

Archive

INSTITUTIONAL ANALYSIS OF GOVERNMENTAL INVOLVEMENT IN
HOUSING: A PRELIMINARY EXPLORATION

Patricia McDaniel and Thomas E. Nutt-Powell

MIT Energy Laboratory Working Paper No. MIT-EL-79-014WP

January 1979

The Photovoltaics Project under which this work was completed is funded by the Department of Energy under Contract No. EX-76-A-01-2295, Task Order number 37.

ABSTRACT

This paper, one of a series resulting from institutional analysis of photovoltaic (PV) acceptance, provides a preliminary exploration of governmental activities in the housing sector. It is based on theoretical formulations and utilizes methods developed in an earlier paper in this series. The housing process is examined in terms of seven institutional functions -- finance, research, political, regulation, production, service, and socialization -- from a governmental perspective. It is concluded that the federal government is most active in providing for finance, research, and political functions. State and local governments tend to perform the bulk of the regulation functions, though recent trends show increased federal involvement in large-scale regulation, through such mechanisms as the Environmental Impact Statement. The production, service, and socialization functions tend to be performed as a result of the direct realization of the first four.

Partial support for work reported in this paper was provided by the MIT Undergraduate Research Opportunities Program (UROP).
The authors gratefully acknowledge the assistance of Richard Tabors and Jeff Cruikshank in the preparation of this paper.

FORWARD

The Working Paper which follows was prepared as a portion of work underway within the Utility Systems Program at the MIT Energy Laboratory. This Working Paper series offers authors a mechanism for circulation of both interim project reports and drafts of reports destined to become Laboratory Technical Reports or journal articles.

Because of the preliminary nature of the findings and conclusions contained in these reports they may neither be reproduced nor quoted without the permission of the authors or the Project Manager.

Richard D. Tabors, Manager
Utility Systems Program

TABLE OF CONTENTS

	page
Introduction	4
The Finance Function	8
The Research Function	24
The Political Function	28
The Regulation Function	35
The Production Function	46
The Service Function	48
The Socialization Function	49
Afterword	50
References	51

This paper is one of a series resulting from institutional analysis of photovoltaic (PV) acceptance. These studies are undertaken with sponsorship of the US Department of Energy (DOE) as part of its Photovoltaic Program. In addition to institutional questions, DOE is interested in economic, marketing, and technological issues, and is sponsoring a series of studies and field tests on these topics. Institutional analysis studies have typically been undertaken in relation to particular PV field tests, though in some cases studies have focused on comparable technologies and institutional forces influencing their acceptance.

The housing institutional arena is being investigated in relation to the PV program, in the context of the DOE-HUD Solar Heating and Cooling (SHAC) Demonstration. The SHAC demonstration program involves direct federal grants to assist project developers in incorporating solar thermal approaches into various building form. In this context, institutional analysis is directed to understanding those forces which influence the rate and nature of innovation acceptance in the housing sector. (For a more detailed discussion of the theory of institutional analysis, see Nutt-Powell, et al., 1978.) An institutional analysis involves seven steps:

- (1) Identify the sector (i.e., economic, geographic) to be studied; determine study objectives.
- (2) Prepare a preliminary sector exploration -- i.e., an overview that could be applied to any such sector (or material) that is location-specific.
- (3) Construct an hypothesized institutional arena.
- (4) Identify the "perturbation prompter."

- (5) Devise the specific research design.
- (6) Monitor perturbations.
- (7) Analyze the institutional arena.

This paper is an element of the second of these seven steps, providing a preliminary exploration of government involvement in housing. Its organization follows the theoretical and methodological constructs for institutional analysis of innovation acceptance presented in an earlier paper in this series. (Nutt-Powell, et al., 1978). That paper posits six types of institutional entities -- formal and informal organizations, members, persons, collectivities and social orders. Institutional action consists of exchanges for which the critical datum is information. Such exchanges occur within an institutional arena. Innovation forces institutional action by disrupting existing social meaning.

In preparing a preliminary sector exploration, one necessarily focuses on the more structured institutions: formal organizations, members, and to a certain extent social orders. What is discovered are more routinized forms of institutional action. The picture presented is rather static, emphasizing as it does functions and activities. The time- and location-specific institutional action (often summarized in the role characteristic of institutions) are not sought at this stage of institutional analysis. Rather, the intent is to develop a structure of sufficient inclusiveness to enable the succeeding steps to be taken. This element of the preliminary sector exploration provides the background with which to assess time- and location-specific data, leading to the construction of an hypothesized institutional arena.

The structure of this paper, then, is as follows: each of the seven functions identified in the earlier theoretical paper are reviewed relative to the housing institutional arena, given the objective of determining the nature of governmental involvement in housing. Preceding these seven sections is a brief introduction to the topic.

INTRODUCTION

The housing institutional arena is vast and extremely complicated. To some extent, this complexity can be attributed to the unique economic attributes of housing: it is a high risk investment, involving individual entrepreneurship and ownership, both subject to the vagaries of the health of the economy. Housing production and consumption are similarly individualized, highly localized, and subject to shifts in personal tastes.

For the builder or developer, there are high land, site development, and labor costs. These costs (together with a profit margin) are absorbed by the eventual owner, for whom housing is a major "lump-sum" investment. (In the case of an owner-occupant, housing typically represents the largest single investment of a lifetime.) Both the builder and the buyer are dependent on the banking industry for financing. The cost of financing is critical. Since housing is a very durable good with financing arrangements spread over a long time period, a small rise in interest rates causes a much greater rise in costs. Furthermore, the substantial and rapid fluctuations of the housing industry are well documented; housing production and consumption both influence, and are influenced by, the conditions of the general economy. As a capital investment characterized by short-term highly discretionary attributes, housing production is very susceptible to the cost and availability of money.

The picture is further complicated by the spreading of housing across many sectors of the economy; seemingly unrelated conditions and changes in these sectors have an impact on housing. Furthermore, housing consumption is complicated by the fact that a dwelling unit is usually tied to a specific

location. Thus, housing decisions are influenced by conditions, policies, and programs pertaining to the surrounding community that are often unique and idiosyncratic. Finally, housing is considered a "merit" good, one to which citizens have access by right; therefore, the government may justify its intervention in the housing market to the extent that the private market operates inefficiently and/or ineffectively. Also, to the extent that the market is unable to provide adequate shelter (the "decent home and suitable living environment" often referred to in policy statements) for low and moderate income persons, many of whom are racial and ethnic minorities, housing is a highly politicized issue.

Given these unique characteristics, it is not unusual to find that public involvement in housing is characterized by extensive intervention at all levels of government. Some of the numerous programs, policies, and regulations are explicitly intended to address aspects of housing production and/or consumption, while others have an inadvertent impact on these areas. Governmental intervention cuts across many jurisdictional lines, both horizontally and vertically; consequently, responsibility for housing and related community development issues is distributed (and, in one sense, fragmented) throughout the legislative and executive branches of government, at federal, regional, state and local levels.

On the federal level, for example, the Department of Housing and Urban Development (HUD) is formally charged with responsibility for coordinating the various federal activities which affect housing and community development, and with keeping economic and fiscal policies in these areas consistent with other activities of the government. But there are many

federal agencies and departments with responsibilities bearing on housing and community development (e.g., the Department of Energy, the Department of Agriculture, and the Federal Reserve Board). Frequently, the goals and tactics employed by two or more of these bodies conflict or work at cross purposes entirely. For example, under tight economic conditions, when housing is at a disadvantage in the competition for capital, the Federal Reserve Board acts to restrict the money supply, while the Federal Home Loan Bank Board advances monies to its member banks, thus increasing the money supply. The task of coordination among agencies is further complicated by the sheer size and conglomerate nature of HUD, as HUD is subdivided many times along both functional and program lines. The housing arena is further complicated by the activities of state and local governments, which exhibit comparable fragmentation in program development and administration.

The federal government, as has been noted, is most active in finance, providing both funds availability and direct ownership and/or operating subsidies. It is involved in the flow of money through the Department of Housing and Urban Development (HUD), the Federal Reserve Board (FRB), the Federal Home Loan Bank Board (FHLBB), and the Farmers Home Administration (FmHA). Mortgage activities, both public and private, are carried out through HUD, VA, and FmHA loans, insurance and guarantee programs, and through the operation of the secondary mortgage market. The federal government is also active in research and political functions. Much of the research is either sponsored or coordinated by HUD. Political activities center in the Congress and its various offices, and in interaction with other agencies, offices, and special interest groups.

States are active in maintaining the money flow, and encouraging mortgages through state Housing Finance Agencies (HFA's). They are active in production through public housing programs, and in service through equal opportunity activities (e.g., the Massachusetts Commission Against Discrimination). Regulation on the state level is generally limited to enabling legislation which authorizes localities to establish building codes, zoning regulations, and so on.

Local governments are largely involved in the regulation, production, and to a lesser extent, finance functions. Localities are in most cases responsible for the establishment, administration, and enforcement of building codes, zoning regulations, and housing codes. Local housing and redevelopment authorities facilitate housing production. Local property taxes finance approximately one half of local government costs; as a result, they play an enormous part in the housing arena.

The remainder of this paper looks more closely at the manner in which various levels of government perform functions important in the housing institutional arena.

THE FINANCE FUNCTION

The financial function involves establishing standards of exchange for scarce resources (Nutt-Powell et al., 1978, p. 35). Government involvement in the financial function of the housing institutional arena is extensive, as well as varied, and can in many ways be characterized as its primary function. The provision of funds, as well as the establishment of means for transfer among institutional entities, constitutes a central focus of federal and state government involvement in housing. Because many of the programs involve the provision of funds (which in turn enables housing production) most will be discussed in this section rather than artificially separating program elements into financial service, and/or production sections.

Finance activities are usefully divided into several categories, including mortgage and rent financing, secondary mortgage market, community-related development, and taxation. In the following sections each is discussed in turn, with attention paid to government involvement at various levels.

Mortgage Financing

There are two approaches to providing financing for mortgages: the first assures the repayment of loans made from private funds sources, and the second uses governmental funds to make the loan directly. The former approach involves mortgage insurance (repayment of defaulted balance from a funded account) and guarantee (repayment of defaulted balance from direct government funds). The latter involves either full financing or financing as a subsidy of interest costs. The intent of all approaches

is to reduce the risk involved in housing production and/or ownership to producer, consumer, or both.

Insurance/guarantee: Mortgage insurance and guarantees are available from the Federal Housing Administration (within HUD), the Farmers Home Administration (FmHA), and the Veterans Administration. The Federal Housing Administration (FHA) provides insurance for private lenders against loss on mortgages for financing homes, multi-family projects, land development projects, and group practice facilities projects, and against loss on loans for property improvements.

The Veteran's Administration creates insurance accounts in the name of qualified lenders. For each loan made by the lender, the VA credits 15 percent of the loan to the lender's insurance account. In case of default, the VA pays the lender either the amount in the insurance account or the unpaid balance of the loan, whichever is less. Losses are likely to be less than the insurance in a typical foreclosure, thus the lender has an incentive to make the loan on generous terms. (The VA is phasing out the "insurance" concept altogether to simplify administration of its housing program.) Under its guarantee program, the VA agrees to pay the lender up to (the lesser of) \$12,500 or 60 percent of the mortgage in the case of default by a borrower. This is normally enough to cover any foreclosure losses a lender might suffer. Guaranteed loans -- including refinancings and mobile home loans -- account for most of the VA's home loan activity (Bureau of National Affairs, 1978, 10:2403)

The Farmer's Home Administration (FmHA) is authorized to guarantee or insure home loans made by private lenders to rural residences of low or

moderate income. FmHA operates its mortgage insurance program in non-metropolitan areas as a parallel to HUD-FHA's program in metropolitan areas. Loans made under the loan guarantee program are originated and serviced by approved private lenders. FmHA's 1760 county offices review the applications and issue the contracts of guarantee. The program is designed to attract private capital into rural areas, reducing the need for insured loans (Bureau of National Affairs, 1978, 40:0019)

Mortgage Loan Financing: The Basic Homeownership Program (Sec. 502 of the Housing Act of 1949) provides the major portion of FmHA's housing assistance. The loans provided through this program may be used to purchase a new or existing structure, or to build, rehabilitate, or relocate a single family dwelling. Although the bulk of these loans are technically "insured loans," with the ultimate source being private investors from the standpoint of the borrower, such loans serve as if they were direct loans from FmHA. The FmHA county supervisor originates and services the loan, and the agency itself acts as the continuing contact for the borrower. The loans are funded from a revolving source: the Rural Housing Insurance Fund. When a loan is made, the borrower receives funds to pay the builder or seller, and FmHA receives a note and the mortgage. FmHA then sells a Certificate of Beneficial Interest to the Federal Financing Bank. The proceeds of the sale go to the RHIF, and FmHA continues to service the loan as a mortgage (Bureau of National Affairs, 1978, 40:0012)

The VA also provides direct loans from a revolving loan fund. This program is used primarily in areas of the country where private mortgage credit is unavailable. The veteran applies directly to the VA for the loan,

the terms of which are the same as for the home loan guarantee program: i.e., the current maximum loan amount is \$33,000 (Bureau of National Affairs, 1978, 11:0012).

A relatively new source of mortgage loans is found at the state level in the form of state housing financing agencies (HFA's). State HFA's are involved in construction loans and permanent financing for multi-family projects, direct mortgages, loans-to-lender, and mortgage purchase programs for single-family homes. Some also provide seed money loans, insurance programs, and housing programs for special needs -- e.g., veterans and the handicapped (Bureau of National Affairs, 1978, 50:0011).

The policies and operations of the agency are typically governed by a board of directors, which generally consists of representatives from state government, labor, industry, and finance. The day-to-day operations are handled by an executive director and professional staff.

Most HFA's raise long-term funds by issuing tax-exempt revenue bonds. The lower interest rate obtained is then passed along to borrowers. Short-term capital needs during the construction period of projects are met primarily through notes, generally in the form of bond anticipation notes.

There are HFA's in 40 states. There is often a link between federal and HFA financing programs in the form of administrative commitments of federal program funds on a "blanket" basis, to be used in support of HFA-funded programs. The most frequent link is HFA permanent financing with federal interest subsidies.

Mortgage subsidies: HUD subsidizes mortgage interest costs under Sections 235 and 236. Section 235 encourages the production of moderate-income, owner-occupied housing by subsidizing mortgage insurance and interest for low- and moderate-income home buyers. The program reduces interest to as low as 4 percent (HUD, 1976, p. 17). Section 236 encourages the production of moderate income rental housing by mortgage insurance and interest subsidies. HUD pays interest subsidies to lenders, allowing the mortgage to be paid off by the project owner at an interest rate as low as one percent. This was designed to produce a reduction in rents, and to provide new or substantially rehabilitated rental or cooperative units for lower-income household; however, Section 236 has been inactive since the housing subsidy moratorium of January 5, 1973. Current activity consists mainly of funding commitments made before the moratorium. (Many of its functions have been replaced by Sec. 8, which will be discussed later.)

Families living in rural areas, whose annual income does not exceed \$8500 and whose net worth does not exceed \$5000, are eligible for the FmHA interest credit program, provided the home is occupied by the borrower and family and is modest in size, design and cost. The interest credit program credits the qualified borrower with some portion of the interest costs of the loan. FmHA was originally authorized to serve as HUD's agent under the Section 235 program, but this program was frustrated by the scarcity of local credit sources in rural areas, and FmHA terminated its role (Bureau of National Affairs, 1978, 40:0015).

In addition to these subsidies of the private sale and rental market (with an orientation toward moderate- and middle-income groups), direct mortgage reduction assistance is provided by HUD (through the Housing Assistance

Administration) to local Public Housing Authorities (PHA's). This assistance takes the form of Annual Contribution Contracts (that is, direct funds) to reduce bonded indebtedness incurred to construct (or otherwise acquire use of) dwelling units for low-income groups (families, elderly, veterans, handicapped, and so on). In theory, rents collected from such residents should cover operating costs, though circumstances of local conditions have resulted in gaps between theory and practice. A comparable form of financial subsidy to this federal program is found in some states, which operate parallel or supplementary programs to that of the federal government.

A second form of direct subsidy outside the private market is provided through grants made to educational institutions for the construction of student residences. This program is administered by HEW. Finally, the Department of Defense directly constructs and maintains a variety of housing (both within and outside the US) for military and civilian/DOD personnel.

Rent Financing

Lower Income Rental Assistance (Sec. 8): Under this program HUD makes up the difference between what a low-to-moderate-income family can afford and the fair market rent for an adequate housing unit. No eligible tenant need pay more than 25 percent of adjusted income toward rent. This assistance may be used in existing, new, or substantially rehabilitated housing (HUD, 1976, p. 33). In existing housing, eligible tenants select housing units and HUD pays the difference between the fair market rent and the tenant's contribution. The local public housing authority, which administers the program under HUD contract, selects the participants. Under the "new"

and "substantially rehabilitated" sections of the program, the developer arranges financing, and HUD pays the difference between the approved rent and tenant contributions. This arrangement is made through a 20-year contract between HUD and the developer. The developer selects families of elderly, handicapped, or displaced individuals with incomes of less than 80 percent of the median income of the area. In some ways, this element of the Section 8 program replaces (the dormant) Section 236. However, unlike Section 236, which subsidizes mortgage interest and insurance, Section 8 directly subsidizes tenants' rental payments.

Rent Supplements: HUD subsidizes the rents of low-income households by paying private developers the difference between the HUD-approved rent and 25 percent of tenant income. Generally, this program is used in multi-family housing units insured by the FHA. Eligible tenants are low-income households that qualify for public housing, and are either elderly, handicapped, displaced by government action, victims of national disaster, occupying sub-standard housing, or headed by a person on active military duty (HUD, 1976, p.32). The Secretary of HUD has primary responsibility for the administration of the program; however, the PHA's have responsibility for selecting developers and contracting to make assistance programs in existing and rehabilitated units.

Secondary Mortgage Operations: Mortgage finance is complicated, and involves more than the relatively simple transactions between the buyer, seller, and the bank. Consider the sale of a house. A is selling his house to B. B gets a mortgage at Bank C, and pays off A. Bank C, in supplying the funds to B,

acts as a primary market for the mortgage. Group D (government agency, private trust, insurance trust, and so on) may then buy the mortgage from Bank C, acting as a secondary market. Mortgage lending is, in general, not very liquid. Bank C is usually very eager to sell the mortgage to Group D. When secondary markets exist, banks are much more likely to make mortgage investments, since the secondary market reduces their risk and assures them of a certain amount of liquidity. Similarly, Group D (purchasers in the secondary mortgage market) is anxious to make sound investments (or in the case of the government, to encourage the steady flow of such investments into housing), but do not wish to create the apparatus to engage in primary lending activities. Hence, the secondary mortgage market is attractive to them as well.

To provide a secondary market and encourage mortgage investment, the Federal National Mortgage Association was created by Congress in 1938, and was given the responsibility of buying insured mortgages. FNMA proved to be a profitable operation. By 1954, there was pressure for it to become privately owned and operated. In 1968, FNMA was reorganized, making it a privately owned, but government-regulated corporation. At the same time, the more risky functions of special assistance, management, and liquidation of holdings were assigned to a new government-underwritten corporation, known as the Government National Mortgage Association (GNMA). Until 1970, there was no secondary market for conventional mortgages. The decline in the proportion of FHA and VA loans to less than one fifth of all new mortgages engendered pressure for the creation of a secondary market for conventional mortgages. The Emergency Home Finance Act of 1970 authorized FNMA to buy conventional

mortgages, and created, under the FHLBB, the Federal Home Loan Mortgage Corporation (FHLMC), with authority to buy both insured and conventional mortgages.

FNMA is now the nation's largest single investor in residential mortgages. The types of mortgages cover the range of conventional, FHA-insured, and VA-guaranteed mortgages on one- to four-family properties; including units in FHA-insured condominiums and Planned Unit Developments (PUD), FHA mortgages on medical care facilities, hospitals, nursing homes, mobile home parks, and HUD Title X land development loans. Loans of FHA projects, including Section 8 assistance, are eligible for purchase as well. In 1975, FNMA began making commitments and buying individual loans in conventionally-financed condominiums and PUD's, and in 1977 drafted a conventional multifamily loan purchase program. FNMA is also authorized to purchase subsidized FHA-insured loans (Bureau of National Affairs, 1978, 70:0013).

FNMA is a government regulated, privately owned and financed corporation. Owned and operated by its stockholders, its policies are established by its Board of Directors, and its day-to-day management is carried out by its chief executive officer and other officers who are appointed by the Board of Directors. Five of the fifteen members of the Board are appointed by the President of the United States, who is required by law to select at least one of his appointees from the homebuilding industry, one from the mortgage lending industry, and one from real estate. The other ten are elected annually by the stockholders (Bureau of National Affairs, 1978, 70:0014).

The Secretary of HUD has general regulatory powers over FNMA, with authority to promulgate regulations to require that a reasonable amount of

the corporation's mortgage purchases be related to the national goal of providing adequate housing for low- and moderate-income families. Offerings of stock, obligations, and other securities by FNMA are required to have the Secretary's approval. The Secretary also may set a maximum rate for cash dividends on FNMA's common stock, taking into consideration a fair rate of return. The issuance of various forms of debt securities and their maturities and rates of interest also are subject to approval by the Secretary of the Treasury (Bureau of National Affairs, 1978, 70:00.4).

The Government National Mortgage Association (GNMA) purchases, services, and sells mortgages insured or guaranteed by the Federal Housing Administration (FHA) and the VA, furnishes fiduciary services to itself and other departments and agencies of the Government, and guarantees privately-issued securities backed by trusts or pools of mortgages or loans which are insured or guaranteed by FHA and VA, as well as certain loans insured by the FmHA.

Under its Special Assistance Mortgage purchase plan, GNMA purchases mortgages at prices favorable to sponsors (part or full face value or multi-family mortgages, and 97 percent face value for home mortgages), and then sells them to FNMA and others at market prices, absorbing the differential in "points" as a subsidy. The mortgages purchased by GNMA have been insured by the VA or FHA. Recently, GNMA has also been authorized to purchase conventional mortgages at below-market interest rates (Bureau of National Affairs, 1978, 70:0081).

GNMA's Guaranteed Mortgage Backed Securities program transforms mortgages into security type investments. The most common security issued by GNMA is the modified "pass through" security, so called because principal

and interest are paid on the mortgages in the pool regardless of whether the money has been collected from the mortgagors. In this program, mortgage originators pool federally underwritten mortgages and issue securities against them. The securities within each pool are of a homogeneous type (single-family, multifamily-project, or mobile home) and interest rate. Once the pool has been approved and the certificates prepared by GNMA, issuers can market securities directly to investors or through securities dealers (HUD, 1976, p. 106).

In addition to these two programs, GNMA has responsibility for the management and liquidation of its own portfolio; the management of the Government Mortgage Liquidation Trust, the Federal Assets Liquidation Trust, and the Federal Assets Financing Trust; and the guarantee of timely payments of principal and interest on trust certificates and other securities by trust or pools composed of mortgages insured by HUD or guaranteed by the VA (Bureau of National Affairs, 1978, 70:0021).

The Federal Home Loan Mortgage Corporation (FHLMC) was created by Congress in 1970 to expand secondary market volume in conventional mortgages. Most of its program participants are savings and loan associations, but any financial institution with federal deposit insurance (and certain institutions with state insurance) can become eligible. FHLMC has two programs under which it purchases the following mortgages: (1) whole conventional loans on home and multifamily properties; (2) up to 95 percent participation in packages of mortgages composed of home loans; (3) FHA-insured or VA-guaranteed mortgages on single-family properties, and FHA-insured multifamily loans; and (4) individual condominiums and PUD unit loans,

either as whole loans or participations (Bureau of National Affairs, 1978, 70:0061).

FHLMC's principal tool in financing its purchase of mortgages is the sale of participation sales certificates. Each certificate represents participation interests in specific mortgage holdings acquired by the corporation. The certificates, unconditionally guaranteed by the corporation, pass through monthly interest and principal payments (Bureau of National Affairs, 1978, 70:0066).

FHLMC also uses its Guaranteed Mortgage Certificates to raise funds, but to a much lesser extent. These also represent ownership in a pool of mortgages, but they are structured to resemble bonds, paying interest semi-annually and returning a portion of the principal annually (Bureau of National Affairs, 1978, 70:0066).

Community-Related Development

HUD supports several community-related development programs that directly affect housing at the local level. Among these programs are Community Development Block Grants, Urban Development Action Grants, the Comprehensive Planning Assistance program, and housing rehabilitation loans.

Community Development Block Grants, a program initiated in 1974, consolidated several categorical grant programs. Though spending priorities are determined at the local level, the law enumerates general objectives which the block grants are designed to fulfill, including adequate housing, a suitable living environment, and expanded economic opportunity for lower-income groups. The available money is divided into two funds:

"entitlement" and "discretionary". Smaller communities compete for the discretionary funds, while larger cities and urban counties are guaranteed an entitlement based on need, calculated by a formula weighted according to population, poverty, overcrowded housing, age of housing, and growth lag (HUD, 1976, p. 2).

Cities and urban counties which have demonstrated ongoing results in providing housing for low- and moderate-income persons and equal opportunity in housing and employment for low- and moderate-income persons and members of minority groups; and who have met minimum criteria that indicate physical and economic stress, are eligible to receive Urban Development Action Grants (Housing and Community Development Act of 1977) to help revitalize local economies and reclaim deteriorated housing through a combination of public and private investments.

States, metropolitan clearinghouses, councils of governments, local communities, Indian Tribal groups, or other government groups having special needs are eligible for Comprehensive Planning Assistance grants designed to support sound state and local development through comprehensive planning (HUD, 1976, p. 4). These "701 program" grants are matched according to a formula by state and local funds and are used in preparing development plans, policies and strategies; deciding implementation measures; and coordinating related plans and activities being carried on at various governmental levels.

Under the so-called "Section 312" program, owners of properties in urban renewal or code enforcement project areas, or areas included in an approved Community Development or Urban Homestead program, are eligible

for below-market interest rate loans (typically three percent) for rehabilitation to bring the property up to applicable code, project, or plan standards. The loans, which can be used for residential, mixed use, or non-residential properties, prevent the unnecessary demolition of basically sound structures. The applicant must demonstrate the ability to pay the loan and must be unable to secure necessary financing from other sources on comparable terms and conditions. Preference is given to low- and moderate-income applicants (HUD, 1976, p. 5).

Taxation

The federal government has adopted a broad range of tax exemptions, deferrals, and deductions, in order to stimulate housing production, home ownership, increase the capital available to the residential sector, and accomplish other federal housing objectives (Solomon, p 33). Certain of these programs (such as tax deductions for mortgage interest) have been adopted in state tax policy.

The largest tax subsidies accrue to homeowners through the deductability of mortgage interest and local property taxes from federal income taxes. These implicit subsidies lower the cost of home ownership relative to renting (and other consumer goods), and increase the after-tax income on the investment in housing (relative to other investments). As a result, some households that have rented, buy their own residences, and some owners choose more valuable residences. Housing consumption by owner-occupied households therefore increases, and especially so for the higher income brackets.

In addition, homeowners can defer taxation on the capital gain realized through the sale of their house if they reinvest the gain in another house

within a specified time period. Individuals over 65 who sell their home but do not buy another may exclude all or part of the capital gain from taxable income (Solomon, p. 35).

Owners of rental property may calculate the depreciation of the property on an accelerated basis. Savings accrue to the extent that accelerated depreciation exceeds true depreciation by a greater margin on real estate than on other properties. In addition, a five-year rapid amortization of certain rehabilitation expenditures is allowed in lieu of depreciation for rental housing for low- and moderate-income tenants (Solomon, p. 35). Both provisions provide incentives for investing in income-producing property.

On the local level, property taxes have a great effect on housing. Most of the nation's municipalities rely heavily on property taxes for revenues. Depending on the extent and variations of reliance on property as a revenue source, local practices have important impacts on the use, ownership, and values of land resources. These effects can be accidental or incidental, or may be the product of deliberate policy.

For example, high taxes on housing tend to reduce demand for housing. This then tends to limit growth in the stock of urban housing, to limit improvement in the quality of the existing housing stock, or in the extreme, to accelerate deterioration or even abandonment. High taxes on forest or agricultural land can be used to encourage more intensive use or a shifting to a higher value use. Unfortunately, this can have the undesirable effect of encouraging waste that comes with premature development, and possible subsequent tax delinquency and tax forfeiture of property rights.

To prompt resource conservation, several states and localities have substituted severance taxes for property taxes. This encourages long-term forestry practices instead of "cut and get out" policies.

Tax policies can also be manipulated to encourage certain land tenure conditions. Capital accumulation, higher levels of living and a wide distribution of ownership rights can result from a policy of uniform, equitable taxes related to ability to pay or the benefits received. Religious and charitable organizations are able to afford high value properties when they are exempted from property taxes. Several states have homestead exemptions which free the owner-occupants of homes and farms from certain tax levies on the first \$500 to \$5000 of assessed value.

When tax revenues are used to promote desired services to property that exceed their costs to the taxpayer, investments in property increase. Regressive taxes discourage increased investment in property. Taxes enhance or depress property values in an analogous manner.

THE RESEARCH FUNCTION

The research function involves the consideration of what is and/or what might be (Nutt-Powell, et al., 1978, p. 34). Most formal research initiated by the government occurs at the federal level, and is in turn focused in the Department of Housing and Urban Development (HUD).

HUD is authorized to assist, either through grant or contract, any program of research or demonstration involving housing or urban development. The Assistant Secretary for Policy Development and Research is charged with responsibility in this area. HUD's research mission is to encourage large-scale experimentation in the use of new technologies, methods, and materials in the development and production of housing and related facilities. Agencies of state and local governments, or other organizations, may undertake research and demonstration programs either on a project basis or under a cooperative agreement with HUD. Approved programs may be eligible to receive up to 100 percent federal funding. HUD is also authorized to provide technical assistance to further research and demonstration. Furthermore, in connection with the construction, rehabilitation or maintenance of housing demonstrations, the Secretary of HUD is authorized to assure that there is no restraint by contract, building code, or zoning ordinance against the use of new or improved techniques (Urban Affairs Reporter, 1978, p. 1583).

HUD's 1976 research efforts are indicative of its research interests:

- a) Community Economic Development
A Federal inter-agency demonstration combining federal resources with private sector investment to generate employment and to revitalize cities.
- b) Experimental Housing Allowance Program
A test of the efficacy of direct cash assistance to low-income households for housing.
- c) Lead Based Paint Poisoning Prevention Research
In cooperation with other federal agencies, HUD is determining the nature and extent of lead-based paint poisoning in children in the United States, and developing more efficient ways to eliminate this hazard from the child's environment.
- d) Modular Integrated Utility Systems (MIUS)
Demonstration projects supplying all utility services to residential communities from a single on-site plant, using natural resources more efficiently and reducing adverse environmental impacts.
- e) National Institute of Building Sciences (NIBS)
A new, nongovernmental entity to provide leadership and technical expertise for the voluntary improvement of the nation's building codes and standards.
- f) Solar Heating and Cooling Demonstration Program
To encourage the use of solar technology in the general housing market.
- g) Tenant Management Program
A demonstration of a new approach to upgrading day-to-day operation of low-rent public housing.
- h) Urban Reinvestment Task Force
A public-private coalition to stimulate and aid investment in inner city revitalization. (HUD, 1976, p. 59)

Additionally, HUD has six major areas of research in which it is developing various forms of study, analysis, and demonstration:

- cost of housing
- alternative housing finance mechanisms
- urban economic development and public finance
- special users -- elderly and handicapped
- neighborhood reinvestment and revitalization
- site selection/integration.

In addition to contracts through HUD, states are eligible to receive funds from the Secretary of Agriculture for rural development extension programs, rural development research, and small farm extension, research, and development programs (Rural Development Act of 1972). Funds for these programs are administered by a land grant college in each state, with the advice and program approval of advisory councils (Urban Affairs Reporter, 1978, p. 1601).

Other departments in the Executive Branch indirectly concerned with housing (e.g., those concerned with energy resources or building materials) also carry out related research. These include the Department of Energy (DOE), the Department of Commerce, the Department of Health, Education, and Welfare (HEW), and the Department of Defense (DOD). In addition, executive offices often carry out research in the course of preparing the budget for Congress and the Office of Management and Budget (OMB). Related to this form of research are reviews by the Congressional Budget Office (CBO) and the General Accounting Office (GAO).

Finally, it is important to mention that task forces are often created to conduct research on specific issues. Sometimes these are comprised only of elected government officials and departmental representatives; sometimes they are combinations of officials, academicians, business/industry and public representatives. Recent examples include the Kaiser Committee, the National Commission on Urban Problems, and the Commission of Financial Structure and Regulation. The Kaiser Committee, formally known as the President's Committee on Urban Housing, created in 1967 by President Johnson, was principally concerned with impediments to the construction of housing (see President's Committee on Urban Housing, 1968).

The National Commission on Urban Problems (Douglas Commission) was also appointed by President Johnson in 1967. They were charged with the search for a "revolutionary improvement in the quality of the American city" and focused on issues such as building codes and technology, zoning and land use, housing codes, tax policies, and development standards (US National Commission on Urban Problems, 1968, iii).

The Commission on Financial Structure and Regulation (Hunt Commission), appointed by President Nixon, studied the effects that changes in structure and regulation might have on thrift institutions.

State, regional, and local governments are involved in research primarily in response to federal initiatives. However, private sector interest in testing new housing approaches will often engage these levels of government in their ventures.

THE POLITICAL FUNCTION

In the broadest sense, the political function involves the formal determination of structures and modes of behavior (Nutt-Powell, et al., 1978, p. 35). Given the extent to which government involvement in housing is related to the financial function, and, in turn, the extent to which that financial function is carried out by or in response to federal initiative, it is not surprising that much of the discussion in this section will focus on the making of housing policy in the federal government.

The legislative branch is a good place to start. A variety of Congressional committees handle housing-related legislation, including:

House Committees

Agriculture

- Subcommittee on Family Farms, Rural Development, and Special Studies

Appropriations

- Subcommittee on Agriculture and Related Agencies

- Subcommittee on HUD -- Independent Agencies

Banking, Finance, and Urban Affairs

- Subcommittee on Housing and Community Development

- Subcommittee on the City

Budget

Interior and Insular Affairs

- Subcommittee on Energy and the Environment

Veterans Affairs

- Subcommittee on Housing

Ways and Means

Senate Committees

Agriculture and Forestry

- Subcommittee on Agricultural Credit and Rural Electricity

- Subcommittee on Rural Development

Appropriations

- Subcommittee on Agriculture and Related Agencies

- Subcommittee on HUD -- Independent Agencies

Banking, Housing and Urban Affairs
 Subcommittee on Housing and Urban Affairs
 Subcommittee on Financial Institutions
 Budget
 Energy and Natural Resources
 Subcommittee on Public Land and Resources
 Veterans Affairs
 Subcommittee on Housing and Insurance

Joint Committees

Economic
 Subcommittee on Economic Growth and Stability
 Subcommittee on Energy
 Taxation.

These committees deal with new policy and program creation, the review and/or modification of existing policies and programs, the authorization and appropriation of funds, and so on. Typically, the committee members and staffs develop specialized knowledge and skill on the issues within the domain of their committee. (For an excellent recounting of the legislative process, see Asbell, 1978.)

The activities of legislative committees and Congress are generally assisted by a number of office in the legislative branch, including GAO, CBO and OTA. The General Accounting Office (GAO) carries out legal accounting, auditing, and claims settlement functions with respect to federal government programs and operations. It also makes recommendations designed to provide for more efficient and effective government operations. Congress may direct GAO to examine a specific matter. GAO staff members may be assigned to assist committees in conducting studies and investigations. The Comptroller General, who directs GAO, may testify before committees on matters considered to be within the special competence of GAO. Finally, committees may request

assistance in drafting prospective legislation or legal advice (US Governmental Manual, 1977, p. 51).

The Congressional Budget Office (CBO) provides Congress with basic budget data and with analyses of fiscal, budgetary, and programmatic policy issues. The CBO has specific responsibility for economic forecasting and fiscal policy analysis; monitoring the results of Congressional action on specified targets; five-year cost projects; annual budget reports; and special studies in budget-related areas.

The Office of Technology Assessment (OTA) was created in 1972 to help Congress anticipate and plan for the consequences of uses of technology. The basic function of OTA is to provide Congressional committees with assessments of studies that identify the broad range of consequences (social and physical) which can be expected to accompany various policy choices affecting the use of technologies (US Government Manual, 1977, p. 67)

Designed by the framers of the Constitution as a mode of representative democracy, the legislative process has evolved to incorporate (with varying degrees of formality) many kinds of interest groups. Interests have explicit representation through organizations. They may be general special interest groups (e.g., the National Association of Home Builders), specific interest groups (e.g., the Pipefitters Union) or public interest groups (e.g., the National Association of Counties). Depending on the level of detail of the analysis, observers may also include regional or ideological blocks within the Congress, and departments, offices and other subdivisions of the executive branch, as part of the interest group interaction now characteristic of the federal legislative process.

National housing policy is subject to the ebb and flow of this interactive process. In this field, as in most, government programs have continuously expanded, because interest groups would rather add programs than sacrifice those favorable to their positions. Most lobbying groups are sympathetic to and form alliances with one or more government agency and office. The agency and the pressure group then give each other mutual support. The main non-governmental interest groups involved in housing either represent the building, real estate, and mortgage industries, are professional organizations, or are equal opportunity-oriented groups. Representative organizations of the various interest groups are presented in the following paragraphs.

The National Association of Home Builders (NAHB) is one of the most powerful, skillful, and successful pressure groups in Washington (Lilley, 1973, p. 23). The NAHB represents home and apartment builders, light commercial builders, and others associated with the building industry. The services extended to its 71,000 members include collection and publication of data on current developments in home building and home builders' plans. In addition, NAHB conducts national schools and conferences on construction, mortgage credit, labor relations, cost reductions, land use, remodeling, and business management (Fisk, 1978, p. 60). NAHB maintains an extensive housing library, and sponsors research to develop new building systems and materials that could reduce the cost of construction. The NAHB Research Foundation has its own laboratory at Rockville, Maryland, and has erected several experimental homes in various parts of the country (Martin, 1973, p. 242).

As a pressure group, NAHB works primarily at the committee level. Its interest centers on more and cheaper mortgage money and more federal (notably FHA) subsidies. NAHB also supports building code modernization (to permit innovation in materials and methods), fights for legislation to keep down the cost of lumber and other materials; and struggles to achieve parity in (if not control of) the labor/management power balance.

The National Association of Realtors (NAR) is a federation of 50 state and 1680 local real estate board associations. The term "Realtor" is registered with the US Patent Office; the designation carries with it a commitment to a code of ethics, and a general alignment with the NAR policies. NAR promotes education, high professional standards, and modern techniques in specialized real estate work such as brokerage, appraisal, property management, land development, and industrial real estate, farm brokerage and counseling. It also conducts research, sponsors a program of involvement in community service projects, and maintains an extensive library and reference service (Fisk, 1978, p. 199).

The Mortgage Banker's Association (MBA), the National Association of Mutual Savings Banks, and the US Savings and Loans League are the three principal lobby groups representing the mortgage banking industry. The MBA represents about 3000 mortgage banking companies and institutional investors throughout the United States, Canada, and Puerto Rico. The MBA speaks for and provides information to these members. Its legislative, economic public relations, and education departments are all active. In addition, it has created a new Department of Urban Affairs (Jones, 1973, p. 240).

The mortgage banking industry specializes in financing land and the use of land, and is one of the more innovative members of the nation's financial community.

The Pipefitters Union (one of several members of the Building Trades Council, AFL-CIO) is illustrative of private-sector specific interest groups. Lobbyists for the Pipefitters work for legislation which put their union's membership in favorable and secure situations in the employment market of the housing industry. This might involve restrictions on the use of materials or practices which would displace pipefitters from construction jobs, or generation of financing sources to guarantee a steady source of construction employment.

The National Housing Conference is a general public interest group whose purpose is to achieve slum clearance and promote national, regional, and urban planning and research in housing and urban renewal. Its 4000 members include local citizens interested in housing and urban renewal, local and national housing and urban renewal executives, and representatives from major international unions, and national, religious, educational, and veterans organizations. It keeps its members informed of developments in the field through a monthly newsletter, Housing Yearbook, and special bulletins on legislative matters and other topics related to housing.

The National Associations of Housing and Redevelopment Officials (NAHRO) is a specialized public interest group. A non profit association of local and public and non-profit housing, urban renewal, and codes officials, NAHRO provides informational, educational, and advisory services

to member agencies and individuals. NAHRO's activities in the legislative process are mainly concerned with public housing, local redevelopment, and conservation/preservation practices.

The National Association for the Advancement of Colored People (NAACP), a specialized public interest group with interests beyond housing, works "to achieve through peaceful and lawful means ... elimination of discrimination in housing, employment, voting, schools, the courts, transportation, and recreation." It is a major national institution which functions at the center of the civil rights revolution as a day-to-day pressure group. The NAACP also operates as a source of information and guidance for government and private organizations, and for the general public.

The National Committee Against Discrimination in Housing (NCDH) is a specialized public interest organization focused on housing, and committed to the development of a society in which all Americans can exercise the same options to secure decent housing in areas of their choice. NCDH serves as a center for public education, information, professional consultation on planning and community development, and research and legal counsel in the housing/civil rights field.

THE REGULATION FUNCTION

The function of regulation involves the administration of formal structures for behavior (Nutt-Powell, et al, 1978, p. 35). Traditionally, most regulatory authority in housing has been place-specific; hence it has been a responsibility of the states, who have in turn delegated it to local government. However, financial regulatory authority is primarily embodied at the federal level, with some state banking regulation. Furthermore, the recent trend has been for the federal government to assume authority over regulatory issues with more than local impact, which have included environmental issues, fair housing rights, and mobile home standards. This section will first consider federal regulatory activities, then examine those at state and local levels.

Federal

Agencies involved in the regulation of housing finance activities, the Department of the Treasury, the Federal Reserve Board, and the Federal Home Loan Bank Board. The Department of the Treasury formulates and recommends broad financial, tax, and fiscal policies that have general significance for the economy (US Government Manual, 1977, p. 435). The Federal Reserve system is the central bank for the US, and has major responsibility for the administration of the nation's credit and monetary policy. The Board influences credit conditions in the nation by fixing requirements for reserves to be held against deposits, and by establishing maximum interest rates that member banks can pay on their savings and time deposits (US Government Manual, 1977, p. 536). The Federal Home Loan Bank Board (FHLBB) is a central banking system for home-loan banks analogous to the Federal Reserve

System for commercial banks. FHLBB governs the twelve regional banks and regulates member institutions. They charter new federal savings and loans, approve or disapprove mergers, and establish accounting regulation. It also establishes reserve ratios, sets maximum interest rates payable on deposits, and provides advances to members.

The federal government, using its control over the chartering and insuring of deposits in financial institutions, has imposed maximum interest rate ceilings on time and savings deposits through Regulation Q of the Federal Reserve Board and related regulations of the Federal Deposit Insurance Corporation and the Federal Savings and Loan Insurance Corporation.

HUD has standard setting responsibility for certain types of housing and land uses. HUD also encourages states and localities to adopt model codes which it supports (whether developed by HUD or other agencies). HUD's Director of Underwriting Standards in the Office of the Assistant Secretary of Housing has responsibility for establishing and maintaining a broad range of standards in a variety of areas, including: architecture, engineering, security, finance, planning, materials, and methods of construction (Code of Federal Regulations, 1977, 24 200.56).

HUD's Office of the Assistant Secretary for Consumer Affairs and Regulatory Functions has regulatory authority over the following programs: Interstate Land Sales; Mobile Home Standards; and Real Estate Settlement; and consumer liaison functions. Under the authority of the National Mobile Home Construction and Safety Standards Act of 1974, national mobile home construction and safety standards became effective June 15, 1976. The Real Estate Settlement Procedures Act was enacted by Congress

in 1974 to minimize abuses and to minimize the surprises buyers experience when purchasing their residences. It requires lenders to give a "good faith estimate" of the settlement costs, in addition to an information booklet on settlement procedures. The act also prohibits kickbacks, and places limits on the amounts of funds held in escrow by lenders (US Government Manual, 1977, p. 296). The Office of Interstate Land Sales Registration (under the Interstate Land Sales Full Disclosure Act) administers and enforces the registration and disclosure requirements which apply to developers who sell land through the use of any means of interstate commerce or the mails (Code of Federal Regulations, 1977, 24:1700.1). Fair housing regulations are administered by HUD's Assistant Secretary for Fair Housing and Equal Opportunity. This includes the administration of the provisions of the Civil Rights Act of 1968, as amended.

Federal involvement with land use controls has mainly been in environmentally-oriented regulations, including the Coastal Zone Management Act, the Clean Air Act, the Water Pollution Control Act, the National Flood Insurance Act, the Noise Pollution Control Act, and the National Environmental Policy Act of 1969.

The National Environmental Policy Act of 1969 (NEPA) is the most far-reaching of this group. It requires that an Environmental Impact Statement (EIS) be filed in advance for all proposed federal projects of programs which will have a significant effect on the environment. Section 102 requires that the EIS include: (1) the environmental impact of the imposed action; (2) any adverse environmental effects which cannot be avoided should the proposal be implemented; (3) alternatives to the proposed action;

(4) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity; and (5) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented (P.L. 19-190). The EIS process is administered by the Council on Environmental Quality, a small staff agency in the Executive Office of the President authorized by NEPA. The Council is not required to comment on the impact statements; indeed, given its small staff, only a third of the statements are read within the CEQ. However, the CEQ does comment on the more important statements, and a shift in decision on a major project is occasionally attributed to the Council (Davies, 1975, p. 118). The CEQ is often confused with the Environmental Protection Agency, created by Reorganization Plan #3 of 1970. The EPA plays the role of anti-pollution policeman; that is it has responsibility for regulating and enforcing environmental laws. The CEQ, on the other hand, functions as an advisory office, especially to the President, although its reports are made public. Housing programs requiring the submission of an EIS include:

- Subsidized Housing for Families and the Elderly
 - Public Housing
 - Section 8 -- Housing Assistance Payments

- Mortgage Insurance Programs
 - Market Rental Housing
 - Condominiums
 - Nursing Homes
 - Mobile Home Parks
 - Single Family Subsidies
 - Single Family Homes
 - Housing for the Elderly
 - Hospitals and Group Practice Facilities

- Community Planning and Development
 - Comprehensive Planning and Management Grants
 - Community Development Block Grants

The Coastal Zone Management Act (1972) administered by the Office of Coastal Zone Management (OCZM), of the National Oceanic and Atmospheric Administration (NOAA) within the Department of Commerce, provides planning and administrative grants to states in order to establish permissible activities within state-specified coastal zone areas. States designate particular critical areas, issue guidelines on the priority of uses, and develop methods for implementing the coastal zone plans. Provision is made for federal review of the procedures for implementing the program, designating restoration or preservation areas, assuring that local regulations do not "unreasonably" restrict uses of regional benefit, and assuring "adequate consideration of the national interest" in the siting of facilities to meet requirements that are more than local in nature (Robinson, 1977, p. 123).

The Clean Air Act (as amended in 1974) requires that states develop plans for the implementation of air quality standards set by the Environmental Protection Agency (EPA). The states are also required to provide for the review of the impact on air quality of "traffic generators." These include major urban roadways, parking lots and garages, shopping centers, recreational centers and amusement parks, sports stadiums, airports, commercial and industrial facilities, and condominium buildings (Robinson, 1977, p. 124).

The 1972 Amendments to the Federal Water Pollution Control Act explicitly call for controls on water pollution to be included in land use planning and regulation. Section 208 requires states to develop area-wide or regional waste treatment plans including land use control elements for all portions of the state (Robinson, 1977, p. 125). The water and air

pollution programs are both administered by the EPA.

Under the National Flood Insurance Act, businesses and individuals located in identified flood-prone areas cannot qualify for federal mortgage guarantees, insured mortgage loans, or other lending by federally-insured or regulated financial institutions for construction purposes -- or for other forms of federal assistance for financing capital costs of construction and equipment -- unless the community has adopted effective land use and management controls. This effects every community having territory below a federally mapped 100-year flood elevation level. This act is administered by HUD (Robinson, 1977, p. 129).

The Noise Pollution Control Act leaves responsibility for the regulation of overall environmental noise to the state, but provides for federal regulation of airports (Robinson, 1977, p. 130).

The basic federal strategy of regulation in the housing area (notably in the various environmentally-linked controls) is the imposition of penalties for non-compliance. The two primary penalties are refusal of federal support for projects (grants and/or permits) and fines for completed projects in violation of standards and/or regulations. This strategy is premised on the rationale that breakdown in the environment is the result of externalities; that is, the side-effects of individual actions which have impact on persons other than the one making the decision. Air and water, it is contended, are public goods. Where the costs of polluting are less than non-polluting, there is little incentive not to pollute. Penalties thus act to increase the cost of polluting. When the costs of not polluting are less than the costs of polluting, the reasoning goes, pollution will cease.

In much the same way that the Federal government has been assuming authority over environmental aspects of land use, the states have developed land use controls that supercede local regulations. This trend has generally included requirements for environmental impact statements, state control of environmentally critical areas, and state over rides to achieve broader policy objectives. For example, New York established a state Urban Development Corporation with power to preempt local building and zoning regulations and building codes. Similarly, Massachusetts developed a special housing permit law (Chapter 774) that allows the developer of proposed subsidized housing to appeal to the Commonwealth in the event of local disapproval of his project. Florida passed a state land and water management act that permits state approval of developments of "regional impact." All of these initiatives contemplate a supervisory role for the state government in local land use decisions (Franklin, 1976, p. 543).

Traditionally, however, the states have delegated regulatory authority to localities. At least 10,000 local governments apply varied and complex land use controls, often with unpaid, part-time boards. Many cannot afford full-time employees or sophisticated data gathering and planning techniques. Those localities that do hire staffs often pay low wages, and as a result cannot attract needed environmental and technological expertise. Seventy-five percent of all local governments have planning boards, zoning ordinances, subdivision regulations, and building or housing codes (Haskell, 1974, p. 11).

The formulation and administration of land use controls involve several distinct bodies or agencies in the local government structure. The general organizational guidelines are set out in state enabling acts,

which normally permit some variations at the discretion of the locality. The normal pattern calls for the participation of a zoning board of appeals, a planning board, and the jurisdiction's governing body. In addition, the opportunity for judicial review is provided (US National Commission on Urban Problems, 1968, p. 210).

Of the 4067 municipalities having a population of 5000 or more, nearly 90 percent have planning boards, and about 80 percent have zoning boards of appeal. Members of both bodies are appointed by the jurisdiction's chief executive and/or governing body, and normally serve without pay (US National Commission on Urban Problems, 1968, p. 211).

Land use control is a significant aspect of local authority. Zoning is the major use of the local police power. A zoning ordinance typically prescribes how each parcel of land in a community may be used. Most regulations cover at least three subjects: use, population density, and building bulk. There are three basic categories of use -- residential, commercial, and industrial. There are often many subcategories, and there is a growing trend to designate more and more categories. Population density can be controlled by setting a minimum required size for each lot, or by setting the number of families permitted per acre. More refined controls, designed to regulate apartment buildings, are found in large cities. Building size is usually regulated by: (1) requiring certain distances along lot boundaries; (2) limiting the building height; and/or (3) limiting the proportion of lot area covered by buildings. More refined measures include "floor area ratio" or "usable open space" requirement. The provision of offstreet parking, minimum house size, landscaping, signs, appearance of buildings,

off-street loading, view protection and grading are among other subjects often regulated by zoning ordinances (US National Commission on Urban Problems, 1968, p. 201).

The zoning ordinance is accompanied by a map to show the "zones" or "districts" established. Within each of these a uniform set of regulations applies. Zoning regulations are designed to be largely "self-executing"; that is, they are formulated and adopted by the local governing body, and subsequently require only the services of a building official, who determines whether proposed construction complies with the requirements (US National Commission on Urban Problems, 1968, p. 202).

Additional kinds of administrative action, however, are provided for in most zoning statutes. Appeals from the decision of the building official are taken to the local board of zoning appeals. Variances can be granted when "unnecessary hardship" would result from strict application, or in otherwise "unique circumstances." Discretionary special exceptions can also be obtained, or in some cases, an amendment can be made to the zoning statute itself (US National Commission on Urban Problems, 1968, p. 202).

Other land use controls include the subdivision control, covenants, public acquisition of land, eminent domain, dedication of land to public purposes, taxes and assessments, and fees and charges.

Subdivision regulations make governmental approval necessary prior to the division of land into lots for sale. Subdivision regulations typically require that the subdivision be consistent with the comprehensive plan for the area. It also covers such details as subdivision naming, street naming, easements, street layouts, curbs and gutters, sidewalks,

sanitary sewers, utilities, erosion, sediment controls, and swimming pools (Robinson, 1977, p. 47). In contrast to the negative control of zoning, subdivision regulations prescribe what builders can do, and are more successful in molding growth positively. The local planning commission or governing body applies these standards, at the time of subdivision, to the preliminary and final plans submitted by the property owners (US National Commission on Urban Problems, 1968, p. 203).

A covenant is a restriction placed on a deed, stipulating certain requirements the owner must meet, or preventing him from using the property for certain purposes (Robinson, 1977, p. 47).

Housing codes and building codes are further examples of state police power put into effect by local ordinances. A housing code sets the minimum standards for the safety, health, and welfare of the occupants of housing, and tend to focus on the suitability and amenities of interior space. Three main areas are covered in the code: (1) the facilities in the structure supplied by the owner (toilet, bath, sink, and so on); (2) the levels of structural and sanitary maintenance; and (3) occupancy (size of dwelling and of rooms, the number of people permitted) (US National Commission on Urban Problems, 1968, p. 274).

A building code is a series of standards and specifications which establish minimum requirements for the construction of buildings in order to protect those who live and work in them from fire and other hazards, and to establish regulations to further protect the health and safety of the public. There are a number of principal national codes: the American Public Health Association Public Health Service (APHA-PHS) code; the

Uniform Building Code, most popular in the West, formulated by the International Conference of Building Officials (ICBO); the Building Officials Conference of America's (BOCA) Basic Building Code, found mostly in the east and north central states; and the Southern Standard Building Code (SSBC) (US National Commission on Urban Problems, 1968, p. 254).

THE PRODUCTION FUNCTION

The production function involves the creation of resources (Nutt-Powell, et al., 1978, p. 35). If the dwelling unit is taken as the resource in the housing field, then many of the functions described earlier (especially finance) also are production functions. However, taken in its most narrow sense, (that is, direct production of housing) government is involved in production in a relatively limited way.

The most direct government involvement in production is through the public housing programs. On the federal and state levels, as discussed earlier, involvement has generally been limited to the financial support of local Public Housing Agencies. The public housing program has been the predominant form of federal housing assistance for low-income families since it was first established by the US Housing Act of 1937. The program, stressing new construction, especially of apartment dwellings, has produced over one million units, housing approximately three million low-income individuals. Although public housing originally served the so-called "working poor", it has become the "housing of the last resort" for America's poorest citizens. Its economic viability has been undermined by this shift, by statutory limits on the rents, and by budgetary cuts and impoundments during the Nixon and Ford administrations. (Specific federal programs are described in the finance section.)

All 50 states have passed enabling legislation for the establishment of PHA's. Six states (Maine, South Carolina, Delaware, Vermont, Alabama, and Hawaii) have established statewide housing authorities. PHA's play

roles comparable to those of private developers, owners, and managers. A PHA is responsible for project planning, design (either directly or by contract to an architectural firm), financing, construction, occupancy and management. PHA's are generally directed by boards, which often serve without pay, and have professional staffs for day-to-day operations. A PHA can build, purchase, or lease any real property appropriate for low-income housing. PHA's are authorized to issue notes and bonds to finance acquisition, construction, and improvement of housing.

Other than PHA's, the only direct involvement of governments in housing production is through the Department of Defense, which provides housing (typically on military installations) for its personnel; and, on a very small basis, certain agencies (such as the National Park Service) which provide housing for their personnel.

THE SERVICE FUNCTION

Service entails providing for the present and future use of desired and/or needed resources (Nutt-Powell, et al., 1978, p. 35). As with the production function, much of what government does in the housing arena -- described in earlier sections -- could reasonably be called service. Indeed, in many respects the basic function of government is service. However, if a more narrow construction can be put on the term, there are some activities which are predominantly service. Primary among these are government activities providing for equal housing opportunities. Both federal and state governments have agencies directly charged with enforcing equal housing opportunities. Many of these agencies assume active monitoring roles, ensuring that housing opportunities are available as opposed to operating simply in response to consumer complaint.

THE SOCIALIZATION FUNCTION

The socialization function involves the transmittal of norms through formal and informal mechanisms (Nutt-Powell, et al., 1978, p. 34). In the opening portions of this paper the complexity and diversity of the housing arena were noted. Housing is a major investment, and a matter of highly individualized taste. There are a plethora of actors involved in this highly-decentralized sector. In many respects, it can be contended that all governmental activities contribute to the socialization function. Certainly tax policies which are advantageous to owning (rather than renting) help establish norms supportive of homeownership. Regulatory policies which make low-rise apartment houses more financially feasible than mobile home developments similarly establish a norm favoring apartment life over mobile home life. Governmental activity is therefore very much involved in the socialization function. But because this is a public process, the norms to be transmitted are subject to public scrutiny. Consequently, in most respects, activities falling into the socialization function are properly considered within the rubric of the political function.

AFTERWORD

This paper has reviewed the seven institutional functions as they are evidenced in governmental involvement in housing in the US. The objective of this review is to provide background for the completion of the preliminary sector exploration stage of institutional analysis. Succeeding papers in this research effort will present the results of the remaining steps of the institutional analysis methodology to the federal government's solar thermal demonstration program efforts in housing. The basic question being addressed in this research is, "What institutional forces contribute to the rate of acceptance of innovation in housing?" The intent is to provide the Department of Energy with guidance on steps to take to accelerate the acceptance of photovoltaics in the residential sector, providing, of course, that the innovation meets as well the tests applied from economic, marketing and technological perspectives.

REFERENCES

- Asbell, Bernard, (1978), THE SENATE NOBODY KNOWS, Garden City: Doubleday and Company.
- Bureau of National Affairs, (1978), HOUSING DEVELOPMENT REPORTER, Washington, DC.
- CODE OF FEDERAL REGULATIONS, (1977), 24 Housing and Urban Development, Office of Federal Register, National Archives and Records Service, General Services Administration, Washington, DC.
- Fisk, Margaret (ed), (1978), ENCYCLOPEDIA OF ASSOCIATIONS, Volume I, Detroit: Gale Research Co.
- Franklin, Herbert M., (1976), "Land Use Controls as a Barrier to Housing Assistance," in HOUSING IN THE SEVENTIES: WORKING PAPERS, National Housing Policy Review, U.S. Department of Housing and Urban Development, Washington, DC.
- Haskell, Elizabeth H., (1974), Land Use and the Environment: Public Policy Issues, ENVIRONMENT REPORTER - Monograph #20, Washington, DC: Bureau of National Affairs, Inc.
- Jones, Oliver H., (1973), The Mortgage Bankers Association of America, in THE FANNIE MAE GUIDE TO BUYING, FINANCING, AND SELLING YOUR HOME, Melvin Mencher, ed., New York: Doubleday and Company, Inc.
- Lilley III, William, (1973), The Homebuilders Lobby, in HOUSING URBAN AMERICA, Jon Pynos, Robert Schafer, and Chester W. Hartman, eds., Chicago: Aldine Publishing Co.
- Martin, George C., (1973), The National Association of Homebuilders, in THE FANNIE MAE GUIDE TO BUYING, FINANCING, AND SELLING YOUR HOME, Melvin Mencher, ed., New York: Doubleday and Company, Inc.
- Nutt-Powell, Thomas E. et al., (1978), TOWARD A THEORY OF INSTITUTIONAL ANALYSIS, Cambridge: MIT Energy Laboratory.
- President's Committee on Urban Housing, (1968), A DECENT HOME, Washington, DC
- Robinson, Shepard D., (1977), LAND USE GUIDE FOR BUILDERS, DEVELOPERS AND PLANNERS, Framington, Michigan: Structures Publishing Co.,

Solomon, Arthur P., (1977), "A Budgetary Framework for Federal Housing and Related Community Development", (unpublished draft for the Congressional Budget Office).

URBAN AFFAIRS REPORTER, (1978), Chicago: Commerce Clearing House.

U.S. Department of Housing and Urban Development (HUD), (1976), PROGRAMS OF HUD, Washington, DC.

US GOVERNMENTAL MANUAL, (1977), Office of Federal Register, National Archives and Records Service, General Services Administration, Washington, DC.

U.S. National Commission on Urban Problems, (1968), BUILDING THE AMERICAN CITY, Report to the Congress and to the President of the U.S., 91st Congress, 1st session, House Document #91-34, DC: US Government Printing Office.