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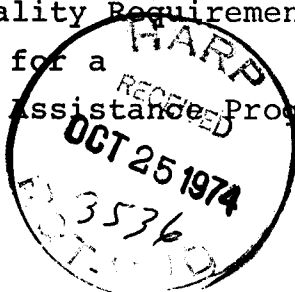
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D R A F T

Housing Quality Requirements
for a
Direct Cash Assistance Program



October 1974

INTRODUCTION

Generalized Income

Regulation of

Transfer Program

Income for Q

Living Program

Family Redemptive

Insurance Program

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Philadelphia, Pa.

January 1, 1941

My dear Mr. [Name]

I am very glad to hear

from you and to hear

that you are well.

I am sure you are

very busy.

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1.0 INTRODUCTION

The purpose of this paper is to assess the need for housing quality requirements in a direct cash assistance program, to define options for the design and enforcement of quality requirements, and to evaluate the options presented. The analysis is primarily intended to provide answers to the following questions:

- Are housing quality requirements needed in a direct cash assistance program?
- What are the advantages and disadvantages of alternative forms of housing quality criteria?
- What are the advantages and disadvantages of alternative mechanisms for enforcing the housing quality criteria?
- Are there reasonable alternatives to housing quality requirements in a direct cash assistance program?

The remainder of this first section briefly examines the nature of income transfer or cash assistance programs which are targeted or "earmarked" for specific purposes, the objectives served in such programs by quality requirements, the need for quality requirements in a housing program, and the nature of quality requirements for a direct cash assistance program.

Part I of the paper considers national or local codes as an option for housing quality requirements in a direct cash assistance program. Section 2 summarizes the extensive analysis of housing codes in Appendix A. Section 3 indicates the likely failure rates of eligible households' housing which would result with the use and enforcement of housing codes. The final section in Part I (Section 4) assesses the option of codes as the program housing quality requirements.



Part II develops a series of approaches to formulating independent program quality requirements. Section 5 outlines the basic conceptual framework for this effort. Section 6 develops alternative minimum program standards and assesses their relationships with the quality of the housing stock. And, Section 7 evaluates alternative enforcement mechanisms.

The final part of the paper provides a concluding analysis. Section 8 presents alternatives to having housing quality requirements in a direct cash assistance program. The three subsections of Section 9 summarize the recommendations for housing quality requirements, analyze the experience with housing quality requirements in the Section 23 Leased Housing Program, and discuss the relationships between housing quality requirements and program design.

1.1 Earmarked Income Transfer Programs

The use of a direct cash assistance strategy for housing produces a program that has much in common with other assistance programs which provide money rather than goods or services to participants whose eligibility is determined by income. Pure income transfer programs, such as the proposed Family Assistance Plan or the Negative Income Tax proposal currently under discussion, are the simplest both conceptually and administratively. The primary concern of such programs is the equitable distribution of subsidies to an eligible population in an economically efficient manner.

Earmarked assistance programs typically are more complex in that two issues beyond the efficient and equitable distribution of payments become critical to program design. Because such programs provide money to participants for particular purposes,



such as the purchase of food, elaborate regulations and/or administrative procedures are generally included to insure that subsidies are not diverted to other uses. Such expenditure control mechanisms include reimbursement of allowable expenses, issuance of vouchers rather than checks, and various incentives for intended expenditures.¹ Second, it is characteristic of targeted assistance programs that they are developed in response to the political recognition of a specific social problem (e.g., dilapidated housing, poor health or malnutrition).² An earmarked assistance program is generally expected to ameliorate the conditions and/or eliminate the social problem to which it is addressed through benefits linked directly to the specific need. The effectiveness of targeted programs is, therefore, at least partly dependent upon the quality and quantity of goods and/or services obtained by participants. This essential quality control issue has resulted in some earmarked income transfer programs adopting provisions which attempt to regulate the behavior of the recipients and/or the suppliers of goods and services.

One of the major indicators of effectiveness of a direct cash assistance program in housing will be improvement in the quality of the dwelling units occupied by program recipients. The introduction of such a program will surely carry with it expectations for some improvement of the housing conditions of the poor. A central concern of this paper is whether or not some direct

¹A more detailed discussion of these expenditure control mechanisms is contained in Arthur P. Solomon *et. al.*, "A Comparison of Payment Formulas for a Direct Cash Assistance Program," (Abt Associates Inc., September, 1974).

²It is also true, as Moynihan and others have pointed out, that earmarking represents a basic mistrust of a population often regarded as the "undeserving poor." Hence, Moynihan's classic phrase, "food stamps but no beer stamps." Nonetheless, few would question the direct connection between the specific concern about hunger and malnutrition in the United States and the Food Stamp program. Daniel P. Moynihan, The Politics of a Guaranteed Income: The Nixon Administration and the Family Assistance Plan, (New York: Random House, 1973) pp.116-117.

regulation of housing quality at some reasonable cost could be expected to improve the housing of participants in a direct cash assistance program.

1.2 · Regulation of Quality in Earmarked Income Transfer Programs

Income transfer or cash assistance programs have generally been proposed in response to dissatisfaction with the effectiveness and efficiency of service delivery programs. Most service delivery programs develop extensive regulations over time requiring ever more expensive administrative apparatus. Experience with social programs in the 1960's indicates that substantial portions of program budgets were used for administration rather than the delivery of services to people in need and that the services delivered to the poor tended to be both of low quality and high cost. A frequent impression from the evaluations of service delivery programs, was that poor people operating as consumers, given sufficient income, might well act more consistently and effectively on their own behalf than public agencies that presumed to "serve" them. Given this background of concern with maximizing the proportion of program funds actually spent on or by participants and repeated examples of program regulations that thwarted rather than enhanced the achievement of program goals, one would expect the designers of alternative (cash assistance) programs to have a strong bias toward minimizing program requirements. Some cash assistance type programs, however, have developed new measures aimed at regulating the quality of services purchased by participants.

The ideal environment for the introduction of an earmarked cash assistance program is one in which a free and relatively competitive market for the requisite goods or services exists. In such a situation, the inability of the target population to obtain, for example, adequate food, medical care or housing is primarily a function of the lack of income. It can then be presumed that program effectiveness is dependent upon little



other than the effective transfer of sufficient income and informed and efficient consumer choice.

The Food Stamp program, for example, was introduced into such an environment. There was an adequate supply of "decent" food available; existing regulation of the market by agencies like the Food and Drug Administration offered sufficient protection in terms of the quality of food available; and a reasonably effective distribution system for food existed. The Department of Agriculture was, therefore, able to initiate a Food Stamp program without regulating supermarkets or limiting participants to markets that had been approved by the program.

Programs designed to give participants access to medical services offer a useful contrast. For general physicians' services, programs like Medicare and Medicaid began with little attention to quality. Over time, growing evidence of fraud, instances of shoddy medical practice such as unnecessary hospitalizations or operations, discriminatory pricing for program recipients and similar problems caused program administrators to pay increasing attention to quality control. The recent requirement of Professional Standards Review Organizations represents an attempt to control the cost and quality of services available through professional peer review. Similar problems were discovered when public assistance became available for nursing home patients. With the additional demand for services, nursing homes were created with little attention to patient care. The resultant horror stories forced program administrators to issue regulations restricting recipients of program funds to nursing homes that met some set of quality standards.

The brief examples taken from cash assistance programs in food and medical services suggest the following criteria which could be used to assess the need for quality requirements:

- the adequacy of existing regulation (external to the proposed program) for the basic protection of program participants
- the responsiveness of supply to the demand for quality goods or services.
- the level of public concern about the quality of the goods or services participants obtain.

The decision to include some form of quality requirements in a cash assistance program depends not only on the need for quality controls but also on the ability to design and administer controls that could be effective at reasonable cost.

1.3 The Need for Quality Requirements in a Housing Program

The nature of housing markets in the United States suggests that a direct cash assistance program in housing will operate under conditions more like those facing medical service programs than those of the Food Stamp program. Application of each of the criteria developed in the previous section to housing suggests the need for quality requirements.

Traditionally, the basic mechanism for protecting the health and safety of individuals in terms of housing has been local codes. As discussed in the analysis of codes, many areas of the United States are not covered by them, and even where codes exist, enforcement of their provisions is uneven. There is generally little effective health and safety regulation for housing.

The supply of housing in the United States meeting some minimum standard of quality is not adequate to house the total population, and increased income alone could not be expected to

improve the housing condition of all poor people.¹ Given the cost of new construction, the time required for any large-scale supply response, and the cost of upgrading much of the existing housing stock, the short-run situation at least appears to imply the need for some form of quality controls.² Providing an incentive for participants to live in housing that meets some set of minimum quality requirements may gradually stimulate production of adequate units either through new construction or rehabilitation of existing units.

If attention is not paid to quality requirements, a direct cash assistance program would run the risk that substantial numbers of families participating in the program might continue over long periods of time to live in conditions that the public, the press and the Congress would find deplorable. The long-term political commitment to a direct cash assistance program in housing that would be necessary to achieve significant improvement in the housing condition of the poor might well be eroded by sensational exposures of the type that have plagued other housing programs in recent years.

¹Analysis of the 1970 Census data indicates that of the 28.6 million American households with less than \$10,000 annual income, 18% (5.1 million) live in units which have no direct access from outside, incomplete kitchen facilities, incomplete plumbing, and/or inadequate heating. (It should be emphasized that these are crude measures of housing quality which are limited by the reported Census characteristics. They are likely to underestimate the extent of poor quality housing.) Marda Post, et. al., "Eligibility in a Direct Cash Assistance Program," (Abt Associates, August, 1974) p.12.

²Given existing knowledge, it is virtually impossible to predict the long-term reaction of the housing market to a direct cash assistance program, with or without housing quality requirements. Information from the Demand and Supply experiments should make possible better estimates of the effectiveness of increased income and consumer demand for improved housing.

1.4 Quality Requirements for a Direct Cash Assistance Program

Quality requirements for a direct cash assistance program would take the form of a regulation that would make the receipt of payments under the program contingent upon securing a dwelling unit that meets some quality standard. The two key elements of quality requirements are a standard, that is, a specified set of qualities that a unit must possess, and an enforcement mechanism, generally some form of inspection.

The "standard" applied to dwelling units occupied by participants in a direct cash assistance program may be defined in terms of housing codes (local codes, one of the model national codes or a new code) or it may be defined arbitrarily as simply a program standard. The standard may include a single set of criteria to be applied uniformly across the nation or it may vary by geographic area. Furthermore, the standard may be fixed over time but systematically applied in an incremental way.

Enforcement mechanisms are basically of two types: (1) inspections in which an independent third party physically examines the dwelling unit and evaluates it against the items contained in the standard; and (2) certification procedures in which an individual (participant or landlord) formally testifies that the unit meets the standard based on a self-inspection procedure.

The following basic sets of options for quality requirements in a direct cash assistance program are analyzed in this paper:

Options for a Program Quality Standard

- the use of local codes
- the use of national code
- the development of an arbitrary set of quality criteria not related to code enforcement which are applied nationally



- quality criteria which vary by housing market
- quality criteria which vary over time and are applied incrementally depending on the quality of housing stock available to participants in a given area and the opportunities for upgrading

Options for an Enforcement Mechanism

- regular third-party inspection
- self-inspection by landlords (with spot checks)
- self-inspection by participants (with spot checks)

PART I

NATIONAL OR LOCAL CODES AS AN OPTION FOR HOUSING QUALITY REQUIREMENTS IN A DIRECT CASH ASSISTANCE PROGRAM

2.0 CHARACTERISTICS OF HOUSING CODES

The primary existing mechanisms for regulating the quality of housing in the United States are housing codes locally adopted and enforced. The research in preparation of this paper involved extensive consideration of existing local and national model housing codes in an effort to determine their appropriateness as housing quality requirements for adoption in a direct cash assistance program. Appendix A provides a detailed analysis of the origins, characteristics, coverage, enforcement, and effectiveness of local codes. In addition, comparison of individual local and model codes indicate the differing purposes and orientation of specific codes. The results of the analysis are significant for an appreciation of the difficulties involved in establishing any set of requirements which would effectively provide minimum health and safety protection, for the assessment of the adequacy of existing housing quality (code) efforts, and for the consideration of housing codes as possible program quality requirements.

There is considerable variability among codes in the scope and specificity of their quality criteria. The following summary list drawn from Appendix A indicates the type of considerations generally encountered:

- Basic Facilities or Equipment
 - kitchen facilities
 - bathroom facilities
 - light and ventilation
 - heating
 - some electrical service
 - space

- Protection against Hazards
 - structural collapse
 - leaking
 - rodent and insect infestation
 - fire hazards
 - unvented fuel burning appliances
 - falls or tripping
- Other Provisions
 - condition of finishes
 - no sharing of toilet facilities or kitchens
 - storage of trash

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Some codes also include provisions concerning required exits, separation of occupancy, electrical and lead-based paint hazards, and physical security. Most major codes do not address such considerations as storage, elevators, neighborhood and community services, and noise.

Briefly summarized, the analysis of local housing codes and national model codes indicates:

- Diverse interests - health and safety, culturally established norms, and economic and political considerations - provide mixed motivations for the criteria in codes, with the means of fully satisfying any one interest unclear. For example, although it is intuitively plausible that detailed and inclusive criteria could provide minimum health and safety protection, no conclusive causal link has yet been demonstrated between housing quality and occupant health.
- The specification of quality criteria in codes varies widely. Some criteria within codes merely identify discretionary performance standards (like requiring a facility to be "adequate"). Other criteria specify detailed technical considerations which may reflect "best practice" rather than broadly applicable criteria.
- Evaluative procedures for determining actual housing quality are often complex. Even detailed codes rely upon some indicators rather than direct assessments of quality.

- Not all communities are covered by housing codes. For many of those which are covered, enforcement mechanisms can be both administratively and politically unwieldly, with the resulting effective coverage of the codes being very uneven.
- Stringent codes and active code enforcement may counterproductively dislocate low-income households. (Section 3 which follows provides estimates of the failure rates for low-income housing that would result from the application and enforcement of code provisions.)

3.0 HOUSING CODES AND HOUSING FAILURE RATES

One of the most critical questions concerning the feasibility and utility of housing quality requirements in a direct cash assistance program is the relationship of any given "standard" to the existing housing stock. A "standard" which, if enforced,¹ would fail most of the housing available or potentially available to low-income households would be inappropriate for a program intended to serve all income-eligible households.

There are no direct means of estimating the failure rates that would be associated with the use of local or national model codes as the housing quality "standard" for a direct cash assistance program. However, examination of data from the Census, from cities that have participated in the concentrated code enforcement program, and from the Experimental Housing Allowance Program sites indicates that most of the housing stock available to the income-eligible population for a direct cash assistance program would not satisfy the quality requirements of national model codes, most local codes, or even the more limited set of criteria used to evaluate the quality of housing in the Demand and Administrative Agency Experiments.

3.1 Failure Rates from Housing Quality Criteria Reported in the Census.

The Census provides a national survey of housing quality. Three attributes of housing quality are reported:

¹The discussions of failure rates in this section of the paper implicitly assume full enforcement of the designated standard. Actual failure rates under any particular standard would be dependent upon not only the quality of the housing stock but also the extent of enforcement. Thus, the actual rates would be expected to be somewhat lower than the results of a survey would suggest.

- provision of plumbing facilities (hot and cold water, flush toilet, bathtub, not shared with another family)
- presence of central heating facilities
- amount of living space defined in terms of the number of persons per habitable room.

For the purpose of this analysis, dwelling units having inadequate plumbing, having no bathroom or a shared bathroom, having inadequate heating facilities, or being overcrowded (defined alternatively as more than 1 or 1.5 persons per room) are classified as substandard or "failing" a quality standard. Table 1 gives the percent of units according to location and form of tenure which fail the criteria.

TABLE 1
FAILURE RATES FROM CENSUS DATA

A. Percent of Dwelling Units with Inadequate* Plumbing

<u>United States</u>	<u>Total</u>	<u>Within SMSA</u>	<u>Central City</u>	<u>Not in SMSA</u>
Total Units	9.0	5.0	6.1	17.2
Owner Occupied Units	5.2	2.3	2.1	10.5
Renter Occupied Units	11.2	7.2	8.0	22.9
<u>South</u>				
Total Units	14.5	5.9	6.1	24.9
Owner Occupied Units	9.1	3.3	3.2	29.2
Renter Occupied Units	18.4	7.3	7.4	33.7
<u>Northeast</u>				
Total Units	6.5	5.4	7.4	10.5
Owner Occupied Units	3.0	2.1	2.3	5.5
Renter Occupied Units	9.3	8.3	9.1	14.9
<u>North Central</u>				
Total Units	7.3	4.7	5.8	12.0
Owner Occupied Units	4.2	2.1	1.4	7.6
Renter Occupied Units	9.0	7.4	8.6	13.1
<u>West</u>				
Total Units	5.1	3.8	4.3	10.2
Owner Occupied Units	2.4	1.4	1.1	8.8
Renter Occupied Units	6.0	5.4	6.1	9.7

*Lacking some or all plumbing facilities or with dilapidated facilities.

Source: Components of Inventory Change, 1970 Census of Housing.

TABLE 1 (cont'd)

B. Percent of Dwelling Units with No Bathroom or Shared Bathroom

	<u>Total</u>	<u>Within SMSA</u>	<u>Central City</u>	<u>Not in SMSA</u>
United States	10.2	3.5	3.8	14.9
South	12.7	4.8	4.1	22.2
Northeast	3.9	2.8	3.9	7.7
North Central	6.3	3.8	4.3	10.7
West	3.5	2.4	2.4	7.7

C. Percent of Units with Inadequate* Heat

United States	21.8	14.1	15.9	37.9
South	42.3	29.5	32.0	57.6
Northeast	7.7	6.1	7.5	13.6
North Central	12.5	6.8	7.9	22.8
West	19.1	15.1	15.9	34.8

D. Percent of Units that are OvercrowdedUnited States

1 person or more/room	7.4	6.9	7.2	8.4
1.5 persons or more/room	1.7	1.5	1.7	2.2

Owner-Occupied

1 person or more/room	5.6	5.6	8.9	5.6
1.5 persons or more/room	1.1	1.0	0.9	1.4

Renter-Occupied

1 person or more/room	9.8	8.6	8.6	13.1
1.5 persons or more/room	2.8	2.4	2.5	4.0

*No heat or some means other than (1) steam or hot water (2) warm air furnace (3) built-in electric units (4) floor, wall or pipeless furnace.

There is a surprisingly high percentage of units having inadequate plumbing where "inadequate" is defined as lacking some or all plumbing facilities (hot and cold piped water inside the structure, flush toilet and a bathtub or shower inside the structure for exclusive use of the occupants of the unit) or possessing these facilities in a dilapidated condition. As might be expected this defect is more prevalent in rural areas than inside of SMSA's; 5.0% of units within SMSA's versus 17.2% of all rural units had this defect. Inadequate plumbing was more than twice as likely to occur in renter occupied dwellings as in owner-occupied dwellings. In the South over one-third of the rural dwelling units had substandard plumbing in 1970. These figures are sufficient to demonstrate that national minimum housing quality requirements would affect different parts of the housing stock differentially and points to those areas where potential participants would have a difficult time finding acceptable housing.

The figures on units having no bathroom or sharing a bathroom with another household tell a similar story; the percentages of inadequate units are significantly higher for rural areas and for the South.

The percentages on units having "inadequate" heating facilities point up the pitfalls of using specification standards on a national basis. Central heating facilities are necessary to maintain inside temperatures in the northern parts of the country while households in the South and Southwest can get by on much less costly equipment.¹

¹A performance standard for adequate heating which differentiates between types of heating equipment and number of degree-days was developed by the Harvard-MIT Joint Center for Urban Studies. This standard has been used along with other measures of housing quality to determine on the basis of the 1970 Census data the amount of substandard housing currently occupied by a potential income-eligible population for a direct cash assistance program. See Marda Post et al., Eligibility in a Direct Cash Assistance Program, (Abt Associates, August 1974), p. 130.

Occupancy data did not vary dramatically by region so figures for the United States only are given. The percentage of units that would fail either requirement (less than 1 person per room or less than 1.5 persons per room) is small. This percentage is significantly higher in renter-occupied units than owner-occupied units and is highest in rural renter-occupied dwellings.

The Code Comparison Chart (Table A-2 in Appendix A) indicates that all of the national codes (and, by inference, most of the local codes) are considerably more stringent than the standard which can be constructed from Census data. Even with the minimum Census considerations, however, substantial portions of the housing stock in the United States fail. Aggregated data indicates the following:

- no county has substantially less than 5% failures on the basis of one or more of the items (except for Nantucket County, Massachusetts in which only 15 of the 1300 units are substandard).
- 10% of all units in "urbanized" areas fail
- 16% of all non-"urbanized" area units fail
- 12.4% of all units in the U.S. fail
- 23% of units in the East South Central States fail
- 30% of the units in Mississippi fail
- over 40% of the units in many U.S. counties fail
- 100% of the units in several Alaskan districts fail

3.2 Failure Rates Based on Housing Quality Criteria Used in the Experimental Housing Allowance Programs (AAE and Demand)

In both the Administrative Agency Experiment and the Demand Experiment, the housing occupied by a sample of participants can be evaluated according to alternative sets of quality

criteria derived from data collected in the Housing Evaluation Forms. These quality criteria may be combined into four standards of increasing stringency by modifying both the number of quality items included and the level of stringency necessary to meet a specific requirement. It is important to note that only one of these standards is actually in use as a program requirement; the program minimum standards for the Demand Experiment is part of the earmark constraint for the minimum standards treatment groups. The other standards were derived to permit analysis of alternative quality levels. Appendix B provides definitions of these standards. There are some minor differences in the specifics of the comparable levels of standards across the two experiments.

The percent of units not meeting each of the four housing quality standards levels are presented in Table 2. The percentages for the AAE sites represent an average failure rate for enrollees across all eight sites. The failure rates for Pittsburgh and Phoenix pertain to participant pre-program housing.

TABLE 2
PERCENT OF UNITS NOT MEETING HOUSING
QUALITY STANDARDS

Quality Level	AAE (average across sites)	DEMAND	
		Pittsburgh	Phoenix
Low Standard	31%	20.5%	29.3%
Medium Standard	48	38.4	36.8
Program Minimum Standard (DEMAND)		70.3	69.7
Medium High Standard (AAE)	71		
High Standard	82	87.3	79.9
Source: AAE, Eight Sites - Initial Housing Evaluation Forms, First Participant Survey Demand - Initial Housing Evaluation Form			

In general, the comparison of codes indicates that none of these standards (including the high standard) is as stringent as the model national codes.¹ The high standard permits only 18% of enrollee housing at the AAE sites and only 12.7% and 20.1% of pre-program housing in Pittsburgh and Phoenix, respectively, to be classified as acceptable. Thus, the probable failure rates associated with the application of the "more stringent" national model codes would make them inappropriate for use as housing quality standards in a direct cash assistance program.

3.3 Failure Rates Under Local Codes

No comprehensive study exists of the relationship of local housing codes to the existing housing stock. Data is available from twelve cities involved in the concentrated code enforcement programs from which some inferences can be made. Table 3 shows rates of failure of the existing housing stock under local code enforcement in concentrated code enforcement areas of twelve cities. It should be noted that the areas selected for the concentrated code enforcement were not the worst in the given cities, but were statistically limited to areas containing buildings of sufficiently good quality such that housing code enforcement, together with some improvement of community facilities would "prevent further decline."

¹It should be noted that the Code Comparison Chart (Table A-2) includes the four alternative standards used in analysis of the Demand Experiment. For the AAE, what is included in the chart are the quality requirements used by each site as a condition of participation, not the four standards, described in Appendix B, which were derived from the Housing Evaluation Forms.

TABLE 3

RESIDENTIAL BUILDINGS WITH HOUSING CODE VIOLATIONS
IN CONCENTRATED CODE ENFORCEMENT PROGRAM AREAS OF
SELECTED U.S. CITIES, 1968, TOGETHER WITH YEARS OF
WORKABLE PROGRAM CERTIFICATION¹

Residential Buildings In- spected in Concentrated <u>Code Enforcement Area</u>			
City	Number inspected	Percent found in violation of housing code	Years certified workable program in effect ²
	(1)	(2)	(3)
San Francisco, Calif.....	2,210	85	13
Baltimore, Md.....	9,063	70	13
Malden, Mass.....	1,181	51	9
Cincinnati, Ohio.....	3,499	82	13
Mansfield, Ohio.....	580	90	5
Salem, Ore.....	201	98	6
Lancaster, Pa.....	505	90	10
Philadelphia, Pa.....	6,554	81	13
Providence, RI.....	2,691	49	10
Chattanooga, Tenn.....	1,536	88	12
Fort Worth, Tex.....	1,640	54	12
Grand Prairie, Tex.....	1,337	35	11
Sources: Columns 1 and 2 "Costs and Other Effects on Owners and Tenants of Repairs Required under Housing Code Enforcement Program." Prepared for National Commission on Urban Problems by the Boston Municipal Research Bureau, 1968; Column 3: HUD Urban Renewal Office.			

¹Reproduced from page 502 of Housing Urban America, edited by Pynoos, Schafer and Hartman (Chicago, Aldine Publishing Co., 1973).

²Counted from year of original certification. Mansfield is the only city reported by HUD to have had significant gaps between annual recertifications.

Failure rates in these cities using local codes ranged from 35% to 98% with a median failure rate of approximately 81%. These data are consistent with those reported elsewhere which suggest that in some areas a substantial portion of the housing stock is standard according to the provisions of the local code in effect, but that in other areas, the local codes may fail virtually all of the existing stock.

3.4 Summary of Failure Rate Data

National model codes and local housing codes incorporate housing quality standards that are sufficiently stringent to fail well over half the housing potentially available to participants in a direct cash assistance program. A housing quality standard that limited potential program recipients to housing that met all the requirements of either local or national codes would drastically limit the coverage of a direct cash assistance program. Furthermore, broad application of codes would have its severest effects in those areas where many of the neediest families now reside.

4.0 NATIONAL OR LOCAL CODES AS HOUSING QUALITY REQUIREMENTS IN A DIRECT CASH ASSISTANCE PROGRAM

In this section, two options for housing quality requirements in a direct cash assistance program are evaluated: one, a requirement that a program participant occupy a dwelling unit that is "standard" according to the quality criteria contained in a single national housing code; and two, a requirement that a program participant occupy a dwelling unit that is "standard" in terms of the provisions of the local housing ordinance in force in the jurisdiction within which the participant resides.

4.1 A National Code

If a single code were to be adopted as the "standard" for a direct cash assistance program, one of the model national codes (probably the American Public Health Association (APHA) ordinance)¹ could be selected, or, alternatively, a new housing code could be developed combining the best features of several model codes. The influence of public interest groups such as APHA and professional code writers would likely push the adoption of a code qua code with a relatively high standard comparable to the existing model codes.

The programmatic effects of a national code would result in a large portion of the income-eligible population for direct cash assistance being unable to participate in the program, and certain geographic areas--both rural regions and central city areas--would be effectively "red-lined." In addition, there would be strong disincentives for families to participate (unless benefit levels were extremely high). It would be

¹Section A-3.2.1 in Appendix A analyzes the APHA ordinance.

likely that the cost of units meeting the standards of a national code would be sufficiently high as to require families to spend a larger proportion of their income (net of program benefits) on housing.

4.2 Local Codes

The use of existing local codes as the "standard" for housing occupied by participants in a direct cash assistance program shares many of the disadvantages of the use of a national code. While generally less stringent than national codes, existing local codes would tend to produce high failure rates, uneven opportunities for participation and strong disincentives for both families and landlords. Local codes have some advantages over national codes. At least some of the local codes will have eliminated from the national model codes provisions that are of little importance to their particular geographic area (such as the requirements for central heating in certain areas of the South or Southwest and for a flush toilet in isolated rural areas). The adoption of a local code requirement, however, would still necessitate the development of a national code that would apply in areas not currently covered by a local housing code.¹ The local code option for the program quality requirement could pose potential problems of inequities among localities because of the wide variation in the provision of local codes.

¹The existence of such a national code (which would tend to be more stringent than most if not all local codes) could have the positive effect of providing incentives for local jurisdictions not currently covered by codes to adopt a local housing ordinance. At the same time, however, some local jurisdictions might find themselves under great pressure to weaken the provisions of existing codes in order to make it possible for local citizens to receive direct cash assistance payments.

4.3 Summary on Codes as the Program Housing Quality Requirements

The adoption of a regulation requiring participant households to live in dwelling units that satisfy the provisions of either a national or an appropriate existing local housing code is not recommended for the following reasons:

- Such a regulation would drastically limit participation in the program and would probably deny any housing aid to those families currently occupying some of the worst housing in the United States.
- The use of such a regulation, tied to the police power either of federal or local governments would result in an uneven application of the law. Local housing codes tend to be rarely enforced, but a program₁ regulation making payments dependent upon inspection₁ of the dwelling would focus enforcement of the law on particular neighborhoods and on a particular class of families. Because code enforcement involves penalties other than being denied participation in the program, landlords, homeowners and even tenants would be loath to subject themselves to the₂ penalties associated with failure to pass inspections.
- It would be especially difficult to get legislative support for a national code regulation with its differing effects in the local housing markets depending on the quality of the stock.

¹The rationale for assuming that code enforcement or compliance with provisions of a code would require third party inspections is presented in Section 7.2.2.

²There is empirical evidence to support this contention. In addition to the Sternlieb study, The Tenement Landlord Revisited, one of the eight agencies in the Administrative Agency Experiment required inspections of dwelling units with the provisions of the local housing code. As a result of this requirement, relatively few minority families were able to participate in the agency program because they were in housing which did not meet the program (i.e., local code) requirement and did not find housing which did satisfy it. In addition, there are indications that some landlords were reluctant to rent units to enrolled households because of the code enforcement action that would have followed.

Thus, the use of codes as the program standard would be complicated and potentially counterproductive. Further, an attempt to provide complete coverage of minimum health and safety criteria through codes would involve a degree of detail (as indicated in the discussion of codes in Appendix A) and an intensity of enforcement that would likely be neither feasible nor desirable.

PART II

INDEPENDENT DIRECT CASH ASSISTANCE PROGRAM

REQUIREMENTS AS AN OPTION FOR
HOUSING QUALITY REQUIREMENTS

5.0 HOUSING QUALITY REQUIREMENTS FOR A DIRECT CASH
ASSISTANCE PROGRAM

The disadvantages of using national or existing local housing codes to protect the health and safety of program recipients, to apply pressure to the housing market for upgrading existing stock, and to avoid political liability for the poor quality of the housing stock suggest the need to develop an alternative approach. Rather than coupling participation in a direct cash assistance program to code enforcement, it is possible to develop a set of quality requirements that place conditions on the opportunity of both families and suppliers of housing to benefit from the program. Such a set of quality requirements could, at least theoretically, be set at any level, be varied geographically and over time in terms of the quality of housing available, and be enforced with any desired level of stringency.

The existing local housing codes and any national code that could be enacted into law by the federal government have been developed within a particular historical context. This context favors a rather stringent set of criteria for what is to be called minimally acceptable under the law by experts who have a professional set of standards for evaluating the provisions of a code. For example, despite the fact that the National Commission on Urban Problems report on codes recognized that existing codes (given the nature of the existing housing stock) could not be enforced, the report faulted existing codes for their failure to contain sufficiently stringent and complete provisions to genuinely insure the protection of the health and safety of occupants.

The first fundamental distinction, then, between a quality standard based on codes and one based on program requirements is related to stringency. The standard based on codes will inevitably fall within a relatively narrow and stringent range of quality while the standard based on program requirements may be arbitrary, i.e., it can be set at any level appropriate to the achievement of program goals.¹

The second major distinction between a standard based on codes and one based on program quality requirements relates to the basis of enforcement. The former relies on the police power of the state, and, theoretically, once a governmental official has determined that a dwelling unit fails to meet the requirements of a code, corrective action is mandatory. The latter relies on the desire of eligible households to participate in the program and the desire of housing suppliers to receive revenue from program participants - economic self-interest - as the support for enforcement. The availability of benefits from the program provides an incentive for finding and maintaining units which meet the program quality requirements.

¹The analysis of the experience with the housing quality requirements in the Section 23 Leased Housing Program is instructive of the existing legislative provisions which bound the range of policy prerogatives for a direct cash assistance program. (See Section 9.2)

6.0 CONTENT OF HOUSING QUALITY REQUIREMENTS

The argument has been developed above that housing quality requirements can be set arbitrarily at any level consistent with the achievement of the direct cash assistance program goals. Three functions have been identified for program quality requirements: some protection of the health and safety of program participants, pressure for the upgrading of existing housing stock, and the avoidance of political liability for poor quality housing. A fourth criterion for determining the appropriate levels of stringency has been implicit in the discussions of failure rates: there is some direct connection between the quality of the housing stock available to families eligible for the program and the level of stringency in quality requirements that is appropriate. For a universal entitlement program that is income-conditioned (with the largest benefits designed to go to those in greatest need) participation rates (and relative participation rates) become important determinants of program effectiveness. If the application of a given set of quality requirements has the net effect of excluding the neediest families from the program, one would argue that the quality requirements chosen were inappropriate. A fifth criterion for use in determining stringency levels relates to the amount of the subsidy available from the program. Housing quality requirements ought to be set at a level where the probability is very high that a given family willing to spend a reasonable proportion of its income in addition to the program subsidy on housing and to make a reasonable effort in searching for housing could find a unit that meets the requirements.¹

These five directives for the setting of housing quality requirements are not consistent. Trade-offs between and among them are necessary. For example, the level of stringency

¹Note: it is also possible for program managers to manipulate payment levels in order to be consistent with a set of housing quality requirements.

required to protect the health and safety of participants is clearly incompatible with high participation, reasonable payment levels, generating a reasonable amount of pressure on the housing market, and a desire to avoid being saddled with the responsibility for having guaranteed the quality of a dwelling unit occupied by participants.

Three generic types of housing quality criteria are identified in Section A-2.1 of Appendix A: neighborhood, occupancy and physical criteria.

6.1 Neighborhood Criteria

Neighborhood criteria generally have been very difficult to specify. The use of them in some minimum standard selected for a direct cash assistance program does not seem reasonable.

6.2 Occupancy Criteria

A major issue with respect to occupancy criteria concerns their appropriateness. They attempt to regulate the behavior of households rather than the quality of housing units.¹ If individual families or especially particular demographic groups (for example, the elderly) prefer to double up and make some of their income available for other needs, should the program constrain their opportunity to do so?

¹Although the housing codes of many municipalities include fairly rigid occupancy standards, actual enforcement is rare. Most government officials are loath to effectively evict households because of overcrowding, particularly in tight housing markets, unless the unit is grossly substandard. Enforcement of occupancy standards generally only takes place as a result of adverse publicity (e.g., gross overcrowding of families living in efficiency units in New York City) or as a tool to exclude a certain class or type of occupant from a community (e.g., excluding households of non-related individuals from a community of family-occupied single-family homes).

The definition of overcrowding is relatively arbitrary. Reasonable and decent living conditions can be imagined that would not meet the prevailing one person per room criterion,¹ for example, efficiency apartments. The enforcement of more complicated occupancy criteria related to size and sex could require significant intrusion into the privacy of families -- something that should be avoided or at least minimized in a federal program. Finally, one can question the utility of overcrowding criteria. Most of the available data concerning overcrowding are consistent with the view that overcrowding is a function of supply and cost, that is, of the absence of dwelling units of appropriate size at a cost some families can afford. The adoption of occupancy criteria would seem to have at best a very indirect and tenuous relationship to decisions that would result in an increase in the supply of, for example, rental units for large families.

An occupancy criterion may be appropriate for a direct cash assistance program, however. In particular, if the benefit levels are related to the number of rooms needed in units for households of different sizes, it would be consistent and, therefore, perhaps reasonable to require households to secure housing according to household size-unit space relationships. In addition, application information concerning household size and recorded housing unit characteristics could provide sufficient information with which to assess fulfillment of an occupancy criterion. The standard selected could be relaxed for large families.

It is relatively clear that occupancy criteria are arbitrary and likely to restrict what might be reasonable household choice. The appropriateness of an occupancy criterion as part of the program standard will depend upon the definition of the filing

¹The Housing and Community Development Act of 1974 defines overcrowding as 1.01 or more persons per room.

unit (will it include only single families, or will it encompass multiple family households and households of unrelated individuals?), the character of the benefit structure (will payments be related to the cost of units correlated with household sizes?), and the desired strength of the quality requirements as an earmark for increased housing consumption.

6.3 Physical Criteria

The main problem for the design of housing quality requirements for a direct cash assistance program is the selection of a set of physical criteria. As the review of codes indicates¹, there is a wide range of physical characteristics of a dwelling unit that could be included.

There are two major approaches available for the development of a minimum set of housing quality requirements. The first approach begins with the objective of protecting the health and safety of program participants and it attempts to postulate a "minimum standard" responsive to that objective. The second approach begins with the proposition that the set of characteristics chosen must reflect attributes generally present in the existing stock.

Because of the desire to compare failure rates under the "minimum standards," the quality requirements specified in the two examples which follow use the Demand Experiment housing evaluation criteria as the basis for discussion.

6.3.1 A "Minimum Standard" Based on Health and Safety Concerns

The "minimum health and safety" checklist presented below was developed from the various Demand Experiment housing evaluation criteria in such a way as to establish a minimum set of considerations that could be used in a direct cash assistance program. Among the various functions of a standard presented above, the

¹See Appendix A.

considerations included in this "minimum" standard emphasize health and safety. The criteria proposed for a minimum health and safety standard are presented in the checklist in Table 4.

Table 4

A "Minimum" Health and Safety Standard Checklist

Minimum Facilities and Equipment

- Can heating system maintain 65° in winter?
- Are all heating appliances vented and do they appear to be in good condition?
- Do all bathrooms, corridors and stairs have electric lights?
- Is there a kitchen sink with safe water?
- Is there provision for a stove and refrigerator?
- Is there at least 100 square feet per person?
- Are there places where occupants may have privacy?
- Does the unit have a toilet, lavatory, and bath or shower all in working order with hot and cold running water?

Maintenance of the Dwelling Unit

- Is there no evidence of major leaks?
- Are the foundations not deteriorated or settling?
- Are the floors firm and fairly level and not deteriorated?
- Are walls free from deterioration, large cracks, splits, or buckles and are they vertical?
- Are ceilings not badly cracked, buckled, or buckling?
- Do all rooms have openable windows in working order or other means of ventilation?

Table 4 (cont'd)

Protection Against Hazards

- Are there two separate ways out (doors and windows) of all habitable rooms?
- Is the interior free of peeling lead paint?
- Is there protection against serious accidents at glass doors and windows?
- Are there no large areas of highly combustible finishes?
- Is the drainage system trapped, leak-proof, and connected to a safe disposal system?
- Is there no evidence of present infestation by insects or rodents?
- Are residential uses separated from hazardous uses in the same or adjacent building(s)?
- Does every unit have a smoke detector and alarm?
- Are there fuses or circuit breakers for all electrical circuits?
- Is all visible wiring in good condition?
- Is all fuel burning equipment kept out of sleeping rooms?
- Is there adequate clearance from combustibles to heating devices?
- Do heaters and water heaters have safety and relief valves?
- Are oil and other fuels stored in metal tanks in good condition?
- Can unit be securely locked?
- Is the unit clear of any accumulations of trash and rubbish?
- Have elevators passed inspection in last year?
(Local ordinances usually require that records of inspection be posted in the elevator.)

Table 4 (cont'd)

Protection Against Unusual Hazards (Where Appropriate)

- Is there an easily accessible basement or specifically constructed shelter for refuge in a tornado or hurricane?
- If flooding or tidal wave is common occurrence, is there an adequate community warning system to enable occupants to reach a safe place?
- Would the building withstand earthquake tremors?

This minimum health and safety standard prescribes considerations that provide a reasonable extent of health and safety protection. It may also be thought of as a minimally acceptable set of considerations that could gain the acceptance and approval of professional housing experts if they were asked to specify what needs to be considered to reasonably ensure minimum health and safety. The "minimum" standard, however, is more stringent than any of the four Demand Experiment program evaluative standards described in Appendix B. It should be recalled that approximately 70% of the pre-program housing of Demand Experiment participants in Pittsburgh and Phoenix did not meet the program standard used as an earmark constraint. Thus, if used as a direct cash assistance program standard, the minimum health and safety checklist could be expected to fail an even greater proportion of the housing stock in those two cities.

The outcome of this modest effort to create a suitable minimum standard may be indicative of what would ensue from any effort which began from the perspective of adequate protection of health and safety. The following points are offered in support of that conclusion:

- A minimum health and safety standard will inevitably be developed in the context of model codes. Since protection of health and safety is a major purpose of codes, any quality requirements relating directly to health and safety will be compared to codes and evaluated against the perceived adequacy of existing codes.
- Minimum health and safety requirements will be a composite of two types of criteria: those which represent the layman's (including most of the Congress') perceptions concerning what are the most deplorable and dangerous housing conditions, and those which are derived from systematic study of hazards to health and safety and incidence of injury or death. The former tend to emphasize the dramatic (lead paint, rat infestation and dangerous dilapidation); the latter give priority to such things as fire hazards, flooding and earthquake protection. There would be very strong pressure to include both types of criteria in any minimum standard defined in health and safety terms.

6.3.2 A Minimum Program Standard Based on the Condition of the Housing Stock

There are several programmatic advantages to a minimum program standard developed in relationship to the quality of the existing housing stock in each locality rather than desired housing quality characteristics. Enforcement of a set of minimum regulations would be designed to exclude some proportion of the "substandard" housing stock from being occupied by participants in a direct cash assistance program without so restricting the range of acceptable housing that eligible households would be effectively excluded from the program.

While less stringent than many existing codes, partial protection against particular defects could be achieved using this approach. It is important to recall that even if program requirements were adopted, participants would still have available to them whatever protection and recourse exists under local housing codes. In this strategy, quality requirements would be designed to exert steady, but reasonable, pressure on the housing market for continued maintenance and upgrading of existing dwellings. Such intervention in the market process

should permit somewhat predictable outcomes if the quality regulations are carefully chosen with reference to both local housing conditions and the expected flow of program subsidies. Finally, the supply cost of housing which just meets the minimum set of requirements developed in this fashion may be more in line with what can be afforded by program participants using their own funds and program payments.

In defining any set of minimum considerations, however, an important point should be kept in mind. In contrast to a model code, the program standard adopted will be necessarily, but desirably, incomplete and arbitrary.

In order to take advantage of Demand Experiment data, the minimum set represents a modification of the "Minimum Standards-Low" evaluative criteria described in Appendix B. There exist many other national or locally-based evaluative standards that could be used as examples, but data on failure rates associated with them is generally not available. The following table presents considerations selected to represent a hypothetical minimum set.

Table 5
A Minimum Program Standard¹

Minimum Facilities and Equipment

- Are there private toilet facilities, a shower or tub, and a wash basin with hot and cold running water?
- Is there a stove, refrigerator, and kitchen sink with hot and cold running water?
- Is there heating equipment?(not applicable in some areas)

Maintenance of the Dwelling Unit

- Is the roof not sagging or buckling?
- Do the exterior walls need replacement for structural reasons?

Protection Against Hazards

- Are there adequate exits (from multi-family dwellings)?

¹The criteria included are defined more fully in Appendix B. This list modifies the Minimum Standards-Low concept in several ways. The requirement for adequate exits was added as a basic fire safety feature. The requirement for adequate heat was deleted from the Phoenix set; while some provision for heat is necessary in Phoenix, the concept should perhaps be modified to better represent climactic conditions. Finally, the requirement that the "core rooms" be present (kitchen, bathroom and living room) was deleted.

It is obvious that this set of criteria is extremely limited; omitted are many of the protective characteristics common to model codes. When posed with the question: "What kind of housing should a direct cash assistance program participant be allowed to occupy?", it may be awkward to admit that even with a minimum program standard such as that above, the housing might be subject to leakage, unsafe wiring, buckling ceilings, etc. However, it is precisely this line of reasoning -- the interest in covering the major health and safety considerations -- that leads to the rapid escalation of the number and type of quality requirements deemed essential.

Despite the limited nature of this program standard, 27.8% of pre-program participant housing in Pittsburgh and 23.1% in Phoenix failed to meet one or more of these minimum considerations. Table 6 portrays the failure rate (% of pre-programming housing in Pittsburgh and Phoenix) that would be associated with the adoption of the suggested minimum set of regulations.

Table 6

Percent of Enrolled Households' Pre-Program Housing
Not Meeting the Suggested Minimum Set
of Program Criteria

<u>Criteria</u>	<u>Pittsburgh</u>		<u>Phoenix</u>	
	#	%	#	%
Plumbing	(296)	16.3%	(289)	16.6%
Kitchen Facilities	(60)	3.3%	(78)	4.5%
Adequate Exits	(176)	9.7%	(18)	1.0%
Roof Structure	(18)	1.0%	(68)	3.9%
Exterior Walls	(9)	.5%	(132)	7.6%
Adequate Heat	(59)	3.3%	*	(18.1%)
Percent Failing One or More Criteria	(504)	27.8%	(403)	23.1%
Source: Initial Household Evaluation Form. There are 1811 observations in Pittsburgh and 1744 observations in Phoenix.				

*The heat regulation was not suggested for Phoenix.

Table 6 reveals that there are substantial differences between Pittsburgh and Phoenix in the failure rates associated with particular items. Comparing the failure rates listed here with those presented in Table 2, one can begin to see how it is possible to construct a program standard with reference to the quality of housing stock available in any given area.¹ Further,

¹The precision with which failure rates can be estimated in Pittsburgh and Phoenix (as a consequence of experimental design) is not a necessary condition for using the approach advocated in this section. Neither is it true that such efforts are dependent upon expensive formal data collection procedures. If applicants are required to fill in self-inspection forms, or there are spot checks, local administrative agencies will have reasonable information on which to base judgments about which items might be eliminated from a proposed set of standards in order to keep failure rates within acceptable levels.

the differences in the patterns of "failure" among the criteria in Table 6 for the two sites indicate the relative sensitivity of the housing stock in Pittsburgh and Phoenix to specific quality criteria.

6.3.2.1 A Minimum Program Standard and the Possibility of Repair

The selection of criteria to be included in a minimum standard has so far only focused on failure rates. The correction of defects through rehabilitation or repair is one of the objectives sought when quality requirements are included in a direct cash assistance program.

The extent to which an increased flow of funds into the housing market will permit repair, maintenance, and upgrading of the existing housing stock is a function of many factors, including the total amount of payments, the level and rate of flow of individual payments, and numerous factors affecting the elasticity of supply. It is also a function of bargaining between recipients of allowance payments and housing suppliers. In the context of defining alternative quality requirements, it is desirable to take into account the type and range of defects which may be identified under any general regulation.

In an attempt to categorize the type of defect associated with failure to meet a quality criterion, the following distinctions among the kinds of efforts necessary to remedy the defect are useful:

- Routine repairs and maintenance of existing facilities and structures
- Rehabilitation and replacement or repair of existing facilities
- Structural rehabilitation and introduction of previously absent (new) facilities or systems.

These categories are by no means precise. Nevertheless, some definition of the type of remedies needed for a given housing stock will be important to program implementation, particularly:

- The extent to which the remedy is a reasonable market response to the flow of program funds
- The enforceability of a given program standard
- The timing of any enforcement.

Routine repairs and maintenance of existing facilities and structures are presumably reasonable market responses. Structural rehabilitation and introduction of new facilities may be less likely to occur, at least in the short term, in response to a gradual stimulus like program payments. Rehabilitation and replacement or repairs of existing facilities is a difficult category of remedy efforts for which to predict a market response.

Data collected by the Demand Experiment on the Housing Evaluation Form provides some indication as to the type of defect occurring under a given quality requirement. Precision in the data is limited, however, since the exact nature of any given deficiency was not recorded.¹ Two sets of examples are provided below which give some impression of the distribution of problems. The first example concerns facilities, the requirements for adequate plumbing and complete kitchen facilities. (See Table 7.)

¹Information estimating the costs of different types of repairs and upgrading would be necessary for an analysis of expected market response. Since it is impossible, with the data used here, to determine the exact nature of any defect, it was considered inappropriate to try to assess the implied costs.

Table 7

Percent of Enrolled Households' Pre-Program Housing
Not Meeting Selected Criteria

Quality Criteria and Sub-Components	Percent of Pre-Program Housing [*]	
	Pittsburgh	Phoenix
Incomplete Plumbing	15.4%	16.4%
No toilet	3.9	2.2
Toilet not working	2.7	3.6
Toilet not closed off	3.4	.1
No shower or tub present	4.4	2.6
Shower or tub not working	.6	1.6
Water not present	4.6	4.0
Water not working	1.5	2.7
Wash basin not present	8.8	6.4
Wash basin not working	1.3	2.9
Water not present	8.8	7.9
Water not working	2.0	4.6
Incomplete Kitchen Facilities	5.0	5.9
No stove	.8	.5
Stove not working	.3	.2
No refrigerator	.8	.6
Refrigerator not working	.3	.1
No kitchen sink	.8	.9
Sink not working	.6	.5
No water	1.0	2.3
Water not working	1.0	1.4
No Bathroom	6.3	2.4
No Kitchen	1.0	.5

* Source: Initial Housing Evaluation Form, Demand Experiment.
Based on 1548 observations in Pittsburgh and 1528
observations in Phoenix.

As defined in the Program Standard for the Demand Experiment, absent or nonfunctioning sub-components of bathroom and kitchen facilities implied failure for the overall Program Standard. This procedure is certainly subject to modification. Although the data is ⁱⁿ difficult to interpret, the absence of a facility presumably has different implications than when a feature is present but in poor working condition.

A second example concerns the ratings for structure and surface of the exterior. For these quality criteria, the evaluator instruction book offered precise specifications with ratings of 0, 1, 2, or 3. Basically these ratings imply good condition, 0; needs some repair, 1; needs major repair, 2; needs replacement, 3. The last rating was the failure condition for structure and surface criteria of the Program Standard. Quite different results for overall failure rates are obtained if a more stringent rating of 2 is considered failing, especially for Phoenix. (See Table 8.)

Table 8

Quality Ratings on Selected Aspects of Enrolled
Households' Pre-Program Housing

Quality Criteria	Percent of Pre-Program Housing	
	Pittsburgh	Phoenix
Exterior Walls		
Structure Rating		
0	70.0%	54.6%
1	25.1%	33.3%
2	4.8%	8.4%
3	.1%	3.5%
Surface Rating		
0	41.8%	44.7%
1	46.4%	31.6%
2	11.4%	16.8%
3	.5%	6.8%
	Percent of Observable Surface	
Roof Surface (Observable)	(977)	(1228)
0	10.0%	44.8%
1	69.8%	38.8%
2	19.8%	11.9%
3	.4%	4.6%
[Roof Surfaces not Observable]	[571]	[300]

Source: Initial Housing Evaluation Form, Demand Experiment.
Based on 1548 observations in Pittsburgh and 1528
observations in Phoenix.

These examples are presented to give some indication of the distribution and type of defects existing in the pre-program housing sample. It is clear that the "failure" rate for a quality criterion is highly sensitive to definition. Secondly, if an attempt is made to distinguish what type of defect exists, greater flexibility exists in how or whether to enforce a criterion of the standard. Finally, the establishment of a reasonable time schedule for corrections and a bargaining mechanism between the tenant and landlord may create a substantial impetus for market response to direct cash assistance program funds. One of the major factors that could potentially be used to determine an appropriate minimum standard would be projected average costs of repair or rehabilitation. If these costs were reasonable, higher initial failure rates on items in the standard could be accepted.

6.4 Variations in Program Quality Criteria

There are dramatic differences in housing quality in the United States, both across regions and between urban and rural areas within a single region. Enforcement of any one set of federal program quality criteria would produce vastly different outcomes in terms of the proportion of a given housing stock which could be occupied by program recipients. And, as mentioned earlier, the areas with the largest concentrations of poor housing would experience the highest failure rates. There is also potential for indirect discrimination against minorities through strict enforcement of a program standard which would reduce their opportunities to find acceptable housing and

participate in the program.¹ Furthermore, the use of minimum quality criteria that were sufficiently low to avoid high failure rates in the worst housing markets would also imply losing the opportunity to put pressure for upgrading in many other markets. It is, therefore, recommended that program quality criteria be varied by housing market, with the level of quality required limited by a maximum tolerable failure rate. In order to keep adequate pressure on the housing market, however, locally established quality criteria need to set sufficiently high to exclude some portion of the undesirable housing stock -- i.e. the "worst" housing.

There are several ways in which a set of minimum quality criteria might be flexibly administered to balance the trade-offs made between program goals and the condition of existing local housing. Among these possibilities are:

- Gradual addition of quality criteria to a core set, as permitted by local housing supply conditions and market responses to the program over time.
- Modification of the number of quality items which must be unacceptable before a dwelling unit is failed.
- Flexible definition of the number and/or stringency of minimum quality requirements according to local housing conditions.

¹The indirect discrimination could result from the differential housing quality of units occupied by white and minority households. Analysis of the 1970 Census data indicates that 24% of the non-white households with annual income of less than \$10,000 lives in substandard units whereas only 16% of the white households may be similarly classified. Marda Post, et al., "Eligibility in a Direct Cash Assistance Program," (Abt Associates Inc., August 1974) pgs. 10-11. Even more dramatic is the more than two-fold difference in the percent of white and minority households failing to obtain standard housing in the Administrative Agency Experiment and therefore terminating from the program. Marda Post and Frederick Temple, et. al., "Participation in a Direct Cash Assistance Program," (Abt Associates, Inc., September 1974) p. 24. These analyses suggest the differential impact of housing quality requirements on white and non-white households. Although discriminatory intent is not implied here, the differences between white and non-white households in (a) their current status of housing quality and (b) their experience in satisfying quality requirements indicate that housing quality requirements will not be "neutral" in their effects.

Taken together these procedures would constitute an incremental strategy designed to gradually eliminate some of the disadvantages of a minimum standard for a direct cash assistance program. Depending upon local housing supply conditions and market responses to a direct cash assistance program, both the protective and the amenity aspects of the set of regulations may be gradually increased. Thus, over time, discrepancies between local codes and program requirements could be lessened. Furthermore, the incremental strategy may be combined with flexible definition of regulations and changes in degrees of stringency to be applied locally.

The incremental strategy would be vulnerable to some criticism, however. While it would permit some degree of equity across housing markets in terms of the number of dwelling units available to program participants, there could be no guarantees that the relative quality of units available in different areas would be comparable. Areas with the least stringent policy toward housing defects might also be the most likely to draw attention and charges that the program is supporting "substandard" housing.

The minimum program standard defined in Section 6.3.2 can be used to explore several hypothetical options for flexible administration. As indicated above, 27.8% of the pre-program units in Pittsburgh and 23.1% in Phoenix do not meet one or more of the criteria. Only small portions of these groups, however, fail two or more of the criteria. Table 9 shows the percent of pre-program housing by numbers of quality items failed from the minimum set.

Table 9

Percent of Enrolled Households' Pre-Program Housing
by Number of Minimum Quality Criteria Not Met

Number of Minimum Quality Items Not Met	Percent of Pre-Program Housing			
	<u>Pittsburgh</u>		<u>Phoenix</u>	
	#	%	#	%
0	1307	72.2%	1314	76.9%
1	416	23.0%	271	15.5%
2	63	3.5%	92	5.3%
3	24	1.3%	30	1.7%
4	1	--	10	.6%
5	--	--	--	--
6	--	--	--	--

Source: Initial Housing Evaluation Form, Demand Experiment.
Based on 1811 observations in Pittsburgh and 1744
observations in Phoenix.

Although arbitrary, it is at least conceivable that a unit would not be failed unless two or three elements were failed. Both the definition of any minimum set and the number of defects presumed to constitute the basis for failure could vary across housing markets. Further, under an incremental strategy, the number of items in the minimum set and the number of permissible defects could be gradually modified. The goal of an incremental strategy is the development of an enforceable specification that approximates general notions of "adequate" housing.

Table 10 is similar to Table 9, but it expands the multiple failure construct to include all 15 quality elements included under the Program Minimum Standard of the Demand Experiment. Failure rates drop off sharply in terms of more than two defects.

Table 10

Percent of Enrolled Households' Pre-Program Housing
by Number of Minimum Standard Demand Experiment
Program Components Not Met

Number of MS Program Components Not Met (MS Program Includes 15 Components)	Percent of Pre-Program Housing that Did Not Meet MS Program	
	Pittsburgh (N=1215)	Phoenix (N=1210)
1	50.0%	41.7%
2	24.0	16.0
3	8.1	12.6
4	9.9	7.7
5	3.9	7.1
6	2.3	5.8
7	1.5	2.9
8	.2	2.4
9 or more	<u>.1</u>	<u>3.9</u>
	100.0%	100.0%

Data Source: Initial Housing Evaluation Form, Demand Experiment.

Another possible approach is to group criteria by either some sense of priorities or some common dimension. Table 11 shows the percent of households failing one or more of the "basic facilities requirements (plumbing, kitchen, heat), the percent failing one or more of the "structural requirements" (roof, exterior walls, exits) and the percent failing one or more items from both sets.

Table 11

Percent of Enrolled Households' Pre-Program Housing
That Did Not Meet Quality Criteria
by Character of Criteria (Grouped)

Quality Group	Percent of Pre-Program Housing Not Meeting One or More Items from the Group			
	Pittsburgh		Phoenix	
<u>Basic Facilities</u> (Plumbing, Complete Kitchen, Heat in Pittsburgh)	#	%	#	%
	349	19.3%	308	17.7%
<u>Basic Structure</u> (Roof Structure, Exterior Wall, Adequate Exits)	197	10.9%	181	10.4%
<u>Basic Facilities</u> AND <u>Basic Structure</u>	42	2.3%	86	4.9%

According to this option, a dwelling unit might fail only when one or more items from each group is not met. Again, this procedure is arbitrary, because there is no real basis for determining how much "protection" from health or other hazards would be foregone.

6.5 Locus of Responsibility for Setting Program Quality Standards

The emphasis in the discussion of housing quality criteria on the arbitrary nature of any set of criteria chosen (even detailed health and safety codes), on the relative sensitivity of code proponents and other public groups to definitions of quality, and on the need for flexibility and variation in the criteria employed all suggest that one of the more critical design decisions for a direct cash assistance program will be the assignment of responsibility for the establishment of program quality criteria. The important issue is whether a central federal office or a locally-based office¹ will make the decisions concerning the housing criteria to be required.

There are two disadvantages to locating responsibility for the setting of standards at the central federal level. First, the amount of information required to make the subtle adjustments to the standard necessary if failure rates are to be controlled may be beyond what one could reasonably expect the federal government to collect and analyze for the thousands of local jurisdictions. A locally-based office, on the other hand, could collect and analyze significant amounts of information. Second, the political pressure to conform program quality criteria to model code provisions would be much greater at the national level. A major reason for giving serious attention to the possibility of establishing quality criteria at the federal level is to protect against potential abuses by local officials not entirely sympathetic to the aims of the program.

¹The term "local" as used here does not necessarily imply a local government. The local administrative agency could be a local HUD office, a local office of a state agency or an office of a unit of local government.

The main advantages of local determination of program quality criteria are the opportunity for flexibility and responsiveness to local conditions, the protection from undue pressure from advocates of stringent criteria, and the opportunity for the federal government to avoid the problem of being held responsible (both legally and politically) for the quality of housing occupied by program participants across the country. The delegation of responsibility to a political jurisdiction with an independent constituency carries with it the possibility of actions that are counter to national goals and procedures. In particular, one would be concerned that quality requirements might be deliberately set high in order to exclude from some jurisdictions (or areas within jurisdictions) families who were eligible for direct cash assistance. The main protection against such an outcome would be a national regulation requiring local administrators to establish housing quality criteria that failed less than some designated percentage of local units. One could also require the adjustment of housing quality criteria whenever a certain proportion of eligible applicants actively seeking housing fail to find units meeting the program standard.

7.0 ENFORCEMENT MECHANISMS

One can divide the available enforcement mechanisms into two categories: those which involve third party evaluation of the dwelling unit through physical inspection and those which are essentially certification procedures in which either the owner or the occupant self-inspect the dwelling unit and formally "certifies" its compliance.

7.1 Alternative Procedures

7.1.1 Third-Party Inspection

Existing mechanisms for evaluating housing quality and enforcement of code provisions generally involve the physical inspection of a unit by one or more trained inspectors. Such a procedure could be adopted for a direct cash assistance program. The dwelling unit occupied or selected by an eligible household would be evaluated by an inspector according to the criteria specified in the program standard. If the unit passed the inspection, the household would then be able to occupy the unit and receive support from the program. If the unit failed, the household would have to find another unit or negotiate with the landlord to make the necessary repairs and/or modifications. Presumably, another inspection would then be required.

Third party inspection procedures tend to be costly. The amount of time (and hence cost) involved in an inspection depends upon the complexity of the quality requirements and relative distances that have to be traveled in order to complete the inspection. At various times estimates from \$25 to over \$100 per inspection have been developed. Given the numbers of inspections that might be required in a national program, such costs are significant.

The use of trained inspectors allows for the development of physical standards which would be difficult for laymen to use. As independent third parties, agency inspectors would have

little tendency to skew judgments (barring potential bribery problems), and it might be possible to keep error rates in the classification of units to an acceptable minimum.

The degree of obtrusiveness of third-party inspections depends significantly on whether the administering agency utilizes personnel who are also responsible for the enforcement of the local housing code. If the inspector also has responsibility for code enforcement, as well, the result of a landlord's willingness to rent a unit to a program participant and hence have the unit inspected may be unusual jeopardy with respect to code enforcement penalties.¹ If the inspector has no such connection with code enforcement, the only penalties associated with inspection would concern opportunities to participate in the program (the tenant) or to indirectly receive benefits from it (the landlord).

7.1.2 Landlord Certification

If this type of procedure were adopted for a direct cash assistance program, a participant household would be able to receive payment only if it occupied a dwelling that the owner (or an agent) had certified was in conformity with program quality criteria. In general, landlords could be presumed to have sufficient knowledge of the physical characteristics of the unit to allow for reasonably technical criteria to be included in quality requirements. Opportunities for error and incentives for fraud by landlords in a certification process could be substantial depending on local demand for the unit by non-program participants and the potential for increased

¹Substantial difficulties arose at one of the Administrative Agency Experiment sites, in part, because the local code enforcement inspectors served as the third-party inspectors of the eligible households' housing. In the low quality housing market available to program households, the impact was significant: many landlords did not wish to rent to program eligibles.



rents if occupied by a recipient of program support.¹ It is assumed that any landlord certification procedure would be backed up by a system of spot checks by third party inspectors. Spot checks would be generated by a random sampling procedure for some set proportion of all units occupied by recipients and they could also result from complaints of participants. A critical element in projecting the effects of requiring landlord certification is the type of penalties which would ensue from the discovery of error or fraud. If the penalties included fines, prosecution, significant public exposure or the like, landlords might be unwilling to certify units, thereby diminishing the housing stock potentially available to participants.

7.1.3 Participant Certification

If this procedure were adopted, a household eligible for direct cash assistance would be provided with a self-inspection form and some instruction in how to use it. When it had found an acceptable dwelling unit, the household would formally certify that the unit meets the program quality standard and could then receive payments. Participant certification procedures would also entail some random third-party spot-checking procedures to encourage compliance. If participant certification procedures were employed, quality criteria would be limited to basic facilities and structural features that could be easily evaluated by laymen. Incentives for error or fraud would depend on the level of benefits provided by the program and the availability of units that meet the program standard.

¹The statement of the National Associates of Real Estate Brokers, Inc. submitted to the Senate Committee on Banking, Housing, and Urban Affairs in October 1973 concerning the Administration's direct cash assistance policy specifically emphasized the need for consumer protection to ensure that the allowance payments "will be used to house recipients solely in standard dwellings and to preclude their being housed in sub-standard units." Committee on Banking, Housing, and Urban Affairs, United States Senate, "Administration's 1973 Housing Proposals," (Washington, D.C.: GPO, 1973), p. 343.

The question of what penalties would ensue from the discovery of error in certification is critical to the evaluation of participant certification procedures and is discussed in detail under "Side Effects."

7.2 Evaluation of the Enforcement Mechanisms

The three types of enforcement mechanisms should be assessed in terms of costs, effectiveness and relation to potential side-effects.

7.2.1 Costs

Third-party inspection procedures will add significantly to the administrative costs of a direct cash assistance program. With certification procedures the primary costs are those associated with spot checks, but these should be significantly smaller than a full third-party inspection option. Participant certification would involve some costs for training and information for participants, but they should still be far less expensive than the third-party inspection procedures.

Comparable costs would be associated with landlord certification, although presumably landlords would need less training but as many or more spot checks. However, since there would be fewer landlords than households associated with the program, the spot checks may be relatively fewer with landlord certification to achieve a similar degree of quality control.

7.2.2 Effectiveness

It is absolutely essential to responsible evaluation of the effectiveness of enforcement mechanisms that the nature of the quality requirements be kept in mind. If local or model codes had proved to be viable as a quality standard for a direct cash assistance program, then the technical nature of the requirements and their status in the law would have required third-party inspections. The quality requirements that can

be reasonably included in a direct cash assistance program are far more modest in scope and intent. The most that can be hoped for from quality requirements is the exclusion of a small category of the worst housing and some modest pressure for the maintenance and upgrading of another portion of the stock (in the short run). If, as recommended, housing quality requirements are established in terms of very rough approximations of what can be achieved given the nature of the local housing stock, one is not interested in a stringent level of enforcement. With modest expectations, for quality requirements, any one of the three options could be satisfactory in terms of potential effectiveness.¹ Selection from among the options must be based on other evaluative criteria.

7.2.3 Side Effects

There are a number of potential negative side-effects that could result from the adoption of the different enforcement mechanisms. The most important of these relate to program liability, effects on the availability of stock or on the willingness of the eligible population to participate, and the potential for inappropriate penalties resulting when a judgment is made that a unit fails to satisfy program quality requirements.

If third party inspections are used to determine whether or not a dwelling unit meets program quality requirements, it may be possible to construe a decision that a unit has passed the inspection as a guarantee of quality. If a recipient were later to suffer economic or physical injury as a result of some aspect of the dwelling unit judged satisfactory by an inspector, an agency could be legally liable for damages. Such problems have been encountered by the Department of Housing and Urban Development in administering the Section 235

¹Four of the eight agencies in the Administrative Agency Experiment employed some form of participant self-inspection. The others used either agency or local code (third-party) inspection. Evaluation of the relative effectiveness of these techniques awaits further data collection and analysis.



and more recently the Section 203(b) and 221 mortgage insurance programs. It would be rather improbable that an agency would end up with such exposure if either participant or landlord certification were adopted, even with a system of spot checks. The function of spot-checks would be to determine the accuracy of the assessment made by landlord or participant and possibly the need for adjustments in the program criteria or supply side assistance.

There is, with each of the three enforcement procedures, a set of penalties that could ensue which would be inappropriate and counter-productive. In the third-party inspection option, it has already been suggested that if agency inspectors had code enforcement responsibility, the effect of an inspection might extend beyond the decision as to whether or not a household occupying the unit could receive payments from the program into such areas as mandatory repairs or court-imposed fines. If this were allowed to happen, one would expect a substantial number of owners (homeowners and landlords) to refuse any connection with the direct cash assistance program.

With the landlord certification option, program participants are allowed to occupy dwelling units which owners have certified as meeting the program quality criteria. When a spot check is made and a discrepancy discovered, both landlords and participants may be subjected to significant penalties. For the landlord, one can envision the establishment of "fraud" procedures which might involve fines or prohibitions excluding participants from other units of the same owner. Any such fines or related penalties would substantially reduce the willingness of owners to certify dwellings, thereby diminishing the stock available to renters and the participation rates of homeowners. For participants, presumably, the penalties which follow discovery of a discrepancy are the costs and inconvenience associated with having to move or lose program benefits. To the poor generally, and particularly to the elderly, these costs may constitute a substantial penalty.

Landlord certification may involve another set of administrative requirements which have been viewed as undesirable. If, as a result of the discovery of a discrepancy in a spot check, a participant will be forced to move, it is almost inevitable that the direct cash assistance program would require the insertion of some special clause into any lease agreement that gave the participant the right to break the lease if it were later determined that the unit failed program quality criteria. For the direct cash assistance program staff to get involved in monitoring lease provisions would add one more set of complex tasks that would be costly in terms of both time and controversy.

In the participant certification option, there is only one appropriate penalty for a discrepancy discovered by a spot check - a requirement that the participant move into a unit which meets program quality criteria or lose benefits. It is crucial to the success of a direct cash assistance program that the "welfare fraud" trap be avoided. It is easy to imagine a situation where the discovery of discrepancies through spot checks would be considered evidence of fraud, and, therefore, a scenario in which local public leaders could build a beneficial political reputation for being tough on direct cash assistance program "cheats". Furthermore, one would expect aggregate evidence of discrepancies to be used nationally by critics either to discredit the program or to provide more evidence of just how "undeserving" at least some of the poor are. These are serious concerns. Since the certification procedure is a necessary step in getting payments, there will be a natural tendency to raise the fraud issue.

The primary purpose of enforcement, however, is not to limit participation or deny program benefits to certain families. It is to influence the housing market, that is, to provide incentives for maintenance and upgrading. The enforcement

of quality criteria is to put modest pressure on the housing stock. This paper specifically argues that housing quality requirements which would fail too large a portion of the stock would be inappropriate in a direct cash assistance program. In an important sense, the willingness of a family to falsely certify a unit as meeting quality criteria (and to expose itself to being required to move later) is an important safety-valve which could compensate for agency errors in the direction of too much stringency. Together, these arguments suggest the inappropriateness of a "fraud" orientation in response to discrepancies. Instead, taking an analogy from traffic regulation (where someone getting more than a certain number of tickets in some time period must attend driver training or safety classes or lose his license), it might be more appropriate to think in terms of requiring a participant who had made an error in certifying a unit to attend one or more self-inspection training sessions. This is not a particularly appealing course of action, but if the potential "fraud" issue is perceived to be a real one, it may be a means of avoiding less desirable alternatives for dealing with it.

PART III
CONCLUSION

8.0 ALTERNATIVES TO HOUSING QUALITY REQUIREMENTS IN A
DIRECT CASH ASSISTANCE PROGRAM

Two alternatives to the inclusion of housing quality requirements in a direct cash assistance program have been proposed. The first involves developing a set of quality guidelines which would aid participants in selecting dwelling units but not exist as criteria that had to be met as a condition of participation. The second alternative would remove the quality control issue from the program and treat it directly through a national code enforcement program.

8.1 Quality Guidelines

Given the complexities of developing and administering housing quality requirements in a direct cash assistance program, a set of unenforced quality guidelines might be an attractive alternative. Quality guidelines would describe a set of desirable attributes of a housing unit which a program participant could use to evaluate a dwelling. The quality guideline approach is essentially a consumer education strategy. Consumer education may indeed be appropriate for a direct cash assistance program, but it is not a functional alternative to housing quality requirements. Quality guidelines are more appropriately discussed in connection with activities designed to provide information and services to program participants. Quality guidelines would not apply direct pressure on the housing market for maintenance and upgrading, a primary function identified for quality requirements.

8.2 Increased Federal Support for Code Enforcement

One of the weaknesses of the housing quality requirements strategy is that it focuses the burden of attempts to improve the overall housing stock on one segment of the population--households whose income is sufficiently low as to make them eligible for a direct cash assistance program. An alternative to the quality requirements strategy which would cause the burden of

enforcement to be more equitably shared would be a more vigorous program of code enforcement supported by the federal government. Returning to the arguments developed in Section 1.2, the objective of a national code enforcement program would be the kind of market regulation that would make any program quality requirements redundant and unnecessary.

It is not the purpose of this report to analyze the worth of a federal code enforcement strategy. The review of codes, their development and history, however, does allow one to assess code enforcement as an alternative to quality requirements for an earmarked income transfer program in housing. The development of a federal code enforcement program to the point where the need for quality requirements in a direct cash assistance program would be eliminated would almost certainly be a long-term process.

Even if developed, however, federal code enforcement support would likely generate failure rates through local codes too high, even on an incremental basis, to avoid counterproductive results. The dilemma of code enforcement arises from the disparities between codes and the realities of housing quality, with the result that pursuit of code enforcement is quickly checked by the inelasticity for improvement of the housing stock.

9.0 INTERPRETATIVE SUMMARY

9.1 Summary of Recommendations

9.1.1 Inclusion of Housing Quality Requirements in a Direct Cash Assistance Program

A direct cash assistance program in housing is an earmarked income transfer program with significant similarities to other existing and proposed programs. A general review of such programs has suggested that some formal mechanism for controlling the quality of goods or services purchased by program funds becomes an integral part of the programs unless they operate in an effectively regulated market characterized by adequate supply. The general condition of housing markets in the United States cannot be characterized as effectively regulated. Housing codes are uneven with respect to coverage and enforcement of code provisions tends to be lax. Furthermore, few would characterize the supply of decent housing in the United States as adequate either for existing demand or for the increased demand that would be generated by a direct cash assistance program. Thus, the development of a quality control mechanism for a direct cash assistance program would appear to be a desirable element in program design.

Earmarked income transfer programs are normally characterized by mixed goals of at least two types: (1) those which focus on the equitable and efficient transfer of money to a population in need, thereby, guaranteeing an economically effective demand, and (2) those which focus on the effective solution of some defined social problem, thereby generating concern over supply responses. The achievement of the principle objective of a direct cash assistance program (progress toward the national goal of a "decent home and suitable living environment" for every American family) is dependent not only on the transfer of income to families who cannot now pay enough for housing

such that it becomes economically feasible for the market to respond, but also on the nature of the long-term supply response. The effectiveness of the income transfer strategy in housing depends both on new construction and on the maintenance and upgrading of existing housing stock. The inclusion of housing quality requirements in a direct cash assistance program provides the program with one means of influencing the supply response. If program participants are required to live in dwelling units meeting some set of quality requirements, there would be incentives for maintenance and upgrading, and some pressure for the early retirement of some portion of the worst housing stock now in existence.

9.1.2 A Minimum Program Standard Related to the Quality of the Local Housing Stock

Neither national nor local codes offer a reasonable basis for quality requirements in a direct cash assistance program. The discrepancy between the criteria embodied in codes and the condition of the existing housing stock is sufficiently large that opportunities for participation would be denied to a substantial portion of the eligible households. Opportunities for owners to upgrade existing housing at reasonable cost in order to pass a standard based on codes would be extremely limited.

The attempt to develop a single national minimum standard is likely to be unsuccessful because of the wide differences in the quality of housing stock across geographic areas and housing markets.

A set of housing quality requirements developed and justified in terms of protecting the health and safety of participants would result in an earmark that would be stringent enough to share the weaknesses of a standard based on codes. No set of quality requirements regardless of their level of stringency will

accomplish what existing housing codes have failed to do, that is, prevent families from living in dwelling units that are substandard, and in some respect dangerous to their health, safety or welfare.

A "program standard" defined in terms of the quality of the local housing stock could be manipulated to avoid denying significant numbers of eligible families the opportunity to benefit from the program. It could also be adjusted to maintain a feasible amount of pressure on the local housing market. The definition of an effective "minimum standard" should be responsive to participant experience in searching for housing.

9.1.3 Enforcement

Third party inspections as a regular enforcement mechanism is a costly alternative in a large-scale direct cash assistance program. Potential agency liability from inspections represents an additional disadvantage.

Landlord certification procedures may result in strong disincentives for owners to allow a unit to be rented by eligible households. In addition, such procedures may lead to requirements concerning lease provisions and an increase in the administrative burden of the program.

Participant certification procedures are consistent with the general participant focus of responsibility in a direct cash assistance program. They would be less costly than the third-party inspection alternative. Also suppliers would be less likely to object to this approach. Concern would be necessary, however, to avoid undue reaction to findings of inaccurate certifications. Some households may find it difficult to occupy acceptable housing. Housing quality requirements are primarily an incentive for housing improvement, not a vehicle for policing action.

The prospect of evaluative analysis from the Administrative Agency Experiment of the third-party inspection and participant certification alternatives cautions against early speculative judgments concerning the relative effectiveness of these two alternatives. Further, the general administrative context of a direct cash assistance program may affect the selection of an appropriate enforcement mechanism. Thus, no recommendation is offered at this time.

9.2 Experience in the Section 23 Leased Housing Program

Given the likeness conceptually of the Section 23 Leased (Existing) Housing Program to a direct cash assistance program,¹ it may be useful to consider how the Section 23 Program deals with the housing quality requirements issue in design, administrative structure, and practice. In the consideration of implications of the Section 23 experience for a direct cash assistance program, it is important to note at the outset one probably critical distinction: Section 23 is not operated as a universal entitlement program (i.e., program benefits have not been available to all income eligible households). From its inception in 1965 through June 30, 1973, the program has placed 86,759 existing housing units under subsidy contract. This is several orders of magnitude less than estimates of the potentially income-eligible households for a direct cash assistance program.² Thus, the market impact of Section 23 does not adequately reflect the strain which a full-scale direct cash assistance program would place on the supply of housing and the opportunities to occupy units meeting specified quality criteria.³

¹Section 23 serves as the funding authority for the Administrative Agency Experiment.

²An estimate of 12.7 million households was derived for an income eligibility option (Option A) in Marda Post et al, "Eligibility in a Direct Cash Assistance Program," (Abt Associates, August 1974) p. 68.

³Observations of local housing authority operations and informal reports suggest that the agencies have tended to restrict their leased housing program activities and to generally select the more easily placed households.

As indicated in the analysis of the Section 23 regulations¹ (Section A-3.2.6), they are of a mixed character involving certifications from units of local government, if required, consideration of some housing characteristics, and the inclusion of a few minimum criteria for sanitary and kitchen facilities. These regulations attempt to fulfill the legislative mandate of "decent, safe, and sanitary" housing. Periodic inspections are required not less than annually, with the administering agency also required to inspect wherever it has information that a unit is not being maintained in "decent, safe, and sanitary" condition.

The development of the current regulations suggests some of the legislative and administrative concerns that enter into the establishment of housing quality requirements for a housing program. For example, the lead based paint hazard criterion arises from HUD's regulations issued pursuant to the Lead-Based Paint Poisoning Prevention Act. Thus, although this has been a particularly costly and troublesome criterion to place on housing for the program and has discouraged some landlords from participating, there is little latitude for excluding it. Hence there are limits to the policy makers discretion in the establishment of program quality criteria. There is flexibility in the selection of an enforcement mechanism, however. Assignment of the responsibility for enforcement of the lead-based paint criterion to the owners through a certification procedure reduces the program's direct administrative costs and the federal government's political liability for this health consideration. The unwillingness of some landlords to participate suggests the indirect costs of this distribution of responsibility.

¹Sheldon B. Lubar, Assistant Secretary for Housing Production and Mortgage Credit, "Section 23 Housing Assistance Payments Program - Existing Housing," Federal Register, Volume 39, No. 93, May 13, 1974.

Among the interesting differences between previous administrative practice and the recently codified procedures are the exclusion of specific references to compliance with local codes and an increase in the required inspection activities. Previous practice had required as a lease provision an owner's warrant of compliance with the applicable local housing codes. This linked program quality efforts to local code enforcement, and, in fact, common practice in many localities has been to use local codes and local code inspections. The replacement of the reference to codes with simple conformity to any formal local certification procedures frees the program from the encumbrances of local codes, although some agencies may continue to use local code inspectors for the required inspections.

The audit reports by the Inspector General of HUD indicating significant substandard housing in the Section 23 Program weighed heavily in the decision to require annual inspections rather than only pre-lease inspections and to make the agency responsible for inspecting whenever it has information that a unit is not being properly maintained.¹ More time will be needed to perceive the effects of this new policy emphasis.

The experience of Section 23 is an interesting example of continuing efforts to assure housing quality. The mixed strategy employed to satisfy the performance standard of "decent, safe, and sanitary" housing:

- conforms with local governmental certification procedures, where required;
- establishes general housing considerations for the quality concerns lacking clear definitions
- specifies criteria (with some latitude) for well-defined quality concerns

¹Discussions with HUD staff familiar with the Section 23 Program provided these perceptions.

- makes the local agency responsible for inspections and any known violations of quality requirements;
- gives the owner the responsibility for enforcement of the particularly difficult lead-based paint criterion.

The approach reflects a differentiation of stringency among quality criteria and a distribution of enforcement responsibility among the actors which is both responsive to general housing stock considerations and to the feasibility of alternative enforcement techniques. It does not provide for criteria specifically keyed to local housing markets, however. Local variability may arise in the interpretation and enforcement of the general quality considerations and limited criteria. The impact of the application of such a general national standard in many different localities is likely to have mixed results. The regulations do not provide the better fitting, tailored approach developed in Section 6 of this paper for locally specified criteria.¹

The effectiveness of the strategy will be tested as experience develops with the new regulations and as the scale of the Section 23 (now incorporated in Section 8) Program increases.² Of particular interest will be the effects of the increased inspection requirements and the owner certification of lead-based paint safety on the availability of housing for eligible households. Even on its broader scale, however, the program will not approach the proposed dimensions of a direct cash assistance program. Hence application of the results from the leased housing program to a direct cash assistance program will be limited.

¹One means of incorporating the tailored approach would be to require each administering agency to specify quality criteria which are consistent with the general regulations and which balance housing improvement with the responsiveness of the local housing market.

²The Department of Housing and Urban Development intends to commit at least 125,000 units of existing housing for leasing under this program in fiscal year 1975. This is nearly 150% of all the units committed in the previous operation of the program.

9.3 Housing Quality Requirements and Program Design

The analysis in this paper has suggested the need to define program housing quality requirements which vary according to local housing market conditions and the likely effects upon the opportunities for income-eligible households to obtain suitable housing with a reasonable household contribution and available program payments. These relationships between the housing quality requirements, participation rates and benefit levels give structure to program design.¹

Stringent quality requirements in housing markets with inadequate stock available at reasonable prices would either effectively redefine the eligible population (declaring many income-eligible households ineligible because of their poor housing quality and undercutting the universal entitlement concept) or require high payment levels in order for households to occupy acceptable units. And rather than provide modest pressure for some upgrading of the stock, stringent requirements might discourage suppliers from participating and be counterproductive to one of the purposes for which they were originally adopted. Active enforcement of quality requirements would also likely require a substantial local administrative presence which would have implications for overall program administrative structure and costs.

On the other hand, relatively lax requirements would leave the program vulnerable to assault for the poor housing quality of some participant households and would provide little stimulus for

¹Martin Rein, "A Model for Income Support Programs: Experience with Public Assistance and Implications for a Direct Cash Assistance Program," (Abt Associates, October 1974) presents a model for analysis of the interactions between elements of program design (pp. 1-13).

improvement of the stock but nonetheless would pose some administrative costs. The effect of the quality earmark would diminish, and there would be little assurance without an independent expenditure earmark that recipient households spend their benefits on housing. The net result would be an administratively costly income maintenance program.

A direct cash assistance program without housing quality requirements, however, would not be a desirable alternative. The poor quality of some of the existing housing stock, the inadequacy of general regulatory mechanisms, and the housing concerns of the direct cash assistance program as a housing program stress the need for quality requirements.

The objectives of a direct cash assistance program and the context within which it would operate argue for housing quality requirements. The interactions between housing quality requirements and other program elements such as participation rates and benefit levels may present dilemmas in program design unless acceptable trade-offs are made among them. The thrust of this paper has been to emphasize the trade-offs involved and to use the consideration of them as a basis for developing appropriate housing quality requirements for a direct cash assistance program.

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APPENDIX A

LOCAL AND NATIONAL HOUSING CODES

A-1.0 HISTORICAL ORIGINS OF EXISTING HOUSING CODES

Although there are on record from early colonial times instances of regulations adopted by local communities concerned with the prevention of certain fire or public health hazards, the first attempt at regulations which resemble housing codes came in 1867 with the New York State Tenement House Act. The Act specified a set of conditions for the ventilation of occupied rooms, roof maintenance, stairway safety rails, sanitary provisions and general cleanliness which thereafter were to be the minimum ones accepted in multi-family dwellings.

By 1867, rapid growth in population in New York and other major cities had created a demand for cheap housing that was met through the construction of large numbers of tenement houses. Given the lack of controls, the absence of alternative dwelling arrangements and the poverty of the slum population, it was probably inevitable that living conditions in tenement housing were deplorable. In this post Civil War period, American newspapers and magazines began carrying sensational stories documenting what was characterized as a helpless tenant population victimized by profiteering landlords. Such stories frequently contrasted the behavior of the ill-housed poor with that of the better housed, more affluent population, postulating causal relationships between bad, overcrowded housing and poverty, crime, immorality, disease, epidemics, early deaths and catastrophic fires--many of which endangered the lives of persons outside of the slums.

Supporters of the 1867 law took advantage of these stories arguing that the worst excesses of tenement house construction and operation (shoddy construction, inadequate provision of light, air, and sanitary facilities, lack of maintenance, and overcrowding) constituted a threat to public health and safety generally. The protection of the public, therefore, required

the enactment of measures which would improve the lot of existing residents of tenements and prevent the construction of additional buildings with equally undesirable characteristics.

The 1867 Tenement House Act is primarily important as a precedent which established the legitimacy of attempts to regulate the construction and operation of multi-family units in the public interest. The regulation of the quality of housing through the enforcement of legislative requirements which eventually became codified was resisted by special interests then and now. Comprehensive coverage of all dwelling units in the United States by a housing code has yet to be accomplished, and, as will be explained later, enforcement of existing codes is far from adequate. A chronological summary of major events in the development of housing codes in the United States is presented in Table A-1.

Table A-1

A CHRONOLOGICAL SUMMARY OF MAJOR EVENTS IN THE
DEVELOPMENT OF HOUSING CODES IN THE UNITED STATES

- | | | |
|----------------|---|---|
| 1626 | - | Prohibition of use of thatch for roofing in Plymouth colony (fire) |
| 1648 | - | Prohibition of use of wood/plaster chimneys in New Amsterdam (fire) |
| 1652 | - | Requirement for a minimum distance of 12 feet between privy and street enacted in Boston (health) |
| late
1600's | - | Regulations requiring householders to maintain the streets adjacent to their homes free of rubbish. Prohibition against disposal of trash and garbage in the canals in New Amsterdam (health) |

Table A-1 (Cont'd)

- 1850 - Publication of Report of the Sanitary Commission of Massachusetts (by Lemuel Shattuck) containing 50 recommendations for improving the health of the people of Massachusetts. The Report recommended establishment of local boards of health, mandatory building permits and submission of planned sanitary arrangements by all persons proposing to build

- 1867 - Passage of the first New York State Tenement House Act regulating:
 - ventilation in occupied rooms
 - roof maintenance
 - stair safety railings
 - provisions of at least one privy or water closet per 20 occupants
 - general maintenance and cleanliness of multi-family dwellings.

- 1879 - Introduction of more quantitative measures of minimum housing quality by New York: ventilation (window opening) of at least 12 feet, etc.

- 1889 - Passage of first multi-family housing controls by city of Chicago

- 1896 - Introduction of more specific controls by Chicago:
 - ventilation
 - light
 - drainage and plumbing

- 1900 - Submission of report entitled Housing Conditions & Tenement Laws in Leading American Cities, a 27-city survey of ordinances and conditions by Lawrence Veiller, Secretary to N.Y. Tenement House Commission.

- 1901 - Passage of New York Tenement House Act (excluding 1 and 2 family dwellings) incorporating Veiller's recommendations. Act established court-enforceable provisions regarding:
 - protection from fire hazards (including exits)
 - light and ventilation (including courts and yards)

Table A-1 (Cont'd)

- sanitary provisions (including water closet)
 - cellar and basement occupancy
 - overcrowding
 - remedies (including requirements for building permits, registration of tenement owners, and other administrative details)
- This act remained in use unchanged for 28 years.
- by 1910 - More than 25% of all states had passed legislation modeled on the New York Tenement Act of 1901.
- 1910 - Publication of A Model Tenement House Law by Lawrence Veiller.
- 1911 - Enactment of a comprehensive housing law by the City of Columbus, Ohio (first comprehensive law in the United States).
- 1914 - Publication of A Model Housing Law by Lawrence Veiller. (Applied to all types of dwellings including 1 and 2-family.)
- 1917 - Enactment of first comprehensive housing laws by the cities of Minneapolis and St. Paul and by the State of Iowa (verbatim copy of Veiller's 1914 model law). In the same year state housing bills were introduced in Illinois and Pennsylvania (both defeated) and a state-initiated bill regarding enforceable regulation of housing in Boston was defeated.
- 1920-1929 - Virtually no new regulatory housing legislation activity in U.S.
- 1929 - Passage of the Multiple Dwelling Law of the State of New York. (Law less stringent in many respects than 1901 statute.)
- 1932 - Passage of Federal Home Loan and Bank Act and (1934) passage of National Housing Act by Congress, creating the Federal Housing Administration and thereby necessitating formulation of first Minimum Property Standards

Table A-1 (Cont'd)

- 1937 - Establishment of Committee on the Hygiene of Housing by American Public Health Association (A.P.H.A.)
- 1941 - Publication of Basic Principles of Healthful Housing by A.P.H.A.
- 1941 - Enactment of first performance-type housing code in the United States by the City of Baltimore ("Ordinance on the Hygiene of Housing"). The act authorized the commissioner of health to adopt rules and regulations deemed necessary for the enforcement of the ordinance.
- 1949 - Passage of the Housing Act of 1949 required that the commitment of public bodies to the enforcement of housing, zoning, and building codes (a "workable program" requirement) be considered in the allocation of urban renewal funds (Section 101). [The Housing and Community Development Act of 1974 with the Community Development Block Grants which supercede the urban renewal programs does not include the code enforcement requirement.]
- 1952 - Publication of A Proposed Housing Ordinance by A.P.H.A.
- 1954 - Publication of the Model Minimum Housing Standards Ordinance by the National Institute of Municipal Law Officers.
- 1955 - Publication of the first model Uniform Housing Code by a national building code organization, the International Conference of Building Officials (ICBO). The purpose of the Uniform Housing Code as stated in the foreword was "to fill one of the primary needs of American Cities in securing funds from Federal Agencies for urban renewal..."
- 1965 - Housing and Urban Development Act of 1965 provides
 - rehabilitation grants to individuals and families for repairs and improvements to satisfy local codes (Section 115)

Table A-1 (Cont'd)

- code enforcement grants to units of local government (Section 117); rehabilitation loans to owners and tenants (Section 312) are made contingent upon this or comparable local code enforcement activity.
 - study of housing and building codes (Section 301).
- 1966 - Demonstration Cities and Metropolitan Development Act of 1966 authorizes grants to state and local public bodies for area-wide development projects where the unit of general local government demonstrates (where appropriate) the establishment and consistent administration of zoning codes (Section 205).
- 1968 - Publication of the A.P.H.A. - P.H.S. Recommended Housing Maintenance and Occupancy Ordinance.
- 1968 - National Commission on Urban Problems issues a major evaluative report on housing and building codes in the United States.

A-2.0 LOCAL HOUSING CODES

2.1 Characteristics of Local Housing Codes

The most recent major study of housing codes in the United States (conducted for the National Commission on Urban Problems in 1968) defines a housing code as follows:

A housing code is an application of state police power put into effect by a local ordinance setting the minimum standards for safety, health and welfare of the occupants of housing. It covers three main areas: (1) the supplied facilities in the structure --that is, toilet, bath, sink, etc., supplied by the owner; (2) the level of maintenance, which includes both structural and sanitary maintenance, leaks in the roof, broken banisters, cracks in the walls, etc.; (3) occupancy, which concerns the size of dwelling units and of rooms of different types, the number of people who can occupy them, and other issues concerned on the whole with the usability and amenity of interior space....¹

The selection and definition of appropriate criteria for setting "minimum standards for safety, health, and welfare of the occupants of housing" is extremely difficult and generally controversial because of the absence of suitable empirical evidence. Even the most basic and intuitively apparent proposition that the health of people bears a distinct relationship to the quality of their housing has yet to be demonstrated successfully.²

¹National Commission on Urban Problems, Building the American City (Washington, D.C.: Government Printing Office, 1968), Part III.

²For some classic statements of the debate, see Daniel M. Wilner, et al., The Housing Environment and Family Life (Baltimore, 1962), Alvin Schorr, Slums and Social Insecurity and Nathan Glazer, "The Effects of Poor Housing" in the Journal of Marriage and the Family (1967). In the National Commission report, Eric Mood concluded a review of much of this material with the comment: "The state of the art today is such that currently there is no single, comprehensive evaluation procedure available that will clearly and concisely delineate the presence or absence of a relationship between the quality of housing and health."

If the basic relationship between housing quality and health has eluded researchers, there is even less empirical evidence on which to judge those characteristics of housing which are critical to the health and safety of its occupants. The selection of housing qualities to be included in codes, therefore, involves a combination of the following:

- attributes which seem logically and intuitively related to health and safety, many of which have been brought to prominence by historical conditions which may no longer be of importance
- culturally established norms reflecting dominant preference patterns for housing consumption
- economic and political considerations, primarily relating to the predicted economic impacts of codes and the necessary compromises among interest groups to get codes adopted.

As the comparison of codes in Section 3 indicates, there is some general agreement about classes of criteria to be included in a code, but wide variance in the selection and stringency of particular characteristics.

A major dilemma facing the writer of codes is the relation of a group of quality characteristics to the existing housing stock. On the one hand, selecting attributes which represent the code writers' comprehension of existing best practice may make the code unenforceable. On the other hand, to set criteria in relation to the existing stock is to forego the opportunity to apply pressure for the upgrading of stock to the levels of best practice. Historically, code writers have tended to favor writing criteria in terms of best practice, thus, choosing to "legislate progress" in the long run rather than modest immediate improvement. Similarly, the desire to produce an ordinance which, if followed, would in fact protect the health and safety of occupants has led to ever more detailed specification of attributes.

In general, local codes attempt to embody some or all of the following three types of criteria:

- physical standards, involving structural soundness, minimum facilities and installed equipment and maintenance of the building
- occupancy standards, involving criteria concerning density in living or sleeping space and separation of children of different sexes
- neighborhood standards, reflecting the level of services provided and the general condition of surrounding dwellings.

2.1.1 Physical Standards

Physical standards generally include criteria stating what code writers consider to be minimally acceptable facilities in the following areas:

- water supply
- waste water disposal
- garbage and rubbish disposal
- kitchen and hand washing sinks
- bathing facilities
- means of egress
- heating equipment
- hot water supply
- lighting
- ventilation
- electrical service

Physical - Structural

In terms of the maintenance of the dwelling unit, the following areas are most commonly specified:

- general sanitary conditions
- chimneys, flues
- fire hazards
- electrical wiring
- insect and rodent infestation
- internal structural repair
- external structural repair
- dampness

Existing codes vary significantly in the specificity with which they treat "physical or structural" criteria. Some tend to rely

heavily on the good sense of inspectors using phrases, such as, "in good repair," "adequate" or "in good condition." Others attempt to eliminate the necessity for such subjective judgments through detailed regulations. As a result of what some would consider the excessive detailing of specifications and a tendency to incorporate other codes and/or standards by reference, most laymen find housing codes impenetrable, and the public rarely comprehends what a "standard" dwelling unit (that is, one which meets all the requirements of a local code) actually is.

The regulation of housing quality began in large cities, and many of the precedents for what should be included in codes were established on the basis of problems that were most acute in such cities. As housing codes spread to less populated areas, some of the provisions became less relevant, but they tended to remain in the codes. One hundred years ago, rural and urban dwellings were often similarly equipped. Private wells supplied water in many towns, and pit latrine waste disposal was common. The concern that large concentrations of people were a danger to themselves and to their neighbors by virtue of their water supply and waste disposal technology set in motion the development of hygiene standards by which much of American rural housing is now judged substandard, even though rural, low-density development with rudimentary water supply and waste disposal technology does not necessarily pose a threat to health.

2.1.2 Occupancy Standards

A major housing problem frequently related to the health and welfare of families is overcrowding. The tendency of the worst housing conditions in the United States in the early twentieth century and to a significant degree in slum areas today to concentrate people into small living and sleeping areas has focused much attention on the issue of overcrowding. Defini-

tions of what constitutes overcrowding tend to differ significantly across cultures and over time. Given the essentially subjective nature of definitions of overcrowding, most codes appear to adopt an occupancy standard that reflects "normal" living/space patterns for the non-poor (e.g., one person per habitable room).

Occupancy standards are significantly different from physical standards in that they seek to regulate not the attributes of the dwelling unit but rather the use to which a particular size unit is put. Any given unit which is not standard because of overcrowding can presumably become standard simply by a reduction in the number of persons occupying the unit.

2.1.3 Neighborhood Standards

Neighborhood standards have been variously interpreted to relate to the physical surroundings of the dwelling unit in question, the public services (fire, police, garbage) and the facilities (parks, stores, schools) available to the occupants, as well as to the socio-economic background of the neighbors. The characteristics of the surrounding neighborhood are certainly no less important than the physical characteristics of the dwelling in determining the overall welfare of the inhabitants. Yet despite their importance, neighborhood standards are rarely incorporated into model or local codes. The APHA-PHS model code goes further than the others in recognizing the importance of the neighborhood in its statements of principles, but it does not propose specific standards.

Among the major problems in incorporating neighborhood standards into minimum housing requirements or codes are the following:

- Most of the possible standards require difficult and subjective determinations. How much litter on the streets constitutes a violation? How little police protection fails a dwelling unit?

- It is difficult to separate characteristics which affect health and safety from amenities. Should pedestrian walkways in urban areas be a requirement? What about street lighting? How close should parks and stores be to the dwelling?
- Barring recipients from even those neighborhoods with characteristics detrimental to health and safety may be unwise public policy. Should all dwelling units in areas with abandoned buildings and cars, high crime rates or low levels of public services be unacceptable? Certainly failure of such neighborhoods offers no solution, but rather aggravates the problem. If the presence of an abandoned house on the block were sufficient to fail dwelling units, this would stimulate moves to better neighborhoods, increase competition for the limited housing in other neighborhoods and hasten abandonment in poorer neighborhoods.

2.2 Coverage of Local Housing Codes

The widespread adoption of local housing codes is a relatively recent phenomenon. In 1956, fewer than 100 of the larger cities in the United States had a local housing code. The most recent survey data available (1967-1968) indicate that by 1960 over half (53%) of the jurisdictions with 5,000 to 50,000 people had local housing ordinances in effect. In cities of 50,000 or more people, 85% had enacted local codes. Only 27% of all local government jurisdictions with more than 1000 population had codes in effect, however.

The rapid growth in the rate of code adoption by local governments during the 1960's suggests that the proportion of communities currently covered by codes may be significantly greater than in 1968.¹ However, a major impetus for communities to establish housing codes during this period was the "workable program" requirement that cities have such codes in order to

¹ Figures are from the National Commission on Urban Problems, op. cit. Members of the study team that prepared the 1968 report and local federal officials in the concentrated community code enforcement program were contacted, but none was able to identify a more recent survey of housing code coverage.

receive federal urban renewal and other similar funding.¹ The Housing and Community Development Act of 1974 removes this requirement. Thus without the legislative impetus, the future trend in the addition, upgrading, and enforcement of housing codes is unclear.

2.3 Enforcement of Existing Local Housing Codes

Existing housing codes presuppose an enforcing agency operating under the public health, safety, and welfare powers of government to bring about compliance, although over time enforcement has been incomplete and uneven. The principal tool of the enforcement agency has been housing inspection operating either in response to specific complaints (probably the general rule) or (less frequently) on a methodical, area-by-area, house-by-house basis.

An inspector, on finding a violation of the code, issues a notice to the owner instructing him to bring the dwelling into compliance before a specified deadline. The dwelling must be reinspected at the deadline to establish compliance or continued non-compliance. Depending upon the outcome of the inspection, the case either is filed as terminated or a court summons is served upon the owner.

If a court summons is issued, the case must be prepared by both prosecutor and defendant, witnesses must be called (including the building owner or his representative, the building occupant, and the housing inspector), the case tried (possibly in a special housing court) and a judgment rendered.

Some courts treat housing code violations as misdemeanors; others levy fines; still others appoint receivers to take control of any building revenues until the violation is remedied.

¹See the reference to Section 101 of the Housing Act of 1949 in Table A-1, p. 74.

Some cities have laws enabling them to commission repairs and to include the bill for these repairs with the next property tax bill. Failure to pay the full amount of the tax bill constitutes grounds for still more severe court action.

2.3.1 Cost of Housing Code Inspections

The cost of municipal housing code inspections is high because the level of skill required of a housing inspector is fairly high; he is expected to exercise judgment competently on many code-regulated aspects of housing. Inspection time per dwelling may vary between one hour and half-a-day depending upon such factors as:

- the travel time to and from the site
- whether the inspection is in response to a single, specific complaint, or is part of a general inspection of all code-regulated aspects of a given dwelling
- the general condition of the dwelling and its enclosing structure
- the number of dwellings within the structure.

Other factors which may affect the cost of inspections are the complexity of code requirements and the specialization of personnel. In some cities, as many as five inspectors (housing, plumbing, electrical, fire, and building) may be required to fully inspect a single unit.

It is also important to note that the cost of inspections is but a small part of the total cost per dwelling of obtaining compliance under a conventional code enforcement program. The municipal government may also have to bear the costs of all the expense of the housing court and at least initially, the costs of any remedial action.

2.4 Effectiveness of Local Codes in Regulating the Quality of Housing in the United States

Given the nature of local codes, the degree of coverage by local codes, and the difficulties experienced in the enforcement of them, one can generally argue that existing quality control mechanisms in housing are inadequate to protect the health and safety of occupants or to maintain significant pressure for the maintenance and upgrading of existing housing stock.

The National Commission on Urban Problems in 1968 reached the following conclusion with respect to the effectiveness of local codes in guaranteeing decent housing:

Although housing codes generally say "No person shall occupy as owner-occupant, or let to another for occupancy, any dwelling unit which does not comply with the following requirements," etc., it is readily apparent that most housing codes are not administered effectively enough to achieve full compliance even with minimum requirements for health and safety. The continued existence of slums and blighted areas in many cities which have housing codes provides inescapable evidence of this fact.¹

There is no evidence to suggest that the situation has changed significantly since that study was completed.

Some of the reasons suggested for the weakness of local codes are relevant to an analysis of quality requirements for a direct cash assistance program, including the following:

- From the code writers' point of view, existing codes themselves are not stringent or complete enough. The National Commission report suggested the following: "The provisions established in codes for 'minimum' standards of health, safety and welfare are often

¹ National Commission on Urban Problems, op.cit.

inadequate to provide even a 'minimum' level of performance for the bulk of the population. A house can meet the legal standards set in a local code, pass a housing code inspection, and still be unfit for human habitation by the personal standards of most middle class Americans. There is an obvious and urgent need for action to bring the provisions of housing codes up to an actual minimum level of health (including physical, mental, and social well-being), safety and welfare."

- Codes are often unenforced. Costs of inspection and follow-up activities are significant, and code enforcement is not likely to fare well in the competition with such things as schools and public transit for local funds. Furthermore, code enforcement is effectively limited by the nature of the housing stock; where there is an inadequate supply of decent housing, the effect of enforcement may well be the dislocation of families and the abandonment of buildings. Where rehabilitation of existing units is accomplished, it is frequently accompanied by increases in rent that may also have the effect of dislocating the very families that code enforcement was intended to protect.
- Local code enforcement is rarely demanded by the people codes are designed to protect. Whereas one might believe that tenants living in seriously substandard dwellings would be the first to file complaints and would welcome the housing inspector, the reverse is often true. George Sternlieb, in The Tenement Landlord Revisited, cites the residents' fears of inspection as a typical phenomenon based apparently on concern about increased assessments, raised rents and landlord vindictiveness toward those filing complaints.

A-3.0 COMPARISONS OF LOCAL AND MODEL CODES

Although there are no nationally enforced housing codes, most local housing codes are modeled after one of the four national model codes:

- American Public Health Association (APHA) "Proposed Housing Maintenance and Occupancy Ordinance," latest edition-1971
- Building Officials & Code Administrators International, Inc. (BOCA), "The BOCA Basic Housing-Property Maintenance Code," latest edition -- 1970 (including 1971 supplement)
- International Conference of Building Officials (ICBO), "Uniform Housing Code," latest edition -- 1973
- Southern Building Code Conference (SBCC), "Southern Standard Housing Code," latest edition -- 1973

Therefore a detailed analysis of these model codes is indicative of the general level of codes, where they exist. Comparisons with the quality requirements that apply at the eight Administrative Agency Experiment sites (Bismarck, Durham, San Bernardino, Peoria, Tulsa, Jacksonville, Springfield, and Salem) generally confirm this observation.

Model codes are not prepared in a vacuum; they assume the existence of other local regulations. For example, no model code has provisions concerning maintenance or safety of elevators, presumably because elevators are generally recognized as potentially dangerous and are covered by local or state regulations and inspection codes. Another reason for examining codes that are not intended to function as housing codes is that, taken together, these codes cover a much broader spectrum of housing quality considerations and are at times much more stringent in their level of performance required for a particular consideration. For example, no model code has specific requirements for the construction of fire escapes

(the sort hung on the exterior of old buildings) although they are commonly thought to offer protection in the event of fire. The National Fire Protection Association ordinance, however, has both detailed requirements for "acceptable" fire escapes and a discussion of the dangers of inadequate fire escapes.

Section 3.1 provides a general discussion of the differences among codes and presents a Code Comparison Chart with which to contrast the kinds of quality criteria and their stringency in different codes and evaluative standards.

The detailed analysis of selected codes in Section 3.2 individually addresses the particular aspects of eight different codes.

3.1 Differences Among Codes

Major variations across codes are partly explained by the following: (1) differences in intent, reflecting variation in the type of organization issuing the code, the scope of housing covered, and regional differences; (2) types of regulations included, with emphases differing among general principles, discretionary performance standards, indicators and performance levels, construction standards, and administrative provisions; and (3) the degree of stringency in housing quality requirements, levels of performance required, and priorities among requirements.

The major codes are compared in summary form in Table A-2 at the end of this section.

3.1.1 Intent of the Codes

3.1.1.1 Organization Issuing the Code

The historical background to code enactment has been discussed earlier in this paper. Three of the four model codes, the BOCA,

ICBO, and SBCC are the product of organizations of building officials, who had earlier promulgated new building codes. Since the building codes are ineffectual in dealing with existing buildings, the model housing codes are intended to supplement them and regulate existing housing. By contrast, other codes are promulgated by special interest groups, such as the NFPA (fire prevention) or APHA (public health) and therefore tend to be more detailed in their special features. Because the FHA/HUD minimum property standards are promulgated by the federal government and are intended for use throughout the country, often in the absence of other codes, they are more comprehensive than the model building codes, such as BOCA. Any federally promulgated housing code would probably be comparably comprehensive for similar reasons.

3.1.1.2 Scope of Housing Covered

Codes may cover new or existing housing; single family, multi-family, trailer, or group occupancies; and may differentiate between urban and rural housing. A typical model code is intended to cover existing housing for single family, duplex, or garden apartments, in a city or town. There are modifications to these regulations built in for rooming houses, trailer occupancy (although the SBCC specifically excludes trailers), and areas without municipal services. In general, the modifications to the codes for different types of housing do not correspond to the very substantial differences in the buildings or occupancies. For example, trailers are much more easily blown away by high winds than conventional dwellings (posing a real threat for the occupants) but no model code recognizes this hazard by special requirements. Alternatively, regulations requiring special trash containers may be inappropriate for many rural situations where refuse disposal is not accomplished by municipal collection.

3.1.1.3 Regional Considerations

One would expect local codes to be tailored to the varying climates in the U.S. and to the prevailing quality and type of housing. Building codes, for example, have varying regulations for wind and snow loading, depending on the climate (the national building codes have sliding requirements generally tied to maps). Housing codes generally do not have specific climatic differences because their regulations for heating and ventilation are expressed as performance standards ("provide a system capable of heating to 70°...") which implies a more elaborate heating plant in a northern than a southern climate. Structural considerations in housing codes, at best, only protect against structural failure by looking for signs of failure in progress (sagging, buckling, deterioration). Regional differences are seen in general in the somewhat lower stringency of the southern (SBCC) housing code. The lack of provisions on egress results from the prevailing one story construction of housing in the South, which usually has multiple egress through doors and windows at grade. Omissions of restrictions on hazardous finishes, large area glass hazards, lead paint, etc. can be interpreted as either a present lack of problems associated with these hazards in some localities or a lack of awareness of the hazards.

3.1.2 Type of Regulations

3.1.2.1 General Principles

General principles include reference to such broad criteria as "protection from weather" or "exclusion of the elements" or "security of persons." Many parts of a building, properly maintained, working together, are usually required to satisfy these principles. Principles are performance-oriented. Model codes tend to avoid such provisions because of their lack of specificity, and hence, lack of protection.

3.1.2.2 Discretionary Performance Criteria

Discretionary performance criteria can be identified by the use of words like: "safe," "adequate," "good condition," "properly maintained," etc. They are usually of the form that such and such an item (a physical part of a building) be properly maintained in a safe condition. Items that frequently are treated in this way include exterior and interior walls, floors, ceilings, heating systems, plumbing systems, electrical systems. Reasons for using this sort of standard are the substantial apparent simplification of the code (it is shorter to say "good" than to define what is meant) and the flexibility to allow different types of equivalent performance. An example of the latter is exits: safe exits may be accomplished by having multiple exits of low quality, direct exits of all rooms to the outside, or highly protected single exits. All codes specify some items this way, although evaluative standards, such as those applied in the Demand Experiment, have avoided this type of standard. One reason for avoiding the performance standards is their reliance on the inspectors' own ideas of what constitutes acceptable levels of performance, and the resulting lack of uniformity of enforcement and protection of occupants.

3.1.2.3 Indicators and Performance Levels

Frequently codes call for some relatively easily observed level of performance, such as requiring certain safety features on heating systems, or a certain number of electrical fittings, or prohibiting some kinds of defects in walls and ceilings. Generally these items are indicative of the general level of quality and maintenance of the item. For example, we might expect to find adequate wiring and circuit protection in a dwelling with adequate lights and outlets, although there is no assurance of this. Or, if there are no obviously sagging floors or buckling walls, it is unlikely that the structure is in imminent danger of collapse, although it may be inadequate

to support normal loads, storm winds, or earthquake tremors. Of course, it is possible to specify a performance level that given complete protection against some hazard (such as requiring no lead paint be used in a dwelling) or provide adequate performance in a particular consideration (such as requiring a tub or shower with hot and cold running water). Most space and occupancy requirements should be viewed as indicators, since the provision of space is an indirect measure of the ability to place furniture, provide for normal family life, to achieve privacy, etc. In this regard it is interesting that the FHA/HUD MPS are moving away from requiring specific areas and minimum dimensions for rooms to requiring space for specific pieces of furniture and patterns of use.

It would be very difficult to construct a code intended for enforcement using only indicator standards because of the great number of standards that would be necessary to describe the performance assumed in discretionary performance standard descriptions like "safe," or "properly maintained." Therefore, the model codes use a combination of discretionary performance standards, indicators, and construction standards.

3.1.2.4 Construction Standards

Construction standards are detailed descriptions of how to build a specific item so that it will obtain a certain assumed minimum standard of performance. This is the typical type of requirement found directly or by reference in the major building codes, such as BOCA or FHA/HUD MPS. Construction standards usually require a high level of performance since they assume that once construction is complete, substantial deterioration will take place as the structure ages; they are intended to protect against hazards caused by deterioration. Construction standards can be extremely detailed. The FHA/HUD MPS are 500 pages long in the October 1973 edition analyzed, and longer in the more recent revision. In addition, they refer to 200 other standards

or organizations with their own lengthy detailed specifications for individual pieces of a building.

Model housing codes usually avoid construction standards, except that the ICBO code refers to its building code requirements for all materials, heating devices and exits but does not require full compliance with all these provisions for existing structures. The APHA ordinance contains very detailed provisions for rat-proofing which approach construction requirements.

3.1.2.5 Administrative Provisions

Administrative provisions, concerning the operation and organization of an enforcement agency form the bulk of both model and local ordinances. Administrative provisions, however, are not compared in any detail here, since they are related to the question of enforcement rather than to the standard of housing quality that is to be applied.

3.1.3 Stringency of the Codes

Judgments concerning the relative stringency of codes are a function of what housing quality criteria are included, the level of performance required against the quality standards, and the degree to which priorities among standards are stated.

3.1.3.1 Housing Quality Criteria

A detailed comparison of the different housing quality criteria in each of the codes analyzed is found in the Code Comparison Chart.¹ The list of considerations in the chart was prepared from the APHA "Basic Principles of Housing and Its Environment" published by the APHA in 1971. The considerations made by this document are listed in the first column. Other considerations not found in this statement but included in other codes have been added to make the list as complete as possible. It should be noted that the considerations on the list are by no means of equal importance or scope, and are of different types, as discussed above. The considerations included in most major codes include:

- Provision of Basic Facilities or Equipment
 - kitchen facilities
 - bathroom facilities
 - light and ventilation
 - heating
 - some electrical service
 - space
- Protection against Hazards
 - structural collapse
 - leaking
 - rodent and insect infestation
 - fire hazards
 - unvented fuel burning appliances
 - falls or tripping
- Other Provisions
 - condition of finishes
 - no sharing of toilet facilities or kitchens
 - storage of trash

¹Table A-2, p. 102.

- Provisions Included in Some Codes
 - required exits
 - separation of occupancy
 - sanitary bath and kitchen finishes
 - maintenance of public areas
 - electrical hazard protection
 - lead paint protection
 - physical security
- Provisions Not Included in Most Major Codes
 - noise
 - storage
 - mental well-being
 - elevators
 - financial protection
 - neighborhood and community services
 - condition of yards
 - many other detailed aspects of housing quality

The major model codes each contain regulations on approximately 50 of the 143 considerations listed on the Code Comparison Chart with the SBCC code requiring somewhat fewer, and the APHA ordinance having requirements on somewhat more. The APHA principles refer to over 100 considerations, many more than their own ordinance. Considerations in the principles and not in the ordinance are for the most part specialized considerations not generally considered hazardous (such as dust, odors, allergenics) or provisions beyond the scope of local housing ordinances to enforce (such as community services).

Some hazards are not included in housing codes although they are subject to other federal regulation, such as lead paint and glass hazards, both of which have come under regulation in the last few years so that it is difficult to purchase new paint or glass doors which are hazardous. Since both of these hazards have only recently been recognized as serious they are not included in the codes, although existing housing still has these hazards.

Development of new materials, such as artificial fiber carpeting, furnishings, or drapes, and plywood paneling pose serious



fire hazards, which are at present not too common, and hence not covered under most model codes. Other products, such as aluminum replacement siding, have as yet unknown performance in fire conditions, but may also be hazardous. Most model codes and enforcement agencies are poorly equipped to deal with new hazards, particularly fire hazards.

Development of new devices, such as smoke or products-of-combustion detectors offer much additional protection from fire and unvented heat appliances. Only in the last several years have these devices been available in quantity at moderate price. Little is known, however, about their long-term reliability. Several codes, such as the FHA/HUD MPS and the new Massachusetts State Building Code (a modification of BOCA) are requiring such devices. In existing buildings they could serve in lieu of more elaborate fire protection provisions because they warn occupants of fires when there is still time to escape injury. Most codes are slow to incorporate such features into their structure.

3.1.3.2 Level of Performance Required

There are substantial differences in the level of performance required for a particular housing quality consideration between different codes. The most recent published comparison of a number of prominent national, state, and local codes is that by Eric W. Mood.¹ The survey conducted in 1967 assesses quantitative differences in a number of space and equipment standards among these codes. There is substantial agreement among the major national housing codes (uniform on ICBO, APHA, BOCA, SBCC) in the requirements for

- minimum floor area per person
- minimum floor area for sleeping rooms

¹Eric W. Mood, Housing Code Standards, Research Report No. 19 prepared for the National Commission on Urban Problems (Washington, D.C.: Government Printing Office, 1969). The survey compares four major national codes (ICBO, APHA, BOCA, and SBCC), nine state codes, and sixteen city codes.



- minimum bathroom facilities
- a kitchen sink
- electrical service

except that ICBO generally does not specify space standards. The majority of state and local codes surveyed agreed with the national codes, although, significantly, several had no requirements, or substantially differing standards. The study found that the APHA code was more comprehensive than the other national model codes in requiring additional kitchen facilities, etc. The national codes were somewhat more comprehensive than local codes in the specification of household equipment and space.

The Code Comparison Chart presents an analysis of the general performance level required by codes. The relative required performance level of the standard for compliance for each individual housing quality consideration is indicated by either a large or a small dot, representing a high or low standard, or by no dot, indicating that the code has no standard for this consideration. A code has a high standard if it has detailed construction requirements, or requires full compliance with all aspects of the consideration, absolutely prohibits a condition, or requires a higher level of performance than other codes studied. By contrast, a low standard is typified by having "no" or a low level of performance specified, having a general level specified (i.e., requiring "good" condition) which leaves much to the discretion of the inspector, of having a related consideration which implies partial compliance, or with a direct statement of partial compliance or prohibition, or having a suggested standard or guideline. For example, in considering "Proper Thermal Environment, Adequate Temperature," all four model codes require the dwelling unit to have safe heating equipment capable of heating all rooms to approximately 70° F. This is viewed as a discretionary standard because it is hard to tell by looking whether a heating system will actually function, and it is impractical to inspect all heating systems on the coldest day

of the year. Thus, the codes that have only this sort of provision are judged to be lower standards (APIA and SBCC) than BOCA, which sets a more detailed performance criterion and requires (by reference) all heating equipment to meet the detailed construction requirements of the Uniform Building Code.

A rough measure of the relative stringency of the codes was calculated by summing the number of "high" standard items plus one-half the number of "low" standard items. By this measure, the SBCC housing code is somewhat less stringent than the other national models. If the provisions of the FHA/HUD Minimum Property Standards were to be required of existing housing, it would be a far more stringent code. The study indicates that local codes tend to be more stringent than the national models, but that local code checklists (the documents used in the enforcement of the code) tend to be less stringent.

3.1.3.3 Priorities Among Criteria

Codes express priorities on a relatively simple basis through exclusions of (presumably) low priority considerations, discretionary enforcement of medium priority items, and detailed construction requirements or high levels of indicated performance for high priority considerations. A very detailed study of accident rates, disease, and the causes and effects of fires (not done in this study) would probably find that typical priorities in codes do not reflect the relative frequency of hazard, however. For example, fires and falls are the usual causes of deaths in the home, but considerations related to them do not represent high priority items in most codes. In the situation of selective enforcement of a code, it is necessary to decide which violations to correct first, and which to let go unenforced. If such a selective enforcement policy is adopted for a direct cash assistance program,

a much clearer definition of priorities than found in existing codes would probably be required.

Table A-2
Code Comparisons

HOUSING QUALITY CONSIDERATIONS			NATIONAL MODEL CODES					OTHER TYPES OF CODES							LOCAL AAE STANDARDS					DEMAND EXPERIMENT							
			APHA - 1971 Principles	APHA - 1971 Ordinance	BOCA - 1973 Housing Code	ICBO - 1973 Uniform Housing Code	SBOC - 1973 Southern Housing Code	1970 Census of Housing Definition	FHA/HUD - 10/73 Min. Prop. Std. MF	BOCA - 1970 New Building Code	BOCA - 1970 Existing Buildings	Typical Zoning Code (Camp. Mass.)	NFPA - 1970 Life Safety Stds.	FIA Section 23 Leasing Standards	Bismark Inspection Form	Durham Tentative Guidelines	San Bernardino Insp. Check List	Peoria City Code	Tulsa Inspection Guideline	Jacksonville Inspection Checklist	Springfield Code	Salem Self-Inspection Form	Reference to Demand Experiment	Low Standard	Medium Standard	Program Standard	High Standard
List Based on American Public Health Association, "Housing: Basic Health Principals & Recommended Ordinance", 1973, (see first column), with additional considerations found in other codes and standards. (Note: List contains 143 items.)																											
UNIT	Protection from Weather-	leaking	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		damp basement	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Proper Thermal Environment	deteriorated roof, walls, etc.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		shelter from hurricane, tornado, tsunami	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		lack of gutters and downspouts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		Air Quality - no:	adequate temperature	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	adequate humidity		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	control of sun		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Light and Illumination	ventilation of habitable rooms	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		air-conditioning	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Food Preparation Facilities:	dust, odor, pathological org.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		CO from heating appliances	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		sunlight	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		natural light in rooms	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	COMMUNITY	Community Facilities	artificial in rooms	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
artificial in halls and stairs			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
window condition			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
sink with safe hot and cold water			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Community Facilities		refrigerator	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		stove	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		storage	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		paved streets and sidewalks	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		police department	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		fire department or service	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
BUILDING SITE	Arrangement of Buildings	maintenance of public spaces	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		public transportation	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		Schools	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		laundry	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Avoidance of sites:	shopping and professional services	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		hospital and emergency services	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		churches	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		parks and recreation	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Site Development Features	density of development	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		open space, setbacks, yards	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
subject to flooding		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
near mosquito breeding sites		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
Maintenance of Sites	near airports or flight paths	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	adjacent to railroads or highways	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	having dangerous topography	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	parking	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
STRINGENCY OF CODE (defined as number of • + ½ number of •)			42	44.5	41.5	45.5	35	5	13	53.5	14	7.5	2.5	21.5	26	54.5	13.5	55.5	25	34.5	41.5	21.5		1.5	2.5	12.5	27

KEY ● HIGH STANDARD, such as detailed construction requirements, full compliance required, absolute prohibition, stringent standard compared to others
 • LOW STANDARD, such as performance level not specified, discretionary enforcement permitted, partial compliance or prohibition, low or moderate level of performance compared to other standards, related standard, suggested standard or guideline, implied by other standard.

(blank) NO STANDARD

3.2 Detailed Analysis of Selected Codes

Discussion in this section is intended to supplement the data presented in the Code Comparisons Chart. The four major national model codes, the FHA/HUD Minimum Property Standards, Section 23 Leased Housing Regulations, a local zoning code, and a life safety code are analyzed to illustrate the differences in stringency among them.

3.2.1 APHA Standard (Housing: Basic Health Principles and Recommended Ordinance, 1971)

By far the most comprehensive and progressive standard available is that prepared by the APHA, consisting of two clearly separated parts, the principles and the model ordinance. The principles section contains a list of housing qualities, many of which typically fall into the category of "amenities" (for example, the presence of views, colors, and community facilities). However, many of these principles do not find their way into the APHA ordinance, apparently an admission that, although important, they are essentially impossible to specify and hence inherently unenforceable. Examples of omitted items include: sun control; humidity control; air quality; outdoor lighting; recreation space; noise control; mental well-being; protection from fire hazards; protection from falls or tripping; gas appliance safeguards; community facilities and environment.

The APHA ordinance places high priority on provisions to ensure the effective control of rodents - devoting a substantial portion of the ordinance to this subject. It also contains amenity items, such as light switches, kitchen cabinets, and storm windows. The omission of standards for protection against fire hazards and gas appliance emissions makes it less than a complete health

and safety code. Most provisions in the ordinance are of the "indicator" type.

3.2.2 BOCA Basic Housing-Property Maintenance Code (1970 edition including 1971 Supplement)

It is the intent of this code to supplement a BOCA building code in a locality. When existing buildings do not meet this housing code, corrective measures are to be performed according to the BOCA building code. Neither code is intended to have detailed provisions for plumbing and electrical construction which necessitate the adoption of other codes in each locality. The BOCA code has been adopted with few changes by many localities and several states. This code places a high priority on interior finish and maintenance and has provisions requiring non-absorbent bathroom and kitchen finishes not found in other model codes. It has no provisions regarding hazards of lead paint, glass areas, highly combustible finishes, or fumes from heating appliances. Its treatment of fire hazards and exits is poor in contrast to the BOCA building code, which requires all existing buildings to have safe exits.

3.2.3 ICBO Uniform Housing Code

Another of the four model housing codes is the stepchild of the Uniform Building Code, designed to meet FHA requirements for standards. The code is organized as a two-tier code (in the 1961 edition that was reviewed). New buildings are required to meet all the requirements of the code, while existing buildings are required to meet a test of "sub-standardness" (Chapter 10). The local building official may order any buildings failing the test to be vacated, repaired, or demolished. The sub-standardness

definition is fairly complete although it does lack standards for:

- privacy
- kitchen appliances
- lead paint avoidance
- prevention of glass hazards
- elevator safety
- prohibition of fuel burning appliances in sleeping rooms.

It is also very vague in its standards for acceptability of items such as:

- the kitchen sink
- heating facilities
- wiring
- occupancy
- maintenance
- flooring

This vagueness could lead to uneven enforcement, or lack of enforcement of minimum safety standards for heating and wiring. If strictly enforced, the "substandardness" definition could reject buildings not providing the following "amenities":

- full code compliance for all construction materials
- full code compliance with (substantial) space standards
- full code compliance for light and ventilation
- paint on the exterior
- connection to sewage disposal system (as contrasted with a requirement for safe disposal of wastes).

3.2.4 SBCC Southern Standard Housing Code (1973 edition)

The SBCC code is the fourth major model housing code. It is a "strictly minimum" standard for residential occupancy, relating primarily to maintenance and occupancy criteria. The housing code is intended to be adopted concurrently with the Southern Standard Building, Plumbing, Mechanical, and Gas Codes.

It exempts mobile homes from consideration. It is also somewhat less stringent than the other model codes because of its use of discretionary standards and its omission of provisions regarding such items as:

- presence of cooking equipment
- separation of occupancy
- maintenance of interior finishes
- restriction on lead paint
- elimination of fire hazards and access to exits

3.2.5 FHA Minimum Property Standards

The Minimum Property Standards (MPS) are in two volumes (one and two family, and multifamily) totaling over 800 pages of recommendations. The multifamily standards revised through October 1973 were analyzed.

The MPS is the most comprehensive and understandable of the national codes. However, it is not intended to apply to existing buildings, and hence if used without modification would eliminate most housing in the U.S. in all income categories even though its standards are truly minimum amenity standards. Few U.S. dwellings pass requirements for noise isolation, thermal insulation, or smoke detectors, even though they may exceed most other requirements. Other problems include:

- few existing urban buildings could pass site development standards, and thus would have to be demolished
- certain "program" limitations are not applicable to direct cash assistance (limitation of mixed commercial and residential structures, for example)
- cost of bringing many structures into full compliance would not be justified by benefits
- there are no criteria for existing buildings

- the neighborhood and environmental standards are relatively weak
- no consideration is given to priorities among amenities
- no specific rat control provisions are included (except it is unlikely that buildings built to FHA standards would harbor rodents)
- no maintenance standards cover upkeep of the unit

The MPS are useful as a definition of space, storage and room arrangement standards for an amenity standard. The length of the document indicates the detail required to define and list all aspects of amenity and the difficulty of specifying objective standards of amenity.

3.2.6 Section 23 Leased (Existing) Housing Regulations¹

The regulations (May 13, 1974) implementing the legislative provision for "decent, safe and sanitary housing" include the requirement of certification from a unit of local government, if required by law, and a series of factors (related to discretionary performance standards and indicators) concerning basic facilities and equipment, structural characteristics, space, environmental conditions, and lead-based paint hazard. Several of the factors indicate considerations (for example, the condition of the exterior and interior) to be included in an agency's determination of "decent, safe and sanitary housing." Other factors present specific criteria (for example, both the sanitary facilities and the kitchen must be private and the kitchen must contain a range and refrigerator, a sink and storage space) for acceptable units. The certification covering the lead-based paint hazard is the owner's responsibility.

¹The Housing and Community Development Act of 1974 enacted August 22, 1974, merges Section 23 into the new Section 8 program with separate retention of Section 23 until December 31, 1974. As of the preparation of this report, only the May 13, 1974, Section 23 regulations were available.

The mixed character of the Section 23 quality regulations leaves broad discretion to the local agency in the definition of some of the criteria for housing characteristics to be considered within the legislative mandate. Others are specified because of legislative requirements (Lead Based Paint Poisoning Prevention Act) or presumably because of the common sense character of the criteria (private sanitary and kitchen facilities).

The regulations require periodic inspection, not less than annually, with an inspection by the agency whenever it has information that a unit is not being properly maintained.¹

3.2.7 Cambridge, Massachusetts Zoning Code

The code analyzed complies closely with state enabling legislation and is assumed to be representative of the kinds of considerations of most such codes, although the actual requirements are not necessarily typical.

Zoning codes provide little protection for basic housing quality and have almost no overlap with model housing codes. This is because housing codes deal with the condition of buildings, zoning codes deal with the use of land. However, just as the FHA/HUD MPS extend to cover land use considerations not usually covered by building codes, it may be of interest to consider some of the items (such as provision of parking, yards, recreation space) in quality requirements for localities where no other regulations apply.

3.2.8 NFPA Life Safety Code (No. 101, 1971)

This code is an example of a partial code growing out of a building "exits" code developed by a national fire

¹The Cambridge, Massachusetts, local housing authority, for example, has the City Health Department perform the inspections.

protection organization. It contains very detailed requirements for:

- exits
- smoke protection
- panic avoidance
- alarms
- avoidance of fire hazards

It does not contain requirements for:

- space and occupancy
- light and ventilation
- structure (except for egress elements, and there it is vastly detailed - 36 pages on construction of exits)
- environment
- noise

Although less than complete as a basic housing code because of its intended scope, its requirements for certain items contain important provisions not found in any other code. For example, it classifies most fire escapes as a menace because of flimsy construction and lack of protection while appearing to be safe. This indicates some of the shortcomings of other codes in the areas of protection from fire and fire hazards.

APPENDIX B: DEFINITION OF ALTERNATIVE HOUSING QUALITY
STANDARDS FOR ANALYSIS OF ADMINISTRATIVE AGENCY AND DEMAND
EXPERIMENT DATA

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APPENDIX B

DEFINITION OF ALTERNATIVE HOUSING QUALITY STANDARDS FOR ANALYSIS OF ADMINISTRATIVE AGENCY AND DEMAND EXPERIMENT DATA

Four alternative levels of housing standards are used for the analysis of housing quality in the Demand and AAE experiments. These criteria are derived from data collected in the Housing Evaluation Forms. The four standards are defined to represent increasing levels of quality. This was done by modifying either the number of quality criteria in a given definition or by changing the level of "stringency" of a specific requirement. Only one of these standards is actually used in any experiment. The Program Minimum Standard for the Demand Experiment is the earmark constraint for the minimum standards treatment groups in the Demand Experiment. A similar standard, noted as "Medium High" was derived for the Administrative Agency Experiment for purposes of comparison. The other standards criteria, noted here as Low, Medium, and High were derived only for the purpose of analyzing the housing conditions of participants along a quality continuum.

A description of the housing quality requirements for each different standard level follows.

B-1.0 LOW STANDARD

A dwelling unit is classified as standard under the minimum standard definition if it meets the following requirements:

- Plumbing

The unit must have complete plumbing facilities which are defined slightly differently for the AAE and Demand households as noted below.

AAE: A complete bathroom with a flush toilet, a tub or shower, a wash basin, and hot and cold piped water must be present.

Demand: Private toilet facilities, a shower or tub with hot and cold running water, and a wash basin with hot and cold running water must be both present and working.

- Kitchen

The kitchen must contain a stove, refrigerator, kitchen sink, and hot running water. Variations in definition are noted below:

AAE: A stove and refrigerator must be present, the kitchen sink must not require replacement (needed if the sink is rusting and heavily worn, or broken, cracked or leaking, or faucet functions improperly).

Demand: A stove, refrigerator, and kitchen sink with hot and cold running water must be present and working.

- Heat

The unit must have heating equipment, which cannot be room heaters without flue or vent which burn gas, oil, or kerosene; or portable electric room heaters.

- Basic Core Rooms

The unit must have a livingroom, bathroom, and kitchen.

- Roof Structure

The roof must not be sagging or buckling.

- Exterior Wall Structure and Surface

Exterior walls must not need replacement for structural reasons (i.e., if walls are buckling or sagging or have damaged or loose structural members, holes or missing sections).

B-2.0 MEDIUM STANDARD

A dwelling unit meets the medium standard if it satisfies the following:

- Low Standard (all components)

- Light and Ventilation

A window is present in the living room (and must open under the Demand definition). There must be a window present in the kitchen and bathroom or else other means of ventilation must be provided.

- Electricity

Electrical outlets must be present in both the living room and the kitchen.

AAE: One switch and one outlet must be present in both the living room and the kitchen.

Demand: Two outlets, or one switch and one outlet must be present and operable in the living room, and one outlet in the kitchen.

- Fire Exits

If the unit is in a multifamily building, there must be at least two exits from the unit leading to safe and open space at ground level. (For the Demand units, this requirement was retroactively modified to permit an override on a case-by-case basis where it appears that the fire safety requirement is met despite the lack of a second exit).

B-3.0 PROGRAM MINIMUM STANDARD (Demand Experiment)

MEDIUM HIGH STANDARD (AAE)

A dwelling unit meets the medium high standard if it

satisfies the following:

- Medium Standard (all components)

- Ceiling Height

The living room, bathroom and kitchen have ceilings 7 feet high (or higher) in at least half of the room area.

- Room Structure

Neither the ceilings or walls in any room in the unit require replacement for structural reasons (i.e., if walls or ceiling show severe buckling or leaning). The AAE definition also requires examination of damaged, loose or unstable structural members or evidence of persistent moisture, dry rot or termite damage.

- Floor Structure

None of the floors in the unit must require replacement for structural reasons (i.e., if a floor shows severe buckling or noticeable movement under walking stress.)

AAE: The AAE definition also calls for examination of evidence of persistent moisture, dry rot or termite damage.

- Floor Surface

None of the floor surfaces in the unit must require replacement or extensive repairs (i.e., have large holes or missing parts).

- Room Surface

Neither the ceilings or walls in any room in the unit must need replacement due to surface defects (i.e. surface material is loose, contains large holes, or is crumbling and severely damaged).

- Light and Ventilation

The AAE and Demand definitions are not directly comparable for this item.

AAE: If a window is present in the living room, kitchen or bathroom, its area must be at least 10% of the floor area in the room and it must not have badly cracked, broken or missing panes, moderate window frame damage,

loose fit so that water or wind can enter the room, or have other conditions which make it inoperable or in need of repair.

Demand: The unit must have a 10% ratio of window area to floor area and at least one window which opens in the living room, bathroom, and kitchen, or a mechanical ventilation system in the kitchen and/or properly vented bathroom.

B-4.0 HIGH STANDARD

A dwelling unit meets the high standard if it satisfied the following:

- Medium High Standard (all components)
- Window Condition

The AAE and Demand definitions are slightly different for this item.

AAE: The living room window and the kitchen and bathroom windows (if present) must be operable and airtight, with no broken or cracked panes. The sash must be sound, tight, and equipped with workable locking devices.

Demand: Windows in the living room, bathroom, and kitchen must not need replacement or repair.

- Condition of Ceilings, Floors, and Interior and Exterior Walls

AAE: Ceilings must not have an observable sag or slope, of structural members or other structural damage indicating need for repairs.

Floors must not have a visibly noticeable slope or sag, frequent squeaking or minor movement under walking stress. Floor surfaces must not be worn or damaged and must not have numerous nicks, dents, scratches or defects.

Interior walls must not have visibly noticeable leaning or buckling. Wall and ceiling surfaces must not show small, shallow holes, large cracks, loose or missing parts or heavily peeling paint or paper.

Exterior walls must not show visible leaning, buckling

or sagging of walls or columns or vertical support members needing repair. Wall surfaces must not show minor holes, missing parts, or numerous loose areas needing repair.

Demand: The structure and surface of the ceilings, floors, interior walls, and exterior walls must not need replacement or repair. (Repair includes conditions such as heavily worn or damaged surfaces, or structural conditions such as noticeable leaning or sag).