

MONOGRAPH

HOUSING FORECASTING AND PROGRAMMING:

THE UNITED STATES EXPERIENCE

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

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Government Housing Programs and Needs

Analysis in the U. S.

I. Housing Policy in the U.S. and the Role of Housing Data

Estimates of the need for new housing construction and for rehabilitation of existing units in the U.S. have been prepared by many government and private analysts for over thirty years, and have been an increasingly important national planning tool. Through the 1960's, it was felt that the basic data from which to determine needs were generally weak and inadequate. The U.S. became increasingly conscious of the importance of monitoring housing conditions in the late 1960's and early 1970's, and has taken deliberate steps to expand data sources, and improve their quality, in order to quantify housing needs more accurately.

Even as the capacity to analyze conditions has improved, a fuller understanding of the underlying determinants of housing needs and production levels has made the task more complex. Needs are dictated by social trends and economic conditions, which can vary greatly in the short term. Production activity is the cumulative result of many independent private and public decisions. The interrelationships have become more involved as the government's role in the housing market has expanded.

A. Housing Policy -- A Historical Perspective

Public interest in housing in the United States is over half a century old. The Federal government was briefly involved in building public housing for defense workers in World War I. Peacetime involvement, however, dates from the Great Depression of the 1930's. In 1932, Congress sought to provide

housing credit resources on a large scale through Home Loan Banks. The Public Works Administration was authorized in 1933 to include slum clearance and the repair and building of low-cost housing among its projects. The National Housing Act of 1934 established Federal mortgage loan insurance, and a secondary market for insured home mortgages.

A major further development in national policy was the 1937 National Housing Act, which provided for local public housing programs under Federal subsidy and regulation. Under the 1937 Act, ownership, site selection, and operation of housing specifically built for low-income tenants were delegated to local authorities, and have since essentially remained in their hands. The role of the Federal authorities in public housing was and is limited to resource allocation by program and area, setting occupancy and construction standards, and making loans or grants to the appropriate local authority.

It was not until 1949, however, that Congress explicitly established as the national housing policy that the general welfare and security of the Nation required "the realization as soon as feasible of the goal of a decent home and suitable living environment for every American family."* Also emerging in the Housing Act of 1949 was the concept of urban renewal - the demolition and clearance of dilapidated areas followed by redevelopment. Subsequently, Federal involvement has expanded to include a number of programs providing various production incentives to private developers, and assistance to supplement tenants' rents in privately owned housing.

* Excerpt from the Housing Act of 1949, Sec. 2, Declaration of National Policy.

If only direct subsidies are taken into account, publicly owned housing accounted for 1.3 million units, or 1.6 percent of the United States' total housing stock as of 1977. Direct subsidies for private housing assist families in another 1.4 million units, or 1.7 percent of all units. However, these low percentages conceal the broader effect of government policies on the economy which directly or indirectly affect housing. Intervention in money markets and use of tax policies have considerable, although sometimes incalculable, effects on the private market production of housing. Federal housing-related tax subsidies alone far exceed the cost of direct housing subsidies.

B. The Role of Data

The passage of the Housing Act of 1949 was influenced by estimates prepared by the Congressional Joint Committee on Housing and the Housing and Home Finance Agency that the U.S. would need from 1.5 million to 1.6 or 1.7 million units per year until 1960 to meet all anticipated housing needs. The total of 16.7 to 17.7 million units in the Housing and Home Finance Agency's analysis included the rehabilitation or replacement of 8.5 million substandard units. Until the late 1960's, when dissatisfaction with urban renewal was increasing and many public housing projects encountered financial difficulties, this type of systematic projection of housing needs from existing data was rare.

In 1968, Congress instituted two substantially new housing production programs, and introduced a timetable for achieving "National Housing Goals". The legislatively stated Goals' estimates were based on a number of studies undertaken as a response to the urban unrest of the mid-60's. These

studies assumed that the nation's housing problems could be substantially solved in a single decade by: (a) producing enough unsubsidized housing units to offset expected new family formations; (b) replacing substandard housing and losses from the housing stock, and thus increase vacancy rates; and (c) by providing assistance in the form of housing subsidies for families who could not afford the cost of standard housing.*

It was in part because of these studies that Congress set a target of constructing or rehabilitating 26 million housing units between July, 1968 and June, 1978. Of these, 6 million were to be subsidized. A subsequent analysis and policy declaration (1969)** separated this into subsidized goals for 5 million new dwelling units and 1 million rehabilitated units. The remaining 20 million units were to be unsubsidized private construction, which subsequent analysis and policy statements separated into goals of 16 million conventional dwelling units and 4 million mobile homes. Later analyses questioned the use of such a long-range forecast and the aggregation of needs to the national level. These factors, however, will be examined later in the monograph.

* The President of the United States, Fourth Annual Report on National Housing Goals, June 29, 1972, p. 27.

**Ibid., see Chart 9, p. 26, of the report.

II. Program Forecasting, Budget Allocation, and Program Evaluation Methods

A. Program Forecasting

Housing-related forecasting and budgeting are spread over a number of governmental units in the U.S. A large proportion of the Federal government funds spent annually on housing are used meeting long-term commitments from previous years. Local government decisions are highly subject to the annually fluctuating availability of Federal funds, and Federal approval of local plans. Housing is the business of not only the federal and state governments, but also of numerous local government entities (counties, cities, local housing authorities). The network of forecasting and budgeting decisions, is, therefore, quite complex.

Resource for housing at the Federal level are determined in a quasi-adversary process between the Executive Branch (the President and Department heads) and the Congress. The Administration allocates a certain amount to various housing activities in its annual budget. Congress then hears testimony from housing agency officials, considers alternative spending priorities offered by legislators, if any, and finally designates spending authority to the Department of Housing and Urban Development (HUD) and other Federal agencies for programs in housing development finance and in neighborhood and community development.

The laws relating to housing and to neighborhood and community development involve over forty different subsidized and unsubsidized programs designed either to help construct or rehabilitate housing units or to assist households in paying for their units. Execution of

these programs requires cooperation by entities ranging from non-profit corporations to private homeowners to municipal governments. Resource allocations vary by program. Some funds are disbursed to the highest priority applicants without regard to location, and some are allocated to state for disbursement. The largest amount of funding is allocated by metropolitan and non-metropolitan designation, and then suballocated to state-level offices for distribution. Funding falls into two general categories - one for specific housing programs, and one for housing-related activities such as community planning, community recreational facilities, water and sewers, etc.

B. Housing Assistance Plans

The Federal Government has in recent years increasingly recognized the value of local forecasting of housing needs. While national level projections are of fundamental importance in formulating national housing policies and are helpful in determining aggregate levels of money needed for assisted housing, two additional factors are of major importance. First, the state of the economy and private household decisions, which are not totally predictable over long periods, exert the predominating influence on total housing production. To some extent, new private production in turn affects the need for subsidized production. Second, patterns of metropolitan and regional growth vary greatly. It is therefore essential to have detailed analyses of local housing markets to address effectively the housing needs of the nation.

Given the necessity of identifying local needs, Federal housing and neighborhood and community development programs now contain requirements that certain local planning be completed prior to qualifying for Federal money. For example, no local government can receive Community Development Block Grants without an approved Housing Assistance Plan (HAP) which estimates the current housing needs of low income and moderate income families residing or expected to reside in the area. HUD regulations are increasingly emphasizing local use of HAPs to determine all local housing needs. In addition, HUD offers special technical assistance grants to localities for the purpose of improving their ability to analyze local housing markets. The HAP process not only indicates how localities are taking stock of their overall conditions as a requirement for community development money, it also identifies local needs for federal subsidized housing assistance of different types.

Housing Assistance Plans (HAPs) have become the Federal Government's primary source of information on housing needs and housing funding priorities at the local level. Submission of HAPs is required for all cities of 50,000 or more persons, all metropolitan counties (250,000 or more persons), and the many smaller communities which receive HUD funds. The following is a summary of the HAP housing assistance planning and allocation process:

1. Data Base Research

- a. Survey of Housing Conditions. The Housing Assistance Plan describes the condition of the housing stock in the community, identifying:

1. All owner-occupied, non-seasonal units, occupied and vacant, and available for sale;

2. All non-seasonal rental units, occupied and vacant;
 3. All standard units, by tenure (owner or renter) identifying those which can be rehabilitated to a prescribed standard;
 4. All vacant units by tenure;
 5. Special housing conditions/problems which may exist.
- b. Development of Overall Needs Estimates. The housing assistance needs of lower-income households residing and expected to reside in the community, subtotaled by owners and renters, household size, and special needs are estimated, identifying the following types of households:
1. Lower-income -- generally families with 80 percent or less of median income, adjusted by household size;
 2. Elderly;
 3. Handicapped;
 4. Small families;
 5. Large families;
 6. Minorities;
 7. Households expected to be displaced during a three-year period by public or private action.

Separate estimates are made for the assistance needs of owner and renter households. Separate estimates are also required for households expected to reside in the community. Special 1970 census tabulations are provided to local governments by HUD for households currently residing in the community. Updates may be done as needed, and are reviewed by HUD for accuracy of methodology. An "Expected to Reside" estimate is computed

by relating individual communities to the metropolitan area, and then making adjustments based on locational differences between employment and residential patterns, and related mobility experience.

Total needs are determined, with HUD review of procedures and data, by identifying the total lower-income population, subtotaled by owners and renters, and then further subdivided by those living in substandard housing. The definition of "substandard housing" used is based on HUD guidelines to the extent they can be related to locally available data, and also includes the housing of those paying more than 25 percent of their income for all housing-related expenditures.

C. Determination of Three-Year Annual Housing Assistance Goals

1. Total Three-Year Goal. After determining overall need, the three-year goal is established at 15 percent or more of total housing need unless the applicant can demonstrate that this is not feasible. This projection is made without regard to the type of housing program (new, rehabilitation, or existing, in addition to specific program type decisions) which might be required and relates to overall housing assistance requirements. This 15 percent is spread over the three-year period based on an assessment of ability to meet needs. The 15 percent needs total must be proportionately divided in a manner consistent with the elderly, family, and tenure group ratios identified in the overall needs estimates.

2. Determination of Housing Type.

a. Existing Housing. The first step (done separately for owner and rental units) is to determine how much

of the goal can be met by existing housing. The process is as follows:

1. Determine absolute number of vacancies.
2. Determine what the "normal" vacancy rate should be, using the following accepted guidelines on vacancy rate ranges* as benchmark criteria.

Range of Desirable Vacancy Rates
By Growth Rate of Area

<u>Tenure</u>	<u>Rapid</u>	<u>Moderate</u>	<u>Slow</u>
Owner-occupied housing	1 1/2 - 2%	1% - 1 1/2%	Less than 1%
Renter-occupied housing	6 - 8%	4% - 6%	Less than 4%

HUD works with individual communities to determine the appropriate vacancy rate which should be used. Economic criteria are applied so that a community which is growing at an exceptionally rapid rate might need and be expected to try to maintain as high as a 10 percent vacancy rate, while a rate of as low as 1 percent might be appropriate for a community which is losing population. As stated, the above ranges are considered benchmarks rather than absolutes. Known factors which would result in changes are factored in, based on mini-market analyses. For example, if a community is now growing fast, an estimate must be made as to how long this will continue if overbuilding and unnecessary vacancies as a result of a future decline or reversal of this growth are to be avoided.

*These ranges are historically derived from analyses of supply-demand relationships in the United States, and are the norms generally accepted by industry and government.

3. The relevant vacancy rate factor is multiplied by the total standard housing stock to determine the appropriate number of vacancies for the community's situation.
4. The result of the preceding calculation (i.e., item "3" above) is compared to the absolute number of vacancies. If an excess of vacancies exists that number, subject to modification, is assumed to represent units which might under certain conditions be available to meet subsidized housing assistance needs through existing housing.
5. Vacancies must be sorted by size, location, and type, e.g., high-rise, garden, etc. The vacancies are then matched against housing needs to determine the extent to which the existing housing stock can be used to meet large family, family, and elderly unit size needs.
6. The number of available vacancies so identified is used as the three-year goal for meeting housing assistance needs through existing housing. Any unfilled "residual" needs would then normally be met with a request for new construction units. In cases where the amount of the new construction "residual" is not feasible in terms of market absorption or other factors, an exception to the 15 percent rule for a lower 3-year goal may be granted.

D. Accumulation of HAP Data

Economists in the HUD field offices review HAP data, data sources, and methodologies utilized. After a HUD Area Office approves a HAP, it

is sent to HUD's Central Office where it is rechecked for completeness and consistency. A computer program provides for automatic mathematical checks, as well as for checks on the reasonableness of these numbers, within predetermined parameters. The procedure is also designed to reject HAPs where the goals are not in proportion to need. Any HAPS with major computer-detected errors are sent back to the Area Office for verification and correction as necessary. The process of placing all HAP data into a computer system also means this information can be compiled and analyzed quickly and easily in any format desired. ;

The most recent detailed summaries of HAP data available were made in connection with applications for Fiscal Year (FY)* 1977 Community Development Funds. Since a community would actually use the funds allocated for housing based on this data in FY 1978, the percentages which result would be applicable to FY 1978 funding. The subsidized housing funds are almost exclusively restricted for new rental units, rental units which must first be substantially rehabilitated to meet program standards, and existing rental units which are already considered to be in acceptable condition. The cost of each of these three types of rental housing varies, and is a major determinant of the total number of units a given amount of Federal subsidy funds can support. Accumulation of HAP data of this type is used by HUD as part of its calculations in making projections of the total number of units

*The U.S. Government does all allocations and budgeting on a "Fiscal Year" basis, which begins on October 1st and ends on September 30th.

that can be provided. The resulting estimates are then used by HUD to give communities an estimate of the number and type of assisted rental units that can be funded by the Federal Government in the following year.

The total number of units requested by localities of over 50,000 persons in their FY 78 Community Development funding applications was as follows:

<u>Type of Assisted Housing</u>	<u>HAPs of Metropolitan Areas</u>			
	<u>One-Year Goals</u>		<u>Three-Year Goals</u>	
	<u>Units</u>	<u>%</u>	<u>Units</u>	<u>%</u>
New Rental Units.....	242,282	43	592,779	40
Rehabilitation of Rental Units.	117,272	21	317,170	21
Subtotal.....	360,154	64	909,949	61
Existing Rental Units.....	203,865	36	569,437	39
Total.....	564,019	100	1,479,386	100

The above information reflects only the HAPs of large cities and metropolitan areas, and therefore has the potential of resulting in statistically biased results if used to estimate all assisted housing needs. To compensate for this bias, HUD also tabulates the HAPs of a number of smaller cities and towns which continue to receive community development entitlements as a result of a previous, multi-year funding commitment. This tabulation showed an even larger proportion of goals for new and rehabilitated assisted rental housing, as reflected in the following table:

<u>Type of Assisted Housing</u>	<u>HAPs of Cities Under 50,000 persons</u>			
	<u>One-Year Goals</u>		<u>Three-Year Goals</u>	
	<u>Units</u>	<u>%</u>	<u>Units</u>	<u>%</u>
New Rentals.....	47,562	53	98,626	48
Rehabilitation.....	14,007	16	36,058	17
Subtotal.....	61,569	69	134,684	65
Existing Rentals.....	28,262	31	72,636	35
	89,831	100	207,320	100

The adjusted HAP totals could then be used to project national Federal assisted housing goals as described in the following section.

E. Use of HAP Data for Funds Allocation

1. Allocation Purposes. HAP data is used to assist in the allocation of funds on three governmental levels in the following manner:

a. National Level. HAP data is compiled nationally and used as a basis for national-level determinations of the type of assisted housing "mix" (relative proportions of new, rehabilitated and existing rental housing) that should be allocated in the following year. Given this "mix", the number of units that will be made available can be computed, and requests can be made for changes in the level of congressionally approved funding to be provided, if necessary to meet total national annual assisted housing unit goals.

b. State Level. Once the total level of assistance available is known, HUD allocates all funds to its state level area offices based on "fair-share" computations. "Fair-share" allocation procedures basically involve dividing up the total funds among

different HUD Area offices on the basis of the total population served by each Office, after adding in factors which make adjustments for levels of poverty and indicators of housing overcrowding and substandard conditions. Each HUD office is in turn required to use the same procedure in suballocating all of its assisted housing funds to localities within its jurisdiction, making adjustments only as necessary to assure the funds are effectively used.

c. Community Level. The HAP data collected for use in HUD allocations are also the basis on which community performance will be measured, and actually becomes a part of a locality's HUD-funded community development program. In many instances communities allocate a significant amount of their own revenues for the same program(s), thereby increasing the impact of federal funds. To the greatest extent possible, HUD Area Offices attempt to provide communities with the same number and type of units requested in their HAPs. To the extent adjustments are necessary, they are applied proportionately to all localities (e.g., if funds are inadequate to meet requests, the percentage reductions needed are applied to all communities).

2. Program Evaluation. The program evaluation function is mainly carried out at the Federal level. There are two avenues of program review - one within HUD and another by the Congress in its authorization and appropriation function. In HUD, the Office of Policy Development and

Research conducts on-going policy reviews. Permanent civil servants and consultants from the academic community collaborate on these evaluations, under the direction of the Assistant Secretary for Policy Development and Research. It is obviously in the interest of the agency to ensure that public money is being spent as wisely and effectively as possible. Such reviews take place continuously, as some programs have regular analyses mandated by law, and others are taken up at HUD's discretion on program questions of greatest concern and interest.

The U.S. Congress is ultimately responsible for the effectiveness of public programs. The staffs of both the House of Representatives and the Senate Committees on Banking, Housing and Urban Affairs conduct separate evaluations of various policies. Generally, the work of Congressional staffs is an extension of HUD evaluations, as the two branches exchange data and views on the performance of housing programs. The cycles of programs vary, as some are authorized for up to three years and some receive authority and outlays for only one year. In either case, amendments to the housing laws can be offered at any time, so programs tend to be reviewed - either to clarify legislative intent, or increase or decrease funding - every year.

III. Information Sources for the Analysis of U.S. Housing Markets

There are four major sources of housing data from which to build estimates of housing need. They vary in frequency and coverage, however, and must be used in conjunction with each other to obtain the most accurate representation of current housing conditions in the United States.

The most comprehensive source of housing data from the standpoint of places covered is the decennial Census of Housing. It obtains detailed data on the social and economic characteristics of households for every region, state, metropolitan area, and local jurisdiction (both urban and rural), and even for census tracts (neighborhood-level survey areas) in metropolitan areas. While it is thorough in its coverage, it only asks a limited number of questions about the location, type, and quality of housing, and occupant characteristics. Moreover, the infrequency of the Census and the time lag between data collection and publication further limit its usefulness.

To augment the data collected in the decennial Census, the Department of Housing and Urban Development and the Bureau of the Census of the Department of Commerce have begun to obtain current data on the conditions of the housing stock and its neighborhood setting using a HUD-financed Annual Housing Survey. The Annual Housing Survey uses both national and Standard Metropolitan Statistical Area (SMSA) sampling schemes to collect a wide range of information describing the quality and condition of American housing, and occupants' perception of their

housing and neighborhoods. The Survey, begun in 1973, provides more detail than has been available from the decennial census, but is limited to data aggregated on national and regional levels, plus that for 60 selected metropolitan areas.

A third important source of information is the monthly publication of construction reports by the Departments of Commerce and HUD. These reports track both public and private new housing starts and completions, the number of units per structure, and housing permit-issuing activity. These reports also include information on the marketing of new one-family houses and new apartments. Data on the dollar value of new construction in process is published monthly for the nation. Monthly data is also issued for residential alterations and repair activity and expenditures, and for detailed structural characteristics (e.g., materials, size, number of stories) of new one-family houses built.

As mentioned in Section II, a resource of growing importance for housing data is the local Housing Assistance Plan (HAP). HUD field office economists review HAP data sources, and methodologies for each community submitting applications, and use this information in their own analyses. The quality of this data is improving each year as local housing specialists became more experienced and sophisticated. However, differences in the quality and availability of data, as well as differences in methodological sophistication, result in variations of such magnitude that national aggregates are of questionable value.

IV. Methods and Experience in Assessing Current Social Housing Needs*

Long-term housing requirements are estimated so as to include types of criteria, basic needs and social needs. "Basic" housing needs are generated by or related to net household formation, replacement of losses from the housing stock, and adjustments for changes in vacancy rates. "Social" housing needs relate to replacement of physically deficient units and alleviation of housing-related problems such as lack of basic housing services (e.g., heat, plumbing, electricity), structural deficiencies, lack of bedroom space, overcrowding, excess cost burden, and neighborhood inadequacies. An overview of the methodology used in determining basic needs and projections of their long-term trends will be presented in Section VI. This Section focuses on the current accepted delineation of social needs. Since social needs are also important in the long-term, estimates of future prospects which can be plausibly made are included at the end of this section.

A. Deficiencies in the Housing Inventory (1976)

The Annual Housing Inventory Survey provides a wide range of information on the quality of America's housing stock. In this section, preliminary data available for 1976 are compared with earlier reports to examine the nature of changes in housing deficiencies. To summarize, almost all are in the direction of better housing. (See Table 1)

* Reprinted in large part from Appendix B of the Tenth Annual Report on Housing Goals, Departmental Document, 1978.

TABLE 1

Summary of Social Housing Needs (Low-
moderate households in parentheses):
(millions)

	<u>1973</u>	<u>1976</u>	<u>1988</u>
Total Physical Deficiencies	7.83 (5.22)	6.05 (4.14)	3.30 (2.30)
Previous Items Total	6.82 (4.65)	5.14 (3.63)	2.60 (1.95)
Lacking Plumbing	2.47 (2.02)	1.95 (1.57)	1.10 (.90)
Lack or Share Kitchen	.41 (.28)	.39 (.29)	.30 (.25)
2 of 4 Maintenance Items	3.75 (2.20)	2.59 (1.63)	1.00 (.70)
2 of 3 Public Hall Deficiencies	.19 (.15)	.21 (.14)	.20 (.10)
New Items Total	1.01 (.57)	.91 (.51)	.70 (.35)
Inadequate Heating	.98 (.56)	.89 (.50)	.70 (.35)
Electrical Problems	.03 (.01)	.02 (.01)	* (*)
Inadequate Sewerage	.00 (.00)	.00 (.00)	.00 (.00)
Bedrooms Lacking Privacy	1.13 (.62)	1.29 (.69)	.00 (.00)
<u>Housing Related Problems</u>			
Overcrowded Units (without and of the above problems)	2.83 (1.44)	2.41 (.24)	1.00 (.50)
Excess Cost Burden**	NA	10.50 (9.40)	NA
Want to move due to inadequate services	NA	2.22 (NA)	NA

Negligible amount

*Estimated. The estimates will be refined with further analysis.

Source: Tenth Annual Housing Goals Report, Appendix B, U.S. Department of Housing and Urban Development, December, 1978.

Twenty-three types of housing deficiencies are enumerated in the Annual Housing Survey, including one (bedrooms used by 3 or more persons), which reflects the pattern of use rather than a deficiency inherent in the housing itself and one (garbage collection in Standard Metropolitan Statistical Areas) which reflects the level of local service rendered. In the latter two cases decreases were reported in 1975 and 1976 in the number of occupied housing units with the specified deficiency. The marked decline in the past three years seems to indicate an improvement in the quality of American housing, as well as the persistence of the same problem.

The Annual Housing Survey's data on deficiencies do not distinguish between deficiencies found with existing housing as opposed to deficiencies in new housing added to the inventory. To make this distinction would require considerably more extensive sampling, and is not considered cost-effective at this time. Moreover, data on the characteristics of housing in use in 1976 constructed since 1970 reveal that even among these relatively new units there are some shortcomings in plumbing and kitchen facilities (but typically only for new units outside metropolitan areas), overcrowding, and high percentages of income devoted to housing costs.

To the extent that the rates for new construction or for the removal/demolition of older units decline, the rate of improvement in the quality of the nation's housing may also be reduced. Since there are some relatively clear cause and effect relationships between housing construction and housing removal in the U. S. - in both the physical and economic sense -

fluctuations in housing construction are closely allied with the rate at which housing units with deficiencies are eliminated from the housing inventory. However, it is also true that significant changes can and do occur in the quality of the existing stock. Upgrading of existing units is an important factor in the elimination of housing deficiencies.

1. Plumbing

According to the Annual Housing Survey, the number of occupied, year-round, housing units lacking some or all plumbing facilities declined from 2.1 million units in 1975 to 1.9 million in 1976. This drop reflects both the removal and the improvement of units lacking plumbing facilities. There are other-plumbing-related matters indicative of inadequate quality for American housing in the 1970's, and the Annual Housing Survey has pursued various lines of inquiry beyond the mere presence of facilities. For example, the question of whether and how often the facilities broke down in the preceding 90 days has been used to identify inadequate services, as is noted in Table 2.

Using the standard of two or more breakdowns of at least six hours duration within a 90-day period, fewer than one million households experienced unusual plumbing breakdowns. About 0.5 million households that had complete bathrooms were sharing them with households that did not. The 1.9 million households that lacked some or all plumbing facilities included almost 1.8 million who had no bathrooms. Most of these units were in rural areas. (See Table B-8)

TABLE 2

Occupied Housing Deficiencies: Plumbing Related
1973 - 1976

Item	Occupied Units (millions)											
	Total*				Owners				Tenants			
	1973	1974	1975	1976	1973	1974	1975	1976	1973	1974	1975	1976
lack some or all plumbing facilities	2.3	2.1	2.1	1.9	1.0	0.9	0.8	0.7	1.3	1.2	1.2	1.2
bathroom: None or shared	3.0	2.6	2.3	2.2	1.3	1.1	0.9	0.9	1.7	1.5	1.4	1.4
two or more breakdowns in 90 days in												
Water supply	0.6	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2
Flush toilet ^{1/}	0.4	0.4	0.4	0.3	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2
Sewage system	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	<u>2/</u>

* Units may not add to totals because of rounding

1/ For units with only one toilet

2/ Less than 0.05

2. Supply of Utilities

Electricity is supplied to 999 out of every thousand occupied, year-round, housing units. Although a number of these households had exposed wiring, lacked electrical outlets in some or all rooms, or were experiencing a heavy rate of fuse blowouts (2 or more within 90 days), improvement had been marked in the past three years. (See Table 3)

3. Structural Deficiencies

Some of the six items enumerated under this heading in Table 4 may be indicative of esthetic flaws (relatively small cracks or holes), rather than of major structural deficiencies. While the general trend in structural deficiencies is downward, the amount and the rate of improvement is much lower than that for electrical elements. (See Table 4)

4. Equipment and Heating Deficiencies

These lines of inquiry include some responses (e.g., additional heat sources used, rooms closed because of insufficient heat) that are highly subjective, reflecting the reactions of the occupants rather than objective standards of heat and humidity. Variations in the use of additional heat sources and room closings may reflect both the severity of the winter and the increased use of insulation.

An incomplete or shared kitchen is an acute deficiency, and in 1976 affected 1.3 million households. In addition, among the 72.8 million with complete kitchen facilities (i.e., a kitchen sink, a refrigerator, and a range or cookstove), almost 500,000 reported one or more of these facilities unusable. Heating inadequacies occurred at

TABLE 3

Housing Deficiencies: Supply of Electricity
1973 - 1976

Item	Occupied Units (millions)											
	Total*				Owners				Tenants			
	1973	1974	1975	1976	1973	1974	1975	1976	1973	1974	1975	1976
Some or all wiring exposed	2.7	2.4	1.3	1.1	1.6	1.3	0.7	0.5	1.2	1.1	0.17	0.6
Lacking electric outlets in some rooms	3.7	3.1	2.5	2.4	2.1	1.7	1.3	1.2	1.6	1.4	1.2	1.2
Fuse Blowouts: Two or more in 90 days	4.3	4.0	3.6	3.5	2.9	2.7	2.4	2.3	1.5	1.4	1.2	1.2

* Units may not add to totals because of rounding

TABLE 4

Housing Deficiencies: Structural
1973 - 1976

Item	Occupied Units (millions)											
	Total*				Owners				Tenants			
	1973	1974	1974	1976	1973	1974	1975	1976	1973	1974	1975	1976
Cracks or holes in ceilings or walls	4.2	4.0	3.8	3.9	1.4	1.3	1.3	1.3	2.8	2.7	2.6	2.7
Holes in floor	1.3	1.3	1.3	1.3	0.4	0.4	0.4	0.3	0.9	0.9	0.9	0.9
Loose, broken, or missing steps or railings <u>1/</u>	1.7	1.6	1.5	1.4	0.2	0.1	0.1	0.1	1.6	1.5	1.3	1.3
Public halls without light fixtures, or broken <u>2/</u>	1.3	1.3	1.3	1.2	0.1	0.1	0.1	0.1	1.2	1.2	1.2	1.1
Leaking roof	5.3	4.7	4.5	4.4	2.8	2.4	2.3	2.3	2.5	2.3	2.2	2.1
Leaking basement <u>3/</u>	9.3	8.7	8.5	7.6	6.9	6.4	6.2	5.5	2.4	2.3	2.3	2.1

* Units may not add to totals because of rounding

1/ For units reporting common stairways

2/ For units with public halls

3/ For units reporting basements

Housing Deficiencies: Equipment and Heating
1973 - 1976

Item	Occupied Units (millions)											
	Total*				Owners				Tenants			
	1973	1974	1975	1976	1973	1974	1975	1976	1973	1974	1975	1976
Kitchen Incomplete or shared	1.6	1.6	1.4	1.3	0.5	0.5	0.4	0.4	1.1	1.1	1.0	0.9
Heating breakdowns: two or more in 90 days	1.5	1.4	1.3	1.2	0.6	0.6	0.5	0.4	0.9	0.8	0.8	0.8
Additional heat sources used <u>1/</u>	5.5	5.0	4.3	4.5	3.1	2.7	2.3	2.4	2.5	2.3	2.0	2.1
Rooms lacking specified heat source <u>1/</u>	13.1	12.7	12.1	12.2	8.7	8.5	8.2	8.2	4.4	4.2	3.9	4.0
Rooms closed: lack sufficient heat	3.3	2.9	2.5	2.3	2.0	1.7	1.5	1.3	1.3	1.2	1.0	1.0

* Units may not add to totals because of rounding

1/ Reporting specified heating equipment: 38.8, 39.6, 40.3, and 41.1 million owners, 16.0, 15.1, 14.9, and 15.5 million tenants in 1973, 1974, 1975, and 1976 respectively, occupied these quarters the preceding winter.

similar rates in tenant-occupied and owner-occupied units. (See Table 5)

5. Non-Structural Deficiencies

The four items reported in this category are unique to the Annual Housing Survey, and reflect poor design, overcrowding, inadequate services, and health hazards. A bedroom used by three or more persons is a deficiency peculiar to the use made of the housing, rather than a physical defect in the housing unit itself. It is, therefore, a defect which is remedied if the occupants move to a more suitable unit. Another deficiency - bedrooms lacking privacy - arises from the inadequate design of the unit, by utilizing a bedroom as a passage area. A change in the use of such a room to other than bedroom use can eliminate this deficiency. The lack of garbage collection services in an SMSA is a potential health hazard, while the presence of rats or mice (up almost four percent over last year) is an immediate danger to the health of the residents. (See Table 6)

B. Neighborhood Measurements

While the quality of the housing stock appears to have improved every year since 1973, perceived changes in the quality of the associated environments have not followed any consistent or obvious trend. As shown in Table 7, of the nine neighborhood deficiencies comparably reported in 1973 and 1976, only one - odors - appears to have decreased in incidence. Inadequate street lighting, first reported by 13.8 million households, is now mentioned by 18.0 million households; this may in part reflect recently instituted energy conservation efforts and

TABLE 6

Housing Deficiencies: Other
1973 - 1976

Item	Occupied Units (millions)											
	Total*				Owners				Tenants			
	1973	1974	1975	1976	1973	1974	1975	1976	1973	1974	1975	1976
Bedrooms lacking privacy <u>1/</u>	6.4	6.4	5.6	5.7	4.0	4.0	3.4	3.5	2.4	2.4	2.1	2.2
Bedrooms used by three or more persons	3.9	3.8	3.6	3.5	2.0	1.8	1.7	1.5	1.9	2.0	1.9	1.9
In SMSA, no garbage collection service	3.8	3.9	3.8	3.6	2.4	2.4	2.3	2.2	1.4	1.5	1.5	1.4
Rats or mice observed <u>2/</u>	6.8	6.7	7.8	8.1	4.0	4.0	4.8	4.9	2.8	2.7	3.1	3.2

* Units may not add to totals because of rounding

1/ For units with two or more bedrooms

2/ In units occupied three months or more

TABLE 7

Neighborhood Deficiencies: Occupants Reporting
Specific Undesirable Street Conditions, 1973-1976

<u>Condition</u>	<u>Number (millions)</u>				<u>Net Change 1973 - 1976</u>
	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	
noise	31.7	34.9	NA ^{1/}	NA ^{2/}	NA
heavy traffic	20.1	22.2	21.9	22.5	+2.4
inadequate street lighting	13.8	14.3	18.1	18.0	+4.2
street repairs needed	9.8	13.7	12.4	13.0	+3.2
commercial or industrial uses	9.3	13.1	12.4	15.1	+5.8
crime	9.1	12.1	13.3	13.2	+4.1
litter	8.5	10.3	10.4	11.3	+2.8
odors	8.0	7.2	6.4	7.0	-1.0
deteriorating housing	6.0	7.1	6.9	7.4	+1.4
abandoned buildings	4.0	4.8	5.0	5.2	+1.2

1/ Airplane noise was reported by 11.9 million occupants;
street noise was reported by 25.1 million occupants.

2/ Airplane noise - 13.1 million; street noise 25.8 million

Neighborhood Deficiencies: Percent of Occupants
Reporting Specific Undesirable Street Conditions
1973 - 1976

Item	Total				Owners				Tenants			
	1973	1974	1975	1976	1973	1974	1975	1976	1973	1974	1975	1976
Noise (street or air- plane) <u>1/</u>	45.8	49.3	NA	NA	44.5	48.5	NA	NA	48.1	50.9	NA	NA
Heavy traffic	30.0	31.5	30.3	30.5	26.4	29.1	27.7	27.6	33.8	35.8	35.1	35.4
Inadequate street lights	20.0	20.2	25.1	24.4	22.6	23.9	28.1	27.1	15.3	15.9	19.6	19.3
Crime	13.2	17.2	18.5	17.8	11.1	15.2	16.2	16.6	17.2	20.7	22.6	21.9
Streets need repair	14.1	19.4	17.2	17.6	15.2	21.1	18.7	18.5	12.3	15.5	14.4	15.8
Odors	11.6	10.3	8.9	9.5	11.4	10.1	8.8	9.2	11.9	10.5	9.1	10.0
Litter	11.4	14.6	14.4	15.4	11.0	14.0	13.8	14.4	14.7	15.7	15.6	17.0
Commercial or industrial uses	13.5	16.6	17.1	20.4	10.1	14.6	12.8	14.7	19.5	26.0	25.1	30.6
Deteriorating housing	8.7	10.1	9.5	10.0	7.5	9.1	8.5	8.8	10.7	11.0	11.4	12.3
Abandoned buildings	5.8	6.8	6.9	7.1	4.9	5.8	5.8	5.8	7.4	8.8	8.9	9.4
Roads impassable				10.7					11.1			9.8

1/ For 1975 and 1976, street and airplane noises were reported separately, as follows:

	1975			1976		
	Total	Owners	Tenants	Total	Owners	Tenants
Airplane noise	16.5	16.8	15.7	17.8	17.9	17.4
Street noise	34.8	32.3	39.2	34.9	32.3	39.4

attendant reductions in street lighting. The largest absolute and relative increases in neighborhood deficiencies were reported for street crime, which went from 9.1 million in 1976 to 13.2 million in 1976. The possibility of some relationship between reports of perceived inadequate street lighting and consciousness of street crime is a subject for further investigation. Abandoned buildings (which went from 4.0 to 5.2 million mentions) might also be involved. A similarly mixed situation exists in the matter of neighborhood services. The number and percent of occupants rating neighborhoods as excellent or good decreased, while the number and percent giving their neighborhood an overall rating of fair or poor increased. (See Tables 7 & 8)

The National Housing Goal set forth in the Housing Act of 1949 calls for "...the realization as soon as feasible of the goal of a decent home and a suitable living environment for every American family." The data from the Annual Housing Surveys of 1973 through 1976 suggest that there has been more progress in achieving the former than the latter goal.

C. Excessive Cost

An aspect of current need not directly related to the supply of housing per se is the extent to which households cannot afford decent housing or spend an excessive proportion of their incomes for housing. Since housing expenditures vary according to family size, income, and tastes, the fraction designated as the level above which expenses are

"excessive" is arbitrary. However, HUD typically recognizes the 25 percent level as an indicator, and considers low and moderate-income families spending more than that to be in a relatively disadvantageous financial condition. One application of this approach is that when there is an income incapacity on the part of some households to satisfy a reasonable demand for decent housing accommodations, policy choices might be broadened to consider income maintenance approaches as well as ways to more directly increase the supply of housing services.

It is assumed that a subsidy must be involved in meeting the "social needs" housing component, since the households do not have enough income to pay the cost of the new rehabilitated units--or, for some reason, have chosen not to acquire adequate units to date. It is further assumed that the broader social benefits arising from rehabilitation or replacement of inadequate units using housing subsidies justify the cost of the subsidy.

As Table 9 indicates, the proportion of renter households paying more than 25 percent of their income in rent increased from 35.3 percent in 1960 to 46.5 percent in 1976. It is not clear that this represents a growing or severe hardship at all levels, however, since of the 46.5 percent the highest income quartile's share grew from 2.5 percent to 6.6 percent, and the lowest quartile actually fell somewhat. The drop in the lowest quartile probably reflects the impact of Federal housing assistance, while the increase among the highest quartile is attributable to either higher housing costs and/or an increased optional expenditure

TABLE 9
PROPORTION OF INCOME PAID FOR RENT, BY INCOME QUARTILE
1960, 1970 AND 1976
(RENTER HOUSEHOLDS IN THOUSANDS)

	TOTAL		LOWEST INCOME QUARTILE		SECOND LOWEST INCOME QUARTILE		SECOND HIGHEST INCOME QUARTILE		HIGHEST INCOME QUARTILE	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
1960 RENTERS	17,493.3	100.0	4,373.3	100.0	4,373.3	100.0	4,373.3	100.0	4,373.3	100.0
LESS THAN 25%	11,326.8	64.7	674.3	15.4	2,549.5	58.3	3,836.8	87.7	4,266.1	97.5
25 TO 34%	2,430.2	13.9	715.9	16.4	1,171.7	16.8	452.3	10.4	90.3	2.1
35% OR MORE	3,736.3	21.4	2,983.1	68.2	652.2	14.9	84.1	1.9	16.9	0.4
1970 RENTERS	20,577.6	100.0	5,144.4	100.0	5,144.4	100.0	5,144.4	100.0	5,144.4	100.0
LESS THAN 25%	12,432.9	60.4	458.0	8.9	2,603.6	50.6	4,381.1	85.2	4,990.2	97.0
25 TO 34%	2,935.6	14.3	700.0	13.6	1,468.3	28.6	635.3	12.4	132.0	2.6
35% OR MORE	5,209.1	25.3	3,986.4	77.5	1,072.5	20.8	127.9	2.4	22.2	0.4
1976 RENTERS	23,982.0	100.0	5,995.5	100.0	5,995.5	100.0	5,995.5	100.0	5,995.5	100.0
LESS THAN 25%	12,814.0	53.4	846.8	14.1	2,081.5	34.7	4,283.6	71.4	5,602.1	93.4
25 TO 34%	4,301.0	17.9	876.5	14.6	1,791.0	29.9	1,299.4	21.7	334.1	5.6
35% OR MORE	6,867.0	28.6	4,272.2	71.3	2,123.0	35.4	412.5	6.9	59.3	1.0

NOTE: INCOMES ARE FOR 1959, 1969, AND THE 12 MONTHS PRECEDING NOVEMBER 1, 1976

SOURCES: 1960 AND 1970 DECENNIAL CENSUSES OF HOUSING U.S. DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS, AND 1976 ANNUAL HOUSING SURVEY, U.S. DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS AND U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, OFFICE OF POLICY DEVELOPMENT AND RESEARCH.

preference for housing. Significantly, both the middle income quartiles registered large increases in the percent that paid over 25 percent of income in rent.

Another way to consider housing cost overburden is to look at the situation of households of a certain income level. In 1975, Table 10 shows that 45.4 percent of all non-subsidized households with incomes under \$10,000 were paying more than 35 percent of their income for housing. The 9 million households in this category include 2.6 million owners and 6.4 million renters. Of the former group, 12 percent of the owners who had no mortgage indebtedness and 38.4% of the owners with mortgages were paying more than 35% of their incomes for housing. Among non-subsidized renters, 48% of the households were paying excessive (more than 25 percent) percentages of their incomes. As Table 10 indicates, 68% of the households with incomes under \$3,000, 58% of households in the \$3,00-4,999 range, and 30% of households in the \$5,000-6,999 range were paying more than 35% of their income. The percentages for households solely in metropolitan areas are similar, although slightly higher.

Housing costs overburdens are of concern not only because of the direct associated hardships, but also because families in this category are frequently unable to pay for routine and non-routine maintenance items. Lack of proper maintenance is the major source of deterioration in the existing housing stock, and has a high (even if hidden) cost to the

TABLE 10

PROPORTION OF INCOME SPENT ON HOUSING, 1975

U.S.	Households* Under \$10,000	Number at 35 + % of Income	Percentage
Owners - Free & Clear	7,223	870	12.0
Mortgages	4,447	1,708	38.4
Owners	11,670	2,578	22.0
Renters	15,317	6,424	41.9
Non-Subsidized Renters	13,344	6,424	48.1
Under \$3,000	4,141	2,816	68.0
\$3,000 - 4,999	3,911	2,252	57.6
5,000 - 6,999	3,203	963	30.1
7,000 - 9,999	4,062	393	9.1
Inside SMSA			
Renters	11,388	5,172	45.4
Non-Subsidized Renters	9,820		52.7
Under \$3,000	2,937	2,094	71.3
\$3,000 - 4,999	2,942	1,893	64.3
5,000 - 6,999	2,394	830	34.7
7,000 - 9,999	3,115	355	11.4

TABLE 11

URBAN HOUSEHOLDS' HOUSING EXPENDITURES, 1975

Central City- Renters	Number of House- holds	Subsidized Households	Non-Sub- sidized Households	Number at 35 + % of Income	Percentage
Under \$3,000	2,151	484	1,667	1,504	90.2
\$3,000 - 4,999	1,978	367	1,611	1,220	75.7
5,000 - 6,999	1,480	212	1,268	462	36.4
7,000 - 9,999	1,856	157	1,699	166	9.8
Under \$10,000	7,465	1,220	6,245	3,352	53.7

* In millions of households.

economy. Housing costs overburdens in the owner-occupant category are therefore assumed to be both a cause and symptom of substandard housing conditions. While less true of the rental category, the same directional relationship also exists, particularly for those of very low income for whom even relatively high rent-to-income ratios are still insufficient to provide the net rental income needed for adequate maintenance.

The extent of the housing depreciation problem associated with cost overburdens is most clearly reflected by examining income/household characteristics' relationships. For central city residents, over 90 percent of those with incomes under \$3,000 pay over 35 percent of income in rent. Of all those with less than \$10,000 in income in 1975, 53.7 percent of the unsubsidized households spent more than 35 percent of their income on housing.

V. Methods and Experiences in Projecting Long-term Housing Requirements

As we mentioned in the previous section, the major determinant of basic long-term housing needs is new household formation. For a given area the net population increase, head of household change, and net immigration are combined to indicate the number of new families that will require housing. Basic needs are also created by losses of units from the housing stock, and the adjustment of vacancies at a level able to accommodate migration patterns among regions. This section briefly reviews the development of the 1968' housing goals and their impact within the context of these variables.

A. Previous Estimates of National Housing Needs

The 1968 estimates of national housing needs were developed in various analyses prepared by the Department of Housing and Urban Development, the President's Committee on Urban Housing (Kaiser Committee), the National Commission on Urban Problems (Douglas Commission) and various research consultants working for these agencies. Their analyses supported the enactment of Section XVI of the Housing and Urban Development Act of 1968, which declared that the national housing goal of "a decent house and a suitable living environment for every American family" established by the Housing Act of 1949 could be "substantially achieved" if the nation were to construct or rehabilitate 26 million units within the next decade (to June 30, 1978). Of these new or rehabilitated units, 6 million were to be for low and moderate income families. The construction and rehabilitation were expected to result in "the elimination of substandard housing."

The Second Annual Message of the President transmitting the Report on the National Housing Goal in 1970 re-examined the estimates of national housing needs, and established new production targets of 25.5 million newly constructed units and 1.0 million publicly-subsidized, rehabilitated units. Again, private rehabilitation was passed over due to the impossibility of measurement.

In the wake of the Second Annual Report on the National Housing Goal, various other analyses of national housing needs were attempted. These resulted in widely varying estimates of need, ranging from less than 22 million to over 29 million units of newly constructed housing needed over the next decade. Covering approximately the same time period, the estimates differed in assumptions about the rate of growth in households and other accepted components of basic construction need, about losses and replacements associated with substandard units, and about the social needs of lower and moderate income households.

The Second Annual Housing Goal Report recognized the role of mobile homes in the inventory by specifically incorporating losses from mobile home stock as a housing need, and by including mobile home production in the revised production schedule. New mobile home production could therefore either replace lost mobile homes or meet other housing needs. The inclusion of mobile homes in the analysis mirrored the fact that a growing number of American households were being housed in mobile homes, as enumerated by the Bureau of the Census in every decennial census from 1940 to 1970. The growing mobile home industry, with an increasing volume of sales and an expanding market demand which resulted

in a rapidly increasing share of the living in mobile home units, had to be accounted for in national housing production statistics. Rejection of mobile home production would have implied a national objective of phasing out the growing mobile home population with conventional units. Such an objective would have ignored the market preferences expressed by mobile home occupants, and would have diverted resources from the provision of adequate housing for families in unsatisfactory housing - whether of conventional or of "mobile" construction. Rather than attempt market intervention on this scale, mobile homes were specifically incorporated in the analysis of the Second Annual Report.

Given the production schedules set forth in the Second Annual Report, housing production has at various times been ahead and behind schedule in meeting the national production target. (See Table 12)

B. Comments on the Wisdom of Setting a National Production Target

It is a simple matter to convert estimates of national housing need over a given period to estimates of need on an annual basis. Annual needs estimates can then be compared with housing starts and mobile home shipments to determine whether production is ahead or behind the schedule needed to eventually meet housing needs through the completion and occupancy of the units. It is assumed that if a housing unit is built, a need is met. However, production of housing units does not automatically assure attainment of the national goal, and slavish adherence to a housing production policy could cause distortions elsewhere in the economy which might ultimately impede

TABLE 12

New Housing Production Targets and Achievements
July 1, 1969 to June 30, 1978
(units in thousands)

<u>Twelve Months Ending June 30</u>	<u>Total New and Rehab</u>	<u>Total New Production</u>	<u>Housing Units Started</u>	<u>Mobile Homes Shipped</u>	<u>Subsidized Rehabilita- tions begun</u>
1969					
Target*	2,001.0	1,958.0	1,595.0	363.0	43.0
Actual	2,005.4	1,967.7	1,599.0	368.7	37.7
1970					
Target*	1,850.0	1,800.0	1,350.0	450.0	50.0
Actual	1,796.1	1,762.0	1,359.4	402.6	34.1
1971					
Target*	2,040.0	1,980.0	1,505.0	475.0	60.0
Actual	2,276.7	2,234.6	1,797.6	437.0	42.1
1972					
Target*	2,330.0	2,255.0	1,805.0	450.0	75.0
Actual	2,867.5	2,825.7	2,269.5	556.2	41.8
1973					
Target*	2,650.0	2,550.0	2,100.0	450.0	100.0
Actual	2,976.4	2,934.3	2,331.8	602.5	42.1
1974					
Target*	2,930.0	2,800.0	2,400.0	400.0	130.0
Actual	2,194.7	2,164.5	1,710.0	454.5	30.2
1975					
Target*	3,085.0	2,950.0	2,550.0	400.0	125.0
Actual	1,339.8	1,322.4	1,089.5	232.9	17.4
1976					
Target*	3,070.0	2,935.0	2,575.0	360.0	135.0
Actual	1,633.5	1,614.4	1,375.0	239.4	19.0
1977					
Target*	3,060.0	2,925.0	2,575.0	350.0	135.0
Actual	2,052.4	2,025.3	1,772.8	252.5	27.1
1978					
Target*	2,994.0	2,857.0	2,545.0	312.0	137.0
Actual (Est.)	2,339.0	2,305.0	2,025.0	280.0	34.0
TOTAL TEN YEARS					
Target*	26,000.0	25,000.0	21,000.0	4,000.0	1,000.0
Actual (Est.)	21,481.5	21,155.9	17,329.6	3,825.3	325.6

*Targets based on revisions set forth in the Second Annual Report on the National Housing Goal, for years ending on June 30th.

attainment of the goal. The desirability of setting rigid numerical objectives spanning a relatively long time period has been questioned on several grounds.

First, setting such numerical objectives for the housing sector of the economy independently of other sectors tends to oversimplify the process of channeling limited national resources into the target sector. There are many national needs in addition to housing, and the problems and interests associated with these must be weighted frequently in order to establish priorities in the allocation of the nation's resources. It is undesirable to modify the market allocation of resources process unless a clear and severe problem exists, since to do so involves possible reductions in allocational efficiency and less productive utilization of the overall resource base. This could in turn reduce the economy's future capability to supply housing. A contributing factor to this problem is the extreme difficulty encountered in attempting to anticipate economic development far in advance. As the economy faces unexpected problems such as the energy crisis, double-digit inflation, and high unemployment, it becomes increasingly difficult to pursue numerical objectives set under entirely different economic circumstances. In fact, the pursuit of numerical objectives in one sector can lead to policies which are disruptive and which intensify problems in others.

A second consideration in evaluating the pursuit of rigid numerical production objectives is that even if aggregate housing targets can be achieved without causing adverse repercussions elsewhere in the economy, there is no guarantee that the additional housing will reach those who need it most - those currently housed in inadequate units. Rather, the

increased production may be overly concentrated in areas where a sufficient or almost sufficient supply of housing already exists, and may simply represent an upgrading of the area's housing. The production could, for instance, go toward second homes for households already well-housed.

Emphasis on meeting numerical production targets alone does not fully address the problem of how the housing stock is distributed among various income groups. Low-income households face two possible problems. First, many occupy housing which is physically inadequate. Second, in many cases, even though the housing itself is physically decent, the low-income occupant must contribute such a large proportion of household income to housing-related expenses that other necessary goods and services become unaffordable. The household can often reduce housing-related expenses only by moving into a less expensive, smaller, but still physically decent housing unit exchanging excessive housing cost burdens for a condition of over-crowding. In either event, the problem is not one of adequate housing. It is an "income" problem rather than a "housing" problem, and it may not be most efficiently solved by the production of more housing units.

VI: Conclusions

Table 13 summarizes HUD's best estimates of future housing needs, as derived from the net increase of households, losses from the inventory, vacancies, and social housing needs. Annual needs between 1978-83 are projected to range between 2.2 and 2.8 million units, with between .78 and 1.3 million going to families with low and moderate incomes. The estimates for 1973-88 are comparable, although somewhat lower.

Reservations have been expressed by many housing analysts about the wisdom of setting a single national housing production target, and about setting it for a period as long as a decade. Two respected observations reflective of this thinking are offered as counterpoints to the views in this monograph. The first is that of Frank S. Kristof of the New York State Urban Development Corporation, who in 1968 made the following statement:

"In my report for the Douglas Commission, I rejected the concept of a national goal for aggregate housing production as irrelevant to the problem of meeting the needs of housing deficit families. The premise behind my position was that, in the long-run, the level of housing construction is determined by new family formation, the level of family incomes, the availability and terms of mortgage credit, and consumer spending propensities. These forces are neither subject to easy prediction nor ready manipulation. I further took the position that if the Federal Government focuses its attention on supplying one-half million subsidized units annually for families of low and moderate income over the next decade, the goal of meeting the nation's housing needs would be significantly advanced irrespective of any national housing goals that were or were not set (or met). The normal forces of the market would, in the meantime, take care of those able to pay for housing. This means that the volume of market output would be dependent upon the influences alluded to above."

In his 1975 book, Housing Markets and Congressional Goals, Ernest M. Fisher states that after his study of the 1968 U. S. Housing Act and its consequences, he found it difficult to accept either the reasoning or the production quota represented in the Act. In his view, the numbers were unrealistic as a quota of production; and, as a means of achieving the "affirmed" and "reaffirmed" goal of the Congress, they were inappropriate and would probably prove as disappointing as many other Congressional programs. Fisher objected to the emphasis on new construction, to construction levels projected in excess of what the country had needed in the years of great migrations and demobilization of the armed forces in the 1940's and 1950's, and the ignoring of the greatest source of housing supply for low and moderate income households (i.e., the existing housing inventory). Fisher was particularly disapproving of the continued emphasis on very expensive new construction for low and moderate income families, and of high levels of new construction even in periods of increasing vacancy rates and rising mortgage delinquencies and foreclosures.

Most of these and similar objections can be met if less precise ranges of production targets are used; if the projection period is shorter and the target ranges are subject to continual revision so as to employ "rolling targets" rather than fixed, legislated targets; if the existing housing inventory receives proper emphasis by incorporating the complementary objective of revitalizing neighborhoods and reducing losses from the stock; and if the special needs of various housing-

disadvantaged groups become the prime concern of needs assessments in a "multi-targeted" approach. Basic housing needs then can be assessed independently of social housing needs, with policies formulated independently for each. A range of reassessable numbers for basic needs would emphasize the point that production in any one year need not adhere to any predetermined production schedule. Rather, the range would be used to determine whether, over a period of two or three years, the long-run market demand implied by the numbers was being met. If not, policy tools which support the mortgage market would be used to a greater extent than normally required. Social housing needs, on the other hand, can be addressed more directly by policies and programs that are under the direct control of Federal housing agencies. These needs can be addressed in a more uniform manner, with activity maintained at a fairly constant pace throughout housing cycles.

The United States anticipates a growing exchange of opinions and methodologies with other nations on the subject of housing needs. We are increasing our research efforts in many areas to improve estimates of current and long-term needs, and we look forward to sharing our findings with the world governmental housing community.

Summary of Housing Needs, Including
Low-Moderate-Income Households
(millions of Units)

	<u>1978-83</u>	<u>Average Annual (High-Low)</u>	
		<u>1983-88</u>	<u>1988-2000</u>
<u>Basic Needs</u>			
Net Additional Households	1.36-1.58	1.22-1.47	1.20-1.50
Low-Moderate Households	.54-.63	.49-.59	.48-.60
Replacement of Losses	.39-.65	.45-.70	.50-.80
Assignable to Low-Moderate Households	.02-.33	.02-.35	.03-.40
Adjustment of Vacancies	.15-.20	.13-.16	.10-.16
Assignable to Low-Moderate Households	.01-.08	.01-.06	.01-.06
<u>Social Needs</u>			
Replacement of Physically Deficient Units	.08-.10	.08-.10	
Low-Moderate Households	.06-.07	.06-.07	
Substantial Rehabilitation	.16-.20	.16-.20	
Low-Moderate Households	.11-.14	.11-.14	
Moderate Rehabilitation	.06-.07	.06-.07	
Low-Moderate Households	.04-.05	.04-.05	
Totals	2.20-2.80	2.10-2.70	
Total Low-Moderate	.78-1.30	.73-1.26	