2 were followed.

Under Plan 3 rents would be set so as to maintain a constant rent-income ratio, this ratio being the median rent-income ratio of all families in the low income group. As derived above this is found to be 30 percent. The rent for each grade, therefore, would be established by taking 30 percent of the income at the mid-point of each grade. As shown in the Summary Table this would result in a reduction in rent for 89 percent of the families in grade A, 74 percent in grade B, 43 percent in grade C, and only 21 percent in grade D. If this plan were followed 79 percent of the families in grade D could be rehoused only at a cost greater than that which they are now paying. Only 48 percent of all families in the low income group would be in the effective market. It should be noted that this percentage for the entire group is only slightly smaller than the percentage under Plan 1. The effect on families in the different grades, however, is radically different. The majority of families in the higher income grades could be rehoused only at higher



costs whereas the majority of families in the lower grades would be rehoused at lower costs. Under both Plans 3 and 1, however, the rent for each grade is higher than that which would be established under Plan 2.

The advantages and disadvantages of each of the three plans are apparent from an examination of the Summary Table. Plan 2 gives the greatest effective market. However, the arithmetic average statutory rent if only families in the effective market are reached is lowest under this plan. Even if all families in the entire market are rehoused the average rent is lower than under any other plan, thus giving a higher subsidy cost of the program than any other plan. The number of families in the effective market under Plan 1 does not differ much from that under Plan 3. However, the number at different grades is much different. As pointed out previously, few of the families in the higher grades are in the effective market under Plan 3 while fewer in the lower grades are in the effective market under Plan 3 than under 1. Although the average rent of the effective market would be higher under Plan 1 than under 3, the average for the entire market is slightly higher under Plan 3. All are higher than under Plan 2.

In view of the advantages of various parts of each of these three plans it is possible to adopt a combination which will more nearly accomplish all of the objectives of the USHA-aided program. Plan 4 represents such a combination. This plan which is recommended for use in most cases has the advantage of maintaining the present median rent in the upper income grade while bettering the situation in the lower grades by setting the rent for the lowest grade at the rent for that grade derived under Plan 3. Since the rent-income ratio for the upper income grade is lower than that for the upper lowest income grade, rents for intermediate grades are determined by prorating the difference between the ratios for the highest and lowest grade and applying uniformly smaller rent-income ratios at successively higher grades. In no case, however, may the rent for any income grade be smaller than the statutory minimum determined under Plan 2.

Under this plan the rent set for the highest income grade is that set for this grade under Plan 1. This has the advantage of maintaining the present median rent for families in this grade. The rent for the lowest grade is that established under Plan 3. This has the advantage of allowing for a reduction in the relatively high median rent now paid by families in this grade. The rents for the two intermediate grades are

established in accordance with the formula  $R = \sqrt[n-1]{\frac{T}{B}}$  where "R" is the ratio of the rent in one grade to the rent in the next lower grade, "T"

is the rent for the top grade, and "B" the rent for the lowest grade, "N" being the number of grades. Solution of this equation substituting \$11.56 for "B" and \$21.09 for "T" gives 1.222 as the value of "R." The rent for grade B is  $\$11.56 \times 1.222$  or \$14.13. The rent for grade C is  $\$14.13 \times 1.222$  or \$17.27. Before making an analysis of the market in accordance with the rents established under this plan a few minor adjustments were made. Final rents were rounded off to the nearest multiple of 25 cents, \$11.50 being used as the rent for grade A, \$14.25 for grade B, and \$21 for grade D. Rounding off the rent for grade C to the nearest 25 cents would give \$17.25. With these rentals the differential between grades A and B would be \$2.75, between grades B and C \$3, and between grades C and D \$3.75. A further adjustment was made, therefore, in the rent for grade C, it being raised from \$17.25 to \$17.50 in order to give the more even differentials of \$2.75, \$3.25 and \$3.50 between the rents at successive grades.

The result of the final analysis of the market with these rentals for the different grades is given in the column for Plan 4 in the Summary Table. It should be noted that under this recommended plan relatively greater advantages are given to the families in progressively lower income grades. Ninety percent of the families in grade A are included in the effective market and would have their housing costs reduced. Seventy-nine percent of the families in grade B are in the effective market while 61 percent of the families in grade C are included in the effective market. Fifty-one percent of the families in grade D, the highest income grade, are included in the effective market and could be rehoused with no increase in rent, many of them having their rent decreased. Only 49 percent would be subject to an increase in their housing cost if they applied for occupancy.

A more detailed analysis of the families excluded from the effective market is presented in the following table.

# SUMMARY OF RESULTS OF MARKET ANALYSIS

IN A TYPICAL CITY

<u>ALL GRADES</u>	<u>Plan 1</u>	<u>Plan 2</u>	<u>Plan 3</u>	<u>Plan 4</u>
Effective market				
Number of families	3477	5287	3317	4494
Percent total	50%	76%	48%	65%
Average* rent	\$19.49	\$14.61	\$17.77	\$16.73
Average* rent of total market	\$19.49	\$15.32	\$20.21	\$17.36
<u>GRADE D, \$901 - \$1200</u>				
Statutory rent	\$21.09	\$20.00	\$26.25	\$21.00 <i>nearest 25¢</i>
Effective market				
Number of families	1165	1326	494	1178
Percent total in grade	50%	57%	21%	51%
Rent-income ratio				
Top of grade	21%	20%	26%	21%
Midpoint of grade	24%	23%	30%	24%
Bottom of grade	28%	27%	35%	28%
<u>GRADE C, \$701 - \$900</u>				
Statutory rent	\$19.05	\$15.00	\$20.00	\$17.50
Effective market				
Number of families	1130	1799	973	1386
Percent total in grade	50%	80%	43%	61%
Rent-income ratio				
Top of grade	25%	20%	27%	23%
Midpoint of grade	29%	23%	30%	26%
Bottom of grade	33%	26%	34%	30%
<u>GRADE B, \$526 - \$700</u>				
Statutory rent	\$18.37	\$11.67	\$15.31	\$14.25
Effective market				
Number of families	914	1642	1372	1450
Percent total in grade	50%	90%	74%	79%
Rent-income ratio				
Top of grade	31%	20%	26%	24%
Midpoint of grade	36%	23%	30%	28%
Bottom of grade	42%	27%	35%	33%
<u>GRADE A, \$400 - \$525</u>				
Statutory rent	\$18.22	\$8.75	\$11.56 = \$11.50 <i>nearest 25¢</i>	
Effective market				
Number of families	268	520	478	480
Percent total in grade	50%	97%	89%	90%
Rent-income ratio				
Top of grade	42%	20%	26%	26%
Midpoint of grade	47%	23%	30%	30%
Bottom of grade	55%	26%	35%	34%

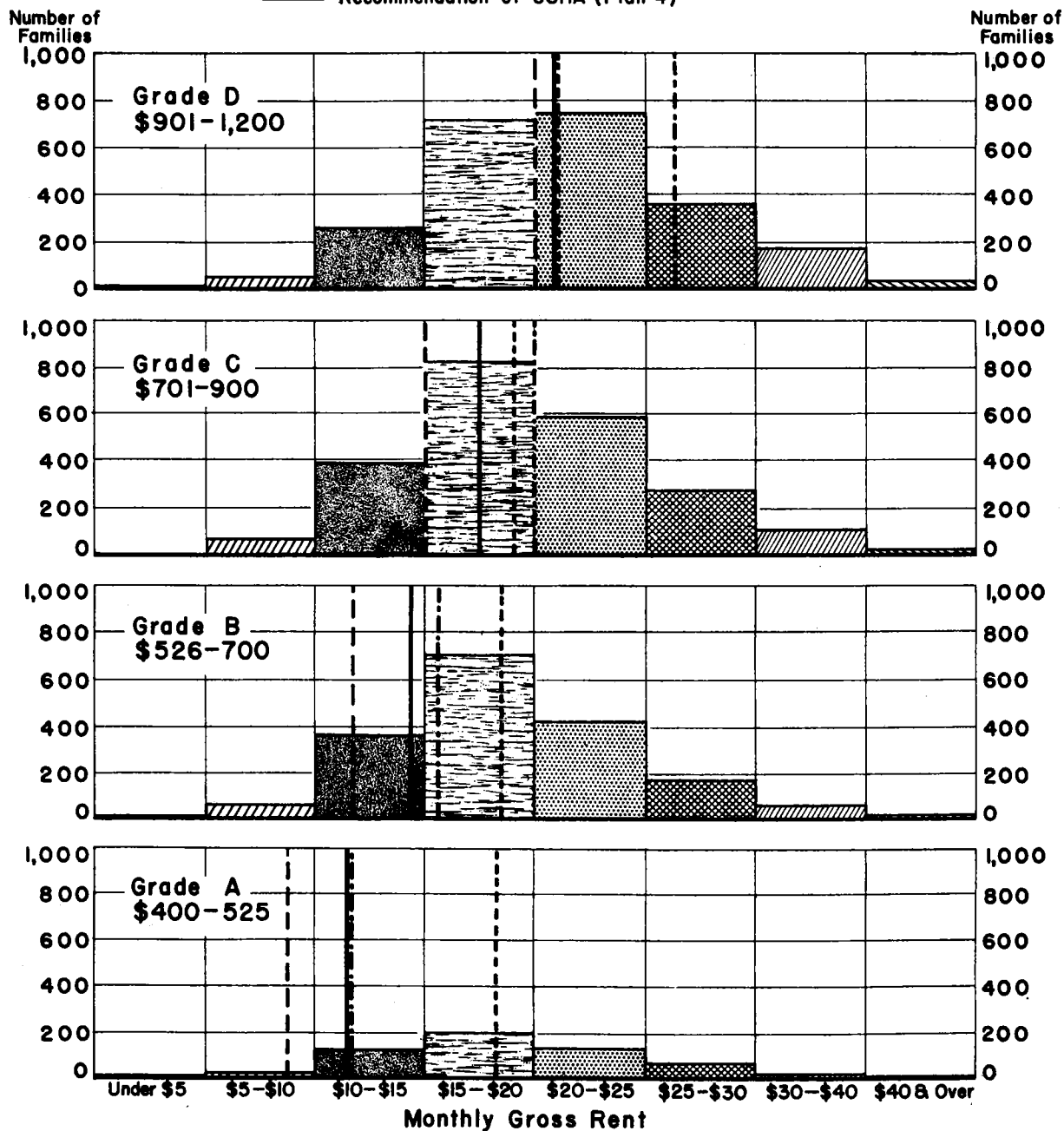
\*The averages given here are arithmetic averages.

# TENANT FAMILIES LIVING IN SUBSTANDARD DWELLINGS, BY ANNUAL INCOME GRADE AND PRESENT MONTHLY GROSS RENT; AND STATUTORY RENT BASED ON FOUR PLANS FOR SETTING RENTS

White Non-relief Families of Two or More Persons in a Typical City

Statutory Rent for Annual Income Grade Based on:

- Median for Grade (Plan 1)
- Statutory Minimum for Grade (Plan 2)
- Median Rent-Income Ratio for All Grades (Plan 3)
- Recommendation of USHA (Plan 4)



Number of White Nonrelief Tenant Families  
of 2 or More Persons in the Market at Specified Income Grades  
and Statutory Rents under Plan 4 Recommended by USHA

Income Grade	Statutory Rent	Number of Families				Total
		Effective Market	Potentially Eligible but Now Paying Less Rent by:			
			\$ .01-2.00	\$2.01-5.00	More Than \$5.00	
\$400-525	\$11.50	480	37	11	7	535
526-700	14.25	1450	149	176	52	1827
701-900	17.50	1386	330	282	262	2260
901-1200	21.00	1178	291	428	433	2330
Total		4494	807	897	754	6952

Adjustments in these estimates to include doubled-up families, relief families, and families which may not have been covered by the survey should be made and presented as Table 2 of the Market Report.

In the example used here for Plan 4 the rent established for the highest grade (that determined under Plan 1) is higher than the statutory minimum. In many communities it may be found that the rent for the higher grades under Plan 1 is less than the statutory minimum. In such a case the statutory minimum should be applied for the higher grades and rents for intermediate grades should be determined by applying the formula to the grades between the lowest (at which the rent is that determined under Plan 3) and the lowest grade at which the statutory minimum is applied. To illustrate, if in the example given the statutory minimum rent under Plan 2 had been used for grade D but the rent determined under Plan 1 for grade C, the rent for grade B would be determined by applying the formula to three grades instead of four.



# THE HISTORY OF THE

REIGN OF HENRY THE FIRST

BY JOHN GILBERT FROTHINGHAM

IN TWO VOLUMES.

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#### VIII. OTHER TECHNIQUES TO BE APPLIED IN MARKET ANALYSIS.

A. Computation of Median Rent and Income. - The computation of median rent and income for each racial group to be rehoused in the program called for in Section A-5 of the Market Report should be based on only those families within the size and income limitations of the market. Single persons and other nonfamily groups, and families with incomes above the top limit and below the lower limit of the low-income group should be excluded. If the local program is to make no provision for extremely large families, they should be excluded.

The computation of the median monthly gross rent in Section B-1 of the Report, on the other hand, should be made on the basis of all tenant families included in the tabulation for each racial group. The median annual income in Section B-1 of the Report should be computed on the basis of all tenant families living in substandard dwellings included in the tabulation for each racial group.

B. Estimating the Market Among Owner Families. - If owners are to be taken into account in estimating the market, they must receive separate treatment. Aside from the fact that there may be a considerable difference in the willingness of present owners to become tenants in a project, the principal difference in market analysis is that for owners income is the only available index of rent-paying ability. Although owners have other expenses of home ownership it is impossible to compare for them a present charge for "rental plus related costs" with that for a project. The number of owner families within any income grade may be estimated. However, "effective market" has no meaning among owners.

C. Adjusting Contract or Shelter Rent to a Gross Rent Basis. - In many communities tabulations by contract or shelter rent may be available which must be supplemented by tabulations of utility payments. In such a case the estimated additional amounts expended for utilities at various rent levels must be added in order to adjust the data to a gross rent basis.

Several of the Low Income Housing Area Surveys provided for a cross-tabulation of family size, income, and contract (or net) rent but not gross rent. These surveys provide a tabulation of contract and gross rents for the same families. A cumulative distribution by such rents is shown in Table 6. The gross rent comparable to a contract rent of \$20, for example, may be derived by interpolating in the gross rent column to find the rent below which fall 61.7 percent (the percentage paying less than \$20 contract rent) of all cases. This is found to be \$22.65. By a similar process it is found that families now paying \$25.00 contract rent pay approximately \$2.80 for utilities, making a comparable gross rent of \$27.80. This technique permits analysis on a gross rent basis of data originally tabulated with additional payments for utilities excluded.



D. Estimating the Market from Independent Tabulations of Rent and Income. - If there is no cross-tabulation of rent and income, it may be possible to compile estimates from independent tabulations of rent and income. One technique which has been found to be useful when estimating the market from such tabulations, is to multiply the number of families in each income grade by the percentage of all families reporting gross rent equal to or greater than the proposed rent. Estimates of the number of families in the effective market thus derived have been found to be accurate within a very small percentage of error when compared with estimates derived from a cross-tabulation of rent and income. This technique does not give, however, any estimate of the number of families with comparable incomes but who are now paying rents of specified amounts less than that proposed. Also, if very unusual relationships exist between rent and income, as indicated for instance by a comparison of median rent with median income, the estimates are subject to greater error.

As yet there has not been developed any entirely satisfactory technique which may be used in estimating the effective market at different income grades when only a distribution of tenant families by rent and family size is available. Without income data it is impossible to determine how many of the families now paying comparable rents have incomes greater or less than the limits of the grade. This problem is being given additional study and if any satisfactory procedure is found further suggestions will be given in an Addendum to this Manual.

## IX. FORMULATING THE IMMEDIATE PROGRAM.

Bulletin No. 24 (Revised) gives certain recommendations with respect to the income grades and family sizes which should be provided for in the formulation of the immediate program. It is the ultimate aim of the low-rent housing program to rehouse all families in the low-income group now living in substandard housing. However, the immediate program should be formulated on the basis of families in the effective market.

Until we have had additional experience in the rehousing of low-income families it is desirable to maintain a margin of safety between the number of families in the effective market and the number of units to be provided in the immediate program. As far as possible, the same general principles are applied in market analysis as in tenant selection. However, some of the families included in the statistical treatment may be found not to qualify when examined more closely for the purpose of tenant selection. It is recognized that because of personal preferences many families will not apply for occupancy. Inaccuracies in the basic market data, particularly as to incomes, may introduce a further unpredictable degree of error. As more families are rehoused it will be possible to evaluate methods and techniques of market analysis and to determine the validity of market estimates. Thus far, however, we have not had sufficient experience to enable us to determine if our procedures of analysis are valid or to measure accurately the degree of error within which an estimate based on different types of data can be made. Thus a margin of safety is necessary in order to assure that a sufficient number of eligible families will apply for occupancy early enough to avoid a long period of expensive vacancy, and to assure a sufficient market to take care of turnover after initial occupancy.

3:1 { Where market data are considered reliable, that is, based on a recent survey of adequate coverage with tabulations such that the interrelationships of family size, rent, and income may all be taken into account, a ratio of 3 to 1 between the number of families in the effective market and the number of units to be provided is adequate. Where the data are old or less reliable for other reasons this ratio should be increased.

5:1 { Until there has been further research into the question of the relationships between rent and income it is impossible to establish any ratio for a market estimate based on a tabulation of only rent or income by family size which would be comparable to a 3 to 1 ratio of an estimate based on a cross-tabulation of rent and income. The size of such a comparable ratio would vary with differences in the relationship between rent and income, which is one of the unknown factors if there is no such cross-tabulation. As a general principle, however, if only tabulations by rent or by income are available, the market ratio should be not less than 5 to 1.

## X. PREPARING THE MARKET DATA CHART.

The purpose of this chart is to show certain basic market data against which may be shown (1) a plan for rehousing low-income families, and (2) projects under loan contract (as well as PWA Housing Division Projects). There should be attached to this Chart, or incorporated in similar form on the same page as the chart, a summary Table showing the Results of Market Analysis such as that at the end of Section VII of this Manual.

Identification of the city, state, and racial group ("White," "Negro," "Latin American," etc.) to which the data apply should be shown in the appropriate spaces at the top of the sheet. Separate charts should be prepared for each racial group to be treated separately in the market.

A. Tenant Families in Substandard Housing. - The number of families shown in the "Distribution of Tenant Families in Substandard Housing" should include only natural and cohesive families; i.e., single individuals, nonfamily groups, and extremely large families for which it is not considered feasible to plan the program should be excluded. This is indicated by entering the range of family sizes included, such as "2 to 7 persons," or "2 to 8 or more persons." The scale to which the chart is drawn should be indicated, as shown in the illustration, by entering the number of families represented by the various distances measured from the base line at the left. The scale should be selected so that the chart will show up as large as possible.

The "annual income classes" shown in the column immediately to the left of the chart may be those used in the tabulation of the original survey data. In general, annual income class intervals of more than \$200 should be avoided; nor is it desirable to use class intervals of less than \$100. The chart is drawn, then, to show graphically the number of families in each income class.

Entries in the three columns at the left of the chart, "Percent Families Receiving Relief," "Number of Families," and "Median Monthly Payment for Rent Plus Utilities" pertain to the families in each income class. Entries in the column "Percent Families Receiving Relief" should be percentages of the "Number of Families" in each income class. If data pertaining to families receiving relief are not available by income but are by rent, this column may be left blank since provision is made in the lower portion of the sheet for percentages by rent classes.

In computing the "Percent Families Receiving Relief" a definition of relief should be used conforming as nearly as possible to the policy of the local authority in admitting relief families to projects. If the same limit is to be applied to families receiving WPA work relief as to those receiving direct relief, both should be included. However, the form



of available data will generally determine how the computations are made. In any case, a complete explanation of what families are included should be given under "Notes."

B. The "Plan for Rehousing". - If such a Plan has been developed, is intended to show the division of all tenant families living in sub-standard dwellings into the various income grades to be rehoused and the average monthly statutory rent at which each grade is to be rehoused. This is indicated, as shown in the Illustration, by drawing horizontal lines across the two columns at the right and across the chart itself and entering in each segment of the two columns the limits of the income grade and the average monthly statutory rent at which that grade is to be rehoused. The income limits which would apply to a four-person family and the statutory rent for a two-bedroom unit may be entered as the income grade and average statutory rent. The lowest income grade and average statutory rent shown will be the lowest which it is believed to be feasible to reach and the highest will be the maximum for the entire program in the community.

When the Plan for Rehousing is shown a dotted line should be drawn on the chart so that the area between the dotted line and the base line will indicate the number of families in each income grade which are now paying at least as much for rent plus utilities as the statutory rent proposed for that grade. The area to the left of the dotted line will indicate those families whose rent would be increased if they were to be rehoused.

C. Distribution of Dwelling Units and of Families Receiving Relief, by Monthly Shelter Rent. - The table in the lower portion of the sheet provides for a tabulation, by shelter rent, of the number of tenant-occupied standard and substandard dwelling units and of vacant standard units. The tabulation may be taken from a Real Property Survey or other local survey or estimates may be derived from other available data. Rent classes may be those used in the tabulation of the original source of the data.

The entries for the number of vacant standard dwelling units in each rent class should be the number of such vacant units prorated on the basis of the total number of tenant occupied units, standard and substandard, occupied by each race. This is derived by multiplying the number of vacant standard units in a given rent class by the percentage of the total number of tenant occupied units in the same rent class occupied by a given race.

The line "Percent Families Receiving Relief" is provided in the lower portion of the sheet in order to permit the inclusion of these data by rent if they are not available by income as called for in the upper part of the sheet. The entries here should be the percentage of the sub-standard units in each rent class occupied by families receiving relief.





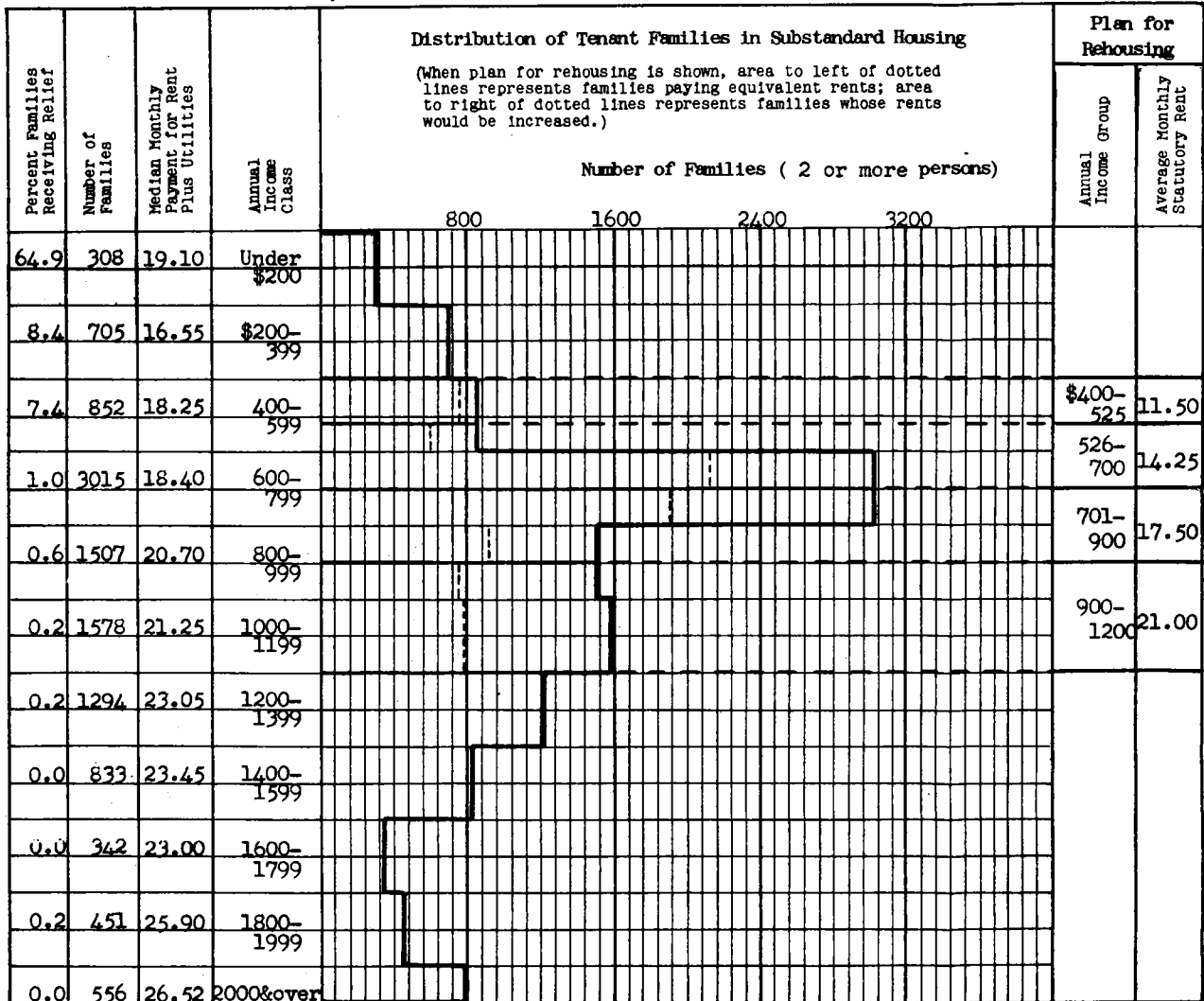
A full explanation of what is meant by the term "relief" should be given in the notes as called for in the instructions above.

The entry for "Minimum Adequate Utilities" should be the minimum monthly cost of an adequate complement of utilities. This may be derived by estimating the amount spent for utilities by families in the lowest shelter rent class in which the number of standard tenant occupied units exceeds the number of substandard tenant occupied units. The reliability of this estimate may be checked by an estimate of the expenditures for utilities by families in the highest income grade, by estimates of the local welfare agency of the cost of such utilities, or by estimates of the cost of utilities on a project adjusted to allow for differences in wholesale and retail rates.

Under "Notes" should be given the source of basic market data, the data to which they apply, and any explanation necessary for a clear understanding or to permit an accurate evaluation of the data.

# MARKET DATA

City Typical State \_\_\_\_\_ Race White



Distribution of Dwelling Units and of Families Receiving Relief,  
By Monthly Shelter Rent

Item	Monthly Shelter Rent										
	Total	Under \$5.00	5.00-9.99	10.00-14.99	15.00-19.99	20.00-24.99	25.00-29.99	30.00-39.99	40.00-49.99	50.00-74.99	75.00 & over
Tenant Occupied Standard Dwelling Units	33,531	2	54	803	3,299	4,494	5,675	9,873	5,309	3,248	774
Substandard Dwelling Units	18,297	283	1,530	5,338	5,087	3,387	1,687	846	111	27	1
Percent Families Receiving Relief											
Vacant Standard Dwelling Units	2,279	0	1	30	100	183	278	676	508	364	139

Minimum Adequate Utilities \$ 2.75 Notes: The number of families shown in the distribution by income includes only nonrelief families in units occupied by single groups. Hence the families indicated by "Percent Families Receiving Relief" are additional families. This also accounts for part of the difference between the number of "families" and the number of "substandard dwelling units," the remainder of the excess of dwelling units being those occupied by single persons and doubled-up families.

What purports to be "monthly shelter rent" includes some utilities. The estimate of "minimum adequate utilities," therefore, is the additional amount which should be added to the "shelter rent" of about \$20 or \$25 in order to adjust to a "rent plus utilities" basis.

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