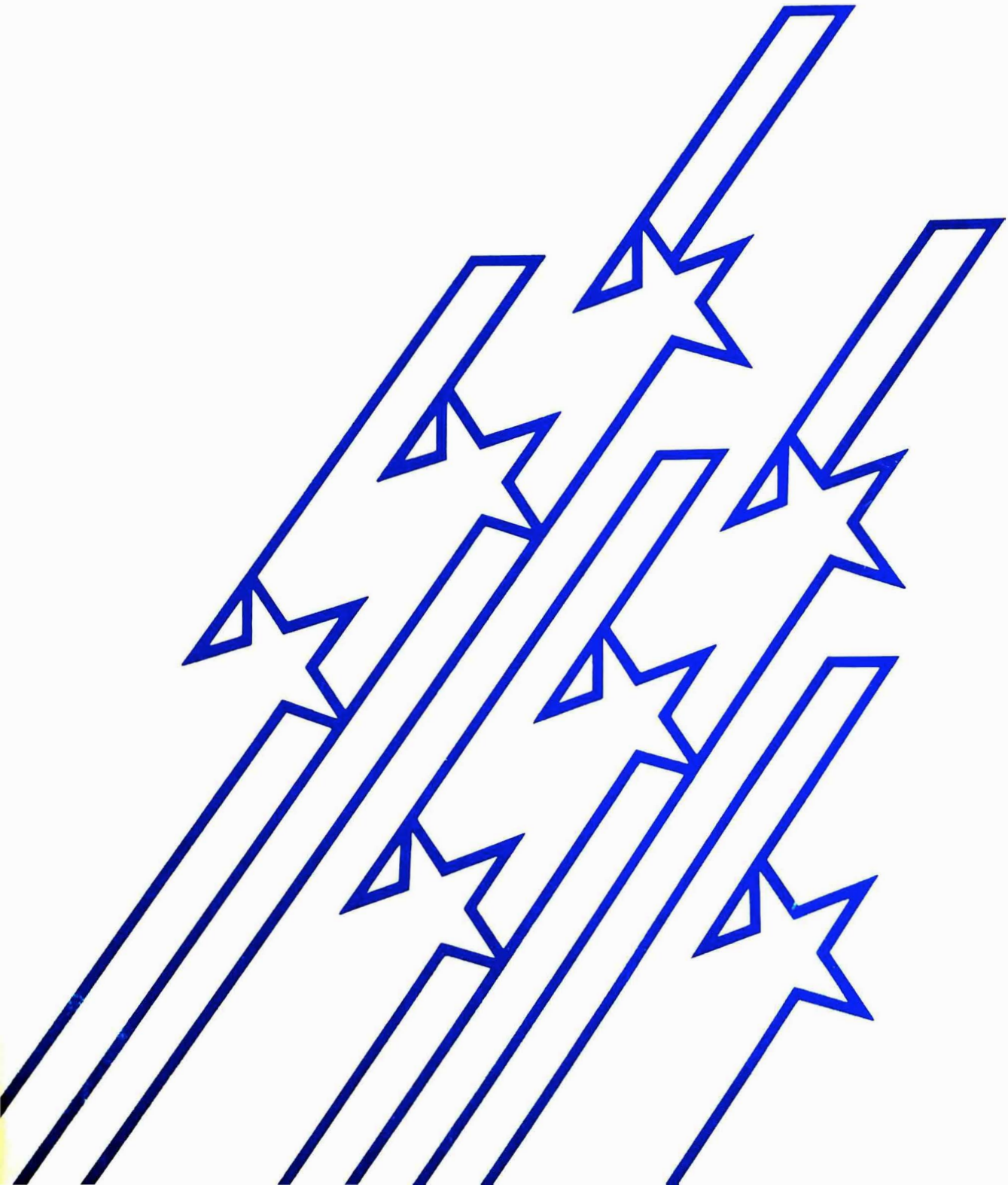
Growth and Development of Human Settlements: United States Perspectives

Assembled for Habitat

United Nations Conference on Human Settlements

Vancouver, B.C. Canada
June, 1976



AMERICAN REVOLUTION BICENTENNIAL
1776-1976

Carla A. Hills
Secretary
United States Department of Housing
and Urban Development

My Fellow Habitat Delegates

I am happy to present you these reports which form the United States' contribution to Habitat, the United Nations Conference on Human Settlements.

These reports set forth many of the challenges our human settlements face. The pages also trace many of the efforts of the American people to meet these challenges and improve the quality of community life. As we shape the space in which we live, we seek to plan for the use of land, to preserve and restore urban neighborhoods, and to provide a decent home and a suitable living environment for all our families.

We believe that our experiences, though unique in some ways, are similar to those of human settlements throughout the world. We look forward to the opportunity to share experiences, insights and ideas at Habitat.

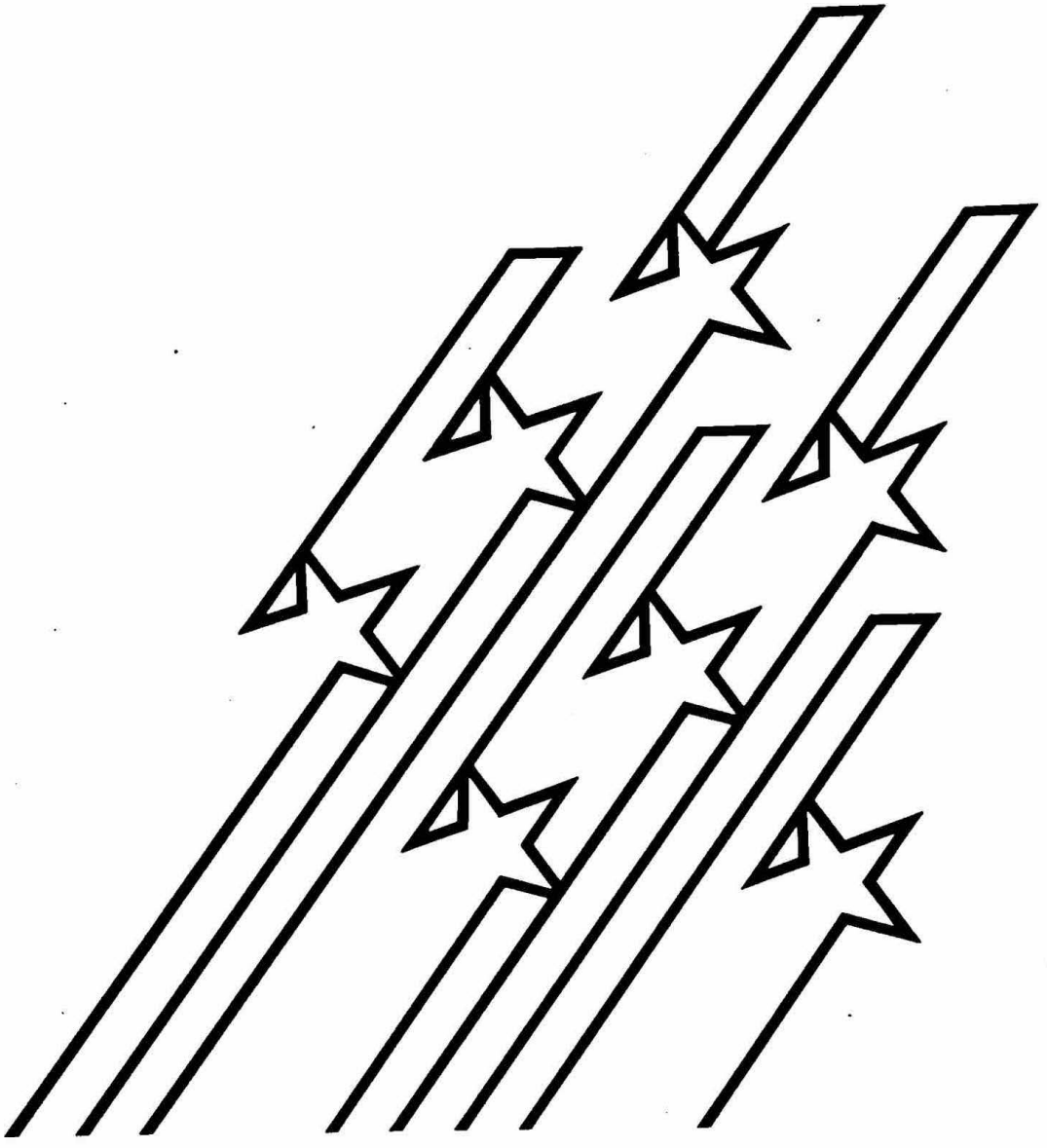
Sincerely,

Carla A. Hills
Chief of the United States
Delegation to Habitat

Executive Summary of the 1976 Report on National Growth and Development

The Changing Issues for National Growth

February 1976



This Executive Summary is a digest of the President's Biennial Report on National Growth and Development submitted to Congress in February 1976, pursuant to Section 703, Title VII of the Housing and Urban Development Act of 1970.

Introduction

National developments since 1974 have shaped the character and formed the themes of the Report which is summarized here. The recent economic recession, coupled with increased concerns about resource scarcity, has brought into question historic high levels of economic growth and expansive physical development as the bases for future policymaking. In all specific policy areas of national growth examined in this Report, there is a recognition of potential constraints on both fiscal and natural resources. It is probable that harder choices will face the private sector and government at all levels in guiding national growth. The Report is thus a broad assessment of trends, issues and policy options which promise to be on the national agenda in the final quarter of the century.

As have its two predecessors, the 1976 Report addresses not only urban growth, but national growth in the wider sense. It considers regional and local effects of economic and social change, and shifting patterns of physical development.

Formulating the Report

Many participants from both within and outside of the government helped to formulate the Report, and a wide range of views on many aspects of national development was sought.

To provide a base for discussion, a technical research program was initiated in the spring of 1975 by the Department of Housing and Urban Development on behalf of the Domestic Council. A 25 member Federal interagency task force was convened to help delineate growth trends, identify problems and present broad policy options.

In keeping with the Administration policy, public participation was emphasized in writing the Report. Five Seminars on Regional Growth and Development were sponsored in October and November 1975, in three locations: Washington, D.C., Kansas City, Missouri, and San Francisco, California. Sixty-five representatives of public interest groups, professional organizations and local governments submitted statements on various aspects of growth.

In December 1975, over 500 copies of the draft report were circulated for review and comment to 35 public interest groups, business and trade organizations, State and local government representatives, areawide organizations and the Congress.

The comments and public advice gained from these initiatives echoed many of the issues that some 6,000 citizens brought to the attention of the President and the Vice President in a parallel series of conferences and meetings during 1975. These included White House Domestic Affairs Conferences held in Atlanta, Georgia; Cincinnati, Ohio; Concord, New Hampshire; Hollywood, Florida; Knoxville, Tennessee; Milwaukee, Wisconsin; Peoria, Illinois; Omaha, Nebraska; Seattle, Washington; San Diego, California; and St. Louis, Missouri. Public Forums were sponsored by the Office of the Vice President in Austin, Texas; Denver, Colorado; Los Angeles, California; Philadelphia, Pennsylvania; and Tampa, Florida.

As required by Title VII, Section 703(a) of the Housing and Urban Development Act of 1970, the Report was transmitted by President Gerald R. Ford to the Congress on February 28, 1976.

Social and Economic Change

Several crosscurrents of social and economic change are shaping public policies at the local, State and Federal levels. These currents will dominate the Nation's growth over several years to come. Identifying patterns of population growth allows estimating future needs; accommodating the needs of an increasing population will impact available natural and institutional resources in a number of ways.

A. Population

The most important trends are those that stay the same. The United States remains a preponderantly urban Nation; large concentrations of the poor exist in the central cities and certain rural areas; the children of the postwar baby boom are now forming households, ensuring continued growth pressures.

- This Nation of 213,400,000 people in 1975 will have to shelter and feed an estimated additional 50 million by the year 2000.
- Despite a 1975 fertility rate of only 0.8 percent, well below the long term replacement level, population is predicted to increase by more than a million annually until at least the 1990s. The relatively young age structure of the population ensures that births will exceed deaths by such a margin that zero population growth is unlikely in this century.
- Legal immigration is expected to remain at 400,000 annually; illegal immigration is now estimated to range upwards from 800,000 annually. If this trend continues, illegal immigrants and their offspring in this country will add at least an additional 25 million to the population between 1975 and 2000.
- Factors contributing to the decline in the fertility rate include higher costs of child-raising. Married couples are having fewer children, fewer Americans are getting married, and more Americans are getting divorced—at a record rate of more than four per 1,000 persons a year.
- One consequence of marriage trends, and of the increased numbers of young and elderly people living alone, was that in 1974, for the first time, average household size fell below 3.0 persons. The number of households is increasing faster than the population, and this trend is expected to continue.
- The dependent elderly population will increase because of the low death rate. In 1975, the 22.4 million persons aged 65 and over constituted 10.5 percent of the population. By the year 2000, the projected 30.6 million aged 65 and over will comprise about 12 percent of the population.

B. Labor Force

- The labor force expanded to 93 million in 1975. Primarily because of earlier retirement, the participation rate for men in the labor force has been declining in recent years. The participation rate for women has increased, however, and is the most significant factor in recent labor force growth. Well over 1 million women joined the labor force in 1974, most of them in the 20-34 age group. In 1975, the participation rate for all adults reached an all-time high of 61.4 percent.
- If population trends continue, the total labor force will increase to about 100 million persons by 1980, even if the rise in female force participation gradually tapers off. Growth should then diminish in the 1980s, as the smaller numbers of children born in the 1960s enter the job market. Even under these conditions, however, the labor force should reach 112.6 million by 1990.
- Employment grew in the suburbs by 3.2 percent between 1973 and 1975, and declined in the central cities by 3.7 percent. Women in the labor force were a major factor in the suburban gain, with their employment in the suburbs up 9.3 percent. The central city decline, by contrast, was the result primarily of decreased employment of adult white males.
- Central city changes in the labor force were due to immigration, increased numbers of women and young workers, loss of skilled and professional workers to the suburbs, and the need for two wage earners per household in high cost of living areas. High unemployment rates among blacks, Mexican Americans, Puerto Ricans, and among youth, the elderly and women in central cities may persist if job competition intensifies as the result of immigration, including illegal aliens.
- Rural nonfarm workers have increased, as service or manufacturing activities locate in smaller

towns and cities. The majority of this rural increase, just more than half, is in counties adjacent to Standard Metropolitan Statistical Areas. Growing at a rate of 6.2 percent between 1970 and 1974, these counties are experiencing fringe development expanding beyond official metropolitan areas boundaries.

● Between 1973 and 1975, employment increased by only 0.2 percent in metropolitan areas, and increased by 1.2 percent in nonmetropolitan areas.

C. Location Shifts

● The migration of people within the Nation continues toward the Gulf, the Great Lakes and the Rockies. More than 80 percent of the Nation's population growth since 1970 has occurred in the South and West together. These trends are largely tied to changes in the distribution of employment and retirement preferences.

● Between 1970 and 1975, the Rocky Mountain Area had the highest average annual population increase—2.9 percent per year, more than triple the national figure. Seven of the 10 fastest growing States in the country are in the Mountain States: Arizona, Nevada, Idaho, Utah, Colorado, New Mexico and Wyoming. About two-thirds of this growth is due to net immigration and reflects growing economic diversification.

● National retirement, welfare, and health programs have been factors helping elderly and other population groups to move where they are more comfortable or can enjoy more amenities, stimulating service employment growth in those areas.

● The metropolitan population increased 3.4 percent between 1970 and 1974, compared with a 5.6 percent increase in nonmetropolitan areas. Recent Census reports reveal that since 1970 metropolitan areas have grown less rapidly than the country as a whole. If this trend were to prove durable, it would constitute an end to the massive migration from rural hinterland to major urban centers that has continued virtually unabated since the early 1800s.

● Five of the eight metropolitan areas with populations of over 3 million experienced a net outmigration between 1970 and 1973. These same eight areas registered one-third of the Nation's total growth over the course of the 1960s. Los Angeles lost 119,000 residents during the 3-year period, compared to its 1.2 million new arrivals over the previous decade. Only Washington, D.C. has grown by as much as 1 percent since 1970.

● Below the 3 million level, regional location rather than size appears to be the main reason for changing growth rates in cities. Just three areas, Miami-Fort Lauderdale, Tampa-St. Petersburg, and Phoenix, Arizona, account for much of the net migration into metropolitan areas of between 1 and 3 million.

● For the first time in this century, many rural areas have been gaining population, almost exclusively nonagricultural. In fact the farm population has dropped at an average annual rate of 1.8 percent since 1970, much lower than the 4.8 percent rate recorded in the 1960s. The farm population is about 8.9 million persons, somewhat less than one-eighth of the total nonmetropolitan population.

Population growth and distribution and social and economic changes pose a number of issues with respect to the future use of our natural resources and protection of the environment, subnational economic growth and development, the quality of urban areas, and the effectiveness of our three-tiered system of government.

Natural Resources

A. Energy

During the past decade, there has been increasing international competition for expensive and politically vulnerable energy resources. At the same time that growth increases national energy consumption, consensus arises on the need for energy conservation. The President has committed the Nation to develop domestic energy resources, and there is greater public concern for a balance between energy development and environmental conservation.

- The U.S., with 6 percent of the world population, consumed 34 percent of world energy population in 1975, with transportation accounting for 25 percent of domestic energy use.
- Significant shortages of natural gas have occurred domestically, and natural gas production has been declining for the last few years; 1975 shortfalls were estimated at up to 15 percent.
- Total proven domestic oil reserves have declined since 1971 and currently amount to only a 10 year supply at current levels of consumption.
- Nuclear power must still overcome major technical and political hurdles before full exploitation of its potential.
- Major economic, ecological and transport problems exist in converting the U.S. coal reserve into energy.
- New energy technologies are being developed, but are not predicted to eliminate dependence on foreign energy sources for at least a decade.
- Total U.S. energy consumption in 1974 and 1975 was less than in 1973.
- Emphasis is on rapid development of untapped energy resources in the outer continental shelf, the Northern Great Plains, and the Rocky Mountain States.
- The development of these untapped resources is being resisted on environmental grounds.

Summarizing these trends, it is apparent that development of domestic energy sources will involve hard choices on the timing, nature and magnitude of development. Additional growth concerns are the strains on social and physical infrastructure in areas of resource development, inflationary capital competition with other economic activities, and economic and social dislocations when resources are depleted.

There is a widespread acceptance of energy conservation measures as essential. These measures may have major effects on the shape of future urban development, on the transportation system, on building design, and on local and regional economies.

B. Environment

Concern for the environment arose primarily from the specter of exponential growth fueled by unlimited cheap energy. Limitations on energy have increased awareness of the limits of other resources, especially fresh air and clean water. Environmental values are becoming institutionalized as part of the developmental process, and acceptance of environmental values is altering methods of resource development and utilization.

- Environmental programs have created some delay and expense as economic activity has had to meet new pollution standards since 1969.
- Environmental programs were responsible for $15.7 billion expenditures on pollution control in 1975 alone.
- Total air pollutant emissions declined between 1970 and 1975.
- Eighty percent of the Nation's waste treatment facilities now provide some form of secondary or better treatment.
- Despite improvements in the last 5 years, air and water quality targets set by Congress are not being met.
- The environmental impact approach mandated by the National Environmental Policy Act of 1969 has led many States and localities to establish similar environmental impact assessment programs.
- Proposed urban transportation control strategies to reduce air pollution have met stiff public resistance.

The direct impacts of air and water quality programs will affect industrial growth and industrial dislocation, urban growth and urban sprawl, and even energy resource development. Since environmental concerns may impact on the intensity and the location of future development, these impacts raise the question of whether environmental regulation should be used to shape or to respond to growth demands.

C. Other Resources

Limitations on energy have created awareness of limitations on other resources, especially land.

- The overall distribution of land use—between urban, agricultural, and other types—has not changed; urbanized land still covers only about 8 percent of all the Nation's land, cropland 21 percent.
- Contradictory demands on public land call for utilization of resources such as timber and nonfuel minerals simultaneously with preservation of resources for recreation.
- Nearby natural resources are no longer critical in determining regional economic development or population migration.
- Awareness of competing demands for using private land has increased, and State Governments are playing an increasing role in land use planning and management.

Current questions in land use include citizen involvement, the ability of government to meet growing and often conflicting demands, and to absorb the impacts of other aspects of growth. There appears to be some consensus that the unrestrained private use of land is not consistent with the public good.

Urban Systems

A. The Cities Themselves

The older Eastern cities appear to be losing economic bases and population. Urban outmigration is balanced by a concern for preserving the capital investment in existing urban areas.

- Social and economic disparities between central city and suburb persist, with the central city taking in and retaining the poorer population, and the suburbs generally absorbing the more affluent population.

- The growth of the suburbs is a continuation of trends established in the 1950s and 1960s; there was a significant shift of manufacturing and office employment from central cities to suburbs. This movement included business enterprises exporting goods and services to the rest of the Nation and not simply those producing for local consumption. The pattern continued in most metropolitan areas from 1970 to 1975.

- Fifteen million new housing units were produced between 1969 and 1975. By fall of 1975, housing production of 1.38 million units was 50 percent less than that in 1973. (As of early 1976, single family housing starts, however, had recovered to 1.55 million units.)

- Housing construction between 1970 and 1973 was 44 percent located in metropolitan areas, 22 percent in central cities, and 34 percent in nonmetropolitan areas.

- Multifamily housing construction in 1975 represented a smaller share of overall construction, 45 percent, than in 1973, the peak period for such construction, despite a growing number of smaller households.

- As new housing production dropped, public awareness of housing and neighborhood deterioration and abandonment increased, and conservation of existing stock became a public and private priority.

- Urban homesteading and other Federal housing programs have begun to emphasize using and upgrading the existing housing stock.

- Some $2.5 billion in Federal aid was available to State and local governments for community development during fiscal 1975.

B. Transportation

- The transportation sector is now in a period of consolidation rather than expansion, as it has surplus capacity to handle the needs of the next two to three decades.

- More efficient use of all existing transportation systems is now a major priority, and most investments are directed toward maintenance and efficiency rather than capitalization for expansion.

- Mass transit, especially light rail systems, has gained increased support and investment, while expressway construction is lessening with the completion of the interstate highway system.

- Paratransit services such as dial-a-ride and carpooling have begun to appear, as alternatives to new capital development.

- Transportation fuel conservation has become a significant effort in both the industrial and the private sectors, and environmental impacts have begun to be measured into transportation development decisions.

C. Telecommunications

- The information transfer industry now includes over 2 million employees, or 2.5 percent of the total work force.

- Information transfer now generates over 5 percent of the GNP.

- Telecommunications methodology is being explored as a means of improving the efficiency and quality of existing services, such as health care and education.

Population shifts away from established urban centers raises issues of changing economies for local governments, as well as new demands for resource allocation, provision of services by local government, and especially coordination of intergovernmental areawide and regional planning.

Economic Systems

Higher interest rates and increased uncertainties about future capital costs and availability are shortening the planning horizon of both public and private sectors. This shortening has direct implications for the character and scale of development and redevelopment proposals likely to be undertaken soon.

- The uncertainty in private sector financial markets and long term capital supply has invalidated many historic operational procedures for financing new development.

- Future growth expectations are more moderate today than previously.

- The U.S. economy used $1.6 trillion in capital funds between 1965 and 1974; the 1975 dollar estimates of need range as high as $4.5 trillion over the next decade, assuming traditional rates of economic growth are pursued.

- The ratio of capital investment to GNP averaged 10.4 percent from 1965 to 1974.

- The ratio of investment to GNP may have to average 12 percent from 1975 to 1980, if projected capital requirements are to be met so that growth may recover its historic rate of 4 percent per year.

- Real GNP increased 11.9 percent in the third quarter of 1975.

- Economic indicators predict a moderate and sustainable forward progress.

It is perhaps a truism to say that competition for investment funds, as much as any overt decision, will influence any action taken to support or influence national growth trends. In the economic climate likely to prevail over the period ahead, mobilizing the sums required, and allocating them to those sectors and locations where most needed, will present a serious challenge to the efficiency of the Nation's capital markets. As much will depend on the durability of the present economic recovery, and the ability of an expanding economy to supply the savings required, as will depend on the national decisions made.

Government Systems

A. Government Economy

As a major participant in the national economic system, government itself is a source of change. National attention has shifted from expanding facilities and services to controlling the rising costs of government, to effectively relating resources to expenditure responsibilities, and to improving the efficiency and responsiveness of public sector activities.

- Public expenditures rose 373.6 percent between 1954 and 1974.
- The public share of the GNP rose from 27.2 percent in 1954 to 35.6 percent in 1974.
- Net Federal debt doubled between 1954 and 1975, to reach an estimated $484 billion.
- State and local debt doubled between 1964 and 1974, to reach an estimated $207 billion.
- Federal Government employment increased by 12 percent between 1965 and 1975.
- State and local government employment increased by 58 percent between 1965 and 1975.
- Federal assistance to State and local government grew from $7.2 billion in 1961 to a projected $59.8 billion in 1976.
- Federal assistance stabilized in 1975 at about 23 percent of all State and local government spending, and remains the largest revenue source for the States.
- During 1975, State and local governments planned to eliminate 140,000 jobs, raise taxes by $3.6 billion, and cut services.
- During 1975, revenue growth slowed and planned expenditures declined at all levels of government.
- During 1976, revenue growth and expenditure trends have begun to climb upward.
- Public expectations of and demands for services from all levels of government have risen without regard to government revenues.
- At all levels of government, social programs have grown most rapidly in scope and cost, with income security programs alone increasing from less than 25 percent of the Federal budget in 1950 to 34 percent in 1975.
- The division of responsibility for public services between all levels of government is not matched by corresponding revenue-raising capacities. The income tax—the primary source of Federal revenue—has the fastest growing tax base. Yields from income and property taxes—the major taxes of States and localities respectively—have grown, but at a much slower pace than expenditures.

B. Government Services

While social programs have been the fastest growing area of government activity, the total range of government involvement has broadened. These activities have significant consequences for the nature and pattern of national growth, as government has become involved in the developmental process itself.

- In the past few years the Federal Government has explored new means to help State and local governments provide services. While categorical grants still accounted for most of the Federal assistance to States and localities in fiscal 1975, preliminary analyses of general revenue sharing and block grant programs indicate that these are improved ways to strengthen the fiscal and management capacity of States and localities.
- The Public Works and Economic Development Amendments of 1974 encouraged economic development planning at the State and local level, created a highly flexible form of economic development district funding, and broadened the range of qualified redevelopment areas. The Regional Development Act of 1975 expanded the capabilities of the Title V Multistate Regional Commissions. The Rural Development Act of 1972 has expanded programs to spur the economic growth of rural areas.
- Federal housing assistance to low- and moderate-income families has been redirected in the past 3 years, and now includes a rent reduction program for new, existing and rehabilitated housing, and an interest subsidy homeownership program for moderate-income families. Experiments also continue in housing allowances.

- Conservation of the existing housing stock and neighborhoods has become a local and Federal priority, primarily through the Community Development Block Grant program.

- All levels of government have initiated or strengthened programs in: natural resource conservation, land use planning, housing assistance, public transportation, neighborhood revitalization, economic development, increasing and improving employment, and studying the effects of resource allocation decisions.

- Government decisionmaking powers are diffused among more than 75,000 general and special governmental units. Improvement of both areawide coordination and government modernization efforts, including greater productivity, could improve the performance of all these units.

The management of all government—as a resource itself—is a responsibility that rests ultimately on the people and their representatives. It is a responsibility as important as the management of all the rest of the Nation's resources—land, food, fiber, air, water, energy, housing, transportation, communities.

Recommendations

Looking beyond 1976, the fundamental policy question for the Nation appears to be whether growth will determine the deployment of natural and fiscal resources, or whether choices on deployment of resources will shape and direct growth.

The policy issues identified in this Report reflect some of the most important opportunities facing the Nation. The Administration's principal recommendations on these issues can be found in the Budget Message, the State of the Union Message and legislative proposals presented to the Congress.

The Report is a complementary means for exploring and analyzing what private citizens and public officials regard as the major community, regional and national growth issues of the day. To ensure that the 1978 Report may continue to serve this important function, several procedural recommendations are made.

- The Interagency Task Force which guided development of the 1976 Report should immediately begin planning the 1978 Report. The research involved in the next Report should be assigned according to agency responsibilities.

- Federal agencies, in cooperation with interested parties, including public interest groups, research organizations and universities, should finance and undertake specific studies according to an agenda developed cooperatively among the Federal agencies under the general supervision of the Domestic Council.

- A series of public seminars should be held in the coming months to help formulate the research program for the 1978 Report, to solicit views on national growth issues and policy alternatives, and to increase public awareness of policy choices and of the necessity to plan for the future. Encouragement should also be given to securing State and local government evaluations of growth alternatives and policies.

- At present, Federal assistance for State and local growth planning activities is fragmented and uncoordinated. Under the auspices of the Domestic Council, the Government should accomplish the rationalization of Federal planning assistance programs and requirements across department and agency lines.

- A clearer and more orderly process should replace the proliferation of public participation requirements in various programs. A Uniform Public Participation Act could modify and standardize many legislative requirements for citizen involvement—thereby simplifying the participation of an informed and concerned public, and helping to ensure open government.

In conclusion, the Report notes that increased public concern about the performance of government is, in itself, a factor to assess regarding the public sector ability to guide the Nation's growth and development. Future governmental responses to the changing social and economic trends of the 1970s must be grounded in realistic expectations, both as to fulfillment of goals and to commitment of resources.

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U.S. Department of Housing
and Urban Development

An Overview of the Contents

The United States of America submits these documents which constitute the national report to the Habitat Conference.

The 1976 Report on National Growth and Development reviews the recent trends and policy alternatives that affect the growth of human settlements in the United States. Two additional reports detail the efforts of our States and cities to manage and control growth. Another volume summarizes the broad public participation that helped prepare these reports. A pamphlet offers a compact historical perspective on the evolution of growth policies in the United States from 1776 to 1976. A final volume outlines the Nation's work with human settlements in an international setting.

Many citizens and government officials helped prepare these reports.

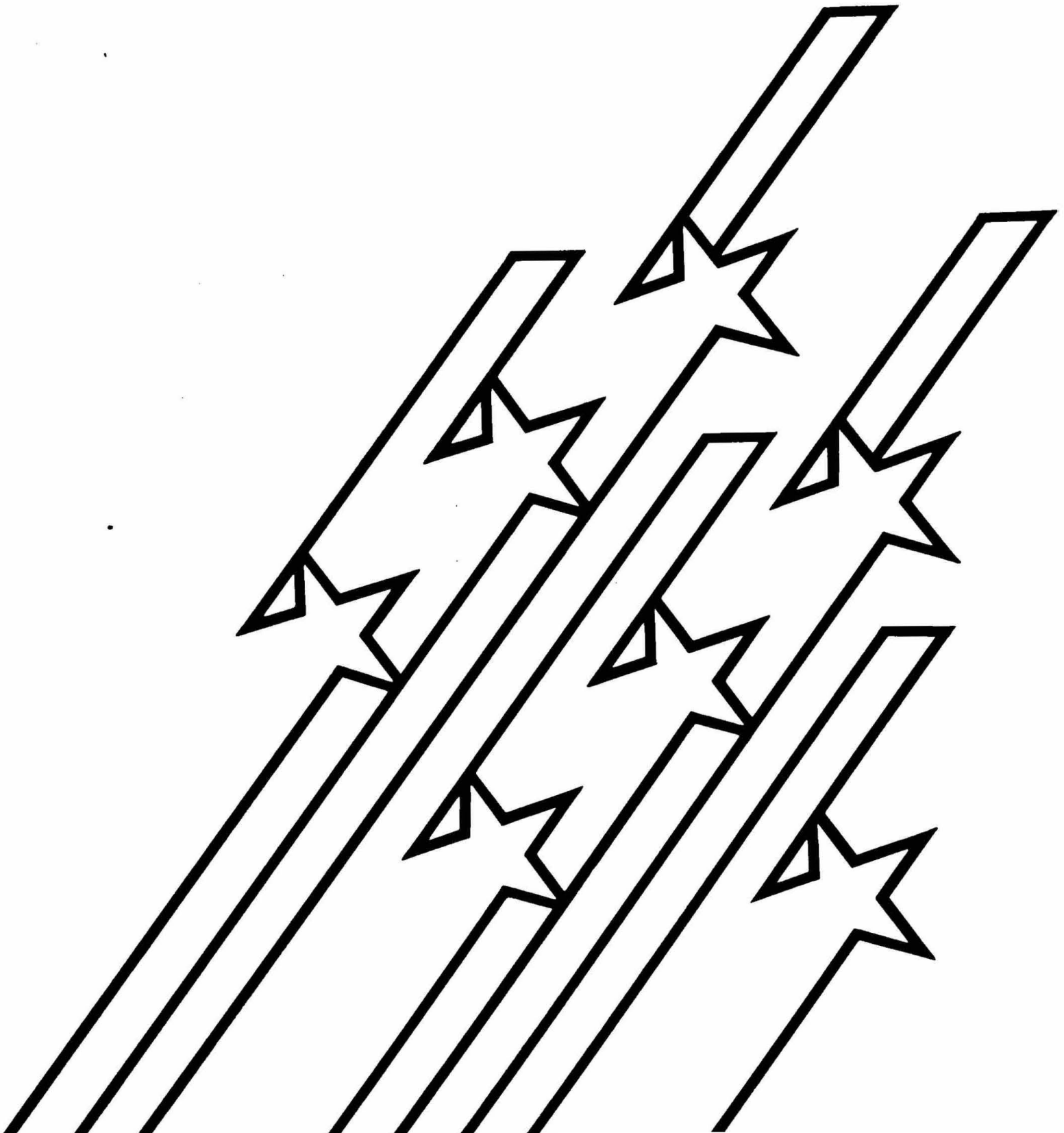
– Government officials and citizens reviewed and commented on draft copies of the reports.

– Public seminars in different regions of the country surveyed the attitudes and obtained the ideas of a broad range of citizens, business leaders, local officials and scholars.

1976 Report on National Growth and Development

The Changing Issues for National Growth

February 1976



1976 Report on National Growth and Development

The Changing Issues for National Growth

February 1976

Third Biennial Report
to the Congress
Submitted pursuant
to Section 703 (a)
of Title VII,
Housing and Urban
Development Act
of 1970

Prepared under Direction of

The Committee on
Community Development

The Domestic Couincil

Introduction and Recommendations

Background

In Title VII of the Housing and Urban Development Act of 1970, the Congress required preparation of biennial reports on national growth and development. Congress recognized the need to analyze the many aspects of the nation's growth in a systematic manner, to determine trends and to present alternatives that could help fashion government policies. The ultimate objective of the Congress was the formulation of a national urban growth policy.

Title VII reflected concerns about wasteful and irrational patterns of development, especially within the nation's metropolitan areas. The first report, transmitted to Congress in 1972, addressed the broader subject of national growth, rather than only urban growth, because rural development problems were both related to urban change and deserving in their own right of attention. The 1974 report retained this enlarged focus and emphasized the dominant role of the private sector in determining growth, the ways in which Federal, state, local and private actions were influencing development patterns, and methods to improve the quality of public decision-making.

Formulating the 1976 Report

The 1976 Report reflects many efforts to involve a broad spectrum of interested parties in national discussion of growth. Many participants from both within and outside of the Government helped to formulate the Report and a wide range of views on all aspects of national development were sought.

- A technical research and consultation program was initiated well in advance of report submission time. In the Spring of 1975, the Department of Housing and Urban Development let a number of contracts to prepare technical materials as the basis for broad public and interagency discussion and formulation of the report.
- A twenty-five member Federal interagency task force was convened to help prepare the report, delineate growth trends, identify problems and present broad policy options.
- In keeping with the Administration's policy, public participation was emphasized in writing the Report. In October and November 1975, five Seminars on Regional Growth and Development were sponsored in three locations: Washington, D.C., Kansas City, Missouri, and San Francisco, California. Sixty-five representatives of public interest groups, professional organizations and local governments submitted statements on various aspects of growth.
- The comments and public advice submitted as a result of these initiatives reinforced or echoed many of the issues that citizens brought to the attention of the President and the Vice President in a parallel series of conferences and meetings. These included White House Domestic Affairs Conferences held in Atlanta, Georgia; Cincinnati, Ohio; Concord, New Hampshire; Hollywood, Florida; Knoxville, Tennessee; Milwaukee, Wisconsin; Peoria, Illinois; Omaha, Nebraska; Seattle, Washington; San Diego, California; and St. Louis, Missouri. Public Forums were sponsored by the Office of the Vice President in Austin, Texas; Denver, Colorado; Los Angeles, California; Philadelphia, Pennsylvania; and Tampa, Florida.
- Over 500 copies of the draft report were circulated for review and comment to 35 public interest groups, trade groups, state and local government representatives, areawide organizations and the Congress.

Contents of the Report

Developments in the country since 1974 have shaped the character and formed the themes of this Report. Economic recession coupled with increased concerns about resource scarcity have brought into question sustained high levels of economic growth and expansive physical development as the bases for future planning. In all specific policy areas of national growth examined in this Report, there is a growing recognition of the limited nature of both fiscal and natural resources. Harder choices among alternatives will face citizens, the private sector and government at all levels in guiding national growth. The Report is a broad assessment of current realities, demographic, social and economic trends and the issues and policy options which will be on the national agenda in the final quarter of the century.

As have its two predecessors, this year's Report addresses not only urban growth, but national development in the wider sense. It considers regional and local effect of economic and social change, and patterns of physical development.

The Report draws from both government and private sources, printed materials and oral testimony. The Report does not advocate a single set of policies for the many issues in addresses. Rather it presents many different viewpoints on current trends and assessments of a range of policy options for future development.

Supplemental reports on the proceedings at the HUD-sponsored seminars as well as technical materials prepared for this effort will be issued from time to time by the Department of Housing and Urban Development.

The national growth of the United States is an integral part of the development of the world family of nations. This interdependent relationship will be highlighted by the United Nations Conference on Human Settlements, to be held in June 1976 in Vancouver, Canada. Each nation participating in the Conference will submit a major paper outlining its efforts to provide adequate shelter, transportation, health and social services for its citizens, to foster regional and national economic growth and to reduce poverty. The 1976 Report on National Growth and Development will be an important part of the nation's statement on human settlements.

Recommendations to Help the Nation's Planning for Growth

The policy issues identified in this Report are some of the most important problems and opportunities facing the Nation. The Administration's principal recommendations for addressing these issues can be found in the Budget Message, the State of the Union Message and legislative proposals now before the Congress. This Report is a complementary means for exploring and analyzing what private citizens and public officials regard as the major community, regional and national growth issues of the day. To ensure that the 1978 Report may continue to serve this important function, several procedural recommendations are presented.

I. Research and Exchange of Information.

A. Federal agency participation in preparation of the 1978 National Growth Report:

The Interagency Task Force which guided development of the 1976 Report should immediately begin planning the 1978 Report. The research involved in the next Report should be assigned according to agency responsibilities. This procedure would help ensure that the Report reflects from the outset a greater depth of analysis and a wider range of policy options.

B. Continuing research on national growth:

Under the general supervision of the Domestic Council, an organized Federal research program should assess the effects of Federal actions, existing and proposed, on states and communities. Federal agencies, in cooperation with interested parties, including public interest groups, research organizations and universities, would finance and undertake specific studies according to an agenda developed cooperatively among the Federal agencies to reflect research priorities.

II. Public Participation.

A. National Growth Reports:

A series of public seminars should be held in the coming months, with a view towards the formulation of the research program for the 1978 Report. Closer to the time of the next Report, a series of public seminars should be held to solicit views on national growth issues and policy alternatives. The

object of public participation is not only to provide for orderly and direct communication to the President and the Congress of a wide range of perceptions of national growth issues but also to increase public awareness of future implications of present policies and of the necessity to plan for the future.

Encouragement should be given to securing similar contributions from state and local government evaluations of growth alternatives and policies.

B. Government Programs:

A clearer and more orderly process should replace the proliferation of public participation requirements in various programs. A Uniform Public Participation Act could modify and standardize, as appropriate, all legislative requirements for citizen involvement—thereby simplifying participation of an informed and concerned public and helping to ensure open government.

III. Executive Branch Coordination of Federal Planning Programs and Requirements.

At present, Federal assistance for state and local growth planning efforts is fragmented and uncoordinated. A designated element of the Executive Branch under the auspices of the Domestic Council should accomplish the rationalization of Federal planning assistance programs and requirements across department and agency lines.

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Summary

Several cross-currents of social and economic change are shaping public policies at the local, State and Federal levels. These cross-currents will dominate the nation's growth over several years to come:

- **Population Growth**

  There are continuous changes in the country's growth, but perhaps more important are the trends that stay the same. The United States remains a preponderantly urban nation; disproportionate concentrations of the poor exist in the central cities and certain rural areas. Average household size has dropped to historic lows and the children of the postwar baby boom are now forming households, ensuring continued growth pressures despite the slackening in the birth rate.

  Even with the fertility rate remaining at the replacement level, the nation will have to shelter and feed an additional 50 million persons by the year 2000. This population increase—considered together with continued economic growth and trends in per capita energy use, automotive travel and other factors —will continue to place severe strains on the environment in many localities.

- **Urban-Rural Population Shifts**

  Census estimates indicate that non-metropolitan areas are growing more rapidly than metropolitan ones. A number of the largest metropolitan areas are experiencing net out-migration. However, more needs to be known about the durability of this trend, its precise dimensions, and its underlying causes before the implications for national growth and development can be fully drawn. The new reversal of rural to urban migration patterns may be explained in part by pollution, overcrowding, crime, tax increases, congestion. Furthermore, non-metropolitan areas have had proportionately more rapid employment growth than metropolitan areas since 1970 in all major industry groups. On the other hand, the reverse migration may well reflect a growing preference for a rural life style on the part of an increasing number of Americans. A number of relatively remote communities are experiencing a population influx for the first time in this century. New demands will be generated for improvements in governmental management and planning capabilities.

- **Regional Population Shifts**

  Changes in the geography of population and economic growth may have far-reaching implications for public policy, particularly subnational economic development policy. For example, in the southern states there is growing demand for public services from a fast growing population. Meanwhile, the earliest industrialized regions of the nation—the Mid-Atlantic, New England, and East North Central states—are growing only slowly. The end of nearly three and a half decades of heavy military involvement in the Pacific may have profound implications for the economic fortunes of the Pacific Coast. Today the most densely populated regions are the ones that present the more difficult economic problems. The long-term trend of diminishing differences in regional income levels may also have implications for regional economic development strategies, diminishing the signficance of differential labor costs as a factor in industrial location and regional competition.

- **Natural Resources**

  The events of the past several years have drastically revised common per-

ceptions of the cost and availability of resources. The unprecedented combination of high unemployment and inflation has raised questions concerning the rate at which our living standards will continue to rise. Even if aggregate supplies of resources prove adequate, important questions of regional and local allocations have to be considered in the growth policy debate.

- **Energy and Environmental Concerns**

Development of domestic energy resources will be one of the most important single factors in shaping the pattern of growth over the next decade. The decisions that will be made about energy will need to be coordinated closely with environmental concerns. Substantial progress has already been made in abating many sources of water and air pollution; public agencies now routinely take environmental impacts into consideration in making their investment decisions. Expansion of agricultural production will intensify environmental problems of land reclamation, chemical runoff and disposal of animal wastes.

- **Shortened Planning Horizon**

Higher interest rates and increased uncertainties about future capital costs and availability are shortening the planning horizon of both public and private sectors. This shortening has direct implications for the character and scale of development and redevelopment proposals likely to be undertaken soon. Trends will be in the direction of greater conservation and rehabilitation policies.

- **Public Lands**

Renewed interest in more intensive use of public lands for energy development, timber, recreation and, to a lesser extent, non-fuel minerals has raised many management issues. These issues include the proper balance among competing uses, the efficiency of public control over private concessions, and the manner in which the public sector shares in the revenues and costs of these activities. At the same time, pressures continue to preserve the value of these lands for the future, even while they are used to meet present needs.

- **Reducing Poverty**

The economic conditions of the mid-1970's, combining inflation and recession, retarded the nation's progress in reducing poverty. Poverty has become increasingly urbanized and concentrated in central cities, although a high percentage of the poor population continues to be located in non-metropolitan areas. Special pressures will be placed on central cities and non-metropolitan areas where poverty and unemployment are concentrated. Continuation of economic recovery should help combat poverty, lowering unemployment and reducing the problems of minorities and disadvantaged groups.

- **Preserving Existing Cities**

The appearance of resource shortages and cost increases argues for more intensive use of the tremendous fixed capital investment represented by our existing cities and towns. The fiscal pressures on local governments reinforce environmental interests in promoting more efficient patterns of growth. These new pressures have implications for overall land use planning and regulatory policies as well as for investment policies in specific functional areas such as transportation and housing. Increased living costs may also serve to reinforce concerns about conservation and to heighten consumer consciousness. These new attitudes, along with higher construction costs, concern about capital availability and energy factors may increase interest in improving older neighborhoods.

This Report is divided into two groups of chapters. The first four chapters discuss the changes that are appearing in the national economy and society.

Chapters five through thirteen describe present trends and many of the choices that the country can make in specific areas of national growth.

NEW CONDITIONS FOR NATIONAL GROWTH

Chapter I discusses the changing context of resource use in light of events over the past several years. Recent changes in the economics of growth have included intensified competition for limited resources and the emergence of the oil exporting countries as a negotiating group. The cost and availability of energy strongly affect economic growth. Energy will be an expensive commodity and harder to come by in the near future. The Federal Energy Administration and an Energy Resources Council have been established to consolidate Federal responsibilities; this effort is being matched by diverse state concerns and initiatives.

Widespread acceptance of environmental conservation values is altering the methods of resource utilization and new development. Implementation of Federal antipollution measures has progressed, but unanticipated difficulties, such as technological problems, costs of control equipment, inflation and fuel shortages, have hampered pollution abatement. Consequently, air and water quality targets and milestones set by Congress are not being met.

World food shortages and potential shortages in foreign sources of industrial raw materials are placing new demands on domestic resources at the same time that costs are rising and awareness is growing of environmental costs of development.

Chapter II reports on the shifting patterns of growth in various regions of the country, in metropolitan areas and in rural areas. Despite a current fertility rate of only 0.8 percent, below the long term replacement level, the nation's population is predicted to increase by more than a million people annually until the 1990's. A small part of this increase is due to both legal and illegal immigration. The decline in the birth rate means that the nation's proportion of elderly Is rising from 10 percent at present to an anticipated 12 percent in the year 2000. The number of households is increasing at a faster rate than the population. The labor force has continued to expand due to the maturation to young adulthood of the so-called "baby boom" following World War II and the increasing employment of women, almost half of whom are now in the labor force.

Geographically, the West and South continue to grow at faster rates than the Northeast and North Central regions. This is especially true of the Rocky Mountain states and, in the South, of Florida, Texas, the Ozark-Ouichita areas and the Southern Appalachian coal fields. Since 1929, the income gap between the rich and the poor states has narrowed considerably. Projections to 1990 indicate a continuation of the pronounced shift of income away from the Northeast and the North Central regions to the South and West.

Metropolitan growth has tapered off, particularly in the largest metropolitan areas. A recent reversal in emigration in 800 rural counties, most adjacent to metropolitan areas and almost all non-agricultural in employment, suggests a shift of manufacturing and service employment to areas of low density. Opinion is divided among experts on the permanence of this non-metropolitan growth. Social and economic disparities between central cities and suburbs are expected to continue with the central city taking in and retaining poor population and the suburbs generally absorbing more affluent population. Not all central cities are in decline, however. Some in the South and West are in better condition than their suburbs, depending on the age of the city and the size of the metropolitan area in which it is contained.

Chapter III turns to family needs and resources, explaining how average incomes and living standards have been changing. For most of the past decade, increases in income more than kept pace with rises in prices. However, in 1974 and 1975 real per capita disposable income was below the 1973 level. In 1973 and 1974 the recession also increased the number of poor, after years of declining numbers. Poverty in recent years has become increasingly urbanized and concentrated in central cities. It has been the poverty areas which have been hardest hit by unemployment trends.

Trends in the nation's housing stock have been towards more homes in suburban areas, improvements in plumbing, decreases in overcrowding of houses, and towards escalating costs of home ownership and rentals.

Chapter IV of the report analyzes financial problems which have been creating new pressures on government. The substantial

growth In governmental activity In recent years has led to fiscal problems, particularly for state and local governments. Revenue growth slowed while expenditures continued their rapid rise. A number of factors have contributed to this increase in expenditures —inflation, unemployment, population increase and movement, expansion of government functions, and rising demand for benefits from government programs. State and local governments have been strongly affected by the large increases in the costs of fuel, debt service and personnel. The amortization and interest costs for local debt have more than doubled in the last decade, though they have decreased as a percentage of total expenditures. Many of the newer programs that involved state and local participation were initiated and at least partially financed by the Federal government. Paradoxically, while government activities have expanded, public confidence in government and approval of its performance have declined.

The present division of responsibility for public services among different levels of government is not matched by traditional revenue-raising capacities. The income tax —the primary source of Federal revenue— has had the fastest growing tax base. Intergovernmental transfers remain the largest revenue source for states. Yields from income and property taxes—the major taxes of states and localities respectively—have grown, but at a much slower pace than expenditures. Federal assistance to states and localities has increased, although the level proposed for 1977 represents a declining proportion of state and local spending.

In response to fiscal pressures, state and local governments have attempted to hold down the growth in their indebtedness and to adjust their operating expenditures to fit their revenues. An improving national economy and fiscal restraint should work to stave off a widespread replication of the New York experience.

MANAGING NATIONAL RESOURCES FOR GROWTH

Chapters five through thirteen turn from the description of present national trends to examine broad policy alternatives in several areas of growth.

Chapter V discusses the steps being taken in accommodating energy imperatives. The national commitment to using domestic energy sources will have impacts on the nature and location of national growth. Federal government control of land and water in which domestic energy reserves are located and its research and development finance capability involve it heavily in energy policy decisions.

Development of domestic energy sources will involve hard choices on the timing, nature and magnitude of development and will involve high costs and the risk of grave consequences for wrong decisions. There are serious environmental concerns involved in the rapid development of coal and offshore oil and gas deposits. Additional growth concerns are the strains on social and physical infrastructure in areas of resource development, inflationary competition with other economic activities and economic and social dislocations when resources are depleted. Policy makers will have to evaluate alternative means for dealing with the impact of future energy development.

There is a consensus that energy conservation measures are essential. These measures may have major effects on the shape of future urban development, on the transportation system, on building design, and on local and regional economies.

The dominant Federal role in the sphere of energy policy is being modified by increasing state initiatives in planning for energy development. A new balance will be struck in the future among the respective roles and responsibilities of the various levels of government and the private sector.

In Chapter VI, the growth consequences of environmental regulations are analyzed. Efforts to identify and respond to the environmental impacts of growth and development, particularly the impact on air and water quality, remain in the public eye in the mid 1970's.

The environmental impact approach mandated by the National Environmental Policy Act of 1969 has led to early involvement of many Federal agencies in considering the growth consequences of their actions. Many states and localities have also established procedures for similar environmental impact assessments. An evaluation of the NEPA process indicates that the impact statement process has been and can be further im-

proved to minimize delay, expense and uncertainty, while contributing to improved management of growth.

The direct and visible impacts of Federal activities, such as environmental protection programs in the areas of air and water quality, raise important issues of industrial dislocation and growth, as noted by the draft report of the National Commission on Water Quality. Similar issues have been posed by the Clean Air Act, especially relating to central cities, in the context of the debate over the meaning and application of concepts such as "significant deterioration" of air quality and control of "indirect sources of pollution". Sewage treatment planning assistance is another recent case where environmental regulation may affect urban sprawl and shape or respond to growth.

Chapter VII presents a discussion of hard choices in natural resources. There are hard choices to be made among competing demands on natural resources for minerals, timber, water, and land for recreational, agricultural and urban uses. The emerging public resources management capability will evolve through a series of new challenges.

Major policy options are involved in responding to possible shortages and high prices of non-fuel minerals. While no immediate shortages or international producer associations like groupings of oil exporting countries are immediately apparent, both government and the private sector will have to be prepared for international changes. The increasing demand for timber can be met by more skillful use of public and private lands. The nation's heritage of parks and recreational lands is the responsibility of government at all levels, from local to Federal. Skillful planning and initiatives will be required to provide outdoor recreation opportunities equitably to the citizens of the country. Water resource development has been heavily subsidized by the Federal government in the past. Considerable analysis and controversy will be involved in determining the appropriate balance between government financing of further development and payment by those who use water.

State governments are playing an increasing role in land use planning and management. Early programs such as the Coastal Zone Management Act and the National Flood Insurance Act involved Federal and state and local officials in joint planning. States through their zoning and taxing powers are dealing with the problems of preserving prime lands and of dealing with private development of rural areas. While there is considerable concern over the increasingly pervasive role of government in narrowing individual choice, there appears to be rejection of the assumption that unrestrained private use of land is identical with the public good.

In Chapter VIII the present period of adjustment in transportation policy is discussed. The transportation system has entered a period of consolidation after the dramatic growth of the post-World War II era. Growth impacts of transportation policy in the near future will stem from the contraction rather than expansion of basic services. Future development decisions will balance benefits to transportation users against social costs such as air and noise pollution, disruption of neighborhoods and damage to natural habitats. Pressures to reduce energy consumption per unit of transportation activity will also be more strongly felt.

An inventory of the present transportation system indicates that it has sufficient, and in some sectors, surplus capacity to handle the needs of the next two to three decades without major system investments. New investment will be directed towards maintenance and more efficient use of existing transportation infrastructure. Despite this, a moderate increase in the level of transportation investment is projected over the next few years.

Problems of transportation planning today include management and maintenance of existing capacity, particularly elements in financial difficulty, resolution of inequities among specific transport modes and solution of institutional problems hampering efficient operations. The government role with regard to the problem-ridden railroad system is the subject of recent legislation and will receive future attention. Public investments in one transportation mode at the expense of others will be a subject of increasing concern. There is a consensus that increased emphasis on urban transportation planning is essential but there are questions of degree and of the relative merits and liabilities of different implementation techniques such as traffic management, bus facilities and light rail construction. The cost/revenue gap for pub-

lic transportation services will continue to be a problem for governments. There are important decisions to be made in coordinating transportation and land use planning at the local and particularly the state and regional levels.

Chapter IX analyzes how the expansion of telecommunications capabilities has affected growth. Telecommunications has both stimulated and responded to the social, political cultural and economic development of the nation. Further growth of telecommunications will parallel the increasing requirements of user industries, will improve the efficiency and quality of existing services, and will contribute to the solutions of complex social problems from energy to transportation to land use. Government interaction with telecommunications will be in the areas of regulatory reform and financial support for certain research and operational systems.

Chapter X describes the changes that are now taking place toward improving America's housing and neighborhoods. Housing production is rising after a period of significantly reduced levels of construction. To stimulate single and multifamily construction and stabilize the housing industry, the Secretary of Housing and Urban Development was authorized to make commitments to purchase over $20 billion of mortgages carrying interest rates below prevailing market rates.

Federal housing assistance to low and moderate income families has been redirected in the past three years. A series of studies found that previous programs had not been meeting their objectives and Federal efforts to assist lower income families are now concentrated on a rent reduction program for new, existing and rehabilitated housing. A homeownership program for moderate income families is also supported while experiments continue on housing allowances.

Conservation of the existing housing stock and neighborhoods has increasingly become a local and Federal priority. Localities are devoting increasing proportions of their resources to housing rehabilitation and neighborhood preservation efforts. Federal assistance to localities in these efforts is primarily through the $3.2 billion Community Development Block Grant Program. Through this support localities have discretion for determining local priorities and addressing community needs.

Chapter XI analyzes regional development and the steps that are being taken toward balanced economic growth. Recent economic growth patterns show a closing of the income gap among the various regions of the United States; much of this due to a high rate of growth in the South. One result of this trend is decreased migration from the South to the North. While treatment of specific disadvantaged regions remains an important national goal, this has been overshadowed recently by the need for economic recovery of the nation as a whole.

Federal economic development assistance has recently undergone several important changes. The Public Works and Economic Development Amendments of 1974 gave the Economic Development Administration the ability to encourage economic development planning at the state and major urban government level, created a highly flexible form of economic development district funding and broadened the range of qualified redevelopment areas. The Regional Development Act of 1975 broadened the capabilities of the Title V Multi-state Regional Commissions and strengthened the role of local development districts in the preparation of state development plans. The Housing and Community Development Act of 1974 has provided more flexible assistance through its block grants program and the effect of the Rural Development Act of 1972 has been to expand significantly programs explicitly addressed to the economic concerns of rural areas.

Federal recognition of the need to increase the utilization of our human resources is evidenced by the diverse array of programs which have been initiated to meet those needs. Economic development and job programs underway today reflect three general types of labor market policies: those that create opportunities for individuals excluded from the labor market; those that enhance the training and education of disadvantaged groups; and those that improve the functioning of the labor market.

In Chapter XII issues are presented on new directions that are being taken in guiding and controlling land development. In recent years, as land for urban development has become a more scarce resource, communities have become more concerned about the use of land and the management of growth. This concern has caused a more acute sensitivity to the effects of develop-

ment patterns on energy use and the provision of basic municipal services.

The states and localities have taken and should continue to take the lead in government responses to these concerns. Local government have fashioned innovative growth management techniques to plan for the rate and quality of development. State governments have implemented new programs in land use planning, coastal zone management, wetlands management, power plant siting, surface mining, critical area designation, tax incentives to preserve open space, and flood plain management.

At the same time, communities are working to reconcile a number of other important and sometimes conflicting concerns: the need to maintain employment and tax bases; pressures to make homes available to low and moderate income families; the need to reduce the residential isolation of minority groups.

While states and local governments have taken the lead in government planning for growth, the Federal government has a limited but significant role. It has supplied financial support for planning and other development activities. Since studies have indicated problems of equity and efficiency in this support, the Federal government has taken steps to coordinate its own activities with those of local governments better. Refinement of these techniques is an important task for the future.

Chapter XIII discusses ways of strengthening the fiscal and management capacity of local government. Changing economic conditions, population pressures and intensified concerns about energy and the environment in the mid-1970s have brought into sharp focus critical questions about the fiscal and management capacity of state and local governments.

National attention has shifted from expanding facilities and services to controlling the rising costs of government, effectively relating resources to expenditure responsibilities and improving the efficiency and responsiveness of public sector activities.

In the past few years the Federal government has explored new ways to help state and local governments provide services to their residents. While categorical grants still accounted for most of the Federal assistance to states and localities in fiscal 1975, preliminary analyses of recently enacted general revenue sharing and block grant programs indicate that such approaches are improved ways to strengthen the fiscal and management capacity of states and localities.

The decision-making powers concerning government finance, organization and activities are diffused among the more than 75,000 general governmental units and special districts. Improvement of both areawide coordination and government modernization efforts, including greater productivity of the public sector, could strengthen the efforts of all of these units.

The conclusion to this Report, Chapter XIV, notes that increased public concern about the performance of government is, in itself, a factor to assess regarding the public sector's ability to guide the nation's growth and development. Government responses to changing social and economic trends must be grounded in realistic expectations, both as to fulfillment of goals and the commitments of resources.

In growth management, the Federal role has largely been to support state and local governments. They have the necessary police and taxing powers to implement growth policies addressing the many issues described in this Report. Multi-state regional organizations offer opportunities for the states to cooperate with the implementation of regional programs for development, in accordance with local objectives.

I. The Changing Context of Resource Use

Recent events have altered the context of resource use in America, especially the manner in which capital, land, and raw materials are transformed into the human settlements and land uses that constitute growth in its physical sense. Inflation, strains on capital availability, and higher interest rates have changed the economics of development itself, prompting reassessment of the rules by which both the public and private sector have traditionally planned their capital programs. Fossil fuel and other natural resources, long taken for granted, are now perceived as scarce goods that must be husbanded with care.

At the same time, widespread acceptance of environmental values has altered the tactics and tenor of public debate over proposals for resource exploitation and new development. The recession brought with it a more acute sense of the need to fashion policies which allow pursuit of both economic growth and environmental objectives.

NEW RULES AND MORE MODEST EXPECTATIONS

Unforeseen Changes in the Economics of Growth

The past several years have introduced a succession of new and disturbing problems to the American scene: shortages of fuel and other critical resources, rapid and unpredictable rates of inflation, doubts concerning the ability of the capital market to meet the investment requirements of a fully employed economy. These problems were ushered in by events that not even the more prescient of observers could have been expected to foresee six years ago as the decade began.

- *Intensified International Competition for Limited Resources.* Although predictions were commonly made that future demand for raw materials would someday strain supplies, few saw the speed with which a highly competitive world market for strategic resources would precipitate relative shortages in timber, metals, food, fuel and other basic commodities. The increased interdependence of national economies results in large part from United States advocacy over the years of freer trade rules, convertible currencies, and the unimpeded flow of capital among nations. While these policies helped to increase the total volume of world trade and development, the new affluence of a number of nations has intensified competition for the earth's limited resources.
- *The New Geopolitics of Resource Production.* Few understood in advance the full implications of the political changes that have worked such profound change in the control of strategic resources such as bauxite, copper, and oil. The emergence of the OPEC cartel, and the Arab oil boycott of 1973 and 1974, gave notice to the consumer nations that fuel supplies could be subject to unpredictable interruption in the future. Uncertainty remains concerning whether these political tactics can and will be applied to exact price increases in other critical materials and agricultural goods.
- *The Inflationary Bias in the World Economy.* Largely unforeseen was the extent to which economic and political events would build inflationary bias into the world economy. Governments around the world have chosen almost without exception to risk inflation in the pursuit of full employment and increased production.
- *The Uncertainty In Financial Markets and Long Term Capital Supply.* The need to reorganize financial markets to supply ever increasing investment demands is recognized. But few predicted the demand for new capital generated

by the need for business modernization and compliance with government regulations. Nor did they foresee the unprecedented jump in interest rates that has invalidated many of the old rules of thumb for financing new growth and development.

These new realities have tempered long held assumptions concerning the inevitability of growth and the rate at which living standards will rise from generation to generation over the years ahead. There are grounds for optimism concerning the prospects for continued upward movement in GNP, per capita consumption, and the overall quality of life for most Americans.

However, future expectations are far more moderate today than they were a few short years ago, and tempered by a new respect for the uncertainties inherent in the life of any nation. There is a more informed understanding of the possible limits to the demands that may be placed on many of the world's resources and recognition that growth brings with it problems as well as benefits.

This new outlook is not transitory but reflects deep-rooted changes in perceptions concerning the place of the United States within the world community and the finiteness of the planet's wealth of land, water, and mineral resources. As the nation moves towards full economic recovery, these new attitudes should continue to influence the public and private decisions that shape the pattern of national growth and development.

Economic Recovery

The nation's economy has recently experienced one of the most disturbing recessions in recent memory. Unsettling to many economists was not just the severity of the recession itself but the persistence of sharp inflation in the face of the highest unemployment rate since the forties, and the steepest decline in personal income and consumer purchasing power of the post-war era.

But since April 1975, signs of economic recovery have become evident. After the rapid acceleration in production activity that heralded the upswing (with real GNP increasing at an 11.9 percent rate in the third quarter of 1975), the economy's forward progress appears to have settled to a moderate, sustainable pace.

- Industrial production rose for six consecutive months, beginning in May 1975, following a period of much decline. The turnaround in inventories—another key indicator of economic recovery—also leveled off from $27.5 billion in the third quarter to $19.0 billion in the last quarter of 1975.
- The unemployment rate peaked at 8.9 percent in May 1975 then settled back to 7.8 percent in January 1976. On the other hand, the number of employees on non-farm payrolls rose at a brisk monthly average of 242,500 from June to December.
- Wholesale prices have behaved in a somewhat volatile fashion, with industrial commodities pushing upward at an 11.5 percent rate, and the prices of consumer finished goods rising at 9.6 percent from 1974 to 1975. However, an encouraging sign is that prices of non-farm crude materials—a bellwether of industrial prices—were lower in December 1975 than they were a year ago as measured by the Bureau of Labor Statistic's index of 22 basic commodities. Overall, the wholesale price index rose by 9.2 percent in 1975, compared with 18.9 percent in 1974; the consumer price index increased by 9.1 percent in 1975 compared with 11.0 percent in 1974.
- Retail sales were sluggish throughout the fall of 1975, leading some to fear an inadequate recovery. A sharp increase in December and continuing into 1976 has reduced the likelihood of an abortive recovery.

On balance, many economists feel that the recovery has sufficient momentum to sustain a steady rise in incomes, employment, factory output, sales, and earnings into 1976 and beyond. *The Economic Report of the President,* transmitted to Congress in January 1976, estimates that real gross national product (GNP) will be about 6 percent higher in 1976 than in 1975. It notes however, that because "we began the present recovery with more slack than in any of the previous postwar cycles, a much longer period of above average growth will be required for a return to full resource utilization." Unemployment and inflation will continue to be cause for serious concern (Table I–1).

Understandably, a strong residue of caution remains evident in the behavior of busi-

Table I–1
SELECTED ECONOMIC INDICATORS:
1970–1975

Year	GNP in current billions of dollars	Employment thousand/ persons 16 yrs. & over	Unemployment thousand/ persons 16 yrs. & over	Unemployment Percentage Rate	Consumer Price Index % Change yr. to yr.	Wholesale Price Index % Change yr. to yr.
1970	982.4	78,627	4,088	4.9	5.9	3.7
1971	1,063.4	79,120	4,993	5.9	3.3	3.2
1972	1,171.1	81,702	4,840	5.6	3.3	4.6
1973	1,306.3	84,409	4,304	4.9	6.2	13.1
1974	1,406.9	85,936	5,076	5.6	11.0	18.9
1975*	1,499.0	84,783	7,830	8.5	9.1	9.2

* Preliminary figures.
Source: Compiled from Tables: B–1, B–23, B–24, B–46, B–50 of the Economic Report of the President, 1976.

nessmen and consumers alike, in the aftermath of the 1973 to 1975 slump. Nowhere are these attitudes and uncertainties more apparent than in the markets for residential, commercial, and industrial space.

THE OUTLOOK FOR PHYSICAL DEVELOPMENT

New Uncertainties Affect Prospects of Housing Recovery

The nation's economic dilemma over the past 15 months was graphically illustrated by the housing industry which responded to changes in the availability of credit and lessened consumer confidence. Following record levels of housing production in 1971, 1972, and 1973, the industry experienced its worst slump of the post-war era. Recovery of the housing industry lagged behind that of the general economy. The single family housing market has since recovered, while the outlook for multi-family activities remains unclear. This pattern contrasted with the patterns of many previous recessions during which housing has tended to be a leader in the recovery process.

Perhaps the major factors affecting the outlook for housing development are changes that have occurred in the cost structure of the development industry.

Construction Materials and Labor Costs

Until the mid-1970's, construction materials and labor costs did not cause disproportionate increases in housing costs in comparison to other consumer goods. The Department of Housing and Urban Development estimated that between 1963 and 1972 these costs rose only 15 percent more than the overall consumer price index, or less than three percent more per year. Between 1970 and 1975, however, construction, labor, and material costs have increased more than 50 percent according to several estimates. The consumer price index increased by 37 percent during this period, so that construction, materials, and labor costs increased by about three percent more than overall consumer prices and at about the same rate as wholesale prices.

Production costs vary among different regions of the country, and within them from one locality to another, reflecting local climate, labor practices, and codes. But the outlook in nearly every area for the next several years is for continuing annual increases in labor and material costs by perhaps three percent more than overall consumer prices.

Land Costs

Although data are limited, available information suggests that over the last decade one of the most persistent and most dramatic cost inflation factors in the housing industry has been the steady increase in the cost of land. Between 1950 and 1969, according to a National Association of Home Builders study, the average cost of a finished building lot rose from $1,485 to $6,183, with land increasing from 11 percent of total housing costs in 1949 to 24 percent in 1969.

In an absolute sense, there is no shortage

of land within the immediate vicinity of major urban centers. More then 500,000 square miles are contained within present Standard Metropolitan Statistical Area (SMSA) boundaries, only about ten percent is in active urban use. Even allowing for the percentage of this acreage that may be unbuildable due to frequent flooding, steep slopes, and other natural features (in an extreme case totalling 60 percent according to a special study conducted in the San Diego area), there would seem to be a surplus of vacant land to accommodate development needs well into the future.

Nevertheless, urban land prices appear to be rising at high rates in many areas around the country. Although hard, comprehensive data are unavailable, an Urban Land Institute survey of developer experience in a number of major SMSA's indicates that between 1970 and 1974 urban land prices rose at a faster pace than in any previous period: an average of from 20 to 30 percent annually compared with an eight to ten percent yearly increase over the previous two decades. In the most extreme case reported—Dade County, Florida —the price of raw land zoned for multi-family use jumped from a reported $1,500/unit to over $6,000 over the three and a half year survey period.

As construction and financing costs have risen, the demand by developers for land has shifted to the more limited and centrally located sites appropriate for multi-family use or large scale, higher density complexes. Where the slow-growth and environmental movements have taken root, developers report increasing complexities in assembling large parcels and converting raw land into buildable sites. Three to four year delays in obtaining local approvals were frequently reported in a 1973 survey by the International City Managers Association. This has tended to divert developer interest to those communities still receptive to growth.

The slowdown in construction during 1974 and 1975 may have slowed the land price spiral occurring in some cities. But some inflation seems to be built into the land market because of patterns of land ownership and practices of speculation. Properties are disproportionately in the hands of patient investors, institutions, and families who do not depend on such investment for income. Moreover, these landholders have relatively low carrying costs and are capable of waiting until they can realize a level of return they consider acceptable. Other factors, controlled by local governments, such as zoning and the provision of utilities and services can limit the supply of sites ready for development. As a result, value increments are created for tracts that are "ready to go" and do not require builders to tie up their capital for long periods in inventorying land.

Financing Costs

Financing costs for new housing construction were also a strong inflationary propellent of housing costs, having risen by an estimated 148 percent between early 1971 and the 1974. In the tight money markets of 1974 and 1975, builders had to pay up to four points or more over the prime rate (reaching a total interest rate of 17 perecent or more) for short-term construction money. Financing costs represent the largest component of housing occupancy costs. Long-term mortgage interest rates have not come down significantly, even with major inflows of capital to thrift institutions and easing of monetary polcies during 1975.

THE SLACKENING PACE OF NONRESIDENTIAL CONSTRUCTION

While easier credit and improved economic conditions could in 1976 or 1977 trigger a rebound in multi-family housing starts, it is unclear whether any substantial rejuvenation of commercial and industrial construction activity will resume over the next two or three years. This observation applies not only to central cities, but to the suburbs as well, where even many shopping centers—perhaps the most robust of the real estate sectors—have experienced a slackening in retail sales growth.

Saturation of the Downtown and Suburban Office Markets

The late 1960's witnessed a surge of speculative downtown office building which has lost momentum. Downtown Philadelphia added over five million square feet of office space from 1970 to 1975, and Pittsburgh added over 3.5 million to 11 million square feet. The result is that today most cities report a glut of office space, with vacancy rates averaging as high as 13 percent nationwide. New York City currently has 28 to

30 million square feet of vacant space; Los Angeles eight to 11 million. The economic recession accounts for only a portion of this surplus. Even with a return to normal space absorption rates, most markets will require two years or more to turn around: Chicago and Los Angeles three to five years, New York City as long as five to ten. At the present time, speculative office construction has slowed to a near standstill; those projects that are moving ahead are primarily institutional or those that have been on the drawing boards for a number of years.

Industry Postpones New Plant Expansion

Short-term prospects for substantial land development for industrial purposes are also negligible. Many manufacturing plants are operating at as low as 70 percent of their present capacity. Mature industries generally must reach a high proportion of capacity before they will justify new plant investment. Strong growth industries are more inclined to expand ahead of the market. But with exceptions such as calculators, there are few domestic industries now undergoing rapid growth and development. The continuance of high interest rates and cautious economic outlook are also inducing industrial caution about building new capacity. Moreover, increased energy costs and uncertainties regarding supplies, and government energy policy have led many industrial concerns to postpone construction plans.

Meanwhile debate continues about limits to capital availability hobbling industrial expansion and modernization over the longer run. Added to this concern is the startling inflation in plant construction that has occurred within the past two years—as much as 100 percent or more for some major industrial projects. Basic capital intensive industries that convert raw materials into energy and materials—aluminum, iron, steel, electric utilities, chemicals—have been struck hardest by construction cost increases.

Sustained curtailment of capital spending by industry could have serious growth consequences on some regions throughout the country. Delays in modernization and capacity expansion could result in even more severe scarcities during the next economic boom, thus perpetuating a vicious circle in which continued inflation in construction costs leads in turn to further postponements of new investment. Moreover, the development plans of many troubled regional economies are dependent on new or expanded industrial facilities for the creation of needed jobs. Conversely, the current economic situation may delay the loss of employment and economic base for some older industrial areas as management shelves plans to phase out obsolete facilities and substitute modernized capacity in new locations.

THE AVAILABILITY OF CAPITAL FOR FUTURE GROWTH NEEDS

Historically, much of America's growth can be attributed to the success with which the savings of countless individuals and business firms have been made available for newly productive forms of public and private investment. A recent Brookings Institution report on capital needs notes:

> "During the postwar period the American economy has demonstrated an unparalleled capacity to produce goods and services of all kinds. In spite of periods of inflation and occasional recessions, living standards have risen almost continuously. At the same time the volume of savings has provided for a continuous upgrading and renovation of industrial and commercial capital as well as for new plants and equipment for a growing work force. In the public sector the demands of vastly expanded educational systems have been met with little strain and 40,000 miles of interstate highways have been built."

But the nation's capital needs, far from being sated, remain imposing. Investment funds needed for development of alternative energy sources, the shortage of capacity in many of the industries that process essential raw materials, the costs of pollution abatement equipment, housing needs, and the new priority assigned to mass transportation have given rise to concern, at least in some quarters, that the United States may be entering an era of capital shortage.

Increased uncertainty about the availability and cost of capital is an immediate reality which can be perceived by those most involved with growth and development at the local and regional level—the home purchaser seeking a mortgage for a new home,

the developer trying to raise debt financing, the municipal official trying to float a new bond issue for schools or sewers, the farmer trying to bring new cropland into production. Current high interest rates, however, are not evidence *per se* of a capital shortage, since they reflect inflationary expectations and risk premiums as well as more fundamental supply and demand factors.

The prediction of capital market trends is fraught with difficulty; considerable differences of opinion exist among economists in respect to both the level of investment demand which will actually materialize over the period ahead and the capacity of the economy to supply the savings required.

The U.S. economy used 1.6 trillion dollars in capital funds between 1965 and 1974, double the total for the previous decade. Estimates for the amount of capital required to return the U.S. to full employment and its historic real growth rate of four percent a year, range as high as 4.5 trillion dollars over the next decade. The Bureau of Economic Analysis in the Department of Commerce has estimated the fixed investment required for business purposes alone to be roughly 1.5 trillion dollars by 1980. The inferences that may be drawn from this projection—and its underlying assumptions in respect to changing capital/output ratios by industry and the added investment required to satisfy pollution control requirements and move towards energy independence are detailed in the President's 1976 Economic Report. The Bureau's estimates suggest that to meet the projected 1975 to 1980 capital requirements, the ratio of business fixed investment to GNP may have to average 12 percent over this period, compared to the 10.4 percent level that prevailed from 1965 to 1974.

In the economic climate likely to prevail over the period ahead, the barriers to mobilizing the sums required, and of allocating it to those sectors and locations where it is most needed, will present a serious challenge to the efficiency of the nation's capital markets. Much will depend on the durability of the present economic recovery, the ability of an expanding economy to supply the savings required, and success in dealing with inflation.

The issues of national growth and development addressed in this Report concern most directly economic sectors whose success in competing for investment funds affects either the magnitude of local community development, the residential and non-residential construction sectors, or the ability of the public sector to finance its own development programs. Progress towards pollution control and energy sufficiency goals will also be affected by the adequacy of capital supply, with consequences for environmental quality. In addition, the ability of industry to finance plant expansion and modernization will influence the geography of local growth and distribution of new employment opportunities.

REASSESSING PUBLIC INVESTMENTS

Trends in demand for capital, urban land, housing, and commercial and industrial space influence the feasibility of efforts designed either to discourage, redirect, or actively promote various types of private sector land development—for example, the level of response to a suburban ordinance authorizing planned unit development, or the ability of a city renewal agency to assemble and market downtown development sites or promote neighborhood rehabilitation. Moreover, increased costs for land, financing, construction labor and materials are causing governmental units to reassess their operating and capital programs.

Higher interest rates and uncertainty about future rates, in particular, act to shorten the planning horizon of any investor, public or private, by favoring investments that involve lower initial capital cost and promise more immediate returns.

Public agencies not only are being obliged to pay high interest rates on their debt offerings, but in a few instances they have been unable to market them. Some local governments are affected by rising costs and relatively static revenues, and in the more extreme situations, such as New York City and State, newspaper headlines have warned of imminent municipal bankruptcies and special purpose public agencies in danger of default. Like any form of economic enterprise, a government pressed to meet its own operating expenses necessarily foregoes investment in new plant and equipment and may defer maintenance of existing facilities. One concern, of course, is that in the older cities

this necessity could lead to a further deterioration in public services and general physical conditions which, in turn, would undermine efforts to prevent continued disinvestment on the part of individual firms and households. Even solvent and stable communities and public agencies are re-examining their capital program for transportation, open space, acquisition, park expansion, site assembly and improvement for redevelopment purposes, schools, hospitals and other community facilities. Large-scale projects already planned are likely to be postponed, reduced in scale, or cancelled altogether. Concurrently, the development thinking of local government can increasingly be expected to center on means for using the fixed investment in existing facilities and infrastructure more intensively.

If historical patterns prevail, as the economy recovers, state and local government revenue increases will precede expenditure increases. Indeed, it appears that most state and local executives proposed either standstill or reduced budgets for fiscal 1976. The net effect should be a reduction in state and local deficits and a more favorable fiscal outlook for these governments.

THE END OF CHEAP ENERGY

The Nation's Energy Dependence

Abundant, cheap energy has stimulated economic growth, increased productivity, and strongly affected national and regional growth and development. Low-cost fuel has encouraged construction of single family housing with an abundance of labor-saving appliances, climatically controlled offices and factories, and dependence on automobile transportation. Low-cost energy has helped to shape metropolitan areas. Energy use is the major cause of air pollution. Though shifts in fuels, notably from coal to natural gas and oil, have eliminated or reduced some forms of air pollution in urban areas, total pollution has increased with the growth in energy consumption, and recent events are causing a shift back to coal. Cheap energy has affected America's rural areas as well. The low costs of distribution of electricity permitted industrial development in areas remote from urban centers. Fuel-intensive production methods, including reliance on hydrocarbon-based fertilizers, have transformed American agriculture.

The United States, with less than six percent of the world's population, consumes 34 percent of the world's energy production. Between 1950 and 1970 energy consumption in the United States doubled. It increased at an annual rate of four percent between 1965 and 1975. Per capita energy consumption grew an average of 3.6 percent per year between 1965 and 1970, and an average of 0.4 percent per year between 1970 and 1975.

Among energy sources, electricity has shown the most rapid growth in consumption, rising at an annual compounded rate of approximately seven percent over the last decade. Because electricity generation involves substantial net energy losses and the efficiency of energy conversion into electricity has not improved, increased relative consumption of electricity has meant greater increases in gross energy consumption for the nation as a whole.

Transportation accounts for one-quarter of domestic energy consumption, including more than half of the petroleum, primarily because of reliance on the automobile for personal transportation and trucking for freight movement. Industrial uses account for 40 percent of energy consumption, including more than half the coal and natural gas. Household and commercial demand is heavily oriented to natural gas and coal, the primary source of electricity. The nation's dependence on petroleum has been increasing as a result of the pattern of urban development, the decline of mass transit systems and railroads, and reliance on automobiles for transportation (Table I–2).

Any discussion of U.S. energy dependence must recognize the critical degree of reliance on oil and natural gas in particular. Three-quarters of industrial heating requirements, half of electric power generation, and 80 percent of all residential and commercial energy use rely on these two fuels. The transportation sector is nearly 100 percent petroleum dependent.

Increasing Dependence on Oil Imports

Domestic production satisfies 85 percent of America's total energy demand. But domestic oil accounts for only 65 percent of consumption. While oil consumption has been

Table I–2
1974 FUEL USE BY MAJOR ECONOMIC SECTORS BY PERCENT

	Petroleum & Liquefied Natural Gas	Natural Gas	Bituminous Coal & Lignite	Percent Of All Energy	Percent Of Electricity Distribution	Rates Of Increase 1965–74
1. Major Sector Including Electricity Generation:						
Household & commercial	19.1	32.0	1.8	18.9	57.9	1.8
Industrial	17.4	50.0	32.0	29.0	41.9	2.3
Transportation	52.6	3.0	0	25.0	.2	4.9
Electricity generation	10.3	15.0	66.2	26.9	—	8.5
Miscellaneous	.6	0	0	.3	0	( )
TOTAL	100.0	100.0	100.0	100.1	100.0	4.0
2. Major Sector Allocating Electricity Generation to Consumer Sector:						
Household & commercial	25.1	40.7	40.1	34.5		2.9
Industrial	21.7	56.3	59.7	40.3		2.7
Transportation	52.6	3.0	.1	25.0		4.9
Miscellaneous	.6	0	0	.3		( )
TOTAL	100.0	100.0	99.9	100.1		4.0

Source: Federal Energy Administration.

rising, domestic production has lagged. Domestic crude oil production peaked in 1970 but has declined eight percent since 1973—the year of the oil embargo. Domestic exploration, as measured by new wells drilled, peaked in 1965.

Nor has production of other fuels increased sufficiently to reduce reliance on oil. Since 1968, new discoveries of natural gas have lagged behind consumption. Although the production of nuclear power has increased 30 times over in the last decade, it has chiefly substituted for coal-based electricity generation rather than consumption of oil. The result is that the nation has become more highly dependent on imported oil and is apt to remain so for some time to come.

Reliance on imported oil was encouraged by lower costs of foreign production and relatively low transportation costs. Indeed, for the major metropolitan areas along the Atlantic Coast, imported oil was lower in price than domestic oil from the Southwest and West prior to 1973. Ironically, countries adhering to the OPEC cartel accounted for only 49 percent of imported oil before the embargo but now are the source of 60 percent of America's oil imports. And short of major cartel-imposed new price hikes, most projections indicate increasing dependence on imports, at least over the next decade.

Responses to Increased Fuel Prices

Higher oil prices and increases in all energy costs have become a fact of life since the oil embargo, though the demands of foreign oil producers are not the only cause of these increases. In fact, energy costs have not reflected the full social and environmental costs of production, though substantial catching up has now taken place.

Price increases have caused changes in patterns of energy consumption. Total energy consumption in 1974 and 1975 was less than in 1973. Residential energy use also declined significantly as a result of higher prices and appeals for conservation. Heating oil consumption dropped eight percent in 1974, gas consumption nine percent. Electricity consumption on the other hand increased along with oil consumption for the generation of electricity.

Sensitivity to price increases was substantial in the transportation sector. Gasoline consumption actually decreased slightly in 1975—a far cry from pre-embargo projections of a ten to 12 percent increase. And there has been a radical shift towards the

production of smaller, more energy-efficient cars. Mass transit patronage also increased.

Regional Price Impacts

Before oil prices rose so much, the energy component of production costs was very low in most industries, and little was done to find ways of reducing energy costs. Now the substantial increase in oil prices and attendant increases in the price of other fuels and electricity have made it more desirable for industry to find ways of cutting energy consumption and costs. Industrial energy consumption was 0.1 percent less in the quarter ending in January 1974 than for the comparable quarter a year earlier, though industrial output was five percent more. Overall, industrial energy consumption declined 16 percent in 1974; it continued to decline in 1975.

Regional effects of rising fuel costs vary. New England, highly dependent on oil, has been particularly hard hit. Fuel costs there are one-third more than the national average. At the opposite end of the spectrum are the South Central and Western regions. Energy costs in the Southwest are less than three-fifths the national average, primarily because of large supplies of natural gas and oil and resulting lower transportation costs. The consumption of energy by the transportation sector in these regions, however, exceeds the national average, and higher gasoline prices may affect future development. Because of the milder climate, energy consumption for residential and commercial uses is relatively low.

Domestic Resources and the Threat of Shortages

Even apart from uncertainty about foreign oil supplies, attention to the availability of fuel is likely to remain a regional and national concern.

- For several years there have been significant shortages of natural gas on the interstate market. Natural gas production has been declining. Estimates of the shortfall for 1975 have been as high as 15 percent, with shortages in some states reaching two to three times that level. The shortage has forced shifts to other energy sources for home heating and kitchen appliances, despite their higher operating costs. Importation of liquified natural gas is possible but expensive.
- Total proven domestic oil reserves have declined since 1971; they currently amount to only ten times annual consumption. While other finds may be made, particularly on the outer continental shelf on the Atlantic and Pacific coasts, the extent of potential reserves is not fully known.
- The United States has an abundant supply of coal, theoretically enough to meet demand for hundreds of years. But there are major problems in converting this resource to useable energy. More than half of the nation's coal supply can be extracted only through underground mining which is comparatively slow, hazardous, and expensive. Surface mining, on the other hand, poses serious environmental risks. Most of the coal that can be extracted by surface mining is located in the West, far from the primary sources of demands. Transportation costs may pose an obstacle to exploitation of this resource unless it can be converted to liquids or gases or shipped in pipelines to eastern and midwestern markets. Conversion to gases or liquids would also be necessary to make coal directly useable as a fuel for many purposes, and such conversion will reduce the net supply available. In addition, sulfur content and particulate emissions of coal may require special treatment or controls to permit the use of coal for electricity generation and industrial uses under air quality standards.
- Nuclear power is not fully exploited. Public concerns over safety and environmental requirements have lengthened the approval process for new generating plants, while escalating costs, declining labor productivity, financial market problems, and uncertainties over future energy demands have all combined to make new capacity less attractive, at least for the present. Large sums have been spent to develop nuclear power reactors but major technical and political hurdles still must be overcome.
- New technologies—including synthetic fuels, shale oil, geothermal energy, solar energy conversion, and recycling of waste heat—are being developed, but

they will not be available for significant commercial application for at least a decade.

Thus, energy promises to be an expensive commodity, harder to come by, in the near future. Conservation will be required to help balance supply and demand and to ensure continued economic growth. Scarcity could affect regional growth patterns. Natural gas shortages and higher oil prices may constrain growth prospects in the Northeast and North Central regions, perhaps accelerating the trends to industrial migration to the South and Southwest. Continued high prices for electricity, heating fuels, and gasoline may foster more compact urban development patterns, migration to warmer climates, increased reliance on mass transit, and greater demand for rail transportation of freight over long distance. The effects of these and other changes resulting from energy scarcity and higher prices and changes in national attitudes about energy will influence the nation's economic and social policies, as well as the living patterns of its people.

The Federal Energy Response

Historically, the Federal government has promoted energy development and use. Controlled prices encouraged the use of natural gas. Tax incentivs for exploration and production encouraged oil and gas development, both at home and abroad. Fuel-intensive forms of transporation were encouraged by public road-building, airport construction, and government expenditures on aircraft technology. The environmental movement, pressure for tax reform and the sense of an energy crisis, however, have combined to induce changes in Federal policy.

The need for a contemporary national energy policy led to reorganization of energy responsibilities in the Federal government. The Federal Energy Administration (FEA) was established with a two-year lifetime in order to deal with the nation's immediate energy crises and to plan for future energy needs; the Administration recently requested a two year extension of this authorization. Energy agencies previously located in the Department of the Interior and the Cost of Living Council were consolidated in the new agency to produce a comprehensive approach to meeting the country's energy needs.

Another major reorganization involved the abolition of the Atomic Energy Commission and its replacement by two agencies: the Nuclear Regulatory Commission (NRC) and the Energy Research Development Administration (ERDA). NRC assumed responsibility for licensing and regulating nuclear facilities and materials, while ERDA was placed in charge of research and development involving all potential energy sources. The formation of ERDA signalled a new move to provide long-term alternatives to fossil fuels and nuclear power. ERDA was given responsibility for the energy research programs previously scattered in the AEC, the Interior Department, the National Science Foundation, and the Environmental Protection Agency. ERDA was given specific guidance by Congress regarding emphasis on non-nuclear energy sources, incldiing geothermal and solar energy.

In order to coordinate energy policy and related environmental policy, the Energy Resources Coucil has been established. It includes the major Federal agencies involved with issues of energy and the environment.

State Energy Initiatives

Many states have acted on energy development and conservation. Concern with the environmental effects of nuclear power plants and oil and coal development have prompted several states to pass legislation regulating the siting of power plants, refineries, surface mining, and oil production. Vermont requires legislative action to approve a nuclear power plant site. New Hampshire set up procedures for approval of refinery and power plant locations and subsequently required local government approval as well. Other states, particularly in New England and the West, have acted to control power plant sites. Western states concerned about plans for accelerated coal development have passed surface mining laws, regulating the location and manner of strip mining.

Some state public utility commissions are considering proposals to change utility pricing policies as a condition of rate increases. The major move, sparked by consumer pressure, is toward higher prices for large energy users and standard rates for minimal consumption by households. In some areas, consumer resistance is making it more difficult for utilities to obtain rate increases to

finance expanded capacity and to meet higher fuel costs. California has asked the Federal Power Commission to allocate additional supplies of natural gas in order to meet air quality standards; Federal regulation controlling the price of natural gas produced for interstate shipment at fifty cents per 1000 cubic feet must compete with unregulated intrastate uses in producer states, where current prices are higher. Some states are proposing standards for automobile fuel economy.

Consolidation of energy responsibilities in the Federal government is matched by diverse state concerns and initiatives.

THE INSTITUTIONALIZATION OF ENVIRONMENTAL VALUES

At all levels of government, public policy directed at environmental protection has been characterized by several major elements: consideration of environmental values in public and private decision-making; pricing of environmental costs to polluters; establishment of key environmental standards and targets; expanded regulation of activities having the potential for environmental harm; and increased public spending on environmental enhancement.

The last five years have witnessed increasing Federal involvement in pollution abatement and environmental enhancement. Creation of the Council on Environmental Quality and Environmental Protection Agency and passage of the National Environmental Policy Act (NEPA) inaugrated a new era of national attention to environmental problems. Federal assumption of responsibility for regulating pollution and defining air and water quality standards has come gradually. There is increasing attention to the man-made, cultural, social and aesthetic environments as well, as an increasingly mobile population demands a national approach to protection of health and the environment.

Progress But Persistent Problems

Implementation of the National Environmental Policy Act of 1969, the Clean Air Act Amendments of 1970, and the Federal Water Pollution Control Act Amendments of 1972 have resulted in a significant reduction in the quantity of major pollutants released into the environment.

- Total air pollutant emissions declined between 1970 and 1975, and a significant reduction in emissions from new automobiles has caused an overall drop in average emissions per mile from motor vehicles. Further improvements may be expected as older, more polluting automobiles are replaced by new cars. Regulation of power plants and other stationary sources have contributed to a reduction in sulfur oxide emissions and suspended particulates.
- Eighty percent of the nation's waste treatment facilities have some form of secondary treatment or better; already sixteen percent meet 1977 standards. Major waterways show significant improvement in the control of oxygen demand and coliform bacteria hazardous to drinking water supplies and aquatic life.

While new controls are reducing generation of air and water pollutants from specific sources, continued growth in population and industrial activity poses unresolved environmental problems. Despite improved sewage treatment, the total BOD (biological oxygen demand) of sewage discharged into the nation's waterways has shown a slight increase since 1968. Growth of population and water consumption for domestic and industrial uses, as well as increasing sewer service, have to some extent offset the benefits of better treatment. Nutrient levels (chiefly phosphorous, phosphates and nitrates that can cause eutrophication) as well as industrial compounds, heavy metals, and pesticide residues remained undersirably high. Ironically, even as salmon and sturgeon reappear in such major waterways as the Hudson River, fish taken from the same waters and the Great Lakes were found to have dangerously high levels of polychlorinated biphenols.

Emissions from industrial processes, except for particulates, increased through 1973. Air quality may be deteriorating in rural areas. High levels of ozone, a major component of smog, have been discovered in rural areas. Industrial development and new power plants, as well as transport of emissions produced in urban areas, pose problems for the future.

Unanticipated Difficulties Hamper Pollution Abatement Efforts

Apart from the effects of inflation and fuel deficits, technological problems have reduced the effectiveness of abatement programs and caused unexpected forms of pollution. Secondary waste and water treatment appears to increase phosphorous loading and generates larger amounts of sludge for land or ocean disposal. Nitrogen oxide and sulphate emissions generated by catalytic converters on automobiles may involve a serious public health hazard. Controversy over their cost, effectiveness, and residual sludge production of scrubbers, plus problems of supply, countered efforts to reduce sulfur dioxide emissions. Control of nutrients in water discharge remains a serious problem, as do the general difficulties of controlling run-offs from nonpoint sources.

Proposed land use and transportation strategies to reduce air pollutants have encountered stiff public resistance. The impact of environmental regulations on industrial location decisions and new residential and commercial developments is uncertain. A policy preference for the dispersion of effluent and emission sources as a means of implementation may conflict with state and local attempts to regulate and concentrate development.

Energy Adds a New Factor

Gasoline shortages and conservation measures during and following the oil embargo in the fall of 1973 apparently reduced air pollution emissions, while the substantial increases in energy prices provided added incentives for conservation. Total energy consumption actually declined in 1974, reflecting higher energy costs and the recession. The market for solid waste, especially for recycled metals and for fuel, was initially enchanced by higher prices. Incentives for efficient use of materials and energy increased. These effects hold out promise for long-term conservation of resources, which in itself would reduce waste generation and environmental pollution.

However, new problems for air and water quality also became evident. Shortages in low-sulfur fuels and fuel desulfurization controls resulted in deleterious impacts on air quality as shifts to coal and high-sulfur oil were made to avoid power shortages. More expensive control technologies, such as stack scrubbers, became necessary to reduce emissions. Pressures rose to relax compliance schedules, particularly for steam electric plants and for some manufacturers. Fuel penalties and costs associated with certain more stringent automobile emission controls have become serious concerns. Deadlines for auto emission standards were pushed back. And energy requirements of tertiary waste water treatment have required reexamination.

Impacts on Air and Water Quality Schedules

The result of all of these factors and the size of the task faced by the Environmental Protection Administration is that the air and water quality targets set by Congress are not being met. June 1, 1975 passed without attainment of health-based air quality standards established by Congress. Water quality standards set for 1977 will not be fully achieved, and the goals set for 1983 and 1985 are being reconsidered. Of possibly greater future importance is the urgency attributed to exploitation of domestic coal and oil supplies, and construction of additional nuclear reactors.

Virtually all energy uses pose enviromental problems (Figure I–1). Increased development of western coal and shale oil, as well as coastal oil production pose new threats to land, water, and air quality. Population growth will be encouraged in relatively pristine areas. Plans for construction of over 100 nuclear power plants pose new problems for water quality, coastal zone management, and disposl of radioactive wastes.

The Implementation of Environmental Assessments

NEPA introduced a wholly new dimension into Federal decision-making: environmental assessment. Environmental Impact Statements (EIS) are required for Federal administrative and executive actions having a potentially significant effect on the environment. Five years of experience make it clear that this requirement has had a substantial effect on both the substance of decisions and the language of Federal decision-making.

Environmental assessments focus on the need to balance social, economic and environmental interests. Disclosure of environmental impacts has enhanced possibilities

Figure I–I

EXAMPLES OF ENERGY-RELATED ENVIRONMENTAL PROBLEMS

Energy Areas	Pollutant/Safety Problems	Waste Problems
Coal Cleaning and Preparation	Process Water Contamination	Waste Water/Residues
Coal Combustion	Flue Gas SO_x Control NO_x Control	Flue Gas Desulfurization Solid Wastes
Coal Extraction	Reclamation in Surface Mining	Mine Refuse
Coal Gasification	Particulates and Trace Metals Control	Char/Ash/Waste Disposal
Coal Liquefaction	Process Water Contamination	Char/Ash/Waste Liquids
Fission	Carbon-14 Control	Radioactive Wastes
Fusion	Accidental Tritium Release	Tritium Contaminated Wastes
Geothermal	H_2S Abatement	Silicate/Chloride Salts
Land Transportation Systems	NO_x and Catalyst Induced SO_x	Abandoned Autos
Petroleum and Natural Gas	Oil Fires	Oil Spills
Shale Oil	Surface Disposal and Rehabilitation	Mine Back Filling for Subsidence Control
Solar	Local Atmospheric Perturbations	Bioconversion Wastes
Transmission and Storage	High Level Electric Field Effects	Battery Disposal
Waste Utilization	Pollutant Characterization	Ash Disposal

Source: ERDA, National Energy RD&D Plan (June, 1975).

for public participation in and criticism of agency decisions. The EIS process has also helped to broaden interagency and intergovernmental coordination.

Early resistance by many agencies to EIS requirements, organized activity by environmental groups and uncertainty regarding Congressional intentions generated a great deal of litigation under NEPA, giving the Federal courts a substantial interpretative role. Though litigation will certainly continue, many basic problems of NEPA's application, EIS content, and public rights of review appear to have been settled. The major open questions involve "substantive rights" under NEPA (the weight to be accorded environmental concerns in decisions), interpretations of legislative standards, and the timing of environmental assessment in project planning and development. Case-by-case judicial review appears to have contributed to refinement in environmental assessments. To date Congress has intervened only once (in the Alaska pipeline case) to free proposed development from full consideration by the courts under NEPA.

State Impact Assessment Grows

More than 20 states and Puerto Rico have enacted environmental impact legislation. Some states only require project statements by their own agencies or for certain types of projects; others have extended the requirement to local government and to private activities. California's process for review is the most extensive, having been applied by judicial interpretation to all private projects hav-

ing potentially significant impact on the environment. Over 6,000 statements, more than four times the number under NEPA, are issued in California each year. The Massachusetts legislature has similarly extended its act, while Minnesota requires statements on private projects of more than local significance.

State requirements on statement content vary in accordance with local concerns and project coverage. California's broad law specifically requires consideration of "growth-inducing impacts" and "measures to mitigate adverse impacts." Thus, increased emphasis is placed on secondary environmental impacts such as local population growth associated with the extension of sewer and water lines. Emphasis on growth-inducing effects also focuses more attention on the links between individual projects, population and economic growth, and the cumulative effects of growth on environmental degradation. More recently, concern about economic conditions has led to the passage of laws in five states requiring assessment of the economic, as well as environmental, impacts of proposed projects.

Efforts are underway to make the impact assessment process work better by improved and earlier assessments, the use of shorter, more analytical statements, and an emphasis on planning that integrates environmental concerns as an essential component of a more comprehensive decision process. The development of Federally-supported state growth management capacity under the Coastal Zone Management Act is an example of progress in the direction of such a comprehensive planning approach.

NEW DEMANDS ON NATURAL RESOURCES

Land and Water Resources Face New Challenges

The United States is well endowed with natural resources. In many respects conditions even today suggest abundance rather than scarcity, particularly in terms of national aggregates of major categories of land use, as can be seen in Table I–3.

Although urban, transportation and other special uses of land have expanded rapidly in recent decades, they still account for a small proportion of total land area. The overall distribution of uses has not changed substantially for years. What has changed is the role that non-fuel natural resources play in determining the location and nature of economic and physical growth. Cropland, water, minerals and forests once determined the patterns of settlement. Fixed in place, often subject to depletion, they were the basis for agriculture and extractive industries that in turn defined the choice of location for industrial and commercial centers.

Table I–3

TOTAL U.S. LAND USE IN 1969

	Millions of Acres	Percent
Forest Land	723	32.0
Grassland Pasture and Range	604	26.7
Cropland	472	20.7
Other Land (desert, swamp, tundra, etc.)	287	12.7
Special Use (urban, roads, parks, etc.)	178	7.9
Total U.S. land area	2,264	100.0

Economic Research Service, U.S. Department of Agriculture, Our Land and Water Resources, May 1974, Table 2.

In recent years this has no longer been the case. The National Water Commission, for example, has concluded that neither the existence of water resources, beyond a generally available minimum, nor programs for water resource development are critical in determining regional economic development or population migration. With an efficient agricultural sector that employs only five percent of the population, sources of energy that can be brought to the user's place of choice, and a mature national transportation network, both producers and consumers have great freedom to choose where to live and work.

Thus the relationship between natural resources and national growth today has changed. The major questions involve the ability of resource uses to meet growing and often conflicting demands and to absorb the impacts of other manifestations of national growth. Changing demand is only in part a function of population increase. It reflects the expectations of higher incomes and consequent demands for products and living

space; changing social values that emphasize environmental quality and the preservation and non-use of unique natural land and water features; the recourse of other countries to U.S. agricultural production; and the nation's striking interdependence, in strength and vulnerability, in a web of world markets and political systems.

These new factors pose new challenges in managing natural resources. The nation has enormous land and water resources to meet future *demands—if* steps are taken to implement more efficient management practices, *if* resource conservation measures receive adequate attention, *if* the natural resources themselves are protected against environmental degradation, and if conflicts among uses can be resolved.

Agriculture Production for World Markets

Agricultural production problems, since 1973, have changed from issues of surpluses to those of developing shortages—at least in the short run. Low U.S. and worldwide harvests, due largely to unfavorable weather and unprecedented sales for export, combined to reduce domestic reserves to historically low levels. Commodity prices reached new highs and the direction of production adjustment shifted from acreage restriction to encouragement of increased production. In both the 1974 and 1975 seasons, despite dampening effects of weather on per-acre yields, the production response of farmers was dramatic (Table I–4).

Table I–4

AGRICULTURAL PRODUCTION COMPARISONS IN THE 1970's

(millions of bushels)

	1970–1972 Average	1974 Crop	1975 Est.	% Increase
Wheat	1,505	1,796	2,134	19%
Corn	5,122	4,664	5,767	24%
Feed Grains	189*	165*	202*	22%
Soybeans	1,191	1,215	1,521	25%

* millions short tons

Source: U.S. Department of Agriculture-Economic Research Service Crop Production Reports—various months

The future role of U.S. agriculture in serving world agricultural needs involves major economic and foreign policy issues. Determinations about trade arrangements with socialist countries, U.S. embargoes on imports, responses to the directives of the World Food Conference, the possible need to establish strategic grain reserves, and the expansion of export markets for U.S. agricultural commodities will have major effects on the outlook for U.S. agriculture and for land utilization.

Continued Improvements in Productivity

The ability of American agriculture to supply domestic and world needs has less to do with the supply of arable land than with improvements in management and technology. Advances in plant genetics, planting techniques, weed and pest control, fertilizer and water applications, use of machinery, harvesting practices, storage, transport, marketing and financial innovations have increased per-acre yields year after year and continued to reduce manpower requirements at the same time. Between 1964 and 1973, production of all crops increased 30 percent even while cropland acreage was declining. The U.S. Department of Agriculture expects that current yields will continue to improve for the major crops.

But concerning the distant future, there are troubling questions as to how much additional cropland can be made available to support increases in production. For example, it is not yet clear how many acres previously diverted under set-aside programs were returned to production in 1974 and 1975. Furthermore, land withheld through government support was of less than average quality. The better lands are for the most part already under cultivation. Shifts in agricultural land use, such as those from pasture and grazing or conservation land uses to crop production, involve major initial costs and may necessitate significant changes in livestock operations. Most farmers are likely to be unwilling to take these steps unless they can foresee significantly higher prices —and these price hikes will have to be added to those necessary to sustain production at present levels in the face of an already altered price structure.

Although the total of 375 million acres cropped for food and fiber in 1975 comprised

only 79 percent of lands described as "available for production," and only 51 percent of the "agricultural land potential," strong incentives would be required to induce farmers to produce crops on the far less productive lands presently unused. Intensive management practices also raise questions of environmental and social impacts that must be addressed—and that may limit the extent of increase in food and fiber production.

Increased Attention to Environmental Impacts

The likelihood of continued expansion of agricultural production raises substantial questions of effects on the environment in such areas as land reclamation, agrichemical runoff and the disposal of animal wastes.

- Over 90 percent of some 20 million acres of hardwood swamp forest in the Mississippi Delta have been transformed to soybean producing farmland. Other millions of acres of wetlands in the midwest, midsouth and Florida have been reclaimed in similar fashion. While the aggregate effect may be small on a nation-wide basis, there are many who strongly resist the further conversion of wetlands that are seen from a regional or local perspective as a scarce natural wildlife and recreational resource.
- High-yield modern farming employs a wide range of agrichemicals—herbicides, insecticides and chemical fertilizers—that have become a major and intractable factor in lake eutrophication and the steadily increasing pollution of river systems. Increased acreage and yields would mean greater application and consequent runoff of these nonpoint source chemical wastes, far more difficult to control than municipal and industrial discharges that are susceptible to direct local treatment.
- A corollary of the widespread use of inorganic fertilizers and the tendency to specialization in agriculture is the already serious problem of disposal of animal wastes. Domestic livestock now produce on the order of 3.5 million tons of raw manure and one million tons of liquid wastes a day, and account for over one-half of the total solid waste produced in the United States. These have for the most part been displaced as fertilizers by agrichemicals that are easier to transport and apply and cheaper in total cost. Over half of the nation's livestock are on the range or in pasture, where their wastes are so dispersed as to pose no significant pollution problem. The difficulties arise where animals are in large concentrations, in feedlots or otherwise, and sufficient land is not available to accommodate waste recycling. In these situations, there are serious problems of water pollution through excessive concentrations of nitrates, phosphates, and organic matter, particularly near intensive livestock operations.
- Addition of new lands to the production inventory has a tendency to bring in lands less suitable for intensive cultivation. This raises the likelihood of excessive erosion and sediment damage to streams, rivers and lakes. Many of the lands available for new production are lands removed from production in the past because of erosion damage or the potential expense and extent of conservation measures needed for proper protection. A major expansion of production through use of these lands would involve a severe potential for negative environmental impacts.

Whether resistance to intensive agriculture on environmental grounds will stop or even slow the expansion of production is necessarily hard to predict, though it does appear likely to at least impose delays and increased costs. For example, EPA has proposed regulations that could require feedlots, regardless of size, to install facilities to prevent runoffs. The implication for costs of food production are presently unknown. Significant reductions in present use of agrichemicals—or even restrictions to current levels in the face of pesticide and fertilizer shortages—may tie further increases in production to the availability of additional cropland far more than in the past and emphasize the problems of competition for land resources from other uses.

Also important is the cumulative effect of these changes on the social character of agriculture. Demand increases in the short run may allow efficient family farms to prosper; in the long run they could combine with higher costs—from inflation in general and

higher land, energy, agrichemical and machinery prices in particular—to reinforce the trend to farm consolidations, fewer and larger farms, and increased exposure of even efficient family farms to short-term fluctuations in price. But there has been debate over the emergence of "industrial" farms for at least fifty years, and American agriculture is still predominantly a family-farm business —and appears likely to remain so.

II. Shifting Patterns of Growth

CHANGING POPULATION GROWTH PATTERNS

The total population of the United States keeps growing by more than 1,000,000 annually. But the rate of increase has slowed significantly. The fertility rate has returned to historic downward trends and dropped below the level required for population replacement in the long run.

The labor force grows as post-World War II babies and more and more women seek work.

Geographic patterns of growth are changing. Certain resource development areas, which only a few years ago were pockets of serious poverty, are experiencing revitalization. Rural areas are no longer declining in population, and some suggest that the historical pattern of rural-to-urban movement has been reversed. The South, long a region of net outmigration, is now growing at a rate nearly double that of the nation as a whole. It is retaining its own people and attracting new and returning residents.

The changes are important—but they do not alter fundamental demographic facts about the United States. America is primarily an urban nation; disproportionate numbers of the very poor are concentrated in its central cities and rural areas; along with the labor force, the number of households, and the elderly population are still increasing. Those facts of life will create continuing demands on the nation's resources, on the private sector, and on government.

Decline in Rate of Population Growth

Since 1972, the nation's annual rate of population growth has remained below 0.8 percent, about half the rate in 1960 and slightly above the record low rate during the 1930's. The principal reason being the marked drop in the birth rate. The 1975 birth rate of 14.7 births per 1,000 population was the lowest in the nation's history. In 1975, moreover, the total fertility rate, which shows annual births expressed in terms of implied family size fell to a record low of about 1.8, below the figure of 2.1 required for ultimate replacement of the population if the rate were to remain at this level for 65 years (Figure II–1). The other determinants of the rate of net growth, the death rate and net immigration rate, have remained fairly constant (Table II–1).

Impacts of Changes in Life Style

A number of factors have contributed to the recent decline in the fertility rate. For one thing there are the higher costs of child-raising. But, there are other reasons too. Married couples, with the aid of birth control methods, are having fewer children. More women are remaining single past their teenage years. Approximately, 40 percent of women in the 20–24 age group were single in 1975 compared to only 28 percent in 1960. Fewer Americans are getting married, at a time when more marriages would have been expected because the "baby boom" population of the early 1950's has reached marriage age. More Americans are getting divorced. Divorces are occurring at a record rate of more than four per 1,000 persons a year. Liberalized abortion laws have had their effect.

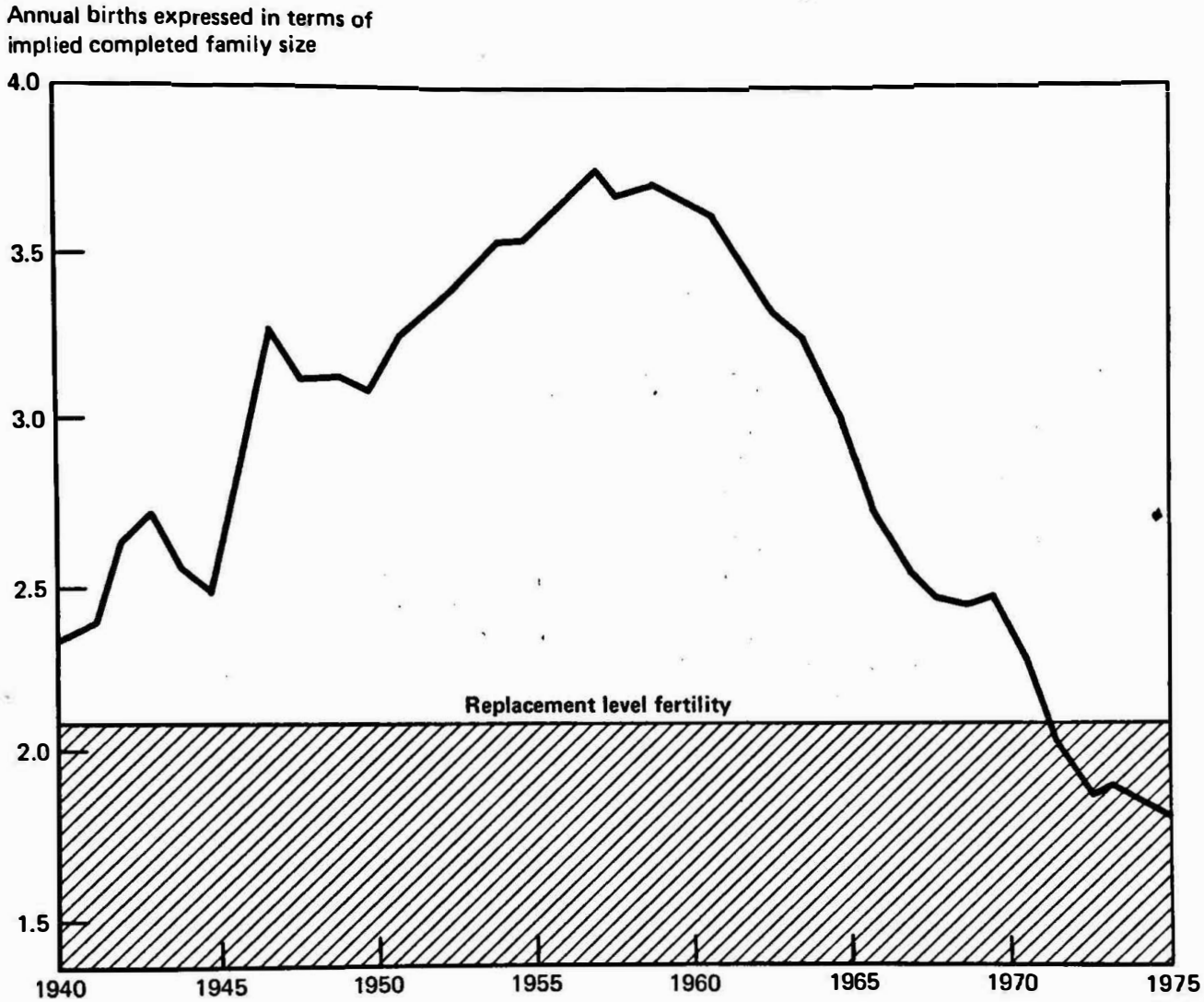
One consequence of these trends, and of the increased numbers of young and elderly people living alone, was that in 1974, for the first time, the average size of households fell below 3.0 persons; a corresponding increase in the number of households is expected to continue, with implications for the housing stock. A greater number of housing units, smaller in size, will be needed in the future.

Legal and Illegal Immigrants

According to the Report of the Presidential Commission on Population and the American Future, legal immigration, which is currently 400,000 persons a year, will add some 15 million persons (including children born here) to the population between 1970 and 2000.

Figure II–1

TOTAL FERTILITY RATE: 1940 TO 1975



Source: Bureau of the Census, *Current Population Reports*, Series P-25, No. 545; and unpublished data.

Motivated by dire economic conditions and rapidly expanding population in their native countries, an estimated 800,000 to two million illegal immigrants a year are finding their way to the U.S., a greater rate than ever before. Apprehensions of illegal entrants, one measure of illegal immigration, increased ten fold over the past ten years. A conservative estimate of 800,000 illegal entrants annually, with subsequent reproduction, leads to a calculation of 30 million more persons being added to the U.S. population between 1970 and 2000.

These estimates of legal and illegal immigration may be on the low side, for the immigrant stream has shifted in recent years from the developed to the less developed countries, whence 55 percent of immigrants to the U.S. now come. It is unlikely that persons migrating from countries with high fertility rates and traditional extended families will immediately adopt replacement level fertility and the concept of a small nuclear family. The extent below replacement level will determine the actual impact of immigration on future U.S. population growth.

Table II–1

ANNUAL RATES OF NET GROWTH, BIRTHS, DEATHS, AND NET IMMIGRATION:
1960 to 1975 (Rate per 1,000 mid-year population including Alaska, Hawaii and Armed Forces overseas)

Year	Net Growth Rate	Rate of Natural Increase	Birth Rate	Death Rate	Net Legal Imm. Rate
1975	8.1	5.8	14.7	8.9	2.3
1974	7.5	5.8	14.9	9.1	1.7
1973	7.1	5.5	14.9	9.4	1.6
1972	7.8	6.2	15.6	9.4	1.6
1971	9.7	7.9	17.2	9.3	1.9
1970	10.9	8.8	18.2	9.4	2.1
1965	11.9	10.1	19.6	9.4	1.9
1960	16.1	14.4	23.8	9.5	1.8

Source: Bureau of the Census, Current Population Reports, Series P–25, No. 545, and unpublished data. Projections based on data through November, 1975.

Beyond a strict growth perspective, immigration also has important population distribution impacts. The Commission on Population Growth and the American Future found that immigration would account for 23 percent of the population growth projected for fixed metropolitan boundaries in the U.S. between 1970 and 2000. Currently two-thirds of the immigrants are settling in just six states: New York, California, New Jersey, Illinois, Texas and Massachusetts. And within these states, certain metropolitan regions are particularly affected.

Projections for the Future

Despite a fertility rate below replacement level, zero population growth has not been reached. On the contrary, the population is likely to increase by more than one million persons annually at least until the 1990's. The relatively young age structure of the current population is conducive to more births than deaths, even with low rates of childbearing. It is unlikely that zero growth over a prolonged period would occur until well into the 21st century.

Assuming that the fertility rate moves toward replacement level, approximately 50 million people would be added to the nation's population by the year 2000. Recent Census Bureau calculations range from 245 million to 287 million persons, representing a 15 to 34 percent increase over the 1975 population (Table II–2). These projections assume continuation of legal immigration at 400,000 annually, but do not account for illegal immigration which could add substantially more.

Changes in Dependent Population

Because of the low death rate, greater numbers of the future population will be elderly.

Table II–2

ESTIMATES AND PROJECTIONS OF TOTAL POPULATION: 1975 to 2000
(Includes Armed Forces Abroad)
(Numbers in thousands)

Year	Series I	Series II	Series III
1975	213,631	213,631	213,631
1980	225,705	222,760	220,356
1985	241,274	234,068	228,355
1990	257,663	245,075	235,581
1995	272,685	254,495	241,198
2000	287,007	262,494	245,098

Source: Bureau of the Census, *Current Population Reports*, Series P–25, Nos. 601 and 614.

Note: The ultimate cohort fertility assumptions (average number of lifetime births per woman) are: Series I—2.7, Series II—2.1, and Series III—1.7.

In 1900, persons aged 65 or over made up only four percent of the total population. In 1975, the 22.4 million persons in this age group constituted 10.5 percent of the population. By the year 2000, the projected 30.6 million elderly will comprise about 12 percent of the population and could be an even greater proportion if the birth rate continues at its current low level.

Almost two-thirds of the elderly population are in the 65 to 74 age range. This group of relatively healthy and active senior citizens combined with an ever increasing number of households whose heads are retiring early, accounts for increased interest in retirement homes and contributes to the continuing growth of population in states with warm climates.

Those 85 years of age and over made up an estimated eight percent of the elderly population in 1975—one percentage point more than four years ago. This group will grow markedly in the future and will continue to require specialized dependent care programs.

A decline in overall dependency will continue as long as the birth rate remains depressed. By the year 2025, however, those born during the "baby boom" of the late 1940's and 1950's will have reached old age, and the number of elderly will climb to a projected 48 million. Some economic and political repercussions are likely because close to half their income comes from public funds —mainly social security, which is paid from a tax on current earnings of those in the labor force.

Pressures on the Labor Force

The labor force has continued to expand in the period from 1974 to 1975. By the third quarter of 1975 there were nearly 93.1 million workers in the civilian labor force, about 3.3 million (or 3.6 percent) more than in the fourth quarter of 1973. Most of the 1974–1975 growth was traceable to population changes rather than economic development.

Primarily because of earlier retirement, the participation rate of men in the labor force has been declining in recent years. The participation rate for women has continued to increase, however, and is the most significant factor in recent labor force growth. Well over one million women joined the labor force in 1974, most of them in the 20–34 year age group. In 1975, the participation rate for all working age adults reached an all-time high of 61.4 percent.

The other major factor contributing to the growth of the labor force has been the increase in the number of young adults aged 20–24 born in the post-World War II baby boom and now entering the labor market. In 1974, more than 2.5 million men and women between the ages of 16 and 24 were seeking work and unable to find it—half of all persons defined as unemployed.

It is estimated by the Bureau of Labor Statistics that if recent population trends continue, the total labor force will increase to about 100 million persons by 1980, even if the rise in female labor force participation gradually tapers off. Growth should then diminish in the 1980's, as the smaller numbers of children born in the 1960's enter the job market. Even under these conditions, however, the labor force should reach 112.6 million by 1990.

Expansion of the female labor force represents a continuation of long-term trends. The number of women in the civilian labor force increased about 50 percent between 1960 and 1973, rising from 23.2 million to 34.5 million. In 1973 alone, the female labor force participants jumped 1.315 million. Continued expansion during 1974 and 1975 reflected both an increase in the number of women reaching working age and a further rise in labor force participation among those age 20 to 44.

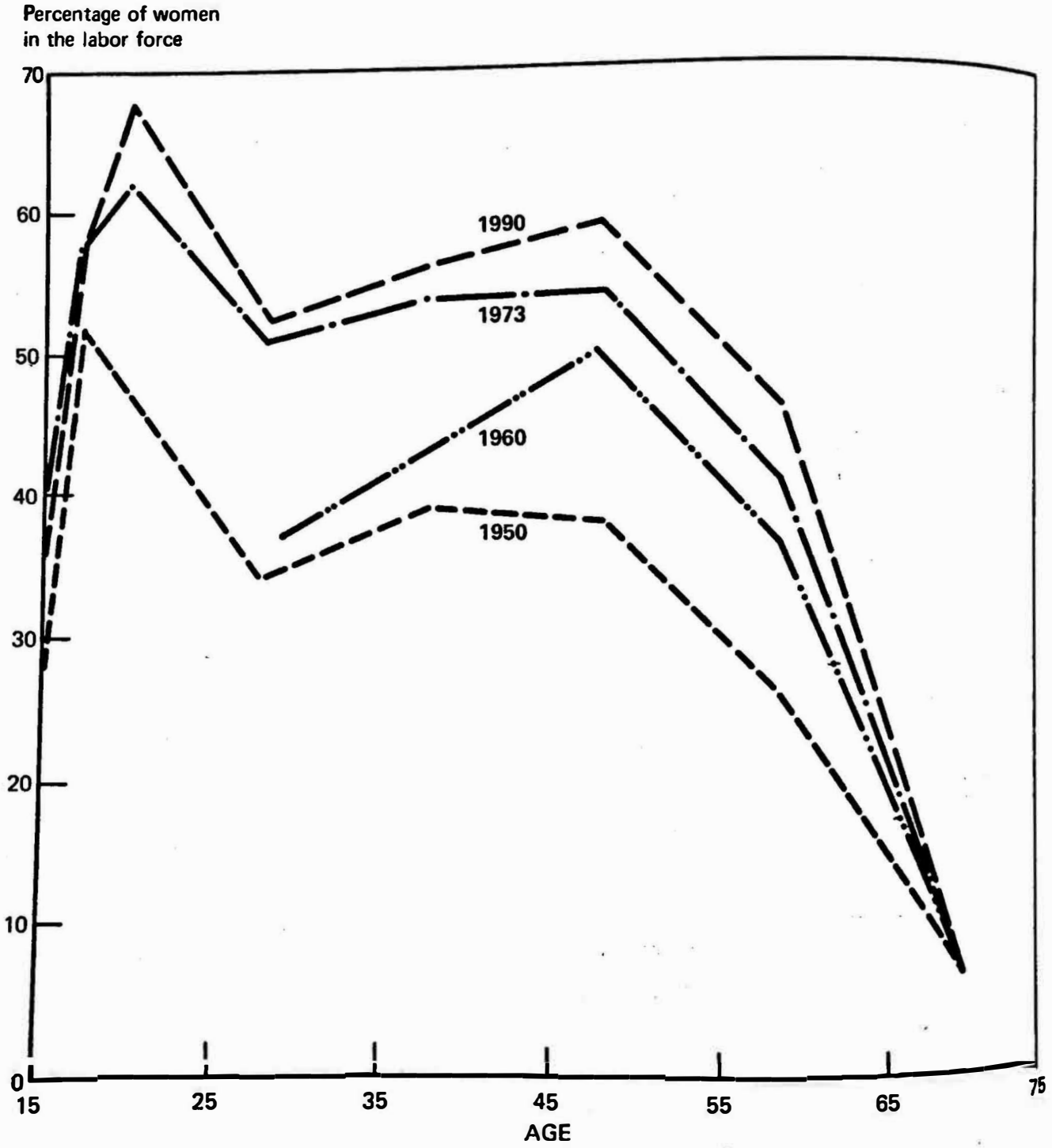
The proportion of working age women who are in the total labor force rose from 33.9 percent in 1950 to 46.4 percent in 1975. Married women are still less likely to be in the labor force than single women, though the discrepancy has lessened and participation rates for married women are expected to continue to increase (Figure II–2).

STABILITY OF REGIONAL POPULATION SHIFTS

The center of gravity of the nation's population shifted steadily westward, until after the Civil War, when second trends started. Population in the industrial centers of the North and in the West grew faster than in the South. Later, as some eastern industries started to relocate closer to cheaper labor sources and manufacturing began to play a

Figure II–2

WOMEN'S WORKLIFE PATTERNS ARE CHANGING RAPIDLY



Source: U.S. Department of Labor.

Note: Even among married women with pre-school age children, labor force participation has increased substantially. In fact, these women are now more likely to be in the work force than were married women who either had no children under 18 or who had only school age children in 1950.

If these trends continue, traditional female worklife patterns will gradually be replaced by something closer to the patterns of their male coworkers.

lessened role in the regional economy, the Northeast population growth rate declined. Twice during this century, in the 1930's and the 1970's, the Northeast has had periods of net outmigration.

Broad regional trends described in the 1974 National Growth Report continue; general migration toward both the Gulf and the Great Lakes Region and continuing overall westward migration. More than 80 percent of the nation's population growth since 1970 has occurred in the South and West together. These two regions grew in population by seven percent in this period (Table II–3 and Figure II–3). The recent growth of these two regions, however, has not had any major effect on the overall distribution of population among regions.

Table II–3

ESTIMATES OF THE RESIDENT POPULATION OF REGIONS: 1970 to 1975
(Numbers in thousands)

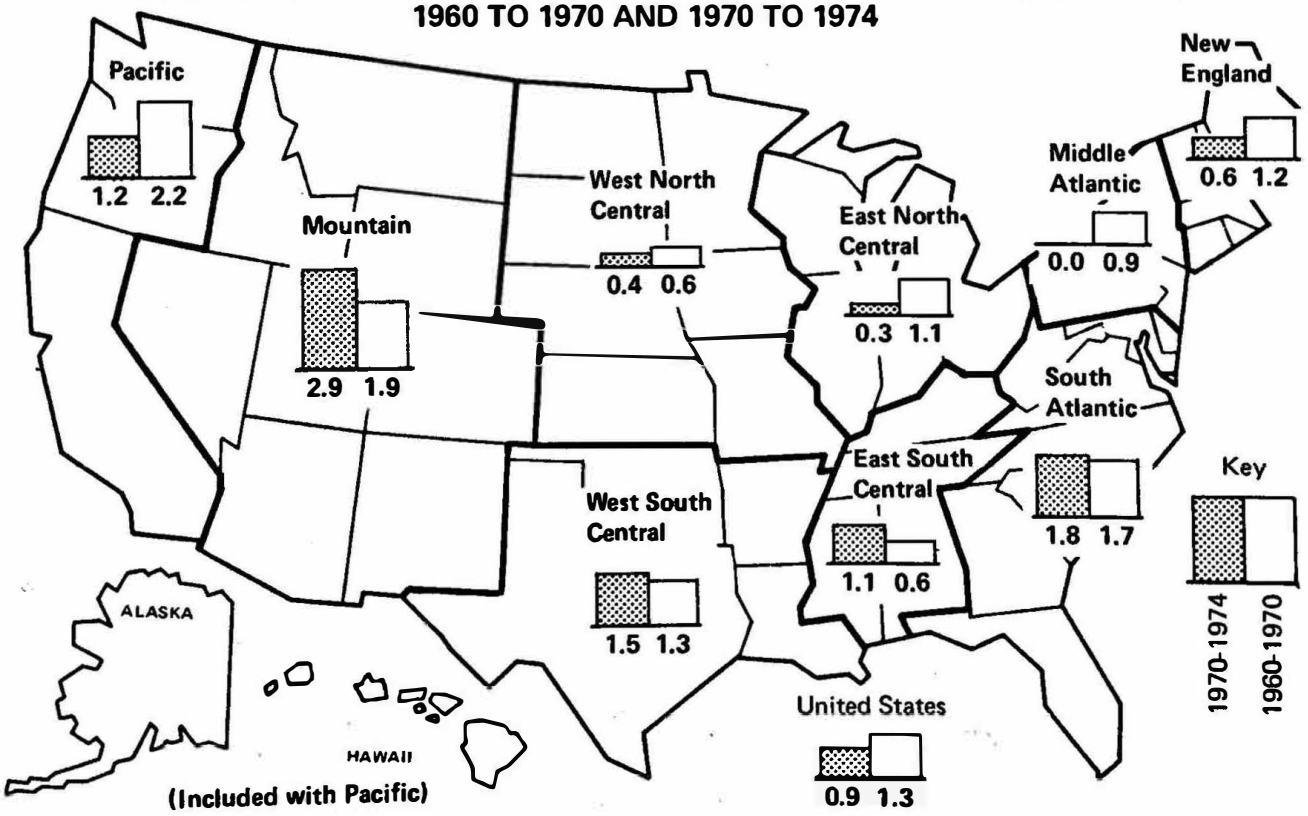
REGION	July 1, 1975 (provisional)	April 1, 1970 (Census)	CHANGE 1970 to 1975 Number	Percent
UNITED STATES	213,121	207,304	9,817	4.8
Northeast	49,461	49,061	401	0.8
North Central	57,669	56,593	1,076	1.9
South	68,113	62,812	5,301	8.4
West	37,878	34,838	3,039	8.7

Source: Bureau of the Census, *Current Population Reports, Series* P–25, No. 615.

Note: Resident population includes estimated Armed Forces personnel residing in each region.

Figure II–3

AVERAGE ANNUAL PERCENT CHANGE IN POPULATION FOR CENSUS DIVISIONS
1960 TO 1970 AND 1970 TO 1974



Source: *Department of Commerce, Bureau of Census 1970 Census of Population* and *Current Population Reports.*

Trends of special note since 1970 are rapid growth in the South and rapid growth in subregions such as the Rocky Mountain States and Florida. These trends are largely tied to changes in the distribution of employment and retirement.

The South Maintains Its Growth

Some of those trends are occurring in the South, a region of more rapid growth because of the increase in the net immigration of whites and the cessation of black net outmigration.

Continuing the pattern of the 1950's and 1960's whites have been moving particularly to Florida and Texas, attracted by the climate, developing recreational and retirement economies, and new professional growth. Florida led the nation in population growth for the 1970 to 1975 period, gaining 1.6 million residents for an increase of 23.6 percent. In fact, more than half the net immigration to the South is in Florida. Texas gained 1.0 million, the third largest numerical increase among states during the five year period. Overall, the population of the South increased by 8.4 percent from 1970 to 1975, nearly as high as the growth rate of the West.

One reason for the shift toward inmigration in the South and to net outmigration in the Northeast has been the nation's increasing reliance on truck transportation. The massive highway construction in the 1950's and 1960's opened up many parts of the South to relatively small manufacturing plants not dependent on rail lines. Traditionally low pay coupled with the rising educational levels in the South, attracted relocating industry. Also, increased use of air-conditioning in homes and commercial and industrial facilities made the South a year-round attraction for new factories, business enterprises, tourists and retirees.

The Rocky Mountain Area Growing Rapidly

Between 1970 and 1975, the highest average annual population increase occurred in the Rocky Mountain area, which had an average increase of 2.9 percent per year—more than triple the national figure. Seven of the ten fastest growing states in the country are in the Mountain States: Arizona, Nevada, Idaho, Utah, Colorado, New Mexico and Wyoming. Nearly two-thirds of the growth in the Mountain Division was due to the net immigration.

Growth in Mountain States represents a continuation of development which began in the 1950's, as the region's economic base diversified beyond farming, ranching, mining and military installations, and towards more tourism and scientific and technical research and development. Many Americans have migrated toward places of scenic beauty, recreational attractions, and sunny climates, thereby putting more pressure for growth on the area. But, recent demands for new resources development—especially coal and shale oil—will put new localized pressure on some states in the Mountain area.

Black Migration Northward Slowing Down

The historic trend of net outmigration of blacks from the South has ceased. Since 1970 the outmigration of blacks has slowed. The number of blacks moving to the South now approximates the number moving out (Table II–4).

Table II–4

NET INTERNAL MIGRATION BY RACE, REGION, AND TYPE OF RESIDENCE
1970 to 1975

(Numbers In Thousands)

	All Races	White	Black
REGION			
Northeast	−1342	−1240	− 64
North Central	−1195	−1145	− 52
South	+1829	+1791	+ 14
West	+ 708	+ 594	+102
TYPE OF RESIDENCE			
Metropolitan	−1594	−1734	+138
Central Cities	−7018	−6595	−243
Outside Central Cities	+5423	+4861	+381
Nonmetropolitan	+1594	+1734	−138

Source: Bureau of the Census. *Current Population Reports*, Series P–20, No. 285.

Diversification and expansion of the Southern economy which has created more and better paying jobs, has been a factor in stemming black outmigration. The decline in black outmigration may also be influenced by the recession which has produced very high unemployment in the Northeast, thereby

reducing the region's attraction for workers from the South.

Although the Northeast has experienced white outmigration since 1940, the black inmigration more than compensated for the white outflux until 1970. During the period from 1960 to 1970 net outmigration of whites totalled 520,000, while net inmigration of blacks totalled 612,000. Since 1970, however, black inmigration has not been greater than white outmigration. For the first time since 1940, therefore, the Northeast has a net population loss through migration. Natural population increase throughout the region has allowed very slow overall Northeastern population growth. The Northeastern states of New York and Rhode Island had estimated populations in 1975 slightly below 1970, although Rhode Island's decline was due entirely to a loss in Armed Forces population.

Significant Subregional Changes

Geographically, several readily identifiable subregions have emerged as centers of rapid growth since the 1970 census: the Ozark-Ouchita area, the Rocky Mountains, the Upper Great Lakes, and the Southern Appalachian coal fields.

Growth and Shifts in Regional Focus of Employment

The distribution of employment in the United States continues to shift. Different rates of economic growth among geographical areas have characterized the history of America, reflecting diversity in respect to resource endowment, location within the national transportation network, proximity to national world markets, and a host of other locational factors. Table II–5, summarizes the national nonagricultural employment growth between 1939 and 1974 by major geographical regions. From 1959 to 1974, nonagricultural employment increased by 46.0 percent for the nation as a whole. The share of the total national nonagricultural employment in the Pacific region increased from 11.5 percent in 1959 to 13.4 percent in 1974, or 1.9 points. The corresponding share in the Middle Atlantic region declined during this fifteen-year period from 22.2 percent to 18.6 percent, a drop of 3.6 points, while the share in the New England region declined from 6.9 percent to 6.2 percent, a drop of 0.7 points.

Regional growth is expected to continue in line with recent historical experience, but the

Table II–5

Regional Trends in Non-Agricultural Employment
(Numbers in Thousands)

Region	1939	1949	1959	1969	1970	1971	1972	1973	1974
New England	2,607.3	3,233.8	3,649.7	4,552.5	4,561.6	4,502.1	4,573.4	4,753.4	4,828.3
Middle Atlantic	8,078.5	10,623.1	11,775.9	14,124.0	14,110.6	13,903.4	14,059.9	14,360.4	14,391.8
East North Central	6,911.1	9,936.2	11,472.9	14,736.1	14,593.6	14,463.7	14,724.6	15,392.9	15,604.8
West North Central	2,484.0	3,492.6	4,133.8	5,333.6	5,361.5	5,370.3	5,546.3	5,841.6	6,004.5
South Atlantic	3,663.8	5,324.6	7,052.5	10,286.6	10,511.7	10,746.5	11,219.3	12,073.3	11,166.0
East South Central	1,466.1	2,160.0	2,715.9	3,773.0	3,825.5	3,903.9	4,133.1	4,385.7	4,503.9
West South Central	2,010.0	3,218.0	4,234.7	5,926.1	5,981.7	6,082.5	6,393.8	6,780.9	7,065.2
Mountain	799.7	1,220.7	1,797.2	2,568.0	2,662.7	2,787.0	2,973.9	3,202.4	3,386.2
Pacific	2,501.6	4,178.3	6,085.8	9,122.2	9,123.7	9,109.9	9,514.5	10,027.0	10,317.3
				Percentage Change					
New England		24.7	12.9	24.7	0.2	−1.3	1.6	0.0	1.5
Middle Atlantic		31.5	10.9	19.9	−0.1	−1.5	1.1	2.1	0.2
East North Central		43.8	15.5	28.4	−0.1	−0.9	1.8	4.5	1.3
West North Central		40.6	18.4	29.0	0.5	0.2	3.3	5.3	2.7
South Atlantic		45.3	32.5	45.9	2.2	2.2	4.4	7.6	−7.6
East South Central		47.3	25.7	37.4	1.4	2.0	5.9	6.1	2.7
West South Central		60.1	31.6	40.0	0.9	1.7	5.1	6.1	4.2
Mountain		52.6	47.2	42.9	3.7	4.7	6.7	7.7	5.7
Pacific		67.0	45.7	49.9	0.0	4.4	4.4	5.4	2.9

Source: U.S. Department of Labor, Bureau of Labor Statistics, Handbook of Labor Statistics, 1974 and 1975 Bulletin 1825 and 1826. Table 48.

trends will be moderated as newer regions mature. It is likely that while the older sections of the country, particularly the Mid-Atlantic, New England and East North Central regions, will continue to grow, this will be at modest rates, relative to other areas of the country.

Regional employment trends are even more dramatic for the manufacturing sector of the economy. Manufacturing employment in the New England region dropped to 1.4 million workers in 1973, a figure below the 1959 level. The region lost nearly 135,000 manufacturing jobs or close to ten percent of its total between 1969 and 1973. An even sharper decline occurred in the Mid-Atlantic region, where manufacturing employment fell by nearly 410,000 jobs during the 1969 to 1973 period. The heavily industrialized East North Central region, whose economy contains the highest concentration of manufacturing jobs nationally, also had a substantial drop in manufacturing employment over the same period. Manufacturing employment shifted away from the heavily industrialized north and northeast to the south and west.

Nevertheless, the three regions losing manufacturing employment still have the highest percentage of manufacturing (with over ten million workers, a majority of the total manufacturing employment in the U.S. The clear and persistent trend, however, shows a marked shift in manufacturing employment away from the industrialized north and northeast.

All regions of the country experienced a marked increase in government employment during the past several decades. Again, however, there were substantial regional variations. The Mountain and Pacific regions had the fastest growing government sectors between 1939 and 1969, with average annual increases of 5.5 to 7.5 percent. By contrast, government employment in the New England, West North Central and Mid-Atlantic regions grew at only 2.5 percent to 4.5 percent per annum. By the early 1970's the region of fastest growth in government employment had shifted to the South Atlantic region where the increase was 5.7 percent from 1972 to 1973, while the growth rates in the Mountain and Pacific regions dropped below five percent, and the East North Central area had an increase of 0.9 percent.

Closing the Regional Income Gap

Reflecting these trends, the income gap between rich and poor states has narrowed considerably over the past 45 years.

The least affluent regions have made the most significant gains. Per capita income in the South rose from 53 percent of the national average in 1929 to 83 percent in 1974. It was the only region that experienced sustained growth over the entire 45 year period. The Plains and Southwest regions also steadily improved their status. Still the wealthiest region, the East, showed the least relative gain. Its per capita income fell from a peak of 150 percent of the national average in 1934 to 116 percent in 1974 (Figure II–4).

The states moved closer together also. Mississippi, with the lowest per capita income, increased its level from 41 percent of the national average in 1929 to 69 percent in 1974. Connecticut, which had the highest per capita income of the "lower 48 states" fell from 146 percent of the U.S. average in 1929 to 119 percent in 1974. New York State declined the most in relative terms. Its per capita income fell from 150 percent to 116 percent of the U.S. average between 1929 and 1974 (Figure II–5).

Projections to 1990 by the Bureau of Economic Analysis of the Department of Commerce indicate a continuation of the pronounced shift of income away from the Northeast and North Central portions of the country to the Southern and Western regions.

A NEW URBAN RURAL BALANCE

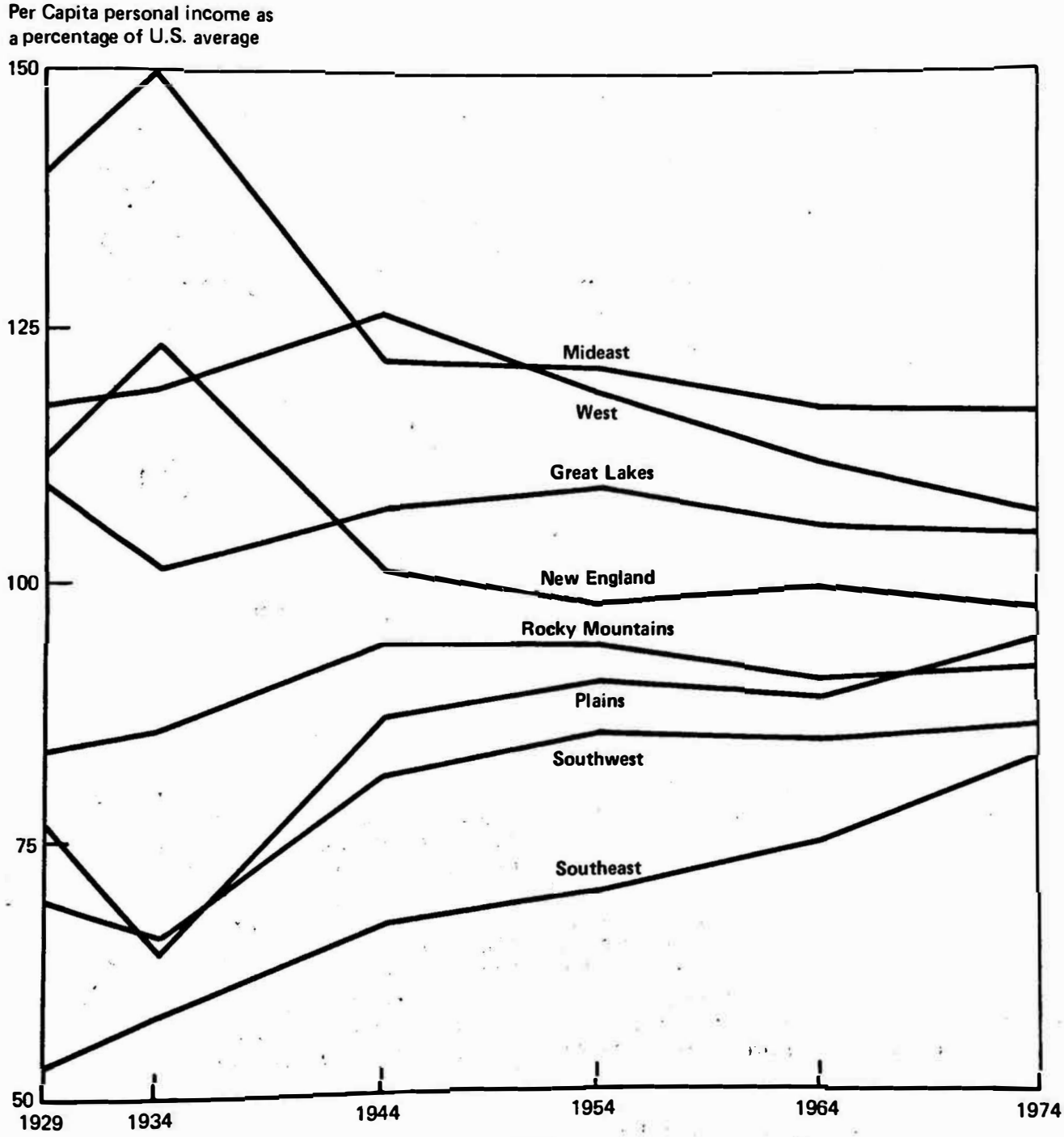
Decline in Metropolitan Growth

Economic and social forces have long caused urbanization of the population. By 1974, some 73 percent of the population resided in metropolitan areas. Over 60 percent of the metropolitan population lived in metropolitan areas of over one million.

Metropolitan urban growth, however, has leveled. Recent Census Bureau reports, covering 1970 to 1974, reveal that since 1970 metropolitan areas have grown less rapidly than the country. The metropolitan population increased 3.4 percent between 1970 and 1974, compared with a 5.6 percent increase in nonmetropolitan areas. The same relative situation holds for growth in jobs; between

Figure II–4

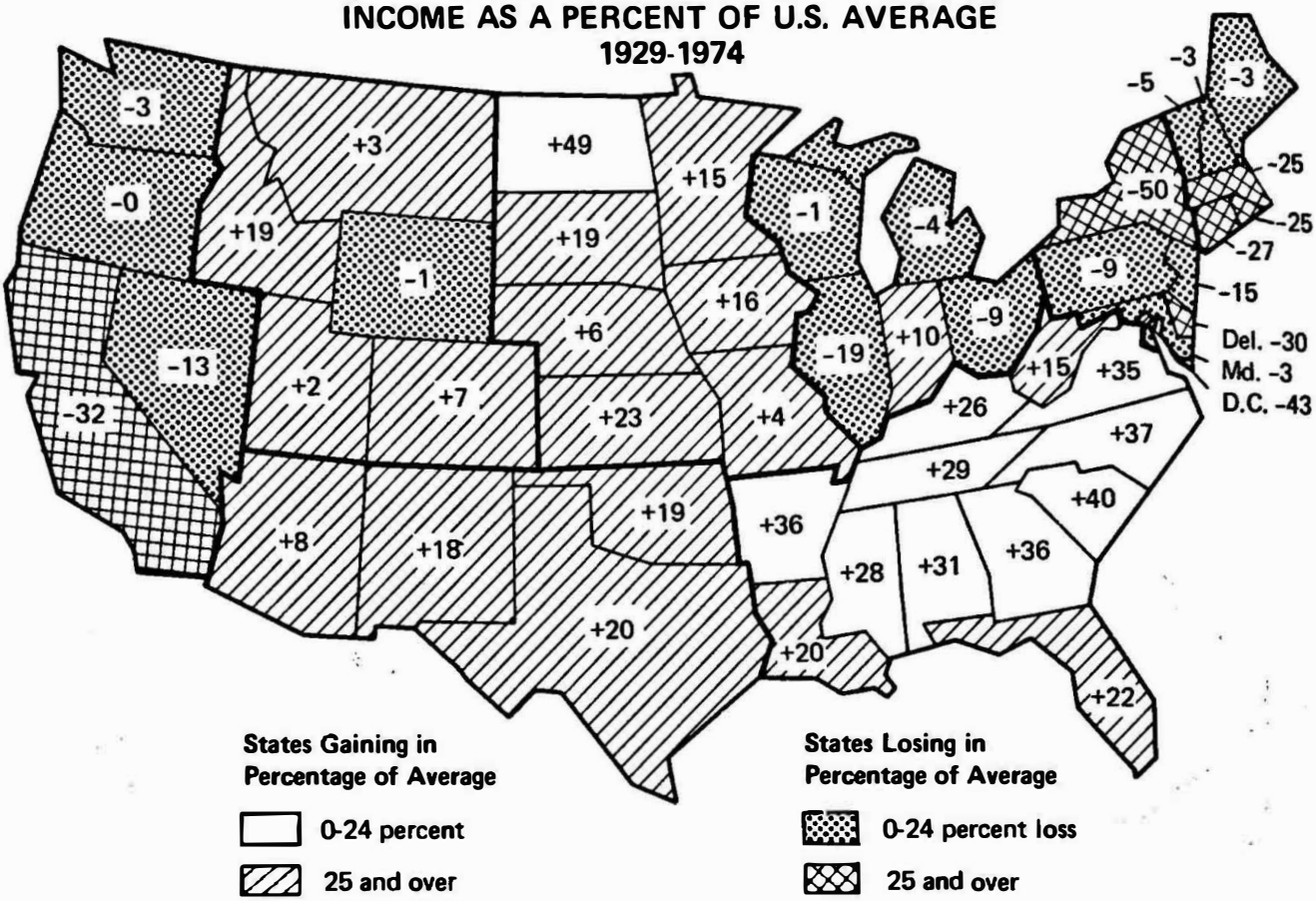
CLOSING THE REGIONAL INCOME GAP
(1929-1974)



Source: Advisory Commission on Intergovernmental Relations, 1975.

Figure II–5

PERCENTAGE POINT CHANGE IN PER CAPITA PERSONAL INCOME AS A PERCENT OF U.S. AVERAGE 1929-1974



Source: Advisory Commission on Intergovernmental Relations, 1975.

1973 and 1975, employment increased by only 0.2 percent in metropolitan areas, while increasing by 1.2 percent in nonmetropolitan areas, even though overall growth in employment has been dampened by recession.

If this trend were to prove durable, it would constitute an end to the massive migration from rural hinterland to major urban centers that has continued virtually unabated since the early 1800's. Interestingly, the countries of Northern Europe, with the exception of France, report a similar tapering off in the growth rate of their major urban centers as a part of a general pattern of less overall growth.

However, the evidence in this country for a drop-off in metropolitan growth rates varies in its conclusiveness by city size. The largest metropolitan areas account for most of the decline. In a striking change, five of the eight metropolitan areas with populations of over three million experienced a net outmigration between 1970 and 1973. These same eight areas registered one-third of the nation's total growth over the course of the 1960's. The most dramatic turn-about was in Los Angeles, which lost a net of 119,000 residents during the three year period, after having attracted a net of over 1.2 million new arrivals over the previous decade. Only Washington, D.C. has grown by as much as one percent since 1970.

Below the three million level, regional location rather than size appears to be the prime determinant of changing metropolitan growth rates. Few North Eastern or North Central metropolitan areas of any size have grown much; most Western and many South-

ern metropolitan areas, however continue to attract some inmigration, albeit for some at lower rates than in the past. However, those large Standard Statistical Metropolitan Areas (SMSA's) that still show a strong attraction for migrants from other regions are virtually all located in states enjoying reputations for warm climates and unusually recreational and environmental amenities. Just three areas; Miami-Fort Lauderdale, Tampa--St. Petersburgh, and Phoenix, Arizona account for much of the net migration into metropolitan areas of between one and three million (Fig. 11–6).

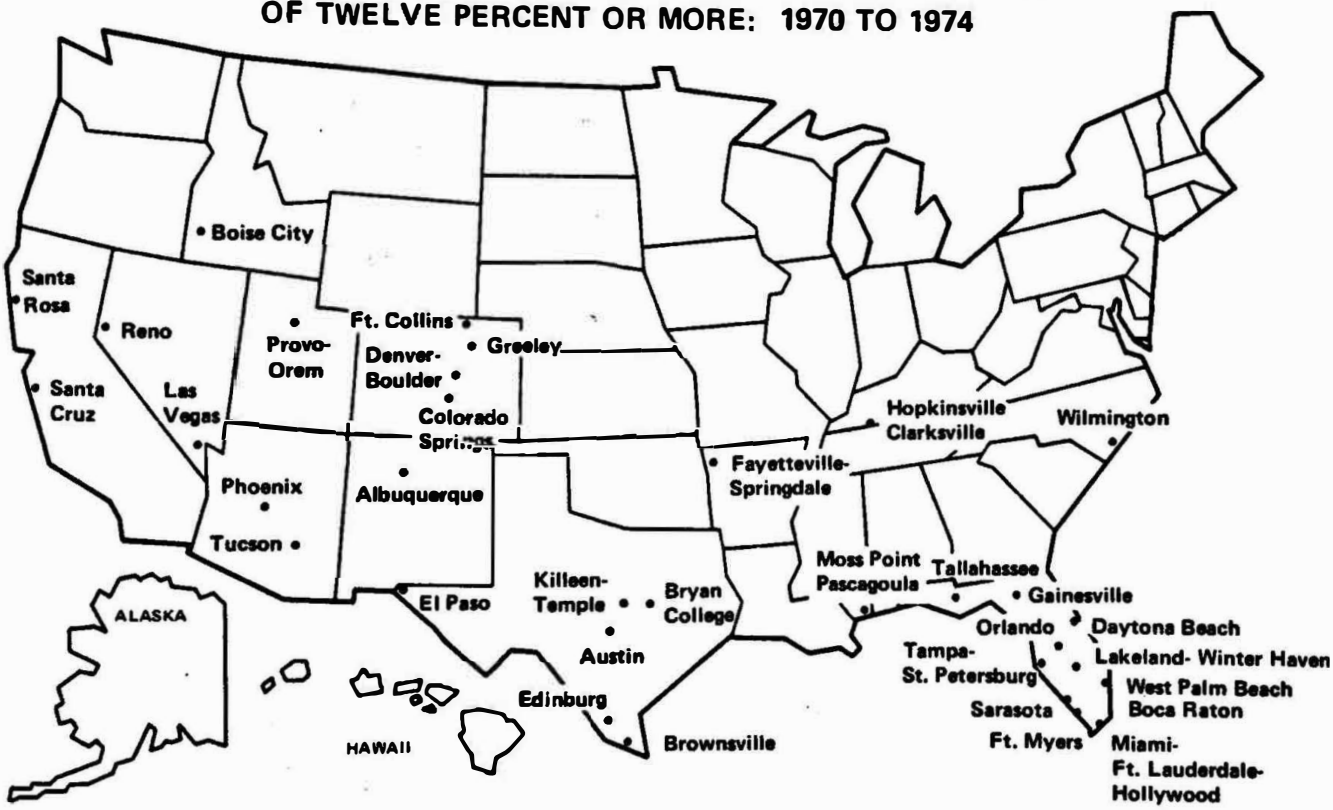
Rural Growth or Exurban Expansion?

A corollary of the weakening of metropolitan growth is that many rural areas have been gaining population for the first time in this century, (Tables II–6 and II–7).

A significant aspect of the recent turnaround in rural growth is that the increase has been almost exclusively nonagricultural. In fact the farm population has dropped at an average annual rate of 1.8 percent since 1970, much lower than the 4.8 percent rate recorded in the 1960's. The rural population is about 8.9 million persons, somewhat less

Figure II–6

METROPOLITAN AREAS WITH POPULATION INCREASES OF TWELVE PERCENT OR MORE: 1970 TO 1974



Source: Bureau of Census, *Current Population Reports*, Series P-25, No. 618.

Thus, the overall decline in metropolitan growth may be related primarily to the weighting of the statistics by the largest metropolitan areas. Urban growth also may have been affected in the short run by recent changes in regional and economic conditions.

than one-eighth of the total nonmetropolitan population.

New rural workers are employed in service or manufacturing activities located in smaller towns and cities. The majority of this rural increase, just more than half, is in counties adjacent to SMSA's. (Table II–6).

Table II–6

POPULATION CHANGE BY RESIDENCE: UNITED STATES, 1970–74

Residence	Population (in 1000's) 1974	1970	Pct. Change 1970–74	Net Migration (in 1000's) 1970–74	1960–70
Total	211,392	203,201	4.0	2,075	3,001
Metropolitan [1]	154,068	149,002	3.4	474	5,997
Nonmetropolitan	57,324	54,299	5.6	1,602	−2,996
Adjacent counties [2]	29,578	27,846	6.2	997	− 724
Nonadjacent counties	27,746	26,452	4.9	604	−2,273

[1] Metropolitan status as of 1974.*

[2] Nonmetropolitan counties adjacent to Standard Metropolitan Statistical Areas.

Source: *Current Population Reports*, Federal-State Cooperative Progrram for Population Estimates. Series P–26 (A few States were published in Series P–25). U.S. Bureau of the Census. Compiled by Population Studies Group Economic Research Service, U.S. Department of Agriculture.

* Entire counties used in New England; criteria applied as in rest of U.S. results in the inclusion of the following counties: Rockingham, N.H.; Sagadahoc, ME.; Washington, R.I.; Middlesex, CT.; and Tolland CT.; in addition to the counties already included by Census Bureau county equivalents.

Table II–7

POPULATION CHANGE FOR SELECTED GROUPS OF METROPOLITAN AND NONMETROPOLITAN COUNTIES 1969–70, 1970–74

(Numbers in Thousands)

	POPULATION			POPULATION CHANGE			
	July 1, 1974 (Provisional)	April 1, 1970 (Census)	April 1, 1960 (Census)	1970–1974 Number	1970–1974 Percent	1960–1970 Number	1960–1970 Percent
Inside SMSA's	154,960	149,816	127,939	5,144	3.4	21,878	17.1
Metropolitan Areas over 3,000,000	56,081	55,774	47,863	307	0.6	7,912	16.5
Metropolitan Areas 1–3,000,000	39,163	37,401	30,969	1,762	4.7	6,431	20.8
Other Metropolitan Areas	59,716	56,642	49,107	3,075	5.4	7,535	15.3
Outside SMSA's	56,430	53,484	51,372	2,947	5.5	2,112	4.1
178 Counties with 20% or more commuters to SMSA's	4,374	4,009	3,655	365	9.1	354	9.7
333 Counties with 10–19% commuters to SMSA's	9,896	9,337	8,694	559	6.0	643	7.4
Other Counties (less than 10% commuters)	42,160	40,138	39,022	2,023	5.0	1,115	2.9

Source: Derived from Bureau of the Census, *Current Population Reports*, Series P–25 and P–26 (county estimates) as reported by Richard Forstall, Population Division. SMSA's (in New England, county equivalents of SMSA's) are as defined December 31, 1975. Breakdown of metropolitan areas by size classifies standard consolidated statistical areas (SCSA's) and other SMSA's according to 1974 estimated population. Breakdown by commuting based on 1970 census commuting data.

Some demographers have questioned the reality of the trend. They ask if nonmetropolitan growth results from suburban sprawl spilling over SMSA boundaries. The most rapid growth in nonmetropolitan areas is in counties adjacent to SMSA's. Growing at a rate of 6.2 percent between 1970 and 1974, these counties are experiencing fringe development expanding metropolitan areas beyond official SMSA boundaries.

To some extent, the factors behind rural growth suggest that urban sources of growth, namely manufacturing and services, rather than agriculture, have partially shifted to low density areas. The decentralization of manufacturing activity over the past 15 years helped transform rural and small town economies, particularly in the upland regions of the South. Between 1962 and 1969 manufacturing comprised half of all nonmetropolitan employment growth. However, growth in manufacturing employment was not a leading factor in the upsurge in nonmetropolitan population after 1970. Rural counties with substantial manufacturing employment had some inmigration, but grew less rapidly than nonmetropolitan areas as a whole. Manufacturing jobs accounted for only 18 percent of job growth in nonmetropolitan areas from 1969 to 1972, versus 50 percent from 1962 to 1969. Since 1970, diversification of the employment base of nonmetropolitan areas has extended to trade and other non-goods producing sectors of the economy. Because growth in the economy as a whole has occurred in sectors such as retail trade, finance, and real estate, this diversification has helped nonmetropolitan areas. The resurgent demand for coal, as oil prices have risen, is clearly the active growth impetus in mining regions.

Much of the decentralization of manufacturing and service employment is located in the areas immediately adjacent to metropolitan areas, around state colleges and universities, and in retirement climates—all locations of the most rapid nonmetropolitan growth in the last five years. National retirement, welfare, and health programs have been factors that have helped elderly and other population groups to move where they are more comfortable or can enjoy more amenities, stimulating service employment growth in these areas. Some observers attribute the post-1970 population shifts in large part to the increasing preference of some people for a rural or small town residential environment, and improved economic conditions that increased the feasibility of their acting on these preferences.

If rural areas are experiencing a rebirth, the implications will be far reaching. More data is needed to determine the strength and permanence of the trend as well as its socio-economic composition and underlying causes, before any clear picture of its implications can emerge.

CONTINUED DISPARITIES BETWEEN CENTRAL CITIES AND SUBURBS

In general, the nation's metropolitan areas will continue to grow, both from legal and illegal immigration and natural increase. The extent of this growth will vary among metropolitan areas. As this growth continues, social and economic disparities between central city and suburb will persist with the central city taking in and retaining the poorest population, and the suburbs generally absorbing the more affluent population.

Continued Erosion of Older Central City Economic and Population Base

Central cities, considered collectively, have evidenced a slight population decline since 1970, with percent decrease from 1970 to 1974 versus a six percent increase during the 1960's. The suburban rings kept adding people at twice the national rate, although their population growth is slower than in the past. And 39 percent of the nation's civilian noninstitutional population lived in the suburbs in 1974, while central cities claimed 30 percent.

The growth of the suburbs is a continuation of trends established in the 1950's and 1960's. Especially during the 1960's, there was a significant shift of manufacturing and office employment within metropolitan labor markets from central cities to suburbs. This movement included business enterprises exporting goods and services to the rest of the nation and not simply those producing for local consumption (Table II–8). The pattern continued in most metropolitan areas from 1970 to 1975.

Table II–8

SHIFTING EMPLOYMENT PATTERNS

	Employment Growth Central City (Percent Change) 1959–70	Employment Growth Suburban (Percent Change) 1959–70	Employment Growth Central City Manufacturing (Percent Change) 1959–70
1. New York	12.7	66.7	– 6.3
2. Chicago	20.4	84.4	7.4
3. Los Angeles	36.2	151.5	18.8
4. Philadelphia	8.0	59.8	–13.1
5. Detroit	13.1	93.9	– 3.7
6. Baltimore	6.9	61.7	– 2.4
7. Houston	80.0	50.2	60.4
8. Cleveland	22.3	84.4	5.4
9. Minneapolis-St. Paul	51.3	80.6	51.5
10. Washington, D.C.	25.8	132.0	7.9
11. St. Louis	5.3	58.5	– 6.0
12. Milwaukee	17.4	181.4	– 0.5
13. San Francisco	31.8	72.2	9.4
14. Boston	15.8	38.7	–10.1
15. Dallas	80.8	38.3	73.1
16. New Orleans	23.9	109.2	10.4
17. Pittsburgh	12.3	7.7	– 3.8
18. San Antonio	52.6	– 44.7	55.6
19. San Diego	43.4	149.8	– 4.1
20. Seattle	28.9	171.9	–11.5
21. Buffalo	15.9	7.2	0.2
22. Cincinnati	45.1	50.4	– 1.0
23. Memphis	50.3	77.6	44.6
24. Denver	42.2	147.5	31.6
25. Atlanta	59.0	134.7	24.3
26. Indianapolis	30.3	59.7	16.6
27. Kansas City	30.3	196.8	18.7
28. Columbus	45.9	61.7	21.7
29. Phoenix	107.3	41.4	143.7
30. Newark	11.7	52.8	– 9.4

Source: "A Comparative View" by Stanley Friedlander & Charles Brecher in New York Is Very Much Alive, edited by Eli Ginsberg. McGraw Hill, New York, 1972, p. 25–26.

The movement of manufacturing concerns from the central cities is a particular concern, given the large concentration of minority workers and individuals with limited skills and education who reside in town and lack transportation to suburban job locations. Between 1951 and 1970, significant decreases occurred in manufacturing employment within 12 of the 30 largest cities in the nation, primarily in the older and more industrialized centers of the Northeast and North Central regions. The declines in Boston and Philadelphia exceeded ten percent of the industrial labor force. The few central cities that attracted new manufacturing employment in this period were located for the most part in the South and Southwestern regions, with the largest gains in Phoenix 144 percent, Dallas with 73 percent, Houston 60 percent, and San Antonio with 56 percent. To various degrees in different areas, however, the expansion of other jobs, particularly in the service sectors, has replaced manufacturing jobs.

Concurrently, an acceleration in the growth of suburban employment occurred around the 30 largest cities, with the exception of San Antonio, and suburban jobs at least doubled in nine of the metropolitan areas involved. In metropolitan areas nationally, employment grew in the suburbs by 3.2 percent between 1973 and 1975, while declining in the central cities by 3.7 percent. Increased participation of women in the labor force has been a major factor in the suburban gain with their employment in the suburbs up 9.3 percent. The central city decline, by contrast, was the result primarily of decreased employment of adult white males.

Central city employment problems will continue to involve changes in the labor forces due to immigration, increased numbers of women and young workers entering the labor force, loss of skilled and professional workers to the suburbs, and the need for two wage earners per household in high cost of living areas. And competition for fewer jobs could aggravate labor problems for firms located in central cities and encourage movement to areas relatively free of such problems. High unemployment rates among blacks, Mexican Americans, Puerto Ricans and among youth, the elderly and women in central cities may persist if job competition intensifies as the result of immigration, including illegal aliens.

Continued Proportional Increase of Low-Income Minorities in Central Cities

The proportions of both white and non-white populations living in central cities have declined somewhat since 1970. From 1970 to 1974 the number of blacks in the suburbs increased 19.5 percent, compared to a previous 26.4 percent gain in the 1960's. The proportion of blacks in the suburbs still is smaller than the proportion for the nation as a whole—five percent as against 11 percent —but a new trend may be emerging, especially in cities with large black populations. In the 1960's these cities started to experience some net outmigration of blacks. If this phenomenon becomes more widespread, the middle class in the central cities may well continue to erode, as more middle class blacks move to suburbs. The consequence of both black and white middle class outmigration from the central cities will be a further widening of the socio-economic disparities between central cities and suburbs (Figure II–7).

Despite the tendency for suburbanization of greater numbers of blacks, central cities are becoming increasingly black. The outmigration of whites continues, and there is a high rate of natural increase among blacks in central cities. The latter fact is partly due to the high proportion of blacks of child bearing age, compared to whites who are older, in central cities. In 1974, 22.0 percent of the total population in central cities was black, a substantial increase from the 16.4 percent recorded in 1960.

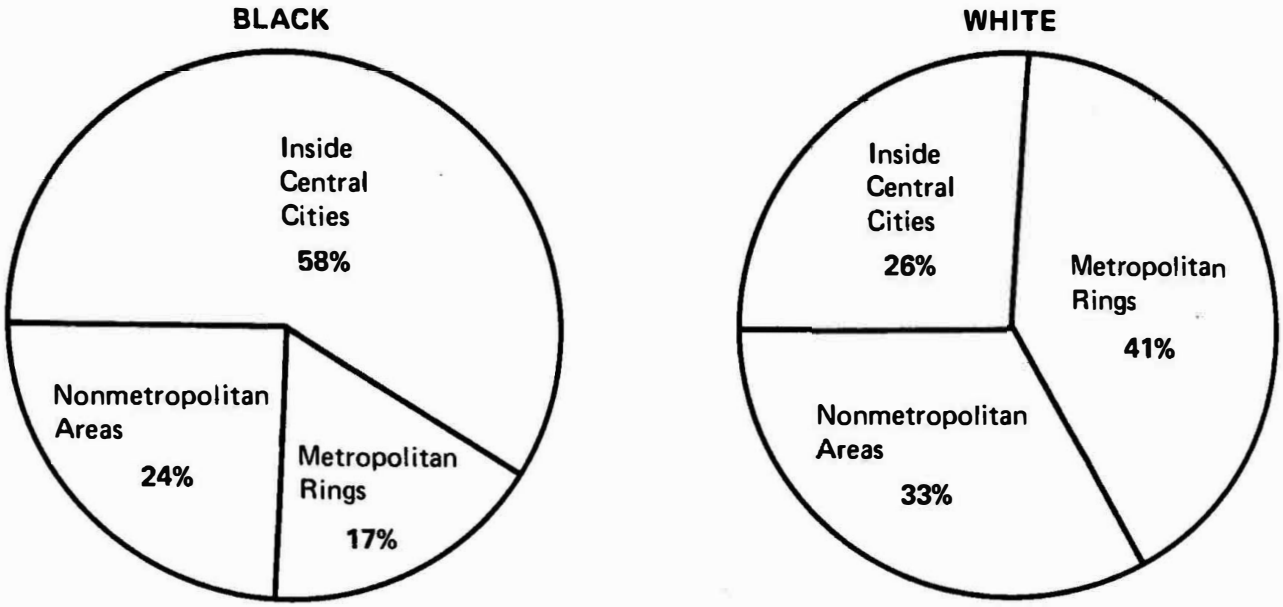
Diversity of Central Cities Suggests New Trends

Not all central cities are in decline. Age and the size of the SMSA which contains the central city have an effect. From 1960 to 1970 at least, an inverse relationship existed between the population of the SMSA and the rate of population growth in the central city. In addition, older large cities tended to lose population while younger large cities gained.

Some central cities in fact enjoy better conditions than their suburbs. The Brookings Institution recently compared the conditions of core cities and their suburbs in all metropolitan areas of over .5 million population. The comparison used a hardship index

Figure II-7

PERCENT DISTRIBUTION OF THE POPULATION, BY METROPOLITAN-NONMETROPOLITAN RESIDENCE: 1974



Source: Bureau of Census, *Current Population Reports.* Special Studies, Series P-23, No. 54, *The Social and Economic Status, the Black Population in the U.S.,* 1974.

measuring six factors: unemployment, dependency rates, extent of education, income level, overcrowded housing, and poverty. The most significant findings relate to the regional grouping of results. With the exception of Atlanta, the ten most troubled cities are grouped in the North East and North Central regions with Newark, New Jersey leading the list and New York City tenth. By contrast, of the 12 central cities revealed as enjoying measurably better conditions than their suburbs, all but one were in the South or West.

These discrepancies can be attributed in part to historic patterns of inter-regional migration and to the problems endemic to the more mature economies of the Northeastern and North Central states. The findings also result to some extent from differing degrees of jurisdictional fragmentation from one SMSA to another. For example, because of liberal annexation laws, the central cities of Houston, and Phoenix house more than 50 percent of the population within their metropolitan areas. Finally, in some regions, the older suburbs are undergoing a process of economic and physical decline more commonly associated with central cities.

THE EFFECTS OF INFLATION AND RECESSION

For most of the past decade, increases in income more than kept pace with rises in prices. While the cost of living rose by 52 percent and food prices jumped 63 percent, median family income doubled. Real disposable personal income per capita increased by an average of 3.5 percent. The proportion of families with incomes of $15,000 or more rose from 3.7 percent in 1960 to 22.3 percent in 1970 and reached 39.8 percent in 1974. Median family income in constant 1974 dollars rose from $9,358 in 1960 to $12,836 in 1974. These gains were shared by white and minority families alike, with the real median family income for whites rising from $9,716 in 1960 to $13,356 in 1974, while the median family income for minorities rose from $5,379 to $8,265.

The economic changes of the last several years have reversed long-term trends of the post-war period, during which steadily rising incomes sustained continued increases in standards of living. During the last two years the purchasing power of the dollar fell by 3.0 percent. Real per capita disposable personal income dropped by 2.1 percent in constant dollars in 1974 and, although it rose in 1975 by 0.8 percent, this was not sufficient to return to the 1973 level. Between January 1973 and July 1975 the consumer price index increased 27.1 percent, while the average hourly earnings of workers in industry rose only 20.2 percent. The value of household savings and other wealth declined 11.5 percent in 1974 and the amount of household debt rose by 18.6 percent.

The value of a dollar in 1967, worth $1.14 in 1960, had fallen to 69 cents in 1974, a decline of 31 percent. In the third quarter of 1975 it fell to 63 cents, a reduction of eight percent since the third quarter of 1974. The consumer price index, which had risen to 138.5 by the end of 1973, rose to an estimated 166.5 by the end of 1975, a trend that was mirrored in the wholesale price index, which rose from 141.8 at the end of 1973 to 178.7 by the end of 1975. While the rate of inflation slowed in the last half of 1975, it continued to be significantly higher than it was during the years preceding 1973.

Even if family income rises as fast as inflation, the increased tax bite of higher tax brackets results in a decrease in purchasing power after taxes. It is estimated that the total net financial assets of households have not grown since 1968. At the end of 1974, these assets had only 64 percent of the total value they had, in constant dollars, at the end of 1972. Household insurance and pension reserves increased 40 percent in current dollars from 1968 to 1972 and increased by only three percent in the period from 1972 to 1974. Equity investments of households fell from $974.1 billion in 1972 to $495.9 billion in 1974.

THE PROBLEM OF POVERTY

The Number of Poor Persons

From 1960 to 1969, the nation made consistent progress in reducing the extent and severity of problems of poverty. In 1960, 39.9 million persons, or 22.2 percent of the population, had incomes below the poverty level (a governmentally defined statistical yardstick which varies by size of family, sex of head of household, and farm-nonfarm residence and is updated by changes in the Consumer Price Index). By 1969, the number of poor persons had dropped to 24.1 million, or 12.1 percent of the population. Since 1969, the proportion of the total population living in poverty has continued to decline, with the number of people in poverty fluctuating between 25.6 million in 1971 and 23.0 million, or 11.6 percent of the population in 1974 (See Table III–1). Inflation and economic recession increased the number of poor persons by 1.3 million between 1973 and 1974. By the end of 1974, the most re-

Table III–1

NUMBER OF PEOPLE BELOW POVERTY LEVEL: 1960–1974

(Thousands of Persons)

Year	Number	Percent of Total Population
1960	39,851	22.2
1961	39,628	21.6
1962	38,625	20.7
1963	36,436	19.3
1964	36,055	19.0
1965	33,185	17.3
1966	28,510	14.7
1967	27,769	14.2
1968	25,389	12.8
1969	24,147	12.1
1970	25,420	12.6
1971	25,559	12.5
1972	24,460	11.9
1973	22,973	11.1
1974	24,260	11.6

Source: U.S. Bureau of the Census, Current Population Reports, Series P–60, No. 98 and No. 99, and P–25, No. 601.

Table III–2

CHANGES IN THE NUMBER OF POOR PERSONS, FAMILIES, AND UNRELATED INDIVIDUALS BETWEEN 1973 and 1974

(Numbers in thousands)

Characteristic	1974	1973	Change Number	Change Percent
All persons ..	24,260	22,973	*1,287	*5.6
White	16,290	15,142	*1,148	*7.6
Black	7,467	7,388	79	1.1
Under 65 years	20,952	19,619	*1,333	*6.8
65 years and over	3,308	3,354	−46	−1.4
All families ..	5,109	4,828	*281	*5.8
Male head	2,757	2,635	*122	*4.6
Female head ..	2,351	2,193	*158	*7.2
All unrelated individuals	4,820	4,674	146	3.1
Male	1,607	1,495	*112	*7.5
Female	3,212	3,179	33	1.0

* 1974 figure is significantly different from the 1973 figure at the 95 percent confidence level.

Source: U.S. Bureau of the Census, Current Population Reports, Series P–60, No. 99, "Money Income and Poverty Status of Families and Persons in the United States: 1974" (Advanced Report) July 1975. Page 2.

cent year for which data is available, a total of 24.3 million persons, or 11.6 percent of the population were below the poverty level.

Some 5.1 million families and 4.8 million unrelated individuals were at or below the poverty level in 1974. Both of these figures represented increases from 1973 levels (Table III–2). The poverty rate for children increased from 14.3 percent in 1973 to 15.5 percent in 1974. About 10.2 million related children under 18 years of age lived with families below the poverty level.

While the number of low income persons aged 65 and over did not increase between 1973 and 1974, the number of poor persons under age 65 increased by 6.8 percent. In the case of the elderly, 1974 was the first year since 1970 when substantial increases in social security benefits were enacted that there was no significant decline in the number of poor persons.

In 1974 the low income or poverty threshold was $5,038 for a nonfarm family of four, reflecting inflation and changes in the Consumer Price index, eleven percent higher than the 1973 cutoff of $4,540. The poverty level was $2,973 in 1959.

The Composition of Poverty

The bulk of increases in poverty occurred among white persons. The number of white persons below the poverty level increased by almost eight percent in 1974. There was no significant change reported in black poverty levels, but the proportion of blacks below the poverty threshold remained substantially greater than that for whites and had declined little since 1971. By the end of 1974 about 8.9 percent of white persons and 31.4 percent of black persons were below the poverty level. Blacks represented 30.8 percent of the low income population. About 23 percent of persons of Spanish origin were below the

low income level in 1974, comprising over ten percent of the poverty population. This was roughly the same level as in 1972 and 1973. Approximately 60 percent of the Spanish poor were of Mexican origin, most of whom lived in south-western states. Poverty levels also remained high for Indians and new Asian immigrants, among others.

In 1974, as in previous years, families with a female head comprised a larger proportion of poor families than of nonpoor families, 46.0 percent compared to 9.7 percent. This difference prevailed for both white and black families. The majority of black families below the low income level, 66.9 percent, were headed by women, compared to 37.2 percent of low income white families (See Table III–3).

Low income families were more likely to have children under age 18 than families above the low income level (75.8 percent compared to 54.3 percent). The proportion of low income families with children was considerably higher for families with a female head than those with a male head (91.8 percent compared to 62.3 percent). Children in female headed families were much more likely to be below the low income level than those in male headed families.

Of the 7.5 million blacks below the poverty level in 1974, about 87 percent were family members. A large proportion of low income black family members were related children under 18 years (58.7 percent); about 70 percent of these children were in families with a female head. About two-fifths of children in black families below the poverty level were in families of seven or more persons. A relatively small proportion of blacks below the low income level were aged 65 or older, (8.4 percent compared to 16.2 percent for whites).

In about half of low income families, the family head worked at some time during 1973 and, of this group, 36.4 percent worked all year round on a fulltime basis. Of the low income family heads who did not work at all during 1973, about 57.5 percent were women with family responsibilities or retired persons.

The Urbanization of Poverty

Poverty has increasingly become urbanized and concentrated in central cities. About nine million of the more than 24 million poor

Table III–3

PERSONS BELOW THE LOW INCOME LEVEL BY FAMILY STATUS AND SEX AND RACE OF HEAD: 1974

(Number in thousands)
(Persons as of March of the following year)

NUMBER BELOW LOW-INCOME LEVEL	
ALL PERSONS	
TOTAL	24,260
PERCENT 65 YEARS & OVER	13.6
IN FAMILIES	19,440
HEAD	5,109
RELATED CHILDREN UNDER 18 YRS	10,196
OTHER FAMILY MEMBERS	4,135
UNRELATED INDIVIDUALS	4,820
PERSONS IN FAMILIES WITH MALE HEAD AND MALE UNRELATED INDIVIDUALS	
TOTAL	12,484
PERCENT 65 YEARS & OVER	11.4
IN FAMILIES	10,877
HEAD	2,757
RELATED CHILDREN UNDER 18 YRS	4,809
OTHER FAMILY MEMBERS	3,310
UNRELATED INDIVIDUALS	1,607
PERSONS IN FAMILIES WITH FEMALE HEAD AND FEMALE UNRELATED INDIVIDUALS	
TOTAL	11,775
PERCENT 65 YEARS & OVER	16.0
IN FAMILIES	8,563
HEAD	2,351
RELATED CHILDREN UNDER 18 YRS	5,367
OTHER FAMILY MEMBERS	825
UNRELATED INDIVIDUALS	3,212
WHITE	
TOTAL	16,290
PERCENT 65 YEARS & OVER	16.2
IN FAMILIES	12,517
HEAD	3,462
FEMALE	1,297
RELATED CHILDREN UNDER 18 YRS	6,180
OTHER FAMILY MEMBERS	2,855
UNRELATED INDIVIDUALS	3,773
NEGRO AND OTHER RACES	
TOTAL	7,970
PERCENT 65 YEARS & OVER	8.4
IN FAMILIES	6,923
HEAD	1,627
FEMALE	1,054
RELATED CHILDREN UNDER 18 YRS	4,016
OTHER FAMILY MEMBERS	1,260
UNRELATED INDIVIDUALS	1,047
NEGRO	
TOTAL	7,467
PERCENT 65 YEARS & OVER	8.4
IN FAMILIES	6,506
HEAD	1,530
FEMALE	1,024
RELATED CHILDREN UNDER 18 YRS	3,819
OTHER FAMILY MEMBERS	1,157
UNRELATED INDIVIDUALS	961

Source: U.S. Bureau of the Census, Current Population Reports, Series P–60, No. 99, "Money Income and Poverty Status of Families and Persons in the United States: 1974" (Advance Report) Table 15.

persons lived in central cities in 1974 and another 5.8 million in metropolitan areas, but outside central cities. Metropolitan areas accounted for approximately 60 percent of the total poverty population.

The growth in the proportion of poor persons living in metropolitan areas and the related decline in the concentration of poverty in nonmetropolitan areas has been a long-term trend. In 1959 the majority of poor, 56 percent, lived in nonmetropolitan America. Over the past 15 years, the number of persons living below the poverty level outside metropolitan areas has declined by 12 million persons, primarily as a result of outmigration from the rural south. But the remaining nonmetropolitan poor face the more intractable poverty problems.

Nonmetropolitan areas and central cities of metropolitan areas had twice the incidence of poverty of suburban areas. In 1974, 14.4 percent of both the nonmetropolitan population and the central city population of metropolitan areas was estimated to be below the low income level, compared to only 7.1 percent of the suburban population.

About one-third of the low income residents of metropolitan areas were black, compared to about one-quarter of the poor residents of nonmetropolitan areas. Low income black residents of metropolitan areas were concentrated in central cities (82 percent in 1974), while low income whites were distributed more equally between the central cities and the suburbs.

The brunt of the recession's impact has been felt in poverty areas; unemployment rose more rapidly in poverty areas, both inside and outside metropolitan areas, for white and minorities alike. Employment declined 11.3 percent in metropolitan poverty areas and 1.2 percent in nonmetropolitan poverty areas between 1973 and 1975 (Table III–4).

Table III–4

PERCENT CHANGE IN EMPLOYMENT IN POVERTY AREAS BY RACE FOR METROPOLITAN AND NONMETROPOLITAN AREAS 1973–1975

	Poverty	Nonpoverty Areas
Total	– 5.3	1.8
White	– 2.5	1.2
Black and Other	–12.1	9.3
Metropolitan	–11.3	1.5
White	– 7.7	0.8
Black and Other	–15.2	9.4
Nonmetropolitan	– 1.2	2.5
White	– 0.4	2.3
Black and Other	– 5.8	8.2

Source: Derived from U.S. Department, Bureau of Labor Statistics, *Employment and Earnings*, October 1974 and October 1975, Table A–60.

Chronically Unemployed Groups

Teenagers and first time workers have particularly severe problems. Despite considerable gains in the past 15 years, employment discrimination against minorities and women still contributes to lower earnings and higher unemployment rates, compared to white male workers.

Adult women continue to have higher unemployment rates than men, although in recent years women have made considerable gains. Between 1973 and 1975, employment of women increased by 1,107,000, while male employment declined by 733,000 jobs. A significant differential between male and female earnings, however, continues to exist. Some of this differential results from the fact that women are concentrated in lower paying industries and occupations and have different educational background and work skills. The expansion of young women in the labor force, who are the most likely to have low paying jobs, also contributes to this problem. Still, discrimination remains and is a serious problem.

A Slowdown in the Economic Progress of Minorities

Rapid inflation, high unemployment, and economic recession slowed the economic progress made by minorities in the 1960's. In the decade from 1960 to 1970, median family income of minorities nearly doubled, rising faster than that of whites. Minorities increased their share of employment. The number of minority persons below the poverty level declined by 2.4 million, and advances were made in educational attainment.

But from 1970 to 1974 much of the progress slowed. Relative income levels of black

families, for example, did not move upward in the four year period. The proportion of black families with incomes under $4,000 in 1974 was 23 percent, virtually the same as it was in 1970, in terms of constant 1974 dollars. The proportion of black families with incomes of $10,000 or more also changed little. The 1974 median family income was almost the same as that for 1970 in terms of constant 1974 dollars (See Table III–5).

The Elderly

About 16 percent of the total aged population were below the low income level in 1974. In addition a significant portion were just above the poverty level. In 1974 the majority of low income aged persons, 62 percent, were living alone or with non-relatives. The poverty rate for aged persons living alone was considerably higher than for those who were family members, 32 percent compared to nine percent. About three-quarters of aged persons below the poverty level who were not family members were women living alone and 84 percent of this group were white.

Previous progress in reducing poverty among the aged did not continue in 1974, and a large proportion of the non-poor elderly, like other American families, are experiencing a decline in standards of living. Increases in the costs of housing, food, and health services have been greater than the general cost-of-living index by which much of the income of the elderly increases.

SHELTER

Improvements in the Nation's Housing Stock

From 1970 to October 1974, it was estimated that nearly 7.5 million units were added to the nation's housing inventory. The United States housing stock was estimated to total 77,602,000 units. The early 1970's was a period of high housing production. An average of 2.3 million units were added in the period from 1970 to 1972, and an additional 1.6 million in 1973 and 1974 (Table III–6).

Of the year-round housing units in 1974, 67.6 percent were single family homes-slightly less than the 69.1 percent in 1970, reflecting the high proportion of new construction accounted for by multi-family units. 62.2 percent of metropolitan housing and 79.1 percent of nonmetropolitan housing were single family homes. Mobile homes increased markedly during this period, totalling 3.7 million in 1974 and representing 4.9 percent of year-round homes compared to 3.1 percent in 1970.

The proportion of housing in metropolitan areas located in suburban areas continued to increase, reaching 53.5 percent in 1974 and 51.0 percent in 1970.

Of new housing constructed between 1970 and 1974, 45 percent was located in suburban areas, while 21 percent was located in central cities. Nonmetropolitan areas accounted for 34 percent of all new construction (See Table III–6).

Table III–5

MEDIAN INCOME OF FAMILIES BY RACE OF HEAD

(In 1974 dollars)

	1960	1965	1970	1972	1973	1974
All Families	9,358	10,874	12,531	13,103	13,373	12,836
Negro and other races	5,379	6,242	8,275	8,376	8,429	8,265
Black	(N/A)	6,072	7,978	8,091	8,066	7,808
White	9,716	11,334	13,000	13,614	13,977	13,356
Income Gap:						
White/Negro/other	4,337	5,072	4,725	5,238	5,543	5,091
White/Black	(x)	5,262	5,022	5,523	5,911	5,548

Source: U.S. Department of the Census

Table III–6

DISTRIBUTION OF THE 1974 HOUSING INVENTORY AND NEW CONSTRUCTION SINCE 1970

(Numbers in Thousands as of October, 1974)

	Total U. S.		SMSA's						Non-SMSA	
			Total		Central City		Suburb			
Type of Housing Unit	No.	%	No.	%	No.	%	No.	%	No.	%
1974 Total Year-Round Inventory	75,886	100.0	51,642	100.0	24,016	100.0	27,627	100.0	24,244	100.0
Occupied	70,831	93.3	48,674		22,566		26,108		22,156	
Single-Family	51,279	67.5	32,109	62.2	12,235	50.9	19,873	71.9	19,170	79.0
Multi-Family	20,889	27.5	18,052	35.0	11,583	48.2	6,471	23.4	2,837	11.7
Mobile Homes/Trailers	3,718	4.9	1,481	2.8	198	0.8	1,283	4.6	2,237	9.2
New Construction Since 1970	9,877	100.0	6,561	100.0	2,070	100.0	4,491	100.0	3,316	100.0
Single-Family	4,669	47.3	2,912	44.4	696	33.6	2,216	49.3	1,757	53.0
Multi-Family	3,523	35.7	3,068	46.8	1,334	64.4	1,734	38.6	455	13.7
Mobile Homes Trailers	1,685	17.0	581	8.8	40	1.9	541	12.1	1,104	33.3

Source: U.S. Census and the U.S. Department of Housing and Urban Development, Office of Policy Development and Research, 1974 Annual Housing Survey.

Most of the improvement in the physical condition of the nation's housing was achieved in the 1940's and 1950's; substantial progress occurred in the 1960's. The quality of housing in the United States appears to have further improved since 1970, according to the Census Bureau. High rates of new construction permitted considerable progress in replacement of old and obsolete housing units. More than half of the housing inventory in 1973 had been built since 1950. The median age of housing in 1973 was 22 years, compared with 23 years in 1970 and 28 years in 1950.

Considerable improvement was made between 1970 and 1974 in reducing the number of housing units lacking some or all plumbing facilities. In 1973 about 4.7 percent of the nation's housing units were defective with regard to plumbing compared with the 1970 figure of 6.5 percent. The largest reduction has occurred in the South—from 11.5 percent to 7.4 percent—although the South still contains the highest incidence of units lacking plumbing. The extent of overcrowding was also reduced from eight percent in 1970 to less than six percent of 1973 total occupied units. Crowding—or more than 1.01 persons per room-is more common in rental than owner-occupied units; about five percent of owner-occupied units were overcrowded in 1973 compared to seven percent of renter-occupied units.

The Growth of Housing Costs in Relation to Income

Despite the nation's progress in upgrading physical housing conditions, the cost of housing is still high relative to the incomes of many families. For the middle class, rapidly rising costs of living and a drop in real disposable income since 1973 have meant revision in homeownership expectations. There is some home ownership among families with income below $5,000, but for the most part poor and moderate income families are limited in their choice of existing housing units to those available for low rents and thus to those of lower quality neighborhood environments.

Acceleration in the Cost of Housing

By mid-1975 the median price of new single family housing in the United States reached $37,900, according to estimates by the Congressional Joint Economic Committee. According to the National Association of Homebuilders, in several major metropolitan areas, very few private housing starts for single family housing priced under $30,000 have been recorded since 1973.

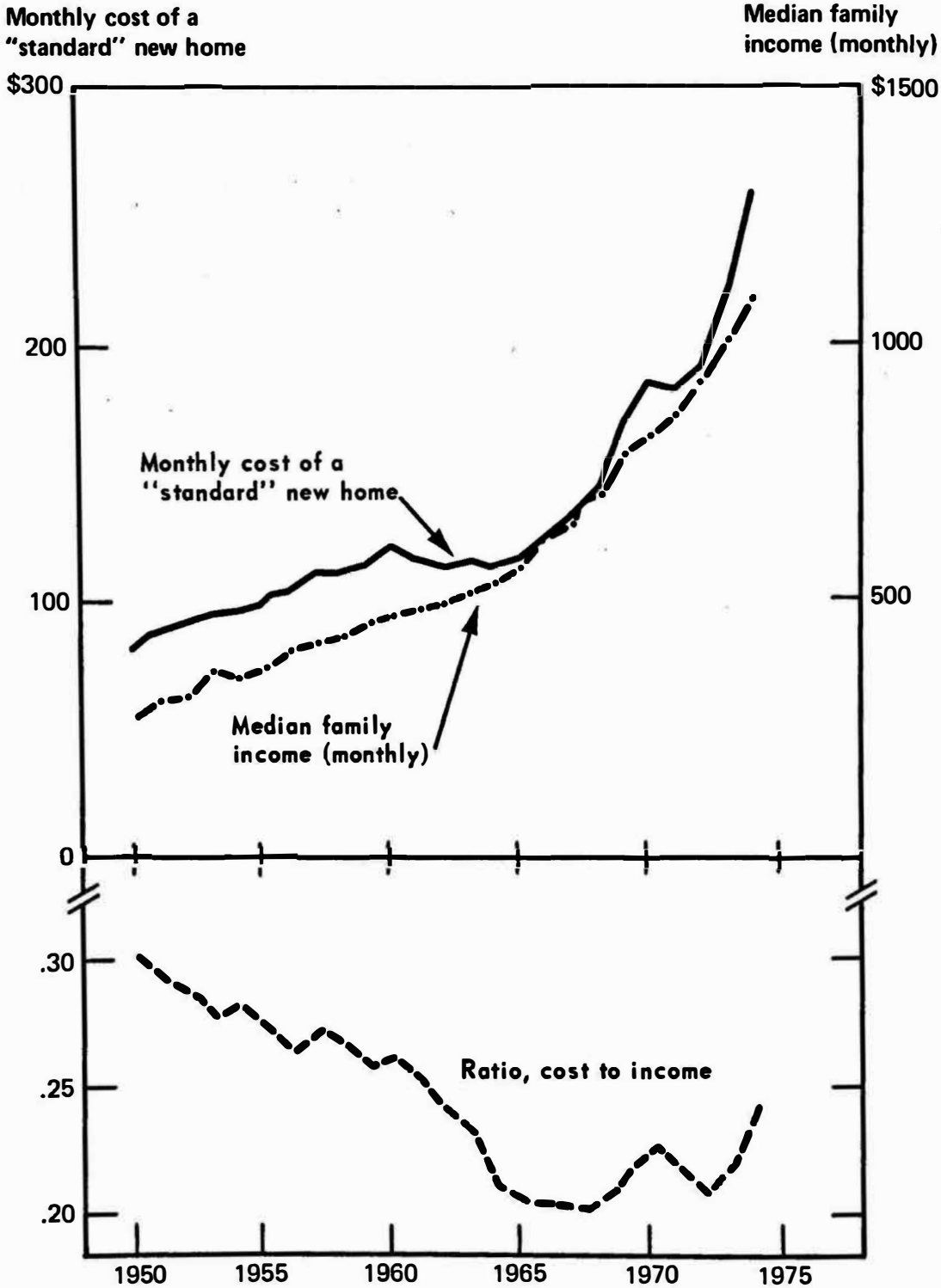
The acceleration of the cost of mortgage financing, property taxes, maintenance and utility services for housing units has been even more dramatic than the increase in basic new construction costs. The impact on families has also been greater, as these elements make up the major elements of the monthly costs of home ownership and rental.

Only since 1972 has this become a major problem. For the previous two decades while housing costs steadily increased, real disposable income more than kept pace (See Figure III–1). In the 15 year period from 1953 to 1967 home ownership costs increased by 33 percent, slightly more than two percent per year, and well below the increase in per capita disposable income and the general consumer price index. In the five year period between 1967 and 1972, home ownership costs increased by roughly 40 percent, more than eight percent a year, only slightly outpacing the growth in per capita disposable income of 39 percent, although substantially exceeding the increase in the consumer price index of 25.3 percent. Increases in the rental component did not begin to accelerate as soon as home ownership costs did. Rent levels increased by 19.2 percent in the five year period from 1967 to 1972 or 3.6 percent per year, only slightly faster than the rate of increase of two percent per year from 1953 to 1967.

From 1972 to 1974, however, many of the major factors of housing costs have dramatically increased: residential mortgage interest rates and amounts, and labor and materials cost, both for maintenance and repair and for new construction. Steadily increasing property taxes reflected local government fiscal needs and the drastic jump of energy costs for heating fuel, gas and electricity reflected the sharp effect of new fuel price levels.

Figure III–1

TRENDS IN NEW HOUSING COSTS AS RELATED TO FAMILY INCOME



Source: Frank de Leeuw, Ann B. Schuare, and Raymond J. Struyk, *Issues and Trends in Housing* Working Paper 226-01. The Urban Institute, August 1975. Developed from data by the U.S. Census Bureau, Bureau of Economic Analysis, Federal Home Loan Bank Board, Federal Reserve System.

IV. New Pressures on Government

In recent decades, in America, there has been a substantial increase of government activity but no corresponding increase of confidence in government.

Growth in government has resulted in fiscal problems, especially at the local level, caused in part by current economic conditions, but also the enormous expansion of government programs and by rising administrative cost. There have been increases in claims to entitlement to government services and benefits.

At the same time, there is increasing skepticism of government's ability to meet domestic problems and a lessening of citizen confidence in its integrity and competence. Citizens and public officials frequently voiced this concern in the regional seminars sponsored by the Department of Housing and Urban Development in three locations in October and November 1975, to provide public contributions to this report. In part, the concern results from government's inability to fulfill all the expectations it has fostered in the past, and in part from concern that government is becoming "too large" and intrusive.

FISCAL TRENDS IN GOVERNMENT

The fiscal problems of government attracted increased attention in 1975, as exemplified by the financial crisis in New York City. The recession has affected the finances of government at all levels, but especially those of local governments. Because of inflation and the recession, revenue growth has slowed, while demands for government services continue. In fiscal 1974, deficits for state and local governments totalled $7.7 billion. In 1975, state and local governments held down the growth of their indebtedness and adjusted their operating expenditures to fit their revenues. Their outlays grew in real terms only 1.8 percent, considerably below the 4.3 percent annual increase in constant dollars during the preceding five years.

A survey by the Joint Economic Committee of Congress in early 1975 indicated that state and local governments were eliminating a total of 140,000 jobs, raising taxes by $3.6 billion, cutting services, and cancelling or deferring one billion dollars in capital projects. At the same time, 43 of 67 cities surveyed by the National League of Cities in the spring of 1975 expected revenue shortfalls in 1975; 42 of the 67 cities expected to raise taxes, cut services, or both; and 36 were postponing capital improvements and 21 had imposed job layoffs and hiring freezes. The survey reports that in many localities, governments have increased property taxes substantially, while resistance to higher taxes has forced reductions in programs in numerous cities.

The Budget Squeeze on Cities

More recently, the general outlook for city fiscal health has improved, although prospects will vary for individual cities. An improved national economy and increased fiscal restraint at the State and local level should work to stave off a widespread replication of the New York Experience.

As the economy recovers from the recession, state and local revenues will be increasing at more rapid rates. One indicator of economic growth is taxable personal income, which in 1975 rose at five percent; for 1976 it is projected to increase at 12.5 percent. This rise in income will be translated into higher state and local income tax revenues directly, and into higher sales and excise tax revenues as consumers increase their spending. On the expenditure side, rapid increases in recent years have been stabilized and in some cases reduced. Since mid-1974, state and local expenditures for employee salaries have climbed more slowly than the rate of inflation; in real terms, total salaries declined by 0.4 percent. This pattern can be expected to continue for about another year, partly because school enrollment should decline further and partly because

local governments are looking carefully to see where employment reductions can be made. Similarly, the rate of growth in state and local government purchases should be less than the rate of growth in state and local tax revenues. The bond market is acquiring new confidence. Long-term bond sales reached an historical high of $29.2 billion in 1975, up 28 percent from the $22.8 billion in 1974. Currently, bond sales for 1976 are estimated to be in the $25 billion range. Of course, not all governments will be able to participate easily in this market. Most investors will be looking for quality issues. Those state and local governments that display sound financial management should fare well; those that cannot will have to pay more to borrow.

Expenditures Increase as Government Grows

Without doubt, the most significant trend in government in the past two decades has been its growth. It has been the fastest growing sector in the economy. Between 1954 and 1974, public expenditures nearly quadrupled, increasing by 373.6 percent. The share of the gross national product for which they accounted rose from 27.2 percent in 1954 to 35.6 percent in 1974. Public employment increased substantially during this period; in the last 15 years, one out of every three new jobs has been in the public sector.

Federal, state, and local government expenditures have all jumped dramatically. Between 1954 and 1974, public expenditures for domestic purposes increased seven-fold from $12.1 billion to $97.6 billion, excluding social security. During the same period, state and local expenditures increased from $27.8 billion to $189.4 billion, or 405.9 percent; their share of GNP rose from 9.2 to 12.1 percent (Table IV–1).

Most of the increase in public employment, especially in the last decade, has been at the state and local level. Between 1965 and 1975, Federal employment increased by

TABLE IV–1

FINANCING DOMESTIC PROGRAMS—THE GROWING FEDERAL ROLE, SELECTED YEARS 1954 THROUGH 1974

(Total Governmental Expenditure for Civilian Domestic Purposes-from own funds)

Year	Governmental expenditure for civilian domestic purposes—including social security outlays				Governmental expenditure for civilian domestic purposes—excluding social security outlays			
	Total	Federal	State	Local	Total	Federal	State	Local
	Amount (billions of dollars)							
1953–54	50.8	17.2	15.8	17.8	45.7	12.1	15.8	17.8
1962–63	110.6	44.6	31.5	34.5	94.8	28.8	31.5	34.5
1972–73est –A	319.7	149.7	90.0	80.0	267.6	97.6	90.0	80.0
–B	319.7	142.9	92.3	84.5	267.6	90.8	92.3	84.5
1973–74est –A	346.0	161.4	99.0	85.6	281.3	96.7	99.0	85.6
–B	346.0	155.3	101.0	89.7	281.3	90.6	101.0	89.7
	Percentage Distribution							
1953–54	100.0	33.9	31.1	35.0	100.0	26.5	34.6	38.9
1962–63	100.0	40.3	28.5	31.2	100.0	30.4	33.2	36.4
1972–73est –A	100.0	46.8	28.2	25.0	100.0	36.5	33.6	29.9
–B	100.0	44.7	28.9	26.4	100.0	33.9	34.5	31.6
1973–74est –A	100.0	46.6	28.6	24.7	100.0	34.4	35.2	30.4
–B	100.0	44.9	29.2	25.9	100.0	32.2	35.9	31.9

A-General revenue sharing included as federal expenditure.
B-General revenue sharing included as state-local expenditure.

Note—For purposes of this study, Federal government expenditure for civilian domestic purposes is defined as follows: Total Federal outlays less expenditure for national defense, International relations, space research, and that portion of interest on debt that is attributable to those functions. The following percentages of interest were estimated to be attributable to national defense, etc. 1954—78%, 1963—77%, and 1973—71%.

Source: Adapted from Economic Report of the President, various years; U.S. Bureau of the Census, Governmental Finances, various years; and staff estimates of ACIR and HUD.

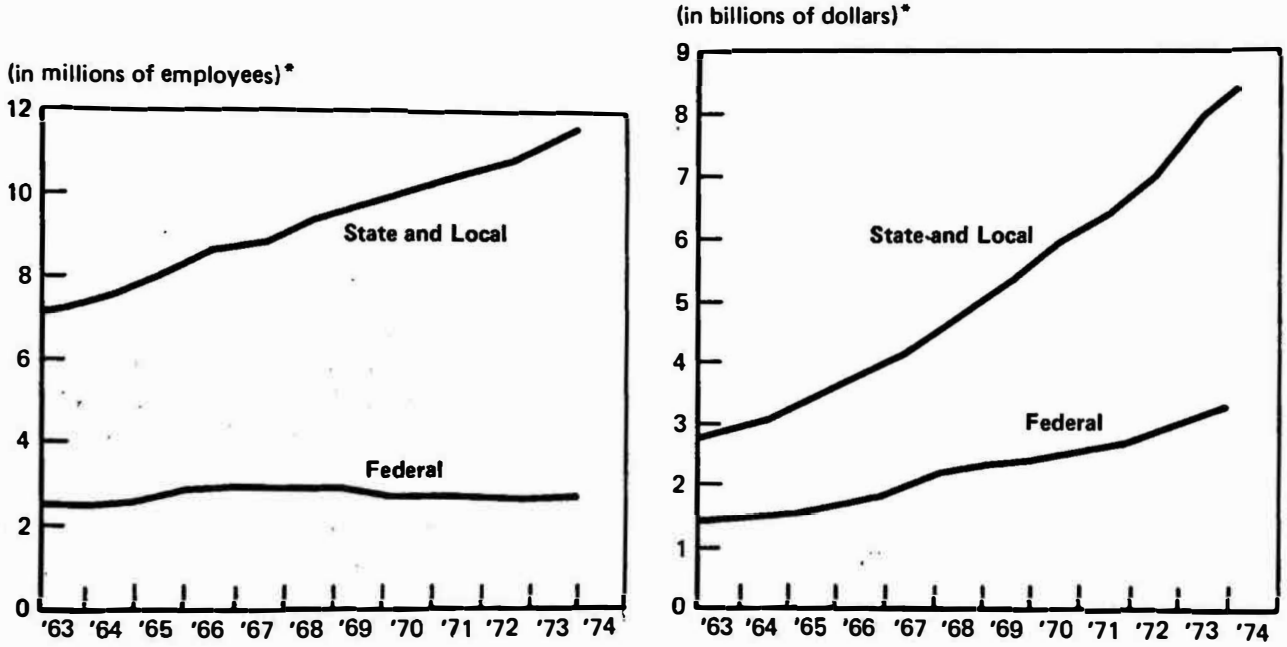
roughly 12 percent, from 2.5 million to 2.9 million. However, as a percentage of the total U.S. work force, Federal employment has been dropping steadily since 1967. In 1975 it was just over three percent. Most of the increase in fact occurred between 1965 and 1968, with little growth since. During the same period, state and local government employment increased by 58 percent, from 7.7 million in 1965 to 12.2 million 1975, accounting for 12.6 percent of the nation's work force (Figure IV–1). A large percentage of local employment growth was in primary and secondary education.

The growth of government is the result of many factors—population increase and movement, urbanization and the development of the suburbs, expansion of the range of governmental functions, and rising demands for service in government programs. Extensive new facilities are required to accommodate the rapid growth of the suburbs; services offered in the cities have to be duplicated in the suburbs. Older inner-city neighborhoods require a variety of programs to meet social needs.

Reflecting these trends, social programs have been the fastest growing government activity in recent decades. At the Federal level, income security expenditures increased from $4.7 billion in 1950 to an estimated $137 billion 1977; their share of the Federal budget has risen from less than one-quarter in 1950 to 34 percent in 1975.

Figure IV–1

PUBLIC EMPLOYMENT AND PAYROLLS: 1963 TO 1974



U.S. DEPARTMENT OF COMMERCE Social and Economic Statistics Administration
BUREAU OF THE CENSUS

Source: Public Employment in 1973.

*Data for each year taken during October.

A substantial proportion of state and local expenditures for social programs involves cost-sharing for Federal programs. Especially in the Northwest and Mid-Atlantic regions and in older urban areas, which until recent years were experiencing large influxes of lower income population, this cost sharing has involved a substantial fiscal burden.

Other Federal programs, moreover, have

also resulted in a growth of state and local activities. Construction of highways and community facilities, health facilities and a variety of new regulatory activities have expanded the role of state and local governments. In some fields—most notably transportation—governments have provided services that once were the province of private industry. All of these activities have significant consequences for the nature and pattern of growth, as do such Federal activities as economic regulation, defense procurement, and public works, many of which have expanded substantially in recent years.

Rising Expectations for Government Services and Benefits

During the last several decades, government has undertaken significant obligations to promote social justice for all groups. The growth of regulatory and assistance programs directed at ensuring equality of opportunity and rectifying the effects of past discrimination has been a major factor in the expansion of government activities. These activities, in turn, generate new demands. Additional groups seek to have their needs recognized. Those whose claims have been recognized argue that they are entitled to more than is provided. As a result, the obligations of government in this field continue to increase.

The Rising Costs of Government Sevices

Inflation has affected government, and especially state and local governments, more than the economy as a whole. Government, of course, has been hit by the extraordinary increases in costs in recent years for such items as fuel and construction. Between 1970 and 1975, the state and local deflator increased 44 percent compared to an increase in the Federal deflator of 51 percent. That is, the state and local deflator increased at an annual average rate of 7.6 percent compared with an annual average Federal increase of 8.6 percent. A major component of increasing costs for government, however, has been personnel.

Public services are highly labor intensive: 70 to 80 percent of the budget for a typical city goes for wages, salaries and fringe benefits. During the 1960's and 1970's, pay schedules at every level of government rose substantially. The Advisory Commission on Intergovernmental Relations indicates that the average annual earnings of state and local government employees increased by 165 percent from 1955 to 1973, compared to 129 percent for private employees, unadjusted for inflation.

These increases are partially explained by the previously low wages of government workers, and a commitment to achieving earnings comparability with private industry. Another factor in increased government pay rates, especially at the local level, has been the bargaining and political strength of public employees. Clerical workers, sanitation workers, policemen, firemen, and teachers often have effectively organized and now constitute powerful political blocs within a locality. The pay raises they get have generally exceeded those among management level government workers.

The fringe benefits of government workers have increased along with salaries and often at an even faster rate. Settlements of labor negotiations with public employees often stress improvements in these benefits, the costs of which are deferred and less evident to taxpayers. Often, the true costs of pensions are hidden by actuarial and accounting processes. Many cities and states have underfunded their pension plans—in effect, borrowing from them to meet current operating expenses.

Pension benefit costs are a major component of many city budgets. Seattle, for example, pays its policemen and firemen an average base amount of $16,000 per year. The pension plan, which allows retirement after 20 years, on 60 percent of pay, with full medical coverage, adds an additional $9,000 per employee to personnel costs. In New York City, more than 20 percent of personnel costs are for retirement benefits.

Personnel costs have also increased because more complex government services and changed technology require more highly trained and specialized personnel. Yet many have serious doubts that the productivity of government employees has correspondingly increased, although there is little agreement on what measures should be used for gauging productivity. The civil service system was adopted to put government employment on the basis of merit rather than political influence. Generally it has upgraded the caliber

of public employees, but in some areas many believe it may have evolved into a tenure system that makes it difficult to remove incompetent workers and to restructure jobs to provide for greater efficiency. Moreover, civil service regulations often hinder promotion on the basis of job performance and exclude qualified outsiders. Other public policies including the employment of minority workers and the creation of public jobs for the unemployed also make it more difficult to restructure jobs or increase the productivity of government personnel.

The Escalating Cost of Capital Financing

The increase in public debt is both an indication of the growth of government and an important factor in the higher costs of government. Net Federal debt (held by the public) doubled between 1954 and 1975, reaching an estimated $484 billion at the beginning of fiscal 1976. Interest on this debt for fiscal 1976 is projected as $29.2 billion.

At the state and local level, capital outlays increased from $20 billion in 1965 to $30 billion in 1970. They are estimated to total more than $40 billion for 1975. Outstanding state and local indebtedness, which had increased from $15.9 billion to $100 billion between 1946 and 1964, reached $207 billion by 1974. The level of state and local debt increased over the last decade twice as fast as the Federal debt (Table IV–2).

These trends, however, may have reversed themselves in 1975. Preliminary figures for 1975 indicate that outstanding state and local indebtedness may have declined by a percentage point in constant dollars, compared to 1974.

The amortization and interest costs for local debt have more than doubled in the last decade. In addition, much of the capital spending by local government has been for facilities whose operational and maintenance costs have increased substantially in recent years.

Even if total debt does not rise as fast in the future as it has in the past, debt service costs will mount sharply in future years because of high interest rates in recent years on new long-term issues. Over the last decade, average interest rates on tax-exempt municipal bonds have more than doubled from 3.34 percent in July 1965 to 7.07 percent in July 1975. This reflects the high cost all sectors are incurring in borrowing money.

TABLE IV–2

FEDERAL AND STATE-LOCAL DEBT, 1952–1974
(billions of dollars)

	Federal	State-local
1952	259.1	30.1
1954	271.3	39.0
1957	270.5	53.0
1960	286.3	70.0
1961	289.0	75.0
1962	298.2	81.3
1962–63	305.9	85.1
1963–64	311.7	92.2
1964–65	317.3	99.5
1965–66	319.9	107.1
1966–67	326.2	113.6
1967–68	347.6	121.2
1968–69	353.7	133.5
1969–70	370.9	143.6
1970–71	398.1	158.8
1971–72	437.3	175.2
1972–73	468.4	188.5
1973–74	486.2	206.6

Source: Tables 3, 13: Historical Statistics on Governmental Finances and Employment, 1972 Census of Governments, pp 35 and 57.

Trends in Federal Financial Assistance to State and Local Governments

Between 1961 and 1969, Federal assistance to state and local governments increased from $7.2 billion to $20.3 billion—an average of 9.6 percent per year on a constant dollar basis. Between 1969 and 1973, the increase was from $20.3 billion to $41.8 billion—or 14 percent per year. In fiscal 1974, however, Federal assistance to states and localities increased by only $1.5 billion, which represented a drop of 1.1 percent in constant dollar terms. Fiscal year 1975 saw a jump of $6.4 billion, followed by $10.1 billion more in 1976. The increase in amount keeps pace with inflation (Table IV–3 & Figure IV–2). Aid to states and localities must compete for attention in the Federal budget with other needs and priorities including defense and other foreign policy areas, national environmental and energy problems, social, transportation and economic policy to meet problems of inflation and economic recovery.

Federal assistance to states and localities has recently stabilized at about one-fourth of state and local spending. In 1965, Federal

Table IV-3

FEDERAL GRANTS TO STATE AND LOCAL GOVERNMENTS
(billions of dollars)

Fiscal Year	Highways and Safety	Other human resources	Unemployment assistance	Other grants	Revenue sharing	Total
1967	4.0	8.3	0.8	2.1	—	15.2
1968	4.2	10.5	1.1	2.8	—	18.8
1969	4.2	11.4	1.1	3.6	—	20.3
1970	4.3	14.3	1.1	4.3	—	24.0
1971	4.7	16.2	2.0	5.2	—	28.1
1972	4.7	21.1	2.7	5.9	—	34.4
1973	4.7	20.6	3.1	6.8	6.6	41.8
1974	4.5	21.6	3.0	8.1	6.1	43.3
1975	4.7	25.5	4.3	9.1	6.1	49.7
1976 estimate	6.4	28.3	7.4	11.4	6.3	59.8
1977 estimate	6.9	28.7	5.5	12.9	6.5	60.5

Source: The United States Government Budget, Fiscal Year 1977

aid was equal to 15.3 percent of state and local expenditures from their own funds. By 1975, federal aid equalled 23.4 percent of state and local expenditures from their own funds; it is expected to hold at about 23.0 percent in 1976.

Increased State and Local Taxes

The average American now pays over one-quarter of his or her income in taxes, compared with less than 15 percent 20 years ago. Because the most rapid increase in tax rates has been for state and local property and sales taxes and the Federal payroll tax for Social Security, which impact more on those with moderate income, the nation's tax structure has become more regressive. The burden on the average taxpayer, one with income of $5,000 in 1953 and $13,000 in 1974, increased 98.3 percent over this period. A significant portion of this increase went to social security taxes. By contrast, the tax burden on those whose income was twice the average increased by 51.5 percent.

The problems of the property tax, the most significant revenue source for local governments, have become increasingly evident. Traditionally it has been argued that prevailing high rates of property taxes have a deterrent effect on consumer spending and the improvement of housing.

The unpopularity of tax increases coupled with continuing demand for public programs have led some elected public officials to avoid proposing higher taxes even when it meant relying on imprudent fiscal policies, such as postponement of orderly maintenance, or borrowing to meet expenditures that should be paid out of current revenues. In other cases, governments have resorted to special sales and transfer taxes or other levies whose effects are hidden. They have been under constant pressure to provide preferential tax treatment to particular groups, with the result that the revenue-raising capacity of taxes that are imposed have been reduced and the tax base eroded.

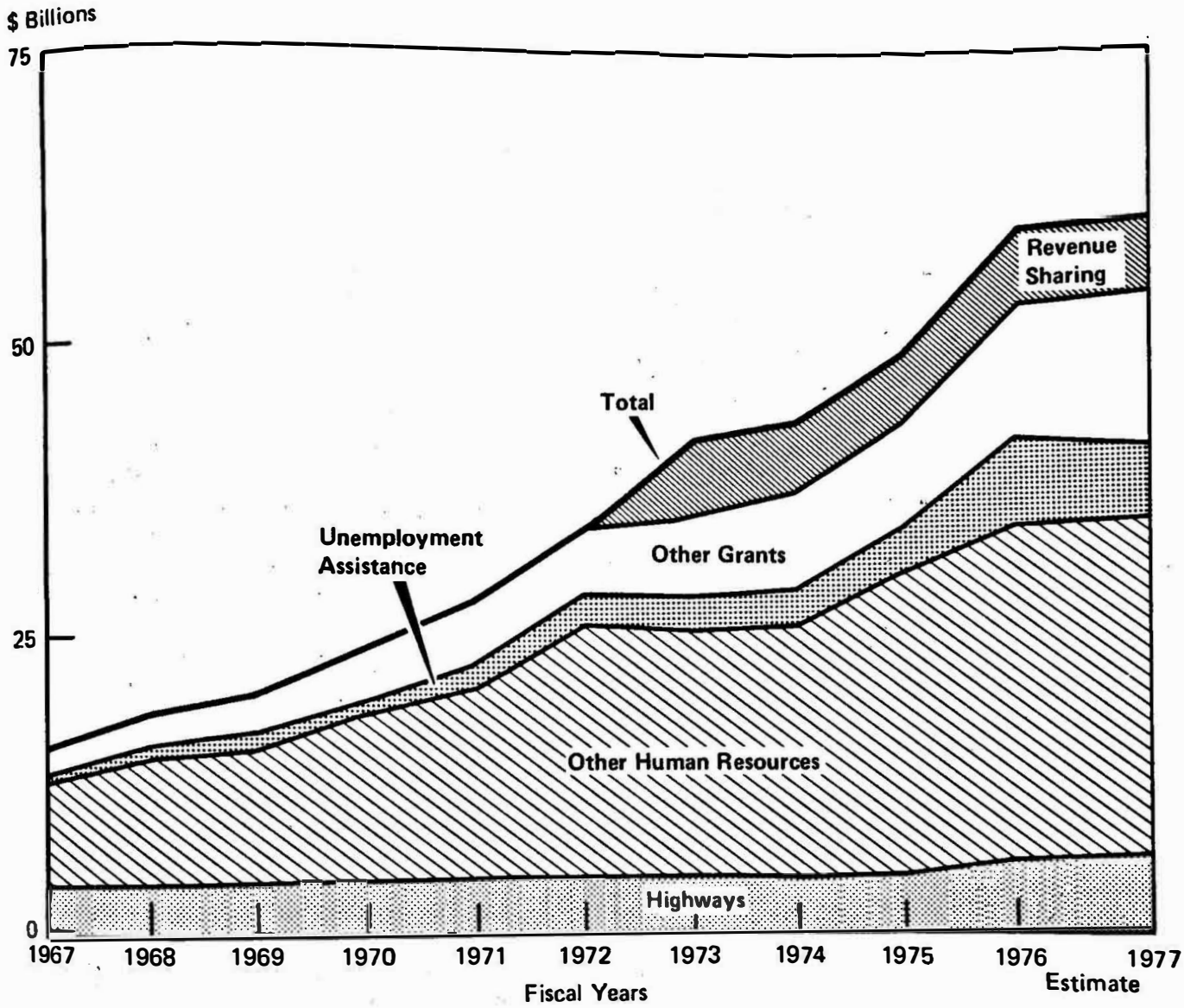
Taxpayer resistance to increased taxes has been growing. A 1975 poll by the Advisory Commission of Intergovernmental Relations indicated that substantial majorities in every population group favor holding the line on spending and taxes or decreasing them. Voter rejections of proposed bond issues, school budgets, and tax increases are frequent.

Fiscal Imbalance in the Federal System

The division of responsibility for public services between the different levels of government which has evolved is not matched by corresponding revenue-raising capacities. Thus, a problem of fiscal imbalance exists in the Federal system. The income tax—the primary source of Federal revenue—has had the fastest growing tax base as personal and corporate incomes have increased. Yields from sales and property taxes—the major revenue sources for states and localities, respectively—have also grown steadily, but at a much slower pace than expenditures at these levels of government.

Figure IV-2

FEDERAL GRANTS TO STATE AND LOCAL GOVERNMENTS



Source: The United States Government Budget Fiscal Year 1977.

In addition to these self-imposed fiscal disparities among levels of government, revenue-raising capacities vary among states and localities. As a result, there are substantial differences in the level of public services and effective tax rates in different jurisdictions. The tax base of many central cities has been eroded by the departure of upper and middle income resident to the suburbs, the flight of industry, and the loss of retail, distribution, and service establishments to outlying locations. At the same time, demand for welfare, education, police, and other services has increased as a result of the influx of low income and minority residents.

The older cities with the largest needy populations, chiefly in the Northeast, North Central, and Mid-Atlantic Regions, are the most burdened by the cost-sharing requirements of various Federal social welfare and community service programs geared to the needs of large numbers of disadvantaged groups. Thirty percent of New York City's expenditures in 1975, for example, were for welfare, primarily to match Federal funds. In most states the welfare burden is the responsibility of the state or county government rather than the localities, but some cities such as St. Louis, Baltimore, San Francisco and New York do have welfare responsibil-

ities. New York City's welfare costs doubled between 1965 and 1976. During this same period, New York steadily lost tax base. The costs of providing government services also tend to be higher in those central cities where wage rates are generally higher and government workers are more often unionized.

In addition to central cities, local governments in some rural areas face fiscal pressures. Many areas have little industrial tax base and few other tax sources, yet contain a significant number of low and moderate income households requiring government services. Many growing areas also face fiscal problems, as new population requires rapid expansion of government services.

Government expenditures and tax burdens also vary widely among states and localities. A 1970 study of five major cities and nearby suburban satellite cities showed substantial differences in total government expenditures per capita, ranging from $340 in Houston to $775 in Los Angeles and Boston. Expenditures for public welfare ranged from one dollar to $137 per capita. In each metropolitan area, expenditures and taxes per capita and the rates of taxes to personal income were higher in the central cities than in small outlying cities.

While residents of nonmetropolitan areas pay nearly the same amount per $1,000 of personal income to support local governments as do residents of metropolitan areas, non-metropolitan areas have lower tax bases per capita and therefore have less funds available for basic community services. Many specialized educational, health, and other services are not available in sparsely settled rural areas.

Within cities, the quality of government facilities and services often varies substantially from neighborhood to neighborhood. Lower income and minority residents who tend to be concentrated in the areas with the poorest housing and community facilities, often receive the lowest level of public services.

Disadvantaged communities find themselves caught in a web of interrelated problems. High sales, property, and income tax rates in central cities have helped speed the departure of business and middle income residents to the suburbs, while property tax assessment procedures and rates discourage residential construction or rehabilitation. Disparities in government services and tax levels tend to perpetuate these differences in social and economic conditions among communities.

DECLINING CONFIDENCE IN THE CAPABILITY OF GOVERNMENT INSTITUTIONS

While government activities have expanded, public confidence in government and approval of its performance have declined. Survey results reflect growing disillusionment with every level of government. Much of this disillusionment is based on the gap between what government has promised and what it has actually been able to deliver. Nowhere is this more apparent than with a number of the more ambitious Federal social programs of the 1960's. Launched with extensive fanfare about their objectives, these programs never fully achieved the results promised.

Moreover, it has become recognized that Federal policies were themselves contributors to some of the nation's domestic problems. The Federal highway program of the 1950's and 1960's, for example, helped produce the less energy efficient pattern of suburban growth and contributed to the decline of the central cities. The proliferation of local government agencies, boards, commissions and departments, each with specialized objectives, which often seem to work at cross-purposes and to be insulated from effective control by elected officials, is in part a consequence of the proliferation of federal categorical grants-in-aid. Rather than reduce the fragmentation of government—which results in costly duplication of services, parochialism, and competition—Federal programs sometimes foster it. Moreover, the matching requirements of Federal assistance to states and localities have often distorted local spending priorities as communities sought to obtain Federal dollars and encouraged a project-by-project approach to community problems.

The growing complexity and size of government have made it more remote from citizens, even at the local level. Some claim that replacement of the city political machine by civil servants has made it harder for citizens to obtain information, redress their grievances, or influence government deci-

sions. The inaccessibility of government has contributed to a sense of powerlessness. It has also been a factor in producing group action—to challenge government policies. While greater opportunities for citizen participation in government processes have been provided in the last decade, they are generally most accessible to organized proponents of a particular viewpoint. Despite increased requirements for citizen participation in government programs, the inconsistency of procedures by the various Federal, state and local programs creates confusion and frustration for citizens. The average citizen is likely to be bewildered by the procedural complexity of the very mechanisms that are intended to enable him to voice his opinions.

Another factor influencing the level of confidence in government is, in a sense, the result of its success. As government has recognized a variety of needs and responded to them, it has created expectations that cannot always be met. Each response to a problem has tended to lead to an expanded definition of the problem, suggesting the need for still greater government action and leading to criticism of the "limited" governmental commitment. The inability of government to meet all the demands of group seeking assistance inevitably contributes to disillusionment.

V. Accommodating Energy Imperatives

The "energy crisis" in the wake of the Arab oil embargo two years ago, and the subsequent national commitment to increased energy security, have focused attention on energy decisions. These decisions will have major environmental and economic impacts on the nature and location of growth. Left unresolved is the debate now underway on how these impacts will be considered in formulating national policy.

ADDRESSING GROWTH IMPACTS OF FEDERAL DECISIONS

There is considerable Federal involvement in energy policy decisions, stemming from control of much of the land and water rich in energy resources, funding research on energy, and financing directly or through Federal loan guarantees the kind of development determined to be in the national interest. The Congress established the Federal Energy Administration (FEA) and authorized it to develop and implement policies to meet national energy needs. In meeting that responsibility, FEA established a framework to develop an energy program designed to ease excessive dependence on imported crude oil by reducing domestic energy consumption while increasing domestic production. The program:

- focuses on allowing domestic oil and natural gas prices to find their own higher levels in the market to decrease demand and encourage domestic exploration, development and production;
- encourages the greater use of abundant domestic coal where environmentally acceptable;
- emphasizes energy conservation by promoting greater auto and appliance efficiencies and higher insulation standards for homes and buildings; and
- stresses the development of a carefully coordinated long-range energy R&D program to assure the nation's ability to maintain its independence from foreign energy sources.

The Federal environmental impact review process, reinforced by active environmental interest groups and advocates, provides the mechanism for identification and amelioration of adverse effects of the exploitation of domestic energy sources. Growth impacts are another set of problems—generally more elusive and difficult to anticipate, examine and solve. Construction of the Alaskan pipeline demonstrated some of the effects of intensive development of energy resources. Large-scale rapid construction has overloaded the capacity of public services and infrastructure across the state and exacerbated local inflation.

Efforts underway to provide "impact assistance" focus on such boom or bust possibilities. Some observers argue that local boom or bust problems are not nearly as important as long-term growth impacts of energy policy decisions not being clearly defined or evaluated. They cite an example of history, pointing to the unforeseen and unintended results of Federal agricultural policy. In that case, research and program support for large-scale, capital and energy-intensive, labor-saving technologies had increased efficient food and fiber production, but resulted in the massive rural-urban and south-north migrations. Thus seemingly technical energy decisions on fuels and technology, on research priorities, on the balance of effort between conservation and new production, could have analogous effects on patterns of growth.

It is, for now at least, far easier to acknowledge the need for a long-term perspective than to find practical means of including these considerations in Federal energy policy decisions. But while efforts to devise appropriate analytical methods are at an early stage, considerable attention is being paid to the more obvious, near-term growth impacts of energy decisions—and of impacts

of growth choices on the need for energy resources.

GROWTH IMPLICATIONS OF ENERGY CONSERVATION

It seems clear that no foreseeable progress in increased domestic resources production can by itself hope to eliminate dependence on foreign energy sources over the next decade. There are some conservation modes that have widespread appeal and support, such as greater efficiency in production and distribution of energy and of manufactured goods.

There is considerable hope that conservation efforts will have a near-term impact on energy consumption. Both FEA and the Energy Resources and Development Administration (ERDA) have conservation programs underway and, in fact, the ERDA plan reflects a sizeable increase in financial support for conservation within the overall Federal energy research program.

The Limits of Conservation

Few have spoken out against the idea of conservation as a desirable component of a national energy policy. In fact, the extent to which the need to alter America's massive use of world energy resources has been accepted as a basis for public policy development is in itself remarkable. The comprehensive Administration energy proposals contain explicit provisions for increased efficiency in the ten most energy-intensive industries. Targets for increased fuel economy performance in automobiles are mandated. However, reduced energy use may mean reduced production and output. And there is little agreement as to whether conservation measures can do much more than lower the rate at which total domestic energy needs will keep rising in the face of population growth, unrelieved pressures for continued improvement in individual material well-being, and strong support for strategies designed to increase the "whole pie" so that disadvantaged persons can get a decent standard of living.

The FY 76 ERDA budget authorization for conservation research, development and demonstration is $75 million of $2.06 billion for all energy-related R,D&D. This figure does not reflect the high national priority for conservation because program development is at an early, "start-up" stage, and there are clear incentives for unilateral private investment in conservation research.

Price and Regulatory Strategies

The allocation of research funds is only one aspect of Federal energy policy; price and regulatory approaches may have greater significance for conservation in energy use and its impact on growth. It is frequently contended that higher energy prices are themselves the greatest inducement to reduced energy consumption. Price increases since 1973 have led to the rapid development of power management systems to reduce energy use in manufacturing plants and commercial and office buildings. Rising prices after decontrol, in whole or in part, might induce further reductions in demand and moderate the growth problems and development pressures that actually materialize in regions with exploitable fossil fuel resources.

There is considerable evidence that energy demands have a sensitivity to the magnitude of prices expected to accompany decontrol and deregulation in the short-run, and an even greater sensitivity in the long run. On the supply side, resource price increases should encourage rapid and extensive development of domestic energy sources. Indeed, the extent of price increases will determine if and when certain types of energy resource extraction—shale oil production, and coal gasification—become commercially feasible. Uncertainty over future price levels is one of the primary reasons that banks are unwilling to finance coal gasification facilities, and Federal guarantees have been sought. "Synthetic" gas from coal must sell at $4–5 per 1,000 cubic feet to be feasible commercially, while estimates of the actual market price of natural gas even after deregulation go no higher than $2 at present.

There is an interactive relationship between growth and energy conservation measures. The policy implication of that relationship for price and regulatory policies bear examination in such fields as: urban development forms; transportation; building design; and electricity production.

Urban Development Forms

Though procedures for calculating comparative energy usage of alternate forms of urban development are still at an early stage, studies such as the widely publicized *Cost of Sprawl*, commissioned jointly by the Department of Housing and Urban Development (HUD), the Environmental Protection Agency (EPA), and the Council on Environmental Quality (CEQ), strongly suggest that more compact forms of development conserve more energy than scattered development patterns.

High density development patterns involve less energy in construction and operation and make it possible for public transit systems to provide a larger share of the transportation services. But identifying—or designing—the urban form with the lowest energy requirements is hardly a sufficient ground for public policy decisions that would favor that type of development. Since energy price increases alone are not likely to be decisive, there are both constraints and competitive values to assess in formulating land use policies based on energy conservation goals.

In the near term the shaping of new development can have only a small impact on total energy use, except in areas of extremely rapid growth. These energy savings must be considered against the costs involved in regulatory efforts needed to affect the spatial organization of development. The mechanism of control and review, and potentially its substance as well, would add another layer of bureaucractic constraint on local economic and residential development, raising issues like those presented by environmental controls and adding to delay and uncertainty.

In addition, serious problems of equity and restrictions on freedom of choice in where and how to live would be raised by Federal or local efforts to channel development into more compact forms. In the household sector, for example, the reduction or withdrawal of FHA and VA insurance programs for single family construction could, hypothetically at least, alter patterns of urban development and housing construction in the direction of multi-family development in more centralized locations. Rowhouses and apartment buildings, due to their relatively smaller amount of exterior surface area and frequently smaller dwelling unit size, generally require less energy to heat and cool than single family homes. However, like the more exclusionary forms of local growth controls, a policy strongly discouraging single family development would deny many Americans of moderate means the opportunity to realize their housing preferences. Moreover, unless accompanied by effective measures to accelerate multi-family construction in suburban locations, it would generally help solidify existing patterns of racial and economic segregation. Energy conservation is only one of numerous goals and values to be merged in developing growth policy.

Fuel Conservation in Transportation

As the nation's largest consumer of petroleum, the transportation sector is a critical participant in current efforts to achieve energy conservation. Over the past several years, energy conservation has become central to decision-making in both the private and public sectors of the transportation industry through programs such as the 55 mph speed limit, now a condition of Federal-aid highway project approval; the automobile fuel economy improvement program; carpooling promotional programs; improved urban traffic management and transit services as a condition of urban highway and mass transit funding; and the Federal Aviation Administration (FAA) seven-point program for jet fuel conservation. Many of these measures have direct implication for the nature and location of growth. The 55 mph speed limit—to the extent it is enforced or observed—changes the mileage limits of commuting times and thus the residential market potential of land surrounding employment centers. More generally, the shift of emphasis in Federal policy from the hegemony of automotive transport towards public transit alternatives has obvious importance for the development of metropolitan areas. In the period immediately ahead, as emphasized by the Department of Transportation (DOT) in a September 1975 statement, public policy will continue to promote fuel efficiency through "more efficient, intelligent, and socially responsible use of the automobile and public transportation" and "more rational route structures and removal of unreasonable regulatory constraints on service." Such a policy argues for more encouragement of

railroads and inland-waterways as energy-efficient movers of bulk freight over long distances and for serious consideration of other energy-efficient means of transport, like long-distance slurry pipelines proposed to move western coal to regional markets.

However, from the perspective of growth impacts, it is important to note that no totally new transportation technologies are on the horizon that would radically alter the transportation infrastructure or that would seriously undermine the dominance of the automobile for most individual travel purposes. In this connection, it has been pointed out that any conservation strategy that greatly increases the price or reduces availability of automotive fuels will prove particularly difficult for smaller communities, which lack alternatives to the private automobile and trucks. For example, today fewer than 400 bus systems operate in cities of under 50,000 population, although in rural areas there are more than 6,000 such towns, inhabited by over 30 million people. Rural interests assert that in light of the energy situation, this dependence on motor vehicles argues for additional support to public transportation in small towns. The Rural Transportation Assistance Program proposed in the Administration's pending highway bill would give state and local governments increased flexibility in making highway and public transportation investments and in initiating and operating rural public transportation services.

Energy Conservation in Building Design

The space heating and cooling and other energy requirements of existing buildings account for over 25 percent of total U.S. energy use. Most existing residential and commercial properties built when energy use was cheap need insulation, storm windows, and improved thermostatic controls to reduce energy waste. The Federal Housing Administration (FHA) now permits purchasers of existing houses to include in their FHA-insured loans the cost of insulating the unit up to the higher FHA standards. In newly built structures, attention to design details such as window size and placement, roof overhangs, and building orientation on the site can contribute further to lower energy use.

No major technological breakthrough for reducing energy consumption in buildings has occurred, and considerable time would be needed to introduce any major innovation. The major emphasis in current experiments centers on solar energy systems and so-called "total energy systems" that capture and use heat energy lost in generating electricity, reducing the capacity needs of centralized generating facilities and also reducing energy transportation losses and costs. In addition, "integrated utility systems" are being developed that combine electricity, heating, water, waste treatment, and disposal in a single process and plant. The viability of these types of energy conserving approaches is in large degree related to the density of new development. Growth policies that promote intensive development will enhance their use when and if they become sufficiently advantageous economically and will in turn reinforce tendencies to high-density development.

The National Science Foundation, HUD and ERDA are currently sponsoring a comprehensive series of studies and demonstrations in the use of solar energy for heating and cooling purpose. Under the Solar Heating and Cooling Demonstration Act of 1974, HUD and the participating agencies are carrying out a 5-year demonstration of commercially available solar heating systems in several thousand residential units.

In order to gain widespread market acceptance, solar systems will have to prove themselves cost-effective on a life-cycle basis over competitive systems. Considerable consumer sophistication will be required to pay the higher initial installation costs of solar equipment with the expectation of regaining the investment through lower utility bills. The commercial success of solar systems will depend on the degree to which equipment costs can be held down and the future price levels of competing energy sources: heating oil, natural gas and electricity.

As building designers begin to take fuller advantage of solar energy, local growth controls like building codes and zoning ordinances, may need revision in order to prevent buildings from interfering with one another's exposures to the sun, or to allow installation of new types of equipment and materials. And the success of efforts to minimize the need for new electrical generating capacity will depend on the development of effective means to integrate individual solar

energy systems with utility development planning and rate structures.

Here again, however, it must be recognized that under even the most favorable assumptions, more energy conscious design and wider use of solar technologies in new construction will initially have only a slight impact on total energy use. In the long run, the extent to which the building industry can implement such techniques and retrofit existing buildings will strongly affect the nation's ability to accommodate continued growth at a lower rate of per capita energy consumption than in the past.

Improved Electricity Production Efficiencies

Electricity is at present a relatively inefficient source of energy because of losses involved in its generation from fossil fuel sources and transmission to consumers. In fact, the generation of electricity is an increasingly large component of total petroleum consumption and the major consumer of coal. Increased efficiency of generation and smoothing out the peaks in daily demand can reduce energy requirements for the production of electricity. Conversion rates now average only 33 percent, but according to some estimates, could go up to 49 percent with improved technology. Hydroelectric and nuclear generation are better sources of electricity than fossil fuel conversion, but hydro power is applicable only in certain regions. And serious environmental concerns and, more recently, escalating plant construction costs have retarded the anticipated development of the nuclear power alternative.

The development of new electric generating plants has become a major problem in growth planning. As a result, there are numerous efforts underway to affect electric power demands through changes in the rate structure that will reduce not only total demand but "peak" requirements as well—which determine the total generating capacity that must be developed. Off-peak reduced rates may accomplish part of the task, by changing the consumption habits of residential users. Solar heating and cooling systems make utilization of off-peak periods more attractive. Such systems typically use electric power as a back-up energy source; since they also include an energy storage medium —tanks of water or rocks—they can draw and store electric energy during off-peak periods, reducing peak load requirements and evening out the rate of electric power generation.

Many state utility commissions are already reexamining rate structures with the object of smoothing daily peaks and valleys in demand. Penalties for peak-hour users must be balanced against long-standing policies in many localities of attracting business enterprises with favorable utility rates. Some states are adopting progressive rates for commercial users, with a low "lifeline" rate for the level of consumption necessary for minimum cooling and heating demands.

Energy Resource Development

Although conservation measures offer significant opportunities for alleviating the energy crisis, they cannot by themselves solve it. A vigorous program of energy resource development is required—particularly with regard to coal, nuclear power, additional oil and gas from the Alaskan North Slope and Outer Continental Shelf, and the more advanced energy technologies—if the United States is to attain energy independence and to sustain a strong and healthy economy.

The OPEC oil embargo and price hikes imposed sudden changes on American economic and social life and brought general recognition of the need for greater energy efficiency, but adaption to energy shortages and high energy prices is a protracted process. Whatever the inroads through conservation, there will be continued increases in total energy demands.

Although the hope for political or technological solutions persist, there are hard choices now on the timing, nature and magnitude of exploitation of domestic energy resources—with significant costs already identified, more debated, and with the risk of irreversible consequences for wrong decisions. From now to 1985 emphasis on increased domestic production is on expansion of nuclear power sources, specifically light water reactors; increased recovery of oil and gas from existing wells; and rapid development of oil and gas from the Outer Continental Shelf (OCS) and of coal, particularly readily accessible and largely undeveloped resources of the Northern Great Plains and Rocky Mountain States. The unprecedented speed and scale of development pro-

posed for western coal and OCS oil have set off intense debate over how the environmental and growth impacts attendant on this national energy commitment that dialogue should count in the formation of energy production policy.

Environmental Concerns

The potential environmental impacts of western coal development are so great that a widely-discussed report by the National Academy of Sciences suggested that the regions involved be frankly identified as "national sacrifice areas," at least in the context of present production plans and intentions. The Department of Interior (DOI) has estimated that domestic coal resources, excluding Alaska, total some 425 billion tons, and that half of the nation's coal reserves are under Federal jurisdiction—primarily in the western states.

These western coal reserves are highly desirable from an energy production perspective. Their relatively low sulphur content would make it far simpler for electric generating plants to meet air quality emission standards, and much of the coal could be easily strip-mined, minimizing production costs and safety hazards.

But efforts to develop the reserves have met strong resistance on environmental grounds. Strip-mining would disrupt soils and vegetation in an arid region where restoration would be particularly difficult. Transportation to markets via proposed thousand-mile coal slurry pipelines would require literally millions of tons of water annually from underground sources. Mine-mouth generation raises a different set of environmental problems. Coal-burning electric power plants in the southwest (Four Corners, Navajo, San Juan and Cholo) already affect air quality and visibility over miles of western public lands, and controversy has centered on the proposed Kaiparowits plant which would be located near Glen Canyon National Recreation Area in Utah. The possible environmental consequences of offshore oil development is no less a matter of concern. Coastal States are resisting offshore oil development and associated onshore facility construction. This is due in part to concern over the risk of damage to waters and beaches which now support recreational and tourist facilities and include unique natural areas. The controversial development of Appalachian coal resources involves substantial environmental impacts and trade-offs that are as critical to that region as coal development is to 16 western states.

These issues are being addressed by Federal environmental and energy agencies and the Federal agencies with jurisdiction over the resources involved—and are being contested in the courts and the political arena by environmentalists and state and local governments with a stake in the immediate outcome of energy policy decisions.

But rapid development of western coal and offshore oil resources raises growth policy issues apart from environmental concerns here—in particular, the nature and magnitude of local growth consequences of energy policy design, and the Federal response that will most effectively and most equitably ameliorate undesirable consequences.

Growth Concerns

The large-scale exploitation of energy resources in sparsely populated areas raise three major problems:

- population growth and public service demands beyond the capacity of existing social and physical infrastructure;
- inflationary competition with other economic activities for workers, capital and natural resources; and
- economic and social problems when local resources are depleted and businesses withdraw.

The coal resource states of the West have not forgotten their economic rise and fall in the course of America's development towards the Pacific and are alert to these challenges of energy production.

Competition for a limited water supply between coal mining and agricultural enterprises has already surfaced in Wyoming, Montana and the Dakotas. Irrigation is critical to the continuation and expansion of the agricultural production dominating the present economic and social structure of the region. Slurry pipelines promise cheaper transport of coal from mines to power plants, but necessitate use of massive quantities of water from underground sources. Tradeoffs between cheaper energy for the entire nation and the traditional way of life of a single area will not be easy.

The Sierra Club has filed suit under the National Environmental Protection Act (NEPA) seeking a large-scale analysis of the effects of coal extraction in the Northern Great Plains. This case is based on the claim that NEPA requires an inclusive consideration of the impacts of coal leasing and development on the entire multi-state coal resource area—an analysis of unprecedented scale.

The proposed rapid leasing of OCS "frontier" areas on the Atlantic and Pacific coasts has raised analogous concerns. It would take a major oil discovery for Atlantic coast production to cause substantial cost-of-energy savings for New England and the mid-Atlantic states. However, new oil and natural gas discoveries would produce some savings and contribute to national energy indepedence. Offshore production and associated transportation and processing facilities might have a substantial impact on regional growth.

Suits are being pressed against the Department of the Interior by coastal states on the grounds that the auction of drilling leases have not been harmonized with state coastal planning as required by the Coastal Zone Management Act. DOI is working with the states to bring them into the exploration planning process at an early stage.

Petroleum-related industries tend to move to locations close to new refineries, off-shore wells, and deepwater ports. For some depressed areas this could bring major economic benefits, but also the risk of economic as well as environmental injuries. The impact statement prepared by DOI for some 876,000 acres set for auction off the Delaware and New Jersey coasts in the Spring of 1976 concluded that more than 15,000 jobs could be created by offshore oil and gas production off the Atlantic Coast, but warned of oil spills that could significantly affect tourism, an important industry in that area, and possibly impair commercial fishing, which has already suffered a major decline. On-shore oil-related development in rural areas could further damage the tourist industry as well as local agriculture. Harmonizing the new energy industries with existing uses of shorelines and minimizing chances of environmental damage is the challenge of growth planning.

These concerns over coal and oil development have focused attention on two key issues: the nature of impact assistance that will be provided to affected states and localities, and the voice they will have in making energy development decisions.

Impact Assistance

Both the long-standing Federal ownership of western coal reserves, and the Federal ownership of OCS oil beyond the 3-mile limit, reconfirmed over competing state claims only last year (1975) by a decision of the Supreme Court, raise the question of Federal responsibility to assist the states and localities affected by the development of these resources.

There is considerable difference of opinion over the specific terms that should apply: the basis, magnitude and timing of the distributions, and the uses to which they can be put.

In the case of western coal, these issues are being debated in the context of a comprehensive reevaluation of the Mineral Leasing Act of 1920, the basic law governing coal development on public lands. Congressional proposals for amendments to the Act call, among other major changes, for the development of an overall coal leasing program and a comprehensive land use plan for pertinent U.S. public lands by the Secretary of the Interior and subsequent leasing in accordance with the program and plans. The extent to which support for state efforts to control and guide associated growth will accompany expanded coal production and will depend on enactment of two further proposed changes to the 1920 Act.

- A Department of Interior leasing program would be developed in coordination with state resource management and land use planning, and state and local officials would have at least a formal opportunity to review the program.
- The state share of coal revenues currently restricted to road and school development would be available, with broad state discretion, for the provision of public services and the planning, construction and maintenance of public facilities.

These amendments of the 1920 Act along with financial impact assistance would greatly improve the western states' capacity to accommodate the growth impacts of rapid expansion of coal production.

The situation in regard to OCS leasing in the "frontier" areas is somewhat different. There are two reasonably clear-cut alternatives under consideration: a revenue sharing approach and an impact assistance program.

The revenue sharing option would distribute a portion of Federal leasing income to the states solely on the basis of the location of offshore production facilities. This approach has been criticized because the location of production is not directly related to the location of on-shore impacts; it is not tied to the provision of public services needed to respond to growth impacts; and it delays the receipt of revenues until production is underway, far too late to plan for or provide what would be necessary.

Although it has in the past been possible to finance present improvements through the sale of notes and bonds in anticipation of future revenues, the current state of the municipal bond market and the experience of Alaska in utilizing this approach argue for more direct and timely impact assistance.

Proponents of specific impact assistance call for allocation of funds directly related to the location and probable nature of growth impacts, and advance funds for planning of public service and facilities development before energy development actually gets underway. A bill along these lines has been proposed by the Administration, to cover growth impacts of all energy development in which the Federal government is involved—OCS oil and gas and inland coal.

PROMISES AND PROBLEMS OF "ALTERNATIVE ENERGY SOURCES"

For many years government energy resource efforts have been focused on development of nuclear power. Only in the last few years has greater attention has been devoted to non-nuclear sources, yet research on nuclear development still accounts for the preponderant share of Federal R & D expenditures.

Setting Federal Priorities

ERDA has established a priority list for research, development and demonstration projects based on the potential of alternative sources to contribute to national energy needs over different periods of time. For the near term, ERDA considers new technologies for the utilization of coal, light water nuclear reactors, and enhanced oil and gas recovery to be the major potential sources of expanded supply, and increased conservation in buildings and consumer products, improvements in industrial and transportation efficiency, and conversion of waste materials to fuel to be the leading methods of energy conservation.

For the mid-term, ERDA considers coal gasification and liquefaction and oil shale production, as well as solar, geothermal and waste heat, to be major new sources. These rankings reflect the likelihood of significant contributions to meeting total energy needs, with emphasis on increasing supply and reducing demand in the short term. For the long term, ERDA will pursue those candidate technologies which will permit the use of essentially inexhaustible resources: nuclear breeders, fusion and solar electricity.

ERDA's present policy is to allocate R & D funds to technologies unlikely to be developed by the private sector, placing emphasis upon five major changes in the nature and scope of the nation's energy R & D program: overcoming technical problems inhibiting expansion of high leverage systems, notably coal and light water reactors; immediate conservation efforts; acceleration of commercial capabilities for shale oil production, coal gasification and liquefaction inclusion of solar electric energy as an "inexhaustible" long-term source; and increased attention to under-used new technologies that can be developed rapidly, such as waste heat recycling.

Regional Implications of Strategy Alternatives

The issues addressed in establishing a national R & D program include near-term versus long-term needs, nuclear versus fossil fuel emphasis, concentration on known possibilities versus balance and diversity, Federal versus private participation, and environment and safety versus private participation, and environment and safety versus energy potential.

The decisions taken will have long-term affects on the relative economic growth potential of competing states and regions and on the environmental burden they will have to bear.

One of the most critical issues is posed by the possibility of coal conversion to gaseous or liquid fuels that could become substitutes for oil and natural gas. As a source of energy for use after 1985, this approach is quite promising because of the abundance of domestic coal reserves and because costs should be competitive with imported oil and natural gas.

Coal conversion also offers the possibility of moving toward energy independence without having to change industrial processes and current patterns of use based on oil and natural gas. On the other hand, the developnent of synthetic fuels from coal will have major impacts on regional growth patterns and the regional distribution of energy supplies and may pose serious environmental problems, unless in-place underground gasification techniques can be developed.

Conventional crude oil production and refining have far less impact on air, water quality and land use than either coal conversion or shale oil development.

Continued development of nuclear power presents problems of a different nature. Over 200 nuclear plants are now either in commercial operation or under construction or firmly planned, but in order for nuclear fission power to reach full potential several problems must be addressed. These include less-than-desired plant reliability and rising capital costs as well as lack of resolution of long-term waste management issues and fuel reprocessing technology. While the bright picture once painted for nuclear power has been tarnished by the difficulties listed above as well as others, nuclear energy is still a cheaper source of electricity than any otther. Expanded nuclear generating capacity could help equalize regional electric power costs.

Concern over operating safety and the environmental risks in radioactive waste disposal have contributed to problems in developing of fission. Yet, if the problems associated with nuclear power could be resolved and "inexhaustible" forms of nuclear energy—such as breeder reactors and fusion —were to become commercially available, certain regions would derive major benefits.

In the past, New England and the mid-Atlantic states have suffered an ecomonic disadvantage because of high energy costs, a disparity that has been aggravated in the 1970's by the impacts of shortages, price hikes, and expenditures on pollution control equipment in the older energy production facilities typical of these regions.

A study of nationwide electric prices completed in the Fall of 1975 have amply documented growing regional differences in power rates (Tables V–1 and V–2).

Table V–1

WEIGHTED AVERAGE BILLS—INDUSTRIAL SERVICE
(1,000 kW/200,000 kWh)
(Selected regions—large cities only)

	1/1/75	1/1/74	1/1/73	1/1/64
Middle Atlantic	$11,991	$8,635	$6,625	$4,187
New England	7,848	5,692	4,661	3,867
U.S. Average	6,888	5,196	4,402	3,414
East S. Central	4,704	3,749	3,432	2,624
West S. Central	4,275	3,374	3,047	2,898

Source: National Association of Regulatory Utility Commissioners, and Federal Power Commission.

Table V–2

WEIGHTED AVERAGE BILLS—COMMERCIAL
(30 kW/6,000 kWh)
(Selected regions—large cities only)

	1/1/75	1/1/74	1/1/73	1/1/64
Middle Atlantic	$425	$321	$272	$187
New England	322	252	218	190
U.S. Average	269	215	194	163
East S. Central	173	141	132	121
West S. Central	200	169	157	155

Source: National Association of Regulatory Utility Commissioners, and Federal Power Commission.

Controversy over plant siting and rising plant construction and fuel costs have clouded early visions of cheap atomic power. But expanded nuclear generating capacity could contribute significantly to the equalization of regional electric power costs and remove the impediments to continued economic growth of these energy-poor regions.

THE STATES SEEK A LARGER ROLE

The national commitment to rapid development of domestic energy resources present challenges and dilemmas to state and local government. The coastal states affected by offshore leasing and the western states that face coal extraction, electric power generation, and oil shale and synthetic fuel production generally concede that development is

necessary and probably inevitable. But there are concerns over what at times appears to be undue haste in reaching and implementing development decisions, and local officials are seeking a larger voice in the determination of the critical features of energy policy: the location, time, and environmental safeguards of development; the extent and nature of planning and impact assistance; the state share of revenues; and the degree of responsiveness to state and local land use planning and resources management.

Federal hegemony in energy policy decisions is a counterpoint to the theme of increased state and local discretion that has characterized changing intergovernmental relations thus far in the 1970's, and the issues involved are being confronted in a number of contexts.

- The Western Governors' Conference has taken the initiative in establishing a forum through which state concerns can be brought to bear on Federal energy development in the western states, and the Administration has already responded by proposing provisions for community impact assistance and for consultation with state and local officials on all synthetic fuel demonstration projects.
- Suits brought by state and local governments on both the Atlantic and Pacific coasts have delayed the offshore leasing program, and raised fundamental questions as to the proper time of development.
- The Energy Policy Project of the National Conference of State Legislatures has become an important source of information and analysis of the specifics of energy development issues at the State and local level and their implications for state action.
- State and local governments are seeking a voice in Federal synthetic fuel decisions analogous to the state role established by the Coastal Zone Management Act of 1972, the Deepwater Port Act of 1974, and the OCS Land Act of 1975.
- An increasing number of states are expanding their capacity to address growth impacts of energy development in a comprehensive manner: in power plant siting, growth planning and environmental controls.

The effects of each of these initiatives are still far from certain, but it is clear that the states have recognized the long term consequences of energy policy decisions that are being made now and are determined to insure that the interests of state and local governments are adequately represented in the process of making those decisions.

VI. Growth Consequences of Environmental Regulations

INTRODUCTION

Environmental concerns to improve the quality of America's human and natural habitats increased during the 1970's. From the viewpoint of 1975, several issues and trends commanded attention.

- Debate over new problems—including the quality of drinking water in some major cities, the possible effect on the ozone layer of pressurized spray can discharges, the presence of highly toxic substances in the Hudson River and Great Lakes, and the environmental implications of domestic energy development—focussed public awareness on the immediate health consequences of industrialization and growth and on measures aimed at ensuring adequate air and water quality standards.
- Private industry and Federal, state and local spending to attain environmental goals now provide over one million jobs.
- The impact statement requirements of the National Environmental Policy Act of 1969 (NEPA) have been emulated in a number of state laws requiring similar assessments for certain state, local and private developments.

The environmental impact approach mandated by NEPA represents an early involvement of many Federal agencies in considering the growth consequences of their actions. Moreover, given the proliferation of the impact approach across the nation, an evaluation of the contribution of environmental impact statements toward more effective growth management and a consideration of the direct effects that the NEPA process itself may have on growth patterns appears to be timely. Federal programs enacted to protect and improve the quality of air and water also affect patterns of growth. For example, similar issues are posed by the Clean Air Act, especially for central cities, in the context of the debate over the meaning and application of concepts such as "significant deterioration" of air quality and control of "indirect sources" of pollution.

The importance of the use of land and, consequently, of intergovernmental and regional cooperation, suggests that diverse values and patterns of human settlement may be brought into opposition as a result of the effects of Federal environmental programs. Sewage treatment planning, for instance, offers one recent case where environmental regulation may effect urban sprawl and raise the perennial question of the extent to which Federal assistance shapes or responds to growth.

ENVIRONMENTAL IMPACT ASSESSMENT

The EIS and Growth Issues

One of the environmental laws that has had major impacts on how the Federal government anticipates growth issues is the National Environmental Policy Act of 1969. This law requires environmental impact statements (EISs) as a prerequisite for approval of any major Federal action with significant impact on the environment. Over half the states now have similar laws or administrative procedures so that environmental impact assessments are now part of most large-scale government decisions. Even before NEPA, the Office of Management and Budget mandated review and comment procedures under Circular A–95 in order to increase intergovernmental cooperation, avoid duplication and waste and achieve wise community growth management.

The NEPA impact statement requirement has become an important mechanism because it has established an enforceable duty on Federal officials to lay out the rationale and implications for major projects and programs. Some have claimed that the result has gone far beyond improved decision-making on environmental grounds and has basi-

cally altered the way that governments' decisions can be reviewed by the public before they are made. Others view the environmental impact statement process as a cause of delay, expense, and uncertainty, whether resulting from the nature of the process or its inadequate management. Federal EISs are now prepared on about 1200 actions annually; thousands of other decisions are assessed for their environmental impacts to see if an EIS is required. If an EIS is not required, the assessment is nevertheless included in the agency's review record. Many state EIS requirements are similar and, in some cases, have also been applied to privately developed projects.

At first, many Federal agencies interpreted the environmental impact assessment process as one dealing with direct environmental effects, for example: pollution of air and water, loss of wildlife habitat and destruction of critical resources. But a series of early court cases made clear that the scope of impact statements had to consider the growth inducing and restraining impacts of certain Federal actions as well.

As the EIS Guidelines promulgated by the President's Council on Environmental Quality point out, impact assessment procedures are tied to issues of growth by:

- recognizing the way Federal actions induce and influence the location of growth;
- making sure the public and local officials are aware of these effects; and
- coordinating the Federal action with appropriate local and state land use plans and growth policies.

Delay, Expense and Uncertainty in Environmental Impact Assessment

In the first years of implementing the EIS requirements, some Federal agencies faced serious backlog problems; unlike the "grandfather" provisions of several of the state EIS laws, the Federal courts were strict in requiring agencies under NEPA to review earlier decisions where final project action had yet to be taken. The result was considerable confusion and frustration over the difficulty of undoing previous decisions, which resulted in delay and added cost to some projects. Much of the difficulty of those early years has now subsided and relatively few projects remain which predate NEPA and have not been subject to some subsequent review.

Another source of delay, expense and uncertainty for some agencies has been their reluctance to formulate criteria for determining which actions require a full EIS. This is related to the difficulty of identifying what is "a major Federal action with significant impact on the quality of the human environment." While rigid rules cannot always be relied upon, the absence of any guidance with respect to the size, nature or category of agency actions subject to EISs left some agencies with too much uncertainty in their procedures. Over time most agencies have adopted clearer guidelines as they have become more confident of how NEPA should apply to their programs.

Some delays have been caused by court decisions which have thrown into question the procedures adopted by Federal agencies. Sometimes these inadequacies have been resolved by adopting new procedures, acceptable to the courts. Appeals to higher courts, which sometimes sustain an agency's procedures, have caused further delay in the EIS process. In rare cases, Congress may step in and amend the law. Thus, when several Courts of Appeals had ruled differently on the degree to which states could help prepare EISs on highway projects, Congress amended NEPA to permit a clearly delineated state role. Other cases are pending in the Federal courts which will settle a number of similar procedural issues on when and how to file impact statements.

Another concern raised about the impact assessment process is the cost of undertaking the required studies. Private developers are particularly affected when, in seeking a necessary Federal license or permit for their facility, they must bear the cost of gathering environmental data. In an effort to cut down on these costs, the Council on Environmental Quality has recently issued guidelines to all agencies. The guidelines indicate CEQ's displeasure at the length of many EISs and recommends that they eliminate background information not essential to explain impacts of the proposed action. The focus of the EIS should be on direct and indirect impacts of the proposal and on the evaluation of alternatives.

In summary, many of the problems of delay, expense and uncertainty in the EIS

process can be mitigated by improved procedures. Except in those few cases where unexpected judicial or legislative decisions create the need to reassess a project, delays can be resolved by including environmental analysis early in an agency's decision process. The expense of environmental review can often be reduced by focusing more on the project and alternatives and less on detailed background data collection. As more agencies establish practices for environmental assessment, uncertainty is reduced and confidence in decision-making increases.

Applying the environmental assessment process to growth poses a coordination problem for Federal, state and local agencies. On the one hand, Federal agencies must explain the implications of their actions on growth in a given area (in the case of sewers, highways or power plants, these implications are usually substantial). On the other hand, the state or locality is best able to make decisions about growth and change within its boundaries. State and local officials, those who are developing and carrying out growth strategies, may not have a similar vehicle or requirement to develop options publicly. As with the A–95 process, better intergovernmental cooperation could involve appropriate state and local officials in the development of alternatives and proposals subject to an EIS, both in their formulation and as part of the review and comment process.

Economic Impact Of Environmental Betterment

Debate over the growth consequences of Federal programs is exemplified by issues arising from pollution control laws: how much abatement should be required, how fast standards should be advanced, and how to implement these laws. Current litigation and Congressional reconsideration of standards and efforts to achieve them present a host of policy problems, including the potential disruption of local economies, the extent and location of new or expanding economic activities, and the mediation of competing environmental values.

Pollution Control Impacts on Growth

Many of the growth impacts of pollution control programs, in particular the 1972 Water Pollution Control Act Amendments, are reflected in the findings of the Congressionally-mandated review now being completed by the National Commission on Water Quality. The draft Commission Report concluded that municipal and industrial pollution of the nation's waters can be reduced and the 1983 goals of clear water attained without endangering the economic well-being of the country.

The Commission estimated that capital requirements for the five most affected industries—metal finishing, chemicals, pulp and paper, steam electric power and mining—would be nearly two-thirds of the $35.5 billion necessary to meet 1977 standards and the additional $30.6 billion to achieve 1983 standards. If the 1977 deadlines were to be met, investment in pollution abatement would rise sharply as a percentage of total capital spending for many of those involved—for pulp and paper, from seven percent in 1974 to 40 percent in 1976; for textiles, from two percent in 1974 to 27 percent in 1976.

And within each industry, a small but significant proportion of smaller, older, less efficient facilities would need to meet far higher individual requirements. The Commission concludes that this will lead to a number of plant closings, particularly of older single-plant firms, in six industries: pulp and paper, metal finishing, textiles, feedlots (mostly dairies), meat packing and fruit and vegetable processors. These plants are concentrated in the Northeast, with others located in the Middle Atlantic and North Central regions, areas already hard-hit by the shift of manufacturing and processing industry to the South and Southwest.

In most instances, the Commission maintains, the plants that close are older, less efficient enterprises which would probably soon be closed by economic pressures anyway, and the pollution control legislation only speeds up this process. This argument, however, does not mitigate the impact of the closings on local economies, particularly during periods when unemployment is already high.

From the standpoint of the health of the national economy, such unemployment may not be critical since many of the jobs lost in closings are picked up elsewhere as other plants expand production to supply customers formerly served by the older plants. This may not help the losing community, and there are likely to be controversies with re-

spect to pollution abatement requirements for individual plants that provide major sources of local employment.

Spurs to Economic Growth

On the other hand, the environment programs have also been directly responsible for some new economic growth. The Federal Water Pollution Control Act has been identified as the single largest generator of such development to date, with over 400 private companies manufacturing water pollution control equipment and approximately 250,000 people employed in manufacturing, operating, and maintaining installations. The Council on Environmental Quality has estimated that total expenditures on pollution control in 1975 were approximately $15.7 billion, including $10 billion from the private sector, and this money indirectly and directly employed over a million people.

Even within regions, it has been noted, there may be a balance of job elimination and job creation. In the parallel case of the imposition of solid waste source-reduction measures through restrictions on disposable beverage containers, an examination of results to date under the Oregon law, one of the most advanced in this regard, has concluded that reduced production and employment in container manufacturing has to a large degree been offset by expansion of reuse activities. Thus, the net effect on state economic conditions may be redistributive, rather than reductive.

In addition to these problems of local economic growth, some communities experience serious problems of financing improved and expanded waste treatment systems. The 75 percent Federal subsidy for municipal construction substantially eases this situation, but the $18 billion originally authorized in 1972 would have to be greatly expanded to accomplish the goals set under the Act.

There are several growth issues related to this program: One is the question of what happens to industries disposing of wastes into municipal sewers when the municipality's treatment facilities do not satisfy the requirements of the law. A second is whether the requirements of the law for pretreating wastes before they are discharged into municipal sewers are so stringent that they will drive industries to adopt full treatment and direct discharge. Such an effect, by breaking the tie with the municipal sewer system could stimulate increased dispersion of plants. A third is the question of the impact of the sewers themselves on metropolitan development patterns.

Impacts on Central Cities

In addition to the impact on small towns faced by the closing of a major source of employment, there is also the issue of whether the air and water pollution control laws are having adverse effects on central cities, aggravating already difficult metropolitan and regional growth situations. Within a metropolitan area older plants are likely to be located in the central city while the new plants open in the suburbs. If pollution control laws accelerate the closing of the older plants, they will stimulate this exodus from the city.

The issue of adverse impacts on downtown areas also arises with respect to transportation control plans and the indirect source regulations being implemented under the Clean Air Act. The purpose of both of these is to reduce automobile-caused pollution by reducing auto usage and congestion in areas that have particularly serious air pollution problems. These regulations are seen as having the potential for particular serious impact on central cities. The pollution problem is likely to be more severe in central cities and the regulations and plans most restrictive, because the necessary balancing between reduced automobile dependence or congestion and the need to assure continued accessibility to downtown areas is extremely difficult. And those restrictions might well accelerate the rate at which stores and offices move to the suburbs. Because of these impacts Congress has been looking very closely at both sets of regulations as it has considered amendments to the Clean Air Act in 1975.

IMPACTS ON THE LOCATION OF GROWTH

The impact that enforcement of environmental standards may have upon local and national economies also involves a larger question of how present programs may influence the location of future development. Two of the most important controversies have been stimulated by court orders in the course of

litigation under the Clean Air Act—the "no significant deterioration" and "indirect source" issues; these issues have significant implications for where growth will and will not take place—and for determining how the decisions will be made.

"Significant Deterioration"

Although the Administration opposed any Federal involvement in significant deterioration, environmental groups in 1972 won judicial support for an interpretation of the Act as prohibiting EPA from approving state implementation plans that would lead to the "significant deterioration" of air quality even where Federal standards presently are being met. The underlying environmental issue is whether such a restriction is a necessary and appropriate responsibility for the Federal government in furthering the nation's health and welfare.

Pursuant to the court order and after initiating an unusually broad-based public debate and considering the range of positions presented, EPA proposed to implement the court's order by establishing three "classes" of air standards for lands not currently exceeding national standards and delegating to the states the authority and responsibility to draw the applicable boundaries. Each class has a different allowable increase of two pollutants: total suspended particulates and sulfur dioxide. Class I applies to land areas where almost any increase in the concentration of these pollutants would be a significant deterioration of air quality; Class II to areas where air quality deterioration that normally accompanies new growth would be considered insignificant; Class III where deterioration to national ambient air quality standards would be considered insignificant.

Development interests have criticized the regulation as arbitrary and unrealistic, and many environmentalists have attacked it as contravening the basic prohibitions established by the court order. The Administration had proposed revisions of the Clean Air Act that would eliminate the statutory basis for the order and for the EPA standards as well and suggested as a minimum, that Congress consider a number of alternatives. But the plan has crystallized debate over the planning implications of air quality regulations, for it would authorize and encourage state planning with Federal review to specify permissible levels of new industrial development by sub-state area—implicity defining prohibited (Class I), moderate development (Class II) and high concentrated growth (Class III) areas.

A related set of EPA regulations to control "indirect sources" recognizes the effect on air quality of vehicular traffic generated by new development. These regulations would require a program of statewide review of indirect sources which would include more than 1000 parking spaces in an urban area or 2000 in a rural area; of any urban highway segment with projected traffic exceeding 20,000 cars per day; and of any airport designed for more than 50,000 flights per year. The Federal government also becomes involved through its right to approve or disapprove the overall State implementation plans.

The regulations raised some critical development and growth policy issues regarding preconstruction review of parking facilities.

- Indirect source review would be primarily a requirement of state air quality agencies, and the regulations could shift review of major developments to the state level. Yet the Federal government has final approval authority and becomes a key player in the process. In response to this criticism, new attention was focussed on the local role in air pollution control. While EPA regulations provided for the delegation of the program to local governments and in fact encouraged this, local governments still feared that the States would exercise their first option of keeping the program at the State level, and the Federal government could always become involved through the approval mechanism.
- Indirect source review requires traffic management by the source to prevent violations of the national standards due to traffic congestion. This may entail change in facility design, minor design changes in entry and exit points from the facility, or major improvements in local highway configurations or reliance on mass transportation. Developers were concerned that they did not have control over the timing of local transportation improvement projects and might have to pay the bill themselves. This problem is greatest with the Federally promulgated program where state and local communities are not involved and arrange-

ments cannot be easily made between air pollution and transportation agencies.

- It was argued that the regulations would promote urban sprawl by encouraging smaller scale development to avoid the review and of siting away from developed areas, though studies showed mixed results as to whether this would occur.

Although the Federal EPA regulations have been postponed as a result of Congressional action, 17 states have submitted plans for regulation of indirect sources. But the issue continues to be an important one for broader reasons. As the CEQ pointed out soon after the regulations were proposed, they would give mandatory review powers over these major developments to state air quality agencies. Taken together with the air quality classification authority proposed by the "no significant deterioration" plan, it would tend to establish *de facto* state facility siting agencies regulating both public and private development with final approval of all plans by the Federal government as still an additional step in the development process. Although there are many who argue that facilities siting should take place in the context of state or area-wide planning, and welcome the advent of environmental controls in forcing consideration of many of the problems involved, there is considerable objection to the implementation of controls that are solely or primarily attuned to environmental aspects of development.

Land Use Planning and Environmental Goals

Since pollution is locationally generated and specially distributed it is closely tied to the uses to which land is put. Currently, air, water, and other environmental planning actions are directed toward achievement of basic national commitments to cleanup tasks that have arisen largely from historic patterns of plant location, equipment utilization, community growth and development. Thus, cleanups of existing conditions rely heavily upon changes in technology and public attitudes. It can be hoped that in the not-too-distant future, newer industrial and institutional processes combined with attention to land use problems at the state and local level could play an important role in maintaining environmental gains while accommodating continued growth.

The advent of regional planning is important for efforts to achieve Federally-defined environmental standards. For example, the Federal Water Pollution Control Act requires states to plan overall water quality improvement strategies (under section 303e) and to designate planning agencies in regions with particularly difficult water quality problems (under section 208). Areawide planning under section 208 is specifically aimed to consider land use and econmic growth in the formulation of decisions on the location of municipal wastewater treatment facilities and the many related measures for meeting standards for industrial effluent discharges and for water quality standards affected by non-point sources.

Although some have argued for efforts to unify the management of pollutants on an areawide basis, the problem, as CEQ and others have pointed out, rests with the difficulty in harmonizing environmental quality objectives with some other land use goals in the process of comprehensive planning. The differences involved, it has been suggested, are practical and fundamental ones. Air and water quality considerations often place limits on the intensity of development in an area so that no undue burdens are placed on the assimilative capacity of particular air and water resources. On the one hand, this may lead to dispersal of new activities. On the other hand, planning that is responsive to the energy needs of the United States today places great value on the concentration of development.

This conflict in values is far from total and is far from being understood. It may pertain largely to environmental actions focussed on air and water quality issues as in the case of water pollution abatement and solid waste management and recycling alternatives that argue for compact growth and energy resource recovery. From a broad perspective, there appears to be considerable support for forms of growth that are intensive rather than widely dispersed. Two years ago, the Council on Environmental Quality, the Department of Housing and Urban Development and the Environmental Protection Agency sponsored a major study *(The Costs of Sprawl)* which analyzed the effects associated with alternative development and con-

cluded that more compact, higher density forms of development were correlated with lower economic and environmental costs, less consumption of energy and natural resources, and greater personal convenience.

In terms of existing planning programs, there has already been significant progress towards effecting interagency coordination at the Federal level—for example, between EPA administration of the section 208 program for areawide waste treatment plans and HUD administration of section 701 comprehensive planning grants (particularly important since roughly two-thirds of the 149 agencies designated for section 208 are the same agencies responsible for section 701 planning in their areas). Coordination between the Coastal Zone Management Program and the discharge of the dredged or full material program administered by the Army Corps of Engineers, Section 404 of P.L. 92–500 is particularly important in protecting certain sensitive aquatic environments. The Section 404 program has been designed to manage, through a permit process, the discharge of those dredged or fill materials to the nation's waters and associated wetlands which have the potential for significant environmental damage. It is too soon, however, to evaluate the growth impacts of the Section 404 program since it was inaugurated late in 1975.

A study of the relationship between the implementation of the Federal EIS requirement and the Principles and Standards and Water Resource Planning is now underway. And EPA, recognizing that air quality control activity is related to land use issues, has emphasized the need to develop effective local and regional approaches that will enable local politically accountable officials to play a role in implementing air quality measures and integrating pollution concerns into a more inclusive land use decision-making process.

Sewer Planning: Self-Fulfilling Prophesies or Effective Growth Policies?

It is fairly well established that the provision of sewage systems tends to increase densities and levels of growth along the length of interceptor and collection lines. This means that within a metropolitan region a community may grow at a faster pace or even experience a disproportionate share of regional growth if it has ample sewage capacity and interceptor lines in undeveloped areas.

The development process traditionally has set a premium on cheaper land in the outlying areas of the metropolitan region. What has happened in a number of instances is that interceptor sewers servicing outlying areas have been blamed for inducing sprawl. The interceptor lines cross vacant lands and are said to induce infilling in bypassed areas.

Understanding these inducements and impacts is central to the issue of whether sewage treatment capacity is to be a self-fulfilling prophesy of growth needs in a community or whether ample public facilities are deliberately tied to local growth policy. Many are now suggesting that rather than have engineers make *de facto* land use policy, the planning of sewage systems should conform to the desired growth pattern of the community. EPA guidance memoranda to construction grant recipients now require coordination of cost-effective sewage system design with land use planning and approval of proposed projects by local elected officials.

In spite of this, however, the program has received criticism in both directions. On the one hand, EPA is being asked to make growth considerations a fundamental aspect of sewage treatment planning. On the other, there are fears by some local groups that EPA may become too involved in these questions.

Related to the "sprawl" issues faced by suburban areas, there have been a number of rural communities which are opposed to the introduction of sewer systems for the very reasons that they are believed to stimulate higher density development. These communities are seeking alternative means of treating and managing wastes. Septic systems are not adequate at higher densities and often not suited to certain soil types and geological areas. This is viewed by many rural areas as a means of ensuring the continued existence of the rural environment. This practice, of course, raises the spector of exclusionary zoning and all of its implications as well as the impact of an increasing number of sewer moratoria around the country.

Sewer moratoria have been invoked in the name of environmental protection and the need to prevent untreated waste from con-

taminating waterways and water supplies. The reasons for the moratoria, however, vary widely. In some areas, delays in funding and construction of treatment facilities are the root of the problem. In more areas, however, there is a deliberate attempt to use the absence of adequate facilities to gain time to reexamine community goals.

The center of the debate is the more fundamental need for the growth policy which respects regional population demands so as not to be exclusionary. Once growth policies are established, waste treatment engineers can provide the best approaches to treating municipal waste as well as protect local drinking water supplies in a consistent manner.

Instead of addressing the growth issues directly, however, many communities are turning to inadequate sewage treatment capacity as a short term panacea to give them breathing room from growth pressures.

As much as the sewer moratoria are maligned and feared by developers and many community officials, however, it is still unclear as to whether they truly accomplish their intended effect.

It should be noted that the Administration has proposed amendments to the Federal Water Pollution Control Act which would allow growth and would return decision making regarding growth to local governments by eliminating Federal financing. Among other changes, the bill would reduce the categories of projects eligible for Federal assistance and would require the states and communities to pay the full cost of capacity beyond that needed to serve current populations. The effect of the proposed changes is to shift the emphasis of the program to meet existing pollution problems in already urbanized areas.

SUMMARY

The most important point to be made regarding debates about the environment and its relation to growth, the economy, energy and other major public concerns is that it is not fruitful to view these relationships as necessarily conflicting. Delay in development of energy sources, if true, is often seen as a negative factor in times of unwanted dependence on foreign resources for energy production. But as a recent Opinion Research poll indicates: "even during a time of recession, high unemployment and rising fuel costs, the public does not voice a readiness to cut back on environmental control programs to solve economic and energy problems."

The challenge is to blend concerns about the environment and various "growth" issues in such a way as to resolve most effectively problems in the public interest. As the League of Women Voters points out: "the American people appear ready to accept a reconciliation of new energy needs and protection of the environment through a changed U.S. lifestyle, one which is energy-wise and environmentally attuned. Perhaps the public senses a divergence in goals implied in so-called energy and environmental tradeoffs and chooses to speak up for values which reconcile both."

VII. Hard Choices in Natural Resources

Public policy consideration of natural resources problems demands a long-term perspective. The distribution of aggregate uses of land has not changed greatly in 50 years and many fundamental natural resource questions—timber growth, mineral depletion, water resource development—need the long view. Indeed, present concerns are to a large extent new or even familiar versions of problems long recognized and discussed. Nevertheless, changes in the last few years have sharpened awareness of the old problems and focused attention on new quandaries as well. There are hard choices among competing demands on natural resources for timber, for non-fuel minerals, for outdoor recreation and wilderness uses, for water resource development, and for conflicting agricultural and urban uses.

RENEWED CONCERN OVER MINERAL SHORTAGES

The ability of the adherents to the Organization of Petroleum Exporting Countries (OPEC) to impose sharp increases in the price of petroleum, and the continued cohesion of the OPEC countries, has raised the spectre of sudden cartel-dictated price increases or withdrawal of supplies in other critical mineral resources. Although the effects are not likely to be as acute or pervasive as those resulting from increases in energy costs, substantial impacts on particular industries are, unfortunately, a real possibility. And the dislocations may be out of proportion to the particular mineral resource considered alone, as such supply constraints or price increases interact with energy resource problems.

The extent of industrial reliance on mineral importation varies significantly among different mineral types. In some cases, exposure to possible manipulations of supply and price is significant, at least in relation to the extent of current import levels. For example, over 90 percent of chromium supplies are presently imported, mainly from the Soviet Union and South Africa, with even theoretical domestic resources severely limited. More than three-quarters of such other essential minerals as tin, asbestos and mercury are also imported, with domestic reserves similarly limited. Current dependence on foreign supply is not necessarily an indication of an absolute domestic lack of resources or even of proven reserves.

Actually price structures for foreign minerals make importation more advantageous than domestic extraction in many cases, and price increases may induce sufficient domestic production and substitution in the long run. The U.S. National Commission on Materials Policy recommended primary reliance on such market forces in its 1973 report, but even they took note of the need to decrease or prevent a dangerous or costly dependence on imports. Where there are demonstrated domestic reserves, the lead time and start up costs associated with their exploitation would be substantial, so that supply cartels would, in the short run, have a considerable probability of enforcing their price demands. Moreover, costs and prices for the domestic extraction of such mineral resources might well be higher than past experience would suggest in light of the increases in energy costs, the larger amounts of energy required to extract lower-grade resources, and the higher environmental standards that have attained statutory form in recent years. And the economic competitiveness of domestic sources, even with such higher costs, would raise a different but no less significant domestic problem of accelerated development in resource locations and renewed conflict with proponents of other uses, of preservation, and of environmental standards.

These conflicts are already manifest in the development of domestic energy resources

and have begun to emerge in non-fuel minerals, as well as in the struggle over proposed phosphate rock extraction in Florida's Osceola National Forest, and efforts to accelerate copper-nickel mining in Minnesota Superior National Forest, where a proposed major mine site is only one-half mile from a million acre boundary water canoe area. Debate over the situation has focused on the need for basic revision of the Mining Law of 1872 and the Mineral Leasing Act of 1920, the laws regulating prospecting and mining rights on Federal public lands. Proposals now under discussion call for changes in the unilateral rights of private interests to proceed, the fees, royalties and regulations imposed, and the role of the state governments in leasing and regulatory decisions and in sharing in the economic value of mining operations. (Some of the changes under consideration in the context of coal leasing are discussed in Chapter Six of this report.)

Strategic questions have also been posed concerning the actions that should be taken to avoid the impacts that might be associated with sudden alterations in supply or price of critical non-fuel minerals. The Materials Policy Commission's concern with import exposure has been echoed by the AFL-CIO and others, and the National Commission on Supplies and Shortages will report to the Congress and the President in March 1976 on the possible need for a national effort in this regard. The first question, of course, is whether or not there is need for new action beyond existing programs. The argument for the continuation of present programs without the addition of major new policies or directions is based on the assessment of a number of factors related to the likelihood of an effective imposition of mineral shortages in the near term.

First, it is argued that it is intrinsically improbable that the OPEC experience will be duplicated in the fields of non-fuel minerals, in light of the diversity and conflict among the nations involved as well as the weakness and internal instability of many of those countries. Initial efforts at cartel development among copper-exporting nations, among others, have in fact foundered on just such obstacles.

Second, it is difficult to predict which minerals will be the object of cartel efforts, making the development of inclusive programs (such as stockpiling or domestic production incentives) questionable. Program costs, particularly if aimed broadly at a number of potentially boycottable minerals, might be far in excess of the actual economic injury.

Third, past predictions of mineral reserve exhaustion have almost always proven unfounded. New recovery technologies and resource substitution have more than kept pace with the exponentially growing demands of society, and it is frequently argued that market incentives and technological innovation can meet needs as they arise.

Finally, some contend that government intervention in these major market operations will have social, political and economic costs that are less desirable than even substantial short-term dislocations in materials supply.

The Need for Action on Critical Minerals

Those contentions, however, do not provide a complete response to possible problems of shortages of particular minerals. Inclusive programs may be costly and unnecessary, but there are a small number of critical minerals, such as manganese for steel production, that are necessary to the American economy and should be singled out for treatment.

Although new recovery technologies are important, higher energy costs and limited known resources of some minerals mean that new discoveries may be necessary for an adequate mineral supply. Resource substitution has limits as well. Many minerals have unique chemical or physical characteristics for which there are no good substitutes.

Most importantly, those concerned with possible shortages argue that the pervasive assumption that technological advances will solve pressing supply problems for minerals must not be allowed to obscure the need for a new emphasis on conservation in resource use in general and for measures to deal with shortages.

Options at the Federal Level

If further action is necessary, it is clear that the policy choices lie mainly at the Federal level. These options include:

- increasing the government role in the development of information resources and their availability;

- development of more specific definitions of critical mineral policies by resource types;
- increasing research and development expenditures for extractive and substitution technologies;
- expanding stockpiling programs;
- improving the security of existing foreign supplies and diversifying the sources of supply;
- establishing incentives for the development of domestic extractive industry;
- increasing the extent and improving the quality of programs of recycling and reuse of critical metallic and non-metallic minerals; and
- moderating growth in demand through conservation of materials, both in use and recovery.

In the long-term, non-energy mineral policy is perhaps impossible to define. Development in undersea mineral exploration, rapidly changing technology, unpredictable shifts in the relationships among the United States and the nations that now compose its sources of mineral supply, and similar changes, will affect the supply and demand balances for individual resources. Particularly in terms of the outlook for the next three to five years, it would appear highly unlikely that nonfuel mineral supply problems will have an impact on the nature and location of national growth that would resemble in any degree the effects of the actions of the member nations of the OPEC cartel.

Even in cases of critical minerals, reliance on "foreign" sources may be not only feasible but desirable. These sources are to a great extent chosen out of preference, not necessity, reflecting lower prices and the "export" of severe environmental impacts rather than the absolute lack of availability of domestic supply. And the "foreign" sources include many major trading partners of the U.S. However, it may be that a specific effort to develop better definitions of "critical minerals", reflecting both the nature and the extent and vulnerability of present sources of supply, would lead to a public decision to undertake major programs aimed at controlling domestic demand or developing more secure sources of foreign or domestic supply.

TIMBER: CHANGES IN DEMAND FOR A RENEWABLE RESOURCE

Take, for example some new questions on timber. Residential construction has long been the most important market for timber products; and, in recent years new construction and housing maintenance accounted for a third to a half of softwood lumber and plywood in use, as well as large amounts of hardwood plywood, particle board and insulation board. But the severe slump in the housing market of the past two years has brought reductions in demand.

There is little likelihood of an absolute decline in timber demand. In fact, with continued population growth and household formation, increases in per capita income, and a possible resurgence of housing production within the next few years, it is assumed by most observers that demand will steadily increase. Yet, many who are concerned with aggregate resource management have suggested that there are reasons to be concerned over this continuing displacement of wood products. Timber is a renewable resource. While the use of mineral derivatives contributes to depletion, there are far greater waste disposal problems associated with substitute materials, few opportunities for recycling and far higher energy production requirements with accompanying impacts on the environment and on national energy accounts. But the encouragement of timber use on conservation grounds returns attention to securing adequate timber supplies now and in the future.

There is a declining capability for supplying timber products from Federal forest lands, and a limited capacity of industrial forest lands to increase their present level of production. The only real opportunity for meeting future timber supply needs is on the 296 million acres in the hands of some four million non-industrial private owners. These lands are producing presently at only half their potential.

Increased timber production can be achieved by a variety of measures, including accelerated regeneration, stand conversion and improvement, commercial thinning, fertilization, improved harvesting practices, and intensified protection. Any satisfactory policy will have to address a variety of difficult issues including the role of exports and im-

ports of forest products in light of domestic needs and the international market, the proper balance between timber production and other forestal land and the relative potential of lands in private and public ownership to meet long term demands for wood products. The opportunities and problems associated with the various options for meeting timber needs receive detailed treatment in the Administration assessment mandated by the Forest and Rangeland Renewable Resources Planning Act of 1974.

TOWARDS GREATER OUTDOOR RECREATIONAL OPPORTUNITIES

The substantial direct Federal role in outdoor recreation is a relatively recent development. For many years Federal involvement was largely a by-product of its ownership of 755 million acres of public land and its involvement in water resource improvements for flood protection and other purposes.

As the recreational opportunities of the vast public estate came into increasing use, an explicit effort was made to develop national parks for public recreation use, to assure that recreation wildlife and wilderness uses received adequate consideration on national forest lands, and to take advantage of the recreational potential of Federal reservoirs. This brought with it an almost inevitable Federal predominance in the provision of outdoor recreational opportunities because of the distribution of ownership of public land resources, as can be seen in Table VII–1.

The Land and Water Conservation Fund, the primary source of monies for acquisition and management of specific recreational resources, was first authorized in 1965. The Bureau of Outdoor Recreation, established in 1963, submitted the first Nationwide Plan at the end of 1973.

The Plan specifically recommended that Federal management and acquisition of recreational lands and waters be restricted to the areas of "national significance," and that resources used primarily by local populations and not of national historic or natural area importance be transferred in ownership or management to local jurisdictional institutions.

The National Park Service, after several years of trying to increase the accessibility of parks, carefully examined the impacts of expanded use and decided in a num-

TABLE VII–1

Public Outdoor Recreation Lands by Type
(In Thousands of Acres)

Administering Jurisdiction	Total	Regional, Community, and Neighborhood Parks and Recreation Areas	Forest Areas	Fish and Game Areas	Historic and Cultural Areas	Wilderness, Primitive, and Natural Areas	Other
Federal	266,719.9	19,106.8	160,165.1	32,789.9	1,310.8	28,094.8	25,252.5
State	41,794.5	4,412.4	19,058.2	15,771.4	49.4	1,432.2	1,070.9
County	8,131.5	1,298.8	4,047.9	1,406.7	11.3	1,338.2	28.6
City	1,629.1	697.4	383.2	209.6	7.5	232.0	99.4
Township	631.4	74.0	495.5	38.3	0.9	21.8	0.9
Park and Recreation Districts and Regional Councils	336.1	166.9	9.9	45.0	2.0	94.1	18.2
Total	319,242.5	25,756.3	184,159.8	50,260.9	1,381.9	31,213.1	26,470.5

SOURCE: *Natonwide Outdoor Recreation Plan, 1973*

ber of individual cases to limit visitor levels and emphasize preservation instead.

The "Legacy of Parks" Program set in motion in 1971 a major effort to provide park opportunities close to urban areas and led to the opening of two major parks in 1974: the 24,000 acre Golden Gate National Recreation Area near San Francisco and the 23,000 acre Gateway National Recreation Area near New York City. And Congress has authorized the acquisition of over 29,000 acres for the Cuyahoga Valley National Recreation Area in Ohio. But the high cost of land acquisition has led former supporters of Federal urban park development to reverse their ground and urge the concentration of funds on more traditional park development.

Federal support for natural land preservation was given its major institutional form by the establishment of a National Wilderness Preservation System in 1964—a system that included 12.3 million acres in 1975, primarily in national forests in the West. An additional 26 million acres, also predominantly in the West, is under review for possible inclusion. The National Wild and Scenic Rivers System established in 1968 has also focused Federal efforts on an intrinsically important natural resource that nevertheless can provide recreational opportunities for only a relatively small proportion of the population.

Federal lands will continue to provide substantial recreational opportunities; there is continued support for scenic and recreational trails under the National Trails Act of 1968; and assistance in the maintenance of historic sites and natural areas will assist in expanding special types of recreational experiences.

But the return to an emphasis on the state and local roles seems clearly underway—a policy direction that is consistent with the substantial financial assistance which has been provided to state governments in the past, that includes over one billion dollars from the Land and Water Conservation Fund since 1937 through special grant programs earmarked for support of fish and wildlife research, management and land acquisition.

The State and local governments have always borne the primary burden of providing recreational opportunities, and their total share has increased faster than that of Federal programs (Table VII–2).

TABLE VII–2

ESTIMATED GOVERNMENT EXPENDITURES ON OUTDOOR RECREATION*

(million dollars)

	1973	1972	1971
Federal	573	563	448
State	661	614	528
Local	2,445	1,991	1,752

* Includes both capital and operating expenditures

SOURCE: National Outdoor Recreation Plan, 1973

FEDERAL FINANCIAL SUPPORT TO STATE AND LOCAL GOVERNMENTS

The first Nationwide Outdoor Recreation Plan, prepared by the Bureau of Outdoor Recreation of the Department of the Interior in 1973, called for changes in the Land and Water Conservation Fund to increase the state share of funds for indoor recreation facilities for improved recreational opportunities in urban areas. Priorities on recreational programs need to be established because of limited funding available.

- The total amount of funds involved is small in terms of any estimation of total needs and in direct comparison with the level of current state and local expenditures. The current appropriation level is $300 million per year.
- The Fund is the primary source of monies for recreational land acquisition by the Park Service, Forest Service, Bureau of Land Management and Bureau of Sport Fisheries and Wildlife, and authorized acreage acquisition already far exceeds available funds.

More generally, real progress in this direction will require a broader reexamination of Federal financial assistance for state and local recreational development, or for the states to assess recreation needs within revenue sharing programs.

As long as fiscal policy calls for restraints on total Federal outlays, any increase in total Federal support in this area will likely be difficult, even if it established a more equitable funding overall. But if Federal programmatic spending is to be restricted to the development of resources that have a "national significance," and if direct Federal action is lim-

ited as far as possible so that state, local and private interests bear responsibility wherever feasible, localities may continue to have difficulty obtaining the financial resources necessary for effective action.

Towards a Better Balance in the Federal Recreational Lands System

Public lands have been acquired by the Federal government through a variety of methods and over a long period of time. The result is a pattern of recreational Federal land weighted towards the Pacific and Mountain regions. As Table VII–3 shows, about 87 percent of Federal lands primarily used for outdoor recreational purposes in the 48 contiguous states are located in these two regions. Although the programs of supervising Federal agencies are designed to serve the entire national public, the use of Federal properties is predominantly on a local and regional basis.

TABLE VII–3

PUBLIC OUTDOOR RECREATION LANDS BY MAJOR REGIONS
(In Thousands of Acres)

Administering Jurisdiction	Total	Mountain and Pacific	All Other
Federal	266,719.9	230,307.1	36,412.8
State	41,794.8	7,901.1	33,893.7
County	8,131.5	1,278.4	6,853.1
City	1,629.1	348.2	1,280.9
Township	631.3	—	631.3
Districts and Councils	336.2	65.1	271.1
Total	319,242.8	239.899.9	79,342.9

Source: *National Outdoor Recreation Plan, 1973*

The effects of this distribution are aggravated by disparities within the relatively resource-poor regions: the concentration of the poor in central city cores; the continued transformation of suburbs to fully developed urban form; and the discrepancies between cities with little or no recreational resources and others nearby with more than adequate public facilities restricted to the use of their own residents.

The challenge of the years immediately ahead will be to serve more effectively the needs of the predominantly urbanized population while maintaining and improving the Federal public recreation estate. These choices at the Federal level come to sharpest focus in terms of equities in the allocation of Federal funds and the regulation of use of the public lands.

One way to compensate for the geographical imbalance in the distribution of Federal recreational lands is to impose user fees based on actual costs of development and operation. Fee requirements are in effect to some extent at the present time, including the "Golden Eagle" passport of admission to the national park system. However, this is not a cost-based fee system, and there are objections to imposition of user fees. There are substantial practical difficulties in collecting fees in dispersed open areas. There is a tradition in much of the country of free use of public lands and of national responsibility for their upkeep and supervision. It is argued that user fees would amount to a regressive Federal tax.

Obviously wilderness areas and forests cannot be administratively relocated to serve population centers. But there are significant nonwilderness alternatives for development in and near metropolitan areas.

- One response to the geographical disparities in Federal recreation facilities was the attempt to develop "urban parks" with Federal funds. But there is growing resitance to this approach even among former supporters, primarily because of the high costs involved. The amount required for a small urban park represents a large proportion of capital funds available and is the equivalent of a far larger recreational development in a nonmetropolitan area. Furthermore, the traditional state and local control of land use makes these governments the more appropriate bodies to establish and maintain recreational lands in populated areas.
- There are other recreational resource programs that may offer opportunities for a better geographical development. The National Trails System, a more recent addition to the array of Federal programs, designated as the first components of its system two major trails close to population centers on both coasts, the Appalachian Trail in the East and the Pacific Crest Trail in the West. Trails under study for possible addition

Include major systems near developed areas, such as the Kittaning Trail and the Potomac Heritage Trail in the East, the North Country Trail in the Great Lakes Area and the Natchez Trace Trail through Louisiana and Tennessee. Many of the rivers under study for addition to the Wild and Scenic River System are similarly located close to population centers. But, even if all trails and rivers now under study were joined to the system, it would represent only a small addition to the recreational resources near population centers.

- Federal programs under the Historic Sites Act of 1935 and the Historic Preservation Act of 1966 have contributed to the improvement of an important type of outdoor recreational opportunity in metropolitan areas while helping to achieve national goals in the preservation of unique natural and historic features. But, the inclusion of sites and structures on the Registry of Natural Landmarks or the National Register of Historic Places is by itself insufficient to assure their maintenance or availability to the public, and a backlog of potentially eligible but undesignated sites awaits consideration.

A RE-EVALUATION OF WATER RESOURCE DEVELOPMENT

Water management decisions for municipal and non-energy industrial users will command attention in the coming years. The regulation of water use through individual water intake metering and incremental pricing will be closely examined, along with the imposition of effluent charges as a mode improving water quality. And there may be growing controversy over choices for extensions of existing water supply and waste water systems.

Such extensions will take on increasing importance as determinants of the distribution of residential and industrial development within metropolitan areas and regional economies, both as a function of increasing costs and in relation to the adoption of controlled-growth zoning ordinances. In addition, there will be greater attention to the competition between increasing consumption uses of water and the preservation of instream flow rates vital to wildlife.

Irrigation use of water is heavily concentrated in the Western States, which are also the location of the oil shale and coal deposits that are important to expansion of domestic energy production. The sharpest conflicts are likely to take place over the development and allocation of water resources among the competing demands of new agricultural, recreational and wilderness uses.

Changes in Cost-Sharing Practices

The shift of support away from implicitly subsidized water resource development was most clearly marked by the 1973 report of the National Water Commission. The Commission specifically recommended a prospective change to a policy setting fees and prices to recover the full costs of development and operation from users of Federal irrigation facilities and electric hydropower projects and from municipal and industrial users of Federal reservoir capacity.

There were two related obstacles to effective water resource development: the effects of below-cost pricing and inconsistencies in cost-sharing principles among and within Federal agency and grant programs.

These issues have stirred considerable controversy but have not yet led to fundamental change. The Water Resources Council is reviewing these questions in the study mandated by Congress in Section 80(c) of the Water Resources Development Act of 1974. Resistance to possible recommendations for a shift to full cost recovery will be substantial, however, and the proponents of continued subsidy are not limited to direct beneficiaries.

Although many projects such as those for hydroelectric power and irrigation are constructed on a reimbursable basis and are therefore related to cost, the Federal agencies responsible for existing programs have missions that are basically unrelated to cost recovery and resist efforts to limit the utility of water resource development programs for accomplishing their statutorily mandated goals.

The construction agencies—the U.S. Army Corps of Engineers, the Bureau of Reclamation, the Department of Interior, and the Soil Conservation Service in the Department of Agriculture are directly concerned with the provision of water-related benefits. And the agencies providing grants for non-Federal

projects—the Environmental Protection Agency, the Economic Development Administration, the Farmers Home Administration —have primary objectives that are extrinsic to water resource use and for which subsidized development is an accepted and necessary ingredient.

These issues, reflect not only the widespread general concern over efficiency in resource use but also the debate over the functionally determinant questions of *how* efficiency is defined—which costs and benefits are to be taken into account, how they are to be measured, what alternatives must be considered as available—and *who* is to make the decision. The public and private interests involved, the forums in which the issues are contested, and the facts and arguments put forth, will vary with each case. But it is useful to consider the problems that are central to these disputes and the policy alternatives that will be argued.

Public Expenditures in the National Interest

Federally financed and implemented water resource development has been a major element in improvements in agricultural land reclamation, flood control, hydroelectric power, navigation and water supply. Wetland reclamation in the late 1960's transformed over millions of acres of Mississippi delta to soybean-producing agricultural holdings with further development on the Red River presently under consideration.

As the result of an extensive program of development, the Bureau of Reclamation today supplies full or supplemental irrigation to a fourth of the approximately 35 million acres of irrigated agricultural land in the 17 western states, which themselves comprise nearly 90 percent of total irrigated farmland. And it is irrigation that is the preponderant withdrawal and consumptive use of water. Yet, water resources from these projects have been made available at prices that do not reflect the full costs of development and operation. The controversy over this long-standing policy has come to a head within the last few years.

The argument for subsidies in Federal water resource development is that the ability of the market to absorb full costs in the short run is not an adequate or acceptable test of what is in the long-term public interest. Public projects at public cost are not only proper but necessary to attain important national objectives.

It has been argued that water resources, subsidized or not, are no longer an important factor in regional economic development. But agencies with program responsibilities will argue for the ability to retain this development capability. However, the future of water resource development decisions will be equally affected, if not more so, by other issues related to the process of assessing potential costs and benefits.

Economic Costs and Benefits and Competing Social Goals

Both the principle of cost recovery and benefit estimates affect the desirability of water resource development and help determine the extent of such development in the future.

Economic benefits to immediate users and a contribution to regional and national economic development are now recognized to be necessary but not sufficient reasons for water resource development projects. The examination of non-structural alternatives to flood-plain management and the influence of the Water Resource Council's Principles and Standards, the National Environmental Policy Act and other Federal and State environmental laws, have expanded the range of interests considered in these decisions.

Proposed Federal projects of long standing for flood control and land reclamation are being strenuously opposed in light of probable impacts on unique water and land resources. Included here are the Red River Dam that would flood a portion of the Red River Gorge in Kentucky, the Dickey-Lincoln Dam in Maine and the Garrison Diversion project already underway in North Dakota.

The effort to eliminate American dependence on unreliable foreign energy supplies through the rapid development of domestic energy sources has troublesome implications for other water resource interests. In hydroelectric power, there is the already familiar confrontation of development and preservation forces, as in the case of the Blue Ridge Hydro-electric Project, which would impact miles of river valley in North Carolina and Virginia and on the very existence of the New River there. But newer and more difficult questions are raised by large-scale coal

gasification and the nascent synthetic fuel industry based on shale. The water needs of these energy extraction technologies are extensive, and the scale of development envisioned reflects the substantial contribution these new energy sources are expected to make in meeting domestic demands.

The controversy over the proposed sale of waters from Federal reservoirs on the Upper Missouri for such energy industry development has made it clear that agricultural and environmental interests in the arid West view water resource allocation as a primary determinant of the nature of physical and social growth and change.

There are parallels to the dispute over the impacts of electric power plants on the Federal recreational and wilderness estate and on the environment generally. However, the allocation of scarce water resources and the threat to agricultural uses are evoking opposition from an unprecedented alliance of previously divided interests.

The emergence of a majority of western governors as spokesmen for those concerned has helped to focus increased attention on a question that has already been the subject of considerable debate: the role of state and local government in water resource development.

The Growing State Role

The beginning of a transition away from primarily structural approaches to flood control towards flood plain management has been accompanied by a movement towards a similar shift from the predominance of Federal construction agencies to the growing role of state and regional water resource entities. The responsibility of Federal initiatives in opening up the West through waterway development and irrigation and in undertaking large-scale flood control projects led to a central Federal role in water resource development characterized by mammoth public works.

But the inland navigation system is now substantially complete, major irrigation development is largely accomplished in the West and new efforts to impose stricter economic tests on water resource construction may greatly restrict the number of such projects in the future.

With this in view, it has been argued that a basic change is necessary: that the time for Federal action has passed, that the basic needs for navigational improvements and dam construction have been fulfilled, and that the Federal government should remove itself as quickly as possible from intra-state development projects and from flood plain and urban water basin management.

The extent and timing of a Federal withdrawal is far from settled. The 1976 Public Works Appropriation Act provided over $2.7 billion for over 500 Corps of Engineers and Bureau of Reclamation projects.

The states are seeking a greater formal or informal role in decisions that will have widespread and long lasting impacts on local and regional economic growth and change and the physical and social conditions in which their citizens will live. This is part of a widespread increase in state and local initiatives in resource management that is bringing basic changes in the context and substance of decisions on resource uses. For example, the 253 mile Tennessee-Tombigbee Rivers navigation project will benefit 23 states by tying together 12 major river systems and linking mid-America's 16,000 mile waterway system to the Gulf of Mexico. The interstate compact, Tennessee-Tombigbee Waterway Development Authority, chaired by one of five member governors, is showing how voluntary regionalism is working to coordinate waterway investment planning and programming with regional development.

THE EMERGING STATE ROLE IN RESOURCE MANAGEMENT

The recognition of environmental values and the pressures inherent in rapid development of domestic energy resources have accelerated a relatively recent but no less important trend toward a more active state role in resource management. This state role is concerned essentially with the allocation of land resources to manage their natural and cultural values, to conserve renewable and non-renewable resources, and to guide major development. It is expanding in response to the impacts of urbanization and development on "prime lands."

The Impetus of the Coastal Zone Management Act

The Coastal Zone Management Act of 1972 is a recent explicit Federal action on land

use policy. It is far from a traditional land use program, since a central thrust of the program is the active management of coastal zone waters. But the Act has stimulated considerable action with probable impacts over and beyond its own ambitious scope.

Eligible states, those with ocean or Great Lake coastlines are participating and have committed themselves to developing a full program. Many states are formulating for the first time comprehensive policies and regulatory schemes to deal with water uses, intertidal areas and subsurface lands.

And, while the program addresses "critical areas" by statutory definition and "areas of particular concern," these must be placed in a quite broad context of land and water policies throughout the coastal zone. Federal officials emphasize that it provides a significant opportunity to achieve efficiencies in what is often now an uncertain, complex, overlapping "system" of environmental controls. The program provides an opportunity for the states to create an explicit and flexible system of regulatory consolidation and coordination in the coastal zone, and the emerging state programs are policy-oriented and emphasize management or regulatory techniques rather than a "plan."

The potentials for a state-federal system for permit-licensing could lead to such improvements as better understanding of the environmental ground rules; time saving; "sign offs" based upon consistency with integrated policies; and a means with which to assess the cumulative effects of individual decisions.

Federal management of the program is important in mediating the coordination of state activities with other Federal assistance, such as for housing, community development and air and water quality management. But it has also been strongly argued that the "national policy" articulated by the Act is a commitment to the primary values of the states, with a framework stipulating that:

- the coastal zone is in particular need of land and water use management;
- the states are the key to better resource management;
- coastal resource conservation should assume at least as much public priority as resource development; and
- an intergovernmental system of management and consistency of actions should be established and maintained.

One of the most difficult but constructive aspects of this policy is its explicit charge to consider Federal and national interests as an integral part of state coastal policy and for the Federal government to harmonize its programs with locally-defined land use policies.

Response to Continued Pressures on "Prime Lands"

The conversion of land to developed uses is an intrinsic part of the process of urbanization. The consequent elimination of open space and outdoor recreational opportunities in metropolitan areas has long been a subject of concern, debate and action. Recent attention has focused on the impacts of the reduction in "prime" agricultural land in and near metropolitan areas and the proliferation of recreation home and lot development in rural areas.

Cropland accounts for an important part of the non-urban land use within metropolitan areas in a number of regions (Table VII–4), but has been increasingly converted to commercial, residential, and industrial uses. Between 1950 and 1972, 17 states lost more than 20 percent of their taxable farmland, nine states more than 30 percent, four states more than 40 percent, and two states more than 50 percent. In California, almost 4.5 million acres of productive cropland has been converted to urban use since 1947, and the trend is continuing; nationwide, some 2.2 million acres are being converted annually, a rate that has been estimated as twice that of five years ago.

The aggregate loss of food and fiber production is not the primary concern in the view of some observers, who contend that this land is neither needed for crops nor efficient when compared to the areas where farm production is expanding. Moreover, loss in taxable farmland is probably due more to other factors than to urbanization. Between 1954 and 1965, some 54 million acres were dropped from the cropland base, but probably less than ten million acres of this loss was attributable to urbanization. The greater part can be accounted for in terms of its economic obsolescence: low productivity and high production costs compared with other available land.

Local perspectives, however, are different. Specialty crop production may itself be considered worthy and welcome, and there is

TABLE VII–4

LAND USE IN METROPOLITAN AREAS (SMAS's): 1970
(In 1000's of acres)

Region	Total for SMSA's	Urban part [1]	Rural part				
			Total	Cropland	Pasture-range	Forest woodland	Other
Northeast	614	116	498	134	35	288	41
Lake States	911	113	798	393	37	308	60
Corn Belt	763	104	659	387	62	104	106
Northern Plains	868	58	810	538	179	30	63
Appalachian	596	76	520	120	58	330	12
Southeast	874	94	780	124	75	510	71
Delta States	579	50	629	137	73	364	55
Southern Plains	1,211	106	1,105	326	529	199	51
Mountain	2,377	78	2,299	216	947	343	766 [2]
Pacific	2,605	170	2,435	339	474	940	682
Average, 48 States [3]	1,044	104	940	250	198	336	156

[1] Includes "urbanized area" plus additional land in "urban places over 2,500 population."
[2] Includes some Federal land used as range.
[3] 242 SMSA's.

Source: Economic Research Service, U.S. Department of Agriculture.

often a desire to maintain agriculture's contribution to employment and the regional economy. For many metropolitan areas, the primary issue is the fact that this continued transformation means less open space today and fewer chances to maintain and improve the balance of resources and opportunities in the future.

And there is renewed concern—explored in detail in the Seminar on Prime Lands sponsored by the Department of Agriculture this past year—that agricultural production for future domestic and export needs may make the fate of metropolitan farmland an urgent question. About 70 percent of all U.S. farms are within Standard Metropolitan Statistical Areas (SMSA's). These farms produce some 21 percent of all agricultural products sold and about one-fifth of the nation's food. The continued productivity of these lands is often affected by the expectation of future development long before such conversion actually takes place: for example, in the form of reduced maintenance and capital investment by farmers who are no longer certain of how long they will continue to crop their land.

A fundamental part of the problem is that land values have continued to rise faster than farm income. At one level this can be taken as direct evidence that there is a higher economic use for such farmland, particularly nearest to urban centers, where land values tend to be highest. Between 1950 and 1971, the ratio of farmland values to net farm income increased in every state, with the extent of that increase ranging from 31 percent in Alabama to 1168 percent in New Jersey. It has been widely recognized that similar increases in real property taxes under these circumstances pose a serious obstacle to the continued economic viability of farming and other private open space uses.

Over two-thirds of the states have provided tax relief by allowing for the assessment of such property at its value under existing use rather than at its market value. But use-tax assessment presents substantial practical and administrative problems and problems of equity as well. Since the income loss to local governments is only partly offset by state payments in return and not even that in all states, the burden is shifted to other property owners without regard to the extent of their actual benefit.

The effects of this tax relief have been particularly criticized in states where there are little or no distinctions drawn, for example, between active farmers and large corporate land owners. It is contended that the re-

lief constitutes an implicit form of tax reduction for large landholders that does not accomplish its purported purpose—the preservation of farmland at the urban fringe.

Even where the tax reduction provided does improve the ability of farmers and other owners to continue agricultural, forest and open space uses, it cannot immunize these landholders from the development pressures attributable to continued urbanization and the rapid rise in land values in metropolitan areas.

In fact, the essential accomplishment of this approach is the postponement rather than the prevehtion of development; and at present the delays may be less attributable to public programs than to the sharp falloff in real estate development.

Thus some local governments are seeking new modes of development control, such as the purchase of "scenic easements" and other less-than-fee interests that leave land in private hands but remove from private owners the right to develop property for more intensive use.

A more ambitious and theoretically promising form of less-than-fee acquisition is the quantification of the "development rights" associated with property ownership which can be transferred separately from land ownership.

When current use or retention as open space is considered necessary, a central public bank would acquire such "transferable development rights" and subsequently resell them to property owners in other parts of the state or district.

Such a system has numerous potential advantages in comparision with other public open space retention programs: for example, it would be self-financing over time, require areawide planning to determine where growth should occur and be more equitable and less vulnerable to constitutional challenge.

But there are substantial technical problems in the design and implementation of such systems. Thus the problem of urbanization and conversion of prime agricultural lands in metropolitan areas is far from a satisfactory solution, even as world-wide demands on U.S. crop production are increasing.

It is the states and localities that must primarily address this problem. As the states increase their commitment to regional and statewide land use planning programs, the question of keeping prime agricultural lands in production will be high on their agendas.

"Subdividing Rural America"

Increased attention to the problems of recreational home and lot development is adding to the pressure for improved land use management at both the state and Federal level. Ownership of recreational property is no longer an upper class luxury. Today, one U.S. family in 12 owns a recreational lot or second home, with the typical second home owner being a family whose income is only slightly above the national average. HUD's Office of Interstate Land Sales Registration (OILSR) has received notice of recreational subdivisions from every state in the Union except North Dakota and Rhode Island. However, activity has concentrated heavily in the South and Southwest, with two states (Florida and Texas) accounting for almost half of the 3.5 million lots registered with OILSR. Second home development seems more evenly distributed geographically, with the largest volume in the Great Lakes Region, the South, and New England.

The first major study of the impacts of recreation lot and second home development, conducted for the Council on Environmental Quality, HUD and Appalachian Regional Commission, was concluded in August of 1975. Titled "Subdividing Rural America," it found that the sale of unimproved recreational lots often results in extensive tracts of land being prematurely subdivided, with no prospect of actual conversion to active residential use or development of a viable community. This speculative activity pre-empts alternative land use for years to come.

Conversely, large-scale second home and resort communities, where commercially successful, have a pronounced urbanizing effect on rural areas, precipitating increased demand on public services for which local communities are ill prepared. Many rural communities experiencing this unfamiliar growth have weak land use control programs, in many cases lacking any regulation whatsoever.

Such community impacts are far from the only problems involved. In some parts of the

country, this development is competing successfully against programs of public land acquisition, outbidding and preempting some unique national resource areas planned for inclusion in the public lands system.

The Federal role in recreational land development has been limited primarily to enforcement of the disclosure provisions established in the Interstate Land Sales Full Disclosure Act administered by HUD. There is considerable room for programs to strengthen consumer protection and to coordinate Federal land acquisition and public land management program to minimize the impacts of competing or adjacent private recreational land development.

The Continued Advance of State Land Use Planning

Integrated planning and emphasis on resource conservation at the Federal, state and local levels are increasingly significant in natural resource use. The majority of resource management issues must be confronted at the state and local level. Changes in land use in both rural and metropolitan areas, perceived threats to scarce land resources such as wetlands and urban open space, authority for tax and land use control measures are all factors which put the primary burden on state and local governments. In this light, the emergence of a new and central state role in land use planning may be the most significant of all developments for the future of natural resource use and availability in America.

Leaders in the field of increased state management of land resources, including application of critical area controls, have to date consisted in the main of states with unusually high environmental amenities which are also experiencing rapid growth. Vermont, Maine, Florida, and Oregon are notable examples. The most extensive programs have been developed by the smaller states where state regulation is easier to justify and implement.

The dominant component of state land use policy has been the concept of "critical state concern." This latter concept is built into the Model State Land Development Code developed by the American Law Institute. In its narrowest formulation, critical areas control involves the extension of partial or complete state regulation over specific geographical areas of major environmental significance. In its broadest formulation, the concept extends to the siting of key public facilities, large-scale private developments of more than local concern, the location of low income housing projects, and land sales or development projects outside the jurisdiction of local governments competent to regulate them.

NEW CHOICES AHEAD

There is still considerable resistance to further incursion of public controls on the prerogatives of individuals to use land in their ownership or possession as they see fit. The degree of acceptance of land use planning varies considerabley among states and regions, as does the emphasis and form of land use measures.

But the differences among and within states may be taken as confirmation of the wisdom of a restricted direct Federal role in these decisions, and the recognition that it is in the laboratory of the states that the solutions that best fit individual and highly varying circumstances can evolve.

The state land use initiatives already adopted demonstrate the considerable range of approaches that can be taken to meet local conditions and preferences:

- making planning assistance available to local government;
- requiring local action at the city or county level;
- providing for local initiative with a mandate for the state to act if local governments do not;
- initiating state planning and controls for the use of "critical" or "special" resources, such as freshwater, wetlands, the shoreline and coastal zone, or resource uses like surface mining or power plant siting;
- unifying the administration of state public lands; and
- providing for comprehensive, statewide land and water resources inventory, planning and regulation.

The rate and extent to which state and local land use planning will be adopted is far from clear. But if there is still considerable concern and uneasiness over the seemingly pervasive role of government in narrowing

the range of individual choice, there appears to have been an irrevocable rejection of the assumption that unrestrained private use of land is identical with the public good. There is substantial tension between themes in American judgments and attitudes, and the manner in which that tension is reconciled in the context of land use planning is one of the important questions facing the nation today.

VIII. A Period of Adjustment In Transportation Policy

A LESS DISRUPTIVE ERA OF TRANSPORTATION INVESTMENT

Intrusive Concerns from the World at Large

The nation's transportation system has entered a period of adjustment and consolidation that contrasts sharply with the dramatic growth which characterized most of the Post-World War II era.

With most of the Interstate Highway System open to traffic and a nation-wide network of airfields constructed over the past several decades, the high facility requirements generated by the major new transport technologies of this century—the automobile and airplace—have not been largely accommodated.

The American continent is spanned today by a well-developed and relatively well-balanced system for the movement of persons and goods that has adequate, and in some instances surplus capacity, for most transportation needs.

Moreover, changing market forces point to a continued slow-down in the growth of demand for transportation services in many sectors, particularly passenger travel. And even where demand might support major new capital investment, transportation policy is constrained by some newly intrusive concerns from the world at large: the effect of inflation on the availability of investment capital; economic and political pressures to reduce energy consumption per unit of transportation activity; and a new insistence that investment decisions more fully balance benefits to the users of transportation services against social costs such as air and noise pollution, disruption of neighborhoods, and damage to natural habitats.

Environmental laws—such as the Clean Air Act of 1970 and the Noise Control Act of 1972—have contributed to a de-emphasis of highway construction in most metropolitan areas and many rural regions and to a revived interest in urban mass transit. Concern with air and noise pollution has brought about not only stricter requirements regarding emission controls on motor vehicles but also public action against the construction or extension of airport, and the rearrangement of flight patterns.

All of these circumstances suggest that the transportation sector may need to re-examine its more ambitious long-term development plans with a critical eye towards making more efficient and energy conserving use of existing transportation systems.

The Changing Nature of Transportation Growth Impacts

Historically, the development of transportation facilities—perhaps more than any other form of public investment—has helped set the pattern and pace of urban settlement, both within metropolitan areas and among major centers of activity on a nationwide basis.

A slowdown in expansion of facilities in future years suggests that there will be some changes in the impacts of transportation as a determinant of interregional economic relocation and a shaper of urban form.

- Less urban expressway construction should moderate the advance of suburban sprawl.
- An increased priority to high capacity mass transportation may contribute somewhat to the development of higher density urban corridors.
- Scheduled cutbacks in rail service and further shifts from rail to truck for non-bulk goods movement, albeit at a lower rate than in the recent past, should continue to facilitate industrial dispersion rather than centralization.
- The unique energy efficiency and cost-effectiveness of water transportation may lead to increased demand for the use of certain inland waterways, port facilities, and coastal channels.

- New technologies for moving coal, ore, and other bulk commodities by pipeline make this the one mode in which dramatic extensions of the present infrastructure may occur. This possibility, if realized, will pose serious development and environmental issues where these facilities are to be built.

For the most part, however, particularly in the inter-city component of the industry, the significant growth impacts from transportation policy over the next few years will stem from the contraction rather than the expansion of basic services and from the elimination rather than the addition of rights-of-way. The retrenchment now in progress in the transportation sector will have particularly serious consequences for those smaller cities and rural communities confronting the termination of rail services altogether.

The Transportation Inventory Today

A useful point of departure for understanding the current retrenchment in the transportation sector is to inventory, in capsule form, the nation's transportation system as it exists today;

- A total of 3,700,000 miles of highways (42,000 in the interstate system, which carries over 20 percent of all vehicular traffic and accounts for 55 percent of all vehicle miles in rural areas); this includes 3,100,000 miles in rural areas and 600,000 miles in urban areas. While few critical gaps in the system remain, many of the facilities now in place require substantial investment in maintenance and upgrading.
- Over 105,000,000 automobiles, virtually one for every two Americans; 23,000,000 trucks; 4,000,000 motorcycles; 315,000 school busses; 50,000 city busses; and 25,000 intercity busses. The automobile "population" has expanded from 23,000,000 in 1930, and it now accounts for 94 percent of all urban passenger miles of travel and 30 percent of all liquid petroleum used in the country.
- More than 204,000 route miles of railroad trackage; 1,700,000 freight cars and 27,000 locomotives, most operated by 73 Class I private railroad companies which account for 95 percent of all rail freight tonnage. Between 10 and 20 percent of all railroad route miles are now estimated to be seriously under utilized, in the aftermath of the extensive cutbacks in service that occurred over the past two decades. Moreover, with an average rate of return on investment in the neighborhood of three percent, many railroad companies have been in no position to raise the capital required to maintain, much less modernize, their extensive systems.
- The rail industry's backlog of capital investment needs has reached extensive proportions. In particular, deferred maintenance on many of the nation's trunk lines, has led to reductions in operating speeds well below those required for effective operation. Moreover, in many areas of the country, two or three trunk lines now serve markets that could effectively be handled by one. Another difficulty—due to the absence until recently of investment in modern management and control systems—has been the frequent operation of equipment carrying less than full pay loads. Despite an investment by Class I railroads of about $1.3 billion per year between 1962 and 1973, three quarters of which went for equipment and rolling stock, periodic complaints of freight car shortages still recur in some locations. A trend to ownership of rail cars by nonrailroad entities is contributing to the solution of what shortages do exist.
- Fixed-rail urban transit systems existing or under construction in ten of the nation's 30-odd metropolitan areas of over one million population. Four of the six existing systems were built prior to 1930. Each of the fixed-rail systems is supplemented by an extensive network of busses and other vehicles operating on streets and highways. The six rail transit cities account for 64 percent of the nation's public transit patronage. Transit, however, currently accounts for only five percent of the nation's urban passenger miles (down from 20 percent in 1945). Since the energy crisis, however, the decline in transit ridership appears to be bottoming out.
- An air travel system consisting of 12,500 airports, 400 equipped with control towers; 140,000 airplanes, 2,500 of which are commercial airliners; and a

network of air traffic control centers operated by the Federal Government. Only 26 of these airports, all serving metropolitan areas of over one million population, account for 70 percent of all commercial airline passenger traffic. Close to 60 percent of the U.S. population lives within 30 minutes of an airport with air carrier service.

- A network of 25,000 miles of navigable rivers, canals, coastal waterways (the Great Lakes, the Mississippi River system, and the Atlantic and Gulf intercoastal waterways being the major components), which account for 16 percent of all inter-city freight ton miles. About 1,800 private companies operate approximately 21,000 barges and 4,000 towboats on these waterways, all maintained by the Federal Government. In addition the nation has 130 deepwater ports and over 500 active ocean-going U.S. flag ships. The trend in U.S. flag ships is towards highly specialized cargo carrying ships—containerships, roll-on/roll-off ships, LASH/SEABEE vessels, liquified natural gas carriers and longer tankers.
- A system of privately-owned and operated inter-city pipelines which now account for about 20 percent of all inter-city ton-miles (up from about 15 percent in 1962). Substantial investment in new lines may result if coal liquification proves economically competitive and overcomes environmental opposition.

This complex system, controlled by a variety of different public and private interests, has evolved over the last 100 years to a position where it appears to have sufficient capacity, and in some sectors a surplus of capacity, to handle the needs for the next two to three decades without major total system investments. That is, no major capital program—such as the post-war construction of airports or in the interstate highway program—will be required in the foreseeable future.

For the most part, where new capacity is needed, it will come from capital investments and management innovations directed towards the maintenance and more efficient use of the transportation infrastructure already in place.

Increasing the Capacity of Existing Facilities

Investment in transportation facilities will not cease to be important in the years ahead. According to 1974 estimates, of the Department of Transportation, annual capital expenditures programmed for various parts of the system are expected to increase over the next few years from $14.3 billion, in 1971 to about $18 billion in the 1972–1980 period.

This apparent anomaly—between continued investment on the one hand and a perceived policy shift from facility expansion to facility maintenance and management on the other—is explained by several factors.

- A high proportion of capital investment is needed for improvement of existing facilities (road widening, traffic control systems, improved intersections, rail roadbed repair, runway extensions); for replacing obsolete equipment; and adding to the inventory of trucks, freight cars and busses operating on existing rights-of-way.
- The lead time is several years before this new orientation will be reflected in the available data on state and local capital program projections. Many planned projects are currently being reassessed and scaled down.
- Many highway departments had a backlog of interstate projects ready to go and politically acceptable at the local level; Federal highway funds for many of these projects—impounded by Presidential order since 1968—have been released at the behest of Congress as an anti-recession measure.

The emphasis on improvements to existing systems is well-illustrated by a breakdown of the American Association of Railroads' $6 billion estimate of the railroad industry's investment requirements over the next 10 years: about $2 billion to prevent further deterioration, about $3 billion to "catch up" on deferred maintenance, and about $1 billion to maintain the status quo with some industry growth.

Dominance and Competition in the Transportation Marketplace

The problems confronting transportation planners today stem from how to manage and maintain the capacity now in place, par-

ticularly those elements in financial difficulty, how to resolve imbalances and inequities among specific transport modes, and how to solve the institutional problems that continue to hamper efficient operations. For the most part, these problems appear to be rooted in the basic competitive characteristics of the system as it exists today.

- The system of moving people is overwhelmingly dominated by the privately owned automobile. This form of transportation is favored by the majority of Americans since, for most travel needs, it offers the most ubiquitous, reliable, and convenient form of transportation available. The industries centered on the production, maintenance, fueling and construction of facilities for automobile travel boast seven of the nation's ten largest corporations and are the keystones of a number of metropolitan economies. However, evidence exists that the limits to growth in the auto population are beginning to be reached.
- The system for moving goods includes a variety of modes with widely different growth rates. Trucks today dominate goods movement in and around urban centers. Moreover, thanks in part to construction of the interstate highway system, trucks have been capturing from the railroads an increasing share of the long distance package freight. Between 1958 and 1972, the trucking industry—both the for hire and private companies—increased its ton-miles by about 105 percent and its revenues by about 83 percent, by far the fastest growth rate among the carriers of freight. During the same period, the percentage increases for the railroads were 46 and 33 percent respectively, and for the waterborne freight carriers 40 percent. Nevertheless, the trucking industry has suffered significantly from the energy crisis through the rising costs of fuel and the limitation of highway speeds. Among all the surface freight carriers, trucks are the least efficient users of energy, requiring as much as three times more fuel than the railroads to move one ton of freight one mile, and as much as six times more than waterborne carriers.
- The railroads have maintained their role as a prime carrier of bulk freight and raw materials (along with pipelines, which have emerged as a major carrier of liquid and gaseous materials).
- A once thriving common carrier industry, including urban public transportation, the railroads are now suffering from the high costs of capital, energy, and labor, sporadic or declining patronage, and increased competition.
- Throughout most of the post-World War II era, the airlines have been the glamorous and perhaps vigorous component of the transportation industry. However, since profitability peaked in 1965, the fortunes of the air carriers have undergone some dramatic shifts, with rates of return to domestic trunk operations showing a sharp decline and international operations showing a net loss over the past two years. As a result of similar pressures, the nation's ocean shipping companies play a significantly reduced role in most aspects of the international maritime industry.

In some instances, technological innovation has increased the complementarity among certain transport modes since World War II. For example, the piggy-backed movement of trucks over the railroads is a major feature of the goods movement system today, along with the development of a nationwide computerized tracking system to monitor the location and status of freight cars.

However, during the next decade or more, the nation's basic passenger transportation market will continue to be dominated by the private automobile for people movement. For goods movement the truck, waterway, and pipeline systems appear to be in a stronger position than the once dominant railroads. The public carriers—those organizations whose business it is to provide services for the transportation of people and goods—will have to find reliable markets for their services if they hope to stabilize their economic positions.

RAIL REORGANIZATION

Over the past decade, a succession of northeastern and mid-western railroad companies have faced a number of dilemmas, including bankruptcies. There is concern in industry and governmental circles that the weaker

lines in other regions could encounter comparable difficulties. As a result, the Federal Government has become more active in helping to maintain vital railroad services in the short-run and to assist the industry to get on a sounder financial basis over time.

This process began with passage of the Rail Passenger Service Act of 1970 which created a national railroad passenger system (AMTRAK) and provided funds for modernized operations. Also in 1970, the Emergency Rail Services Act authorized financial assistance to railroads being reorganized under bankruptcy proceedings. The Regional Rail Reorganization Act of 1973 created a process through which the northeast and midwestern railroads could be restructured into a viable, competitive system of private carriers.

On February 5, 1976, the President signed into law the Railroad Revitalization and Regulatory Reform Act of 1976, the most comprehensive and complex piece of railroad legislation ever enacted. Containing a total of $6.4 billion in Federal financial assistance for the railroad industry, the Act has these features.

- It implements the Final System Plan developed by the United States Railway Association for reorganizing the seven bankrupt railroads in the Northeast into the new carrier ConRail;
- It provides for extensive reform in the regulation of railroads by the Interstate Commerce Commission;
- Federal financial assistance is provided nationwide for the rehabilitation and improvement of rail facilities and equipment;
- Improved inter-city rail passenger service will be implemented in the densely populated Northeast Corridor from Washington, D.C. to Boston;
- Transitional Federal financial assistance is provided for the development of self-supporting transportation alternatives to unprofitable light density rail line services;
- It mandates extensive Federal research into virtually every area of railroad operations.

This Act was the result of extended negotiations among the Administration, Congress, independent regulatory agencies, the industry and rail labor over the proper Federal role in the troubled railroad industry; it represents the most extensive peacetime Federal involvement in the industry in this century. The success or failure of this Act in helping the industry solve its many problems is likely to result in one of the following three positions regarding the nation's long-term involvement in the rail industry.

- The first would preserve the private industry status of railroads and reduce the number of firms to a level that would be competitive enough to maintain incentives for efficiency, but would have markets secure enough to insure profitable business opportunities.
- A second view argues that the railroad system in this country, like most of its counterparts elsewhere in the world, should be permanently owned and operated as a public enterprise. Advocates for this alternative feel that expectations for re-establishing the railroads on a self-supporting basis are unrealistic, and that reorganization plans should recognize that the government's involvement must be permanent and comprehensive if the system is to operate at all.
- A third approach would provide for some form of joint public-private responsibility—for example, through public ownership of rights-of-way and railroad property, with the rights to operate service leased to private companies. The State of Massachusetts has been considering this type of approach in respect to retaining its deficit-ridden commuter rail services.

Local Adjustments to Rail Abandonment

The more challenging geographically specific issues in respect to reform in the interstate transportation system over the next few years will arise in the details of carrying out the U.S. Railway Administration's plans to prune excess capacity from the nation's rail system. The intention is to consolidate trunk line service between any two major centers into lines which could operate profitably and to eliminate unprofitable service on lightly used branch lines. The necessity of some streamlining is generally not an issue of dispute. Instead, the debate centers on the overall extent of the cut-backs involved and the criteria to be employed for abandoning specific lines. Any workable solution requires that the future role of the railroads in the

nation's transportation system be analyzed, particularly in light of an economy moving from heavy to light manufacturing and services, a locational shift of economic activities away from existing rail lines and heavy competition from the truck, barge, and pipeline industries.

The growth impacts of rail reorganization will likely materialize primarily in terms of enhanced competitive positions for those cities located on trunk lines with basic rail services intact. Direct physical development implications will probably be slight, except where terminal improvements may create special opportunities for joint development in some cities. While capital costs for revitalizing the railroads are high (estimates put investment requirements as high as $6 billion), these expenditures will go primarily for maintenance of existing lines and replacement of obsolete equipment, rather than for new facilities and routes that might alter the pattern of local development.

At the same time, the rail reorganization currently underway will necessarily result in termination of rail freight service to communities located on underutilized branch lines. Truck and bus service, however, often tends to be substituted upon rail abandonment, at a higher cost for long haul freight, but at a lower cost for passenger service. In some instances, the use of piggy-back service represents an available option which combines the short-haul advantage of trucks with the long-haul efficiency of rails.

Meanwhile, State and local governments are being encouraged, with transitional Federal assistance, to assume responsibility for branch lines that will remain outside the trunk corridors of the integrated, nationwide freight system that is now emerging.

At the same time, where abandonment is unavoidable, assistance available from Federal and State governments needs to be coordinated in order to help secure better transportation service, preserve local businesses now oriented to rail freight services, and alleviate any unemployment or other negative economic impacts that may result.

Rail Properties: A Valuable Land Bank for Urban Development

Streamlining of the nation's rail system may create some unique opportunities for community development. Abandonment of rights-of-way, switching yards, and other railroad properties will free strategically located parcels for alternative land use purposes. In central cities, where large-scale site assembly often presents insurmountable problems, railroad holdings in the past have often proved a uniquely valuable land bank for important urban development projects.

A number of the more dramatic real estate ventures in recent decades have been constructed either on land removed from railway use or built with air rights over existing trackage.

Much of Pittsburg's "Golden Triangle" redevelopment replaced railyards located within the apex formed by the Allegheny and Monogahela Rivers. The Place Ville-Marie complex in Montreal combines office, shopping and high-rise residential development around a unique urban space that has revitalized a deteriorated portion of the city and become a tourist attraction in its own right. Boston's Prudential Center—built over switching yards formerly belonging to the Boston and Albany line—has altered the skyline and created a new locus of high-rise development over a mile from downtown. Portsmouth, Virginia has redeveloped a waterfront district previously in railroad use. Atlanta's new Omni Sports complex has been built over railroad yards close to the downtown area.

The reasons behind this phenomenon are self-evident: railroad properties often represent the only large, relatively vacant tracts of land remaining in the central cities that are under single or relatively consolidated ownership. Moreover, compared with other centrally located parcels with obsolete or seriously deteriorated structures ripe for redevelopment, the re-use of rail properties involves little displacement of jobs or residences. Existing yards are often viewed by the local community as eyesores, traffic barriers, and tax liabilities whose redevelopment could be actively encouraged.

Other opportunities reflect the fact that railroad holdings generally occupy strategic locations within the regional transportation network. Former rail rights-of-way can thus be converted to highway and/or public transit use with a relatively low capital investment. Encouraging high density development at appropriate points along such corridors can generate the concentration of

travel demand that helps make such transportation investments feasible.

Taking advantage of re-use opportunities will require local cooperation between management and labor, local and regional development and transportation authorities, the railroad union, ConRail and appropriate Federal agencies, the local financial and development industry, and impacted community groups. Careful synchronization of the schedules for railroad improvements and property disposition with local redevelopment efforts can, at the same time, facilitate the financial management of rail reorganization itself.

The Effects of Public Investment on Competition Among Modes

As part of the effort to achieve a more competitive transportation system, closer scrutiny is also being given to public investments in one transportation mode that tend to seriously erode the market of another.

Historically, the potential consequences of such investments are well illustrated by the railroads' loss of freight business to the long haul trucking companies as a result of the Interstate Highway System having been built and maintained at public expense. Trucking concerns do pay taxes and other user fees in exchange for access to the highways, but recent studies still indicate substantial underpayment for the benefits they receive.

Essentially the same issue has arisen recently in respect to the U.S. Army Corps of Engineers' proposal to enlarge the capacity of the Mississippi River waterway system through the expansion of the Alton locks and dam north of St. Louis. This project would lead to some diversion of freight traffic from the railroads to the waterborne carriers operating between various midwest points of origin and Gulf ports destinations. Critics of the proposed expansion contend that this diversion of business may threaten the financial survival of some rail companies—the very result which, in the case of the bankrupt northeastern railroads, is already necessitating the expenditure of several billion dollars of Federal funds. Supporters of the Alton project reply that it constitutes a necessary and desirable improvement to the entire waterway system in the area. Difficult issues such as this can be expected to emerge with some frequency in the years ahead, obliging those who plan transportation facilities to take into account the potential trade-offs among business viability, transportation service quality and quantity, and other vital non-transportation related public interests.

Where public investments that subsidize one transportation mode to the detriment of its competitors are a historical fact, or where other such investments are undertaken in the future, the competitive advantage can be neutralized, all or in part, by the imposition of appropriately scaled user charges. For example, in a major policy statement issued in September 1975, the Secretary of Transportation proposed a new tax on inland and Great Lakes water barges, noting that the Federal Government currently spends between $500 and $800 million annually to construct, maintain, and improve dams, locks and waterways which the barge operators currently enjoy tax free. The President's 1977 Budget includes a proposal to seek legislation which would result in the collection of $80 million in waterway user changes in that year. Higher user fees for trucks are another means to help the railroads compete on a more equitable basis in the freight business.

ALTERNATIVES TO NEW AIRPORT CONSTRUCTION

A serious problem, with direct consequences for growth policy has emerged on how to expand airport capacity to meet the needs of future air travel, particularly in the larger urban areas. Surrounded by development, these airports are unable to enlarge their land area, extend runways, or provide new facilities without substantial cost and widespread community opposition. Attempts to build new airports well beyond the urban fringe to supplement or replace these older facilities have not been notably successful. Airports are not considered to be "good neighbors" by most communities. Institutionalization of the environmental impact review process has provided citizen groups with a potent legal tool for translating their feelings into effective resistance to new airport construction. Costs for constructing facilities that are acceptable are skyrocketing.

Local airport authorities and the Federal Aviation Administration are therefore reexamining forecasts of air traffic movement and airport capacity needs developed in the

period of rapid air travel expansion. They are also reevaluating existing airports to determine ways to avoid massive enlargement or the construction of new fields in the future. Particularly since the advent of widebodied aircraft and improvement in the noise levels of aircraft operations, some hope has arisen that industry and environmental interests can be accommodated without the costly expansion programs foreseen in the 1960's as inevitable. Some options being considered are:

- expanding runway and terminal capacity at existing airports, as possible;
- spreading the peak periods of usage of airports by encouraging scheduling changes among the major carriers;
- relying on larger aircraft, configured to handle expected larger numbers of passengers;
- encouraging the use of feeder airports, rather than major commercial hub airports, for general aviation; and
- shifting non-true origin and destination traffic away from saturated, large hub airports by utilizing by-pass, non-stop flights, or under–utilized alternative airports as connecting or transiting points.

LOW COST URBAN TRANSPORTATION ALTERNATIVES

Reassessment of Long Term Programs

The past few years have seen a major policy shift, as many of the nation's urban areas have foresworn the effort to accommodate the private automobile and begun trying, instead, to curb its indiscriminate use. Plans for the development or completion of extensive expressway systems in the larger metropolitan areas have been cut back and public transit scheduled in their place.

The larger urban areas are scaling down their more ambitious transit programs as well. In the smaller urban centers, where development of capital intensive transit systems has never been economically justifiable, the renewed interest in transit improvements centers on methods to make more effective use of existing street capacity through improved bus services.

Choices Within the New Orientation

This general reorientation of urban transportation planning policy is not a subject of dispute as much as a question of degree and of the relative merits and liabilities of specific implementation techniques. Some observers question the extent to which the automobile driver can be inconvenienced and penalized without negative repercussions for downtown retail sales, theater receipts, and other commercial activities. Others perceive substantial investment in mass transit as essential to the economic survival of central business districts in the face of suburban competition.

The following are some of the options being explored in various metropolitan areas as elements of a less highway oriented, less capital intensive approach to urban transportation:

- more intensive use of existing expressways and arterials, including features such as "bus ways" for the exclusive use of public transit vehicles, special ramp metering devices to limit access to expressways during periods of heavy congestion, and electronic control systems to monitor speeds accordingly and to minimize congestion resulting from accidents and breakdowns.
- improved traffic management on urban arterials, giving more attention to improving vehicular flow and safety through means such as full or partial grade separations at heavily used intersections, special left turning lanes, construction of median barriers, computerized signalization, improved lighting and signs, construction of sound barriers and other buffering devices, and special bus turnouts.
- development of complementary, rather than competitive highway transit facilities, such as using highway funds to construct park and ride facilities for transit patron use at strategic points within heavily travelled transportation corridors.
- innovative use of "para-transit" services, including phone services (taxis, jitneys, limousine, dial-a-ride), hire and drive services and pre-arranged ride sharing services (car pools, charter and subscription bus services).
- revised use of light rail systems. Some areas—notably San Francisco, Washington, D.C., Baltimore and Atlanta—have opted for completely new, grade separated, fixed rail rapid transit systems.

The Department of Transportation views

"heavy rail" systems as appropriate only in a few highly populated metropolitan areas where state and local land use and development policies are explicitly committed to the generation of high densities sufficient to support these modal choices on a cost effective basis.

Other metropolitan areas are examining the development of so called "light rail" systems. Cities such as Pittsburgh, Boston, Cleveland, Philadelphia, and San Francisco, which have retained "street cars" in service over the years, have taken a new interest in modernizing and, in some cases, expanding these facilities as a lower cost alternative to conventional transit systems.

A study done in 1972 for the Department of Transportation analyzed 21 low cost urban transportation alternatives; it ranked "busways" of various kinds as the single most promising cost-effective technique to increase the peak-hour capacity of public transit systems. A 4.5 mile busway, constructed for about $2.8 million on the Shirley Highway in Metropolitan Washington, D.C., dramatically increased the ratio of bus to private car commuters from 1 to 4 to 1 to 1. In both New York and Boston, lanes on existing expressways have been earmarked for "contra flow" bus operations during peak travel periods for costs of under $50,000, with estimated time savings of about 50 percent for bus passengers.

THE SUBSIDY OF PUBLIC TRANSIT DEFICITS

The Cost/Revenue Gap Continues to Worsen

As late as the mid 1950's all but a few of the nation's urban transit systems were in private hands. Even as recently as 1965, only 12 urban systems were publicly owned. Since then, increasing numbers of these systems have been taken over by the public, particularly in the larger metropolitan areas. The basic reason for this takeover is dwindling transit patronage, yielding lower revenues and correspondingly higher deficits. This situation has become worse due to cost increases for labor, maintenance of equipment and, more recently, fuel and power. The peaking of travel demand during the morning and evening rush hours has always meant that transit operators must keep more equipment and manpower available than will be used for most of the day—a problem which, more than any other, precludes most urban transit companies from showing a profit.

Faced with the demise of privately operated transit systems, public officials in most sizable urban areas have opted for public acquisition and operation of these systems rather than abandonment. But even with public operation, few if any sizable urban transit systems in the country have found a formula to stem the tide of rising operating deficits. In fact, the cost-revenue gap continues to widen despite evidence that transit patronage is beginning to recover, partially as a result of the energy crisis and despite substantial fare increases.

The deficit problem afflicts not only older transit systems, but also newer systems which incorporate the most advanced available technology. For example, the deficit per passenger trip on one of the nation's oldest transit systems, Boston, is presently about 75¢ while on the nation's newest, San Francisco, it stands at about $1.08.

Alternatives to Financing Urban Transit Deficits

With the fare box unable to support the operating costs of most of the nation's urban public transit systems, the question of how to raise revenues needed to operate these systems will continue to plague policy makers at all levels of government in the years ahead. While the National Mass Transportation Assistance Act of 1974 authorizes the use of certain Federal funds for meeting the costs of transit operation, the potential demand for such funds outstrips the available resources at all levels of government.

The experience of those metropolitan areas that have recently made major investments in modernized transit systems will provide an important indicator of the potential ability of urban transit authorities to at least stabilize their deficits, if not actually reduce them. Many transit companies are trying to encourage greater off-peak use by offering incentives such as reduced fares. In some metropolitan areas, plans for staggering the working hours have been tried in order to smooth out the peaks in demand and get better utilization of capacity.

Even with some improvement in transit usage and operating efficiencies, the question will remain as to the best way to distribute the costs of public transit services. One option, of course, is raising fares. While this has proved unavoidable in most cases, at some point such increases become counterproductive in both economic and social terms.

First of all, although transit demand is more sensitive to service levels than fares, substantial fare hikes can result in a decline in ridership.

Secondly, as fares climb, they discourage downtown commutation and shopping trips by transit with a shifting of some trips to the automobile.

Thirdly, fare increases can impose an inequitable burden on the many users of public transit—the poor, the elderly, who have no other travel option.

Traditionally, deficits not covered by fares have been borne by local taxpayers, either through the regular property tax or some other form of local levy. More recently, some metropolitan areas have been exploring other alternatives such as diverting surplus toll revenues from bridges, tunnels, and other highway facilities and developing special taxes. A few states have developed special financial aid packages to aid urban transit operations. Some proposals have been made that transit authorities could finance part of their deficit by operating revenue producing parking facilities or owning real estate in the vicinity of major transit stops—real estate whose value is likely to be increased by planned transit investments.

An argument for the latter approach is that in most cases such increases in land value constitute an "unearned increment" created by public action but realized by private landowners in the form of windfall profits. Some transportation experts feel that unearned increments should be recaptured to help pay for the transit investments that produced them (either through advance public land acquisition in the vicinity of planned transit stops or some form of special tax). Similar arguments are made for the public's sharing more fully in the benefits created by highway investments, particularly around the interchanges of limited access expressways.

TOWARDS MORE BALANCED AND FLEXIBLE TRANSPORTATION PLANNING

With passage of the National Mass Transportation Act of 1974 and the Federal Aid Highway Act of 1973, localities enjoy greater flexibility in the use of Federal Aid.

The 1974 National Mass Transportation Assistance Act requires, for all localities receiving assistance under the Act, that regional and state level transportation planning be coordinated and that governors and local officials participate in developing long range plans to improve and coordinate all transport modes within urban areas. The Department of Transportation's new regulations for implementing the Act have combined the separate planning requirements for highways and urban mass transit into a unified set of procedures.

For mass transportation, capital assistance is contingent on the funds being used to carry out a unified transportation program that is consistent with the comprehensively planned development of the recipient area, particularly in respect to land use and environmental improvement. In the future, if present Federal transportation grant programs are consolidated into broader purpose block grant programs—urban mass transit assistance may be channeled through State Departments of Transportation.

The Symbiosis of Transportation and Land Use

These changes should, in turn, encourage more sophisticated transportation planning processes at the local level, particularly in the large and medium sized metropolitan areas that have been and will continue to be the focal points within the nation's transportation network and the major generators of travel demands. Despite over a decade of Federal efforts to promote and strengthen metropolitan-wide transportation planning, fragmented political responsibilities in most areas still frustrate effective action on a regional basis.

This problem of fragmentation is most acute in respect to the interface of transportation and land use planning activities. Expenditures on transportation facilities—perhaps more than any other form of public

investment—set the pattern and pace of private land development.

These patterns, in turn, shape the geography of demand for transportation services—above all determining whether the desire for trips is concentrated into high density corridors of traffic or too diffused to support efficient forms of transit service. Although official acknowledgment of these relationships is widespread, systematic land use planning and control is exercised mainly by units of local government, a political fact of life which thus far has precluded full integration of transportation and land use planning at the metropolitan level.

A New Focus for Metropolitan Area Transportation Planning and Implementation

The prevalent approaches to area transportation planning are now being scrutinized with an eye to needed revisions. The Federal Government has already begun to review its policies and practices relative to those area-wide planning processes funded under Section 134 of the Federal Aid Highway Act of 1973 with the following objectives:

- Strengthen the development of metropolitan area planning organizations by encouraging elected officials to operate within the framework of local councils of governments, not only in overall planning, but in the programming and monitoring of transportation programs as they are implemented.
- Encourage stronger linkages between transportation and other aspects of metropolitan wide planning, particularly in the areas of land use and environmental improvement.
- Lessen preoccupation with capital intensive investments and encourage more intensive use of existing facilities, "capacity management," improved local services. Most state and metropolitan transportation plans envisage complete systems in place by the 1980's, or 1990's, with substantial improvements to all major classes of facilities. The discrepancy between these long term plans and immediate realities is becoming more and more apparent.
- Direct technical efforts away from the measurement of long-term demands for transportation facilities and towards estimating mobility needs by specific groups for specific transportation services.
- Emphasize the programming of transportation improvements on an annual basis, in conjunction with planned expenditures under the revised Federal aid programs.
- Explore more equitable ways of sharing the costs of public transportation services on a metropolitan-wide basis.

The restructuring of metropolitan area planning processes depends above all else on the capacity of state and local governments involved to develop a politically acceptable and workable formula for cooperation. Inevitably, the true test of metropolitan transportation planning will be its ability to command the attention of operating agencies and subordinate functional preoccupations to a more comprehensive style of transportation decision–making.

Capturing Opportunities for Joint Land Use Development

Transportation corridors are in many instances logical places for concentrating higher density land uses. Haphazard commercial and industrial uses that characteristicslly materialize around highway interchanges typify a history of missed opportunities for achieving desirable forms of development.

Moreover, these access points cause problems of congestion and vehicular and pedestrian conflict, depending on the pattern of neighboring land uses that come into being. Such considerations suggest the need for a public capability to carry out joint transportation-land use development in appropriate locations, designed to shape growth around new transportation facilities.

Few conclusive precedents exist for soundly conceived joint development in metropolitan areas undergoing rapid expansion of their transportation networks. Planning for every major post-war transit system has addressed this issue, at least in passing; however, the results, with the exception of some transit district zoning such as New York City's Second Avenue Transit District, have been minimal. For example, suburban communities along San Francisco's BART system have tried either as in North Berkeley to zone growth out altogether, or else, in

other cases, to solicit new investment indiscriminately, with little regard to environmental quality, urban design, or capture of value added.

One approach to carrying out joint development would be to enlarge the land development powers of transportation agencies themselves. Most transit and highway authorities are established as single-purpose agencies, with no authority to regulate land uses in areas beyond rights-of-way or to acquire land aside from that essential for the construction and operation of the transit or highway facility itself.

Some urban experts, however, are leery of entrusting such powers to traditional transportation agencies, noting their lack of expertise and accountability in land use matters. They also point to the mixed record of port and airport authorities, the one form of public transportation agency which has been involved itself in broader purpose real estate ventures in the past.

An alternate approach would look to some form of multi-purpose public development corporation or special highway or transit impact district to organize and regulate land development in concert with transportation investments. Connecticut, for example, has authorized the State to make grants to communities for acquiring land around highway interchanges in order to control contiguous development.

Strictly regulatory approaches, without public land assembly, are easier to implement, but generally suited to accomplishing more limited objectives. New York and San Francisco have both experimented with incentive zoning techniques to encourage the inclusion of direct access to transit stations in plans for contiguous commercial and office development. These alternatives each raise a variety of issues in respect to financial and legal powers, geographical jurisdiction, and accountability to state, metropolitan, and local land use planning activities that must be resolved within the context of local needs and institutions.

IX. Expansion of Telecommunications Capabilities

The growth of telecommunications has stimulated and responded to the growth of the nation for well over 100 years. In providing increasingly sophisticated methods of breaking down the barriers of space and time, telecommunications has decreased the burden and increased the speed of economic development. As an industry, telecommunications has posted a strong seven percent average annual growth rate since 1947. As an essential component in the economic and social development of the nation, it has literally revolutionized many lives. In conjunction with transportation, telecommunications has enabled business and industry to locate nearly anywhere in the continental United States without fear of being out of touch with major suppliers and customers. These same forces could, to some degree, give families an option to move away from highly congested urban centers—an option whose exercise may increase with continuing improvement in the quality and capacity of communications links.

This chapter explores the impact of telecommunications on national growth and as a growing industry in its own right. It examines the impact of this dual role of telecommunications on a changing economy, on capital formation, on government regulation, and on the industry's capability to meet burgeoning communications needs and opportunities.

GROWTH OF TELECOMMUNICATIONS SERVICES AND INDUSTRIES

The U.S. "post-industrial society" is coming to be recognized as a services economy in which the dominant feature is information.

Computers and communications are vital growth industries, spawning economics of abundance rather than the economics of scarcity that tends to characterize energy and other natural resource sectors. The industries are characterized by high technology, high productivity, and increasingly large capital investments. Today that infrastructure has grown to include over two million employees or 2.5 percent of the total work force; has directly contributed over 5 percent of the GNP; and has generated sales and services in excess of $100 billion in 1975. More importantly, telecommunications industries have been experiencing accelerating rates of product and service innovation, declining unit costs, and increasing responsiveness to diversified consumer needs.

The convergence of computers and communications systems has been increasingly remarked. "Teleprocessing," or remote access to computers through communications links, has itself become a significant growth industry. Computers have also become integral parts of advanced telecommunications networks, notably in electronic switching devices. A host of new services such as packet switching and electronic funds transfer have been developed. It is therefore appropriate to regard the computer industry as a vital part of the overall telecommunications sector of the economy.

Telephone service is now available to about 95 percent of all domestic households and 100 percent of all business establishments. By 1978, the revenues of domestic and international U.S. carriers—of voice, video, data, facsimile, and record messages; by terrestrial, undersea, and satellite transmission—are expected to exceed $40 billion, an increase of about 11 percent from 1975.

The year 1974 saw the beginning of domestic communications satellite service. Further launches are in process or in planning, including both general-purpose and highly specialized applications. The United States has been the leader in international satellite communications since the passage of the ComSat legislation in 1962.

New technologies such as electronic switching for long distance as well as for local exchange areas have been introduced.

Radio microwave links have proved a highly cost-effective means of long-haul transmission. The growing field of data transmission has benefited from enormous increases in the carrying capacity of communications channels made possible by advances in digital technology.

Newer and even more revolutionary technologies are now on the planning horizon. It presently appears that the first operational optical-fiber transmission system of major significance will be deployed in urban telephone inter-exchange trunk and exchange distribution applications during the late 1970's or eary 1980's. In conjunction with basic local distribution facilities, this technology will create for urban areas a potential capability for simultaneous carriage of two-way voice, video, data, and facsimile services. Together with the expected advent of the integrated, push-button, home telecommunications terminal, this development will raise fundamental questions of realigned industry structure and regulation.

Another of today's basic telecommunications industries, radio and television broadcasting, is pervasive in the U.S. In the average American household, the television set is in use more than one-quarter of the day. Ninety-nine percent of American homes own a T.V, 70 percent of which are color, and about 91 percent of households receive all three network channels either over the air or with the help of community antenna systems and cable TV.

The economic growth of both TV and radio is expected to continue, with joint revenues reaching $10 billion by 1985—reflecting average annual growth rates of about eight percent. During the same period, cable TV is expected to grow at about 13 percent per year to perhaps 35 million subscribers and three billion dollars in revenue by 1985.

New services, and new industries to provide them, are also experiencing accelerated introduction and growth. Mobile radio, citizens band radio, and satellite and microwave transmission of voice and data communications, are just a few of the services which have grown on demand and have taken advantage of explosive advances in technology.

Some of this growth, and the future potential it implies, has taken place with essentially no direct governmental subsidies or tax preferences. Unlike other infrastructural industries basic to national growth— such as energy and transportation—telecommunications has been paying its own way and will continue to do so. There have been instances, however, in which economic regulation has operated to limit innovation. There have also been occasions when government has sought to facilitate the introduction of new services through procurement and research and development actions.

THE INFORMATION SOCIETY: TELECOMMUNICATIONS CAPABILITY TO SUPPORT NATIONAL GROWTH

In a highly complex society, the ability to transfer information is essential to growth, productivity, and efficiency. Telecommunications offers to the business and professional community an efficient and economical means of conducting its affairs. Executives can confer by telephone, facsimile, or teletype instead of using energy-inefficient and time-consuming transportation. The suburban and exurban homeowner can use telecommunications for recreation, education, and access to cultural events. For a still small but increasing number of non-urban households, electronic banking, universty credit courses, telemedical links, surveillance child-care systems, concerts, football games, first-run movies, and on-the-spot news reports are becoming available. The least developed of these services will eventually be commonplace. In addition, video face-to-face conferencing, participation in community meetings, and electronic shopping will play a conspicuous role in reducing the time needed to establish communication, transmit orders, and consummate business and personal transactions.

Growth of the telecommunications industry is based on development along three basic paths. First, telecommunications will parallel the growth of all segments of the U.S. economy which require the services of telephone, computers, television, and the like. Second, telecommunications will be used to improve the efficiency and quality of existing services such as health care and education. Third, telecommunications will help to provide new solutions to many growth problems, among them the conservation of declining energy and transportation resources and accom-

modating the migrations of households and businesses within the U.S.

Paralleling Growth of All Industries

Since all segments of the U.S. economy use communications services, it is evident that future growth in the telecommunications industry will track that of other industries. As population, business activity, and housing expand, so will the demand for telephone service. Growth in the transportation and energy industries will increase communication requirements for air traffic control, mass transit scheduling, and marine navigation. The banking industry now processes over 30 billion checks each year, a feat that would be virtually impossible without modern computers and communications. In addition payroll, billing, inventories, and applications processing are expanding geometrically.

Enhancing Existing Social Services

A second area of projected growth lies in the potential of telecommunications to provide public services more equitably and efficiently. Among these services are education, health care, welfare, emergency services, and law enforcement. The nation's agencies responsible for these services are under mounting pressure to provide more diverse and better quality service to an ever greater number of people at less cost. At present, telecommunications is assisting in accomplishing these goals in a number of constructive ways.

In the emergency-service and health-care field, telecommunications is essential to improved emergency care. Recent Federal programs have instituted the "911" phone number centralizing emergency aid to citizens. So called EMS frequencies also allow paramedics to maintain direct mobile contact with physicians and hospitals during their on-the-spot treatment of a patient. This is especially important to auto-accident and heart-attack victims, where immediate diagnosis can be lifesaving. In addition, telecommunications makes medical records or lab reports immediately available to medical personnel. Hospitals are using this as a means of verifying medication and treatment, with particular benefits in the case of travelers requiring emergency care.

In more developmental applications, the medical field is giving telecommunications close attention. Experiments conducted in several institutions are exploring the potential of telecommunications in consultation, supervision, direct patient care, administration and management, and education and training. A central concept in these experiments is the full use of telecommunications to enchance delivery of health care.

In education, the use of telecommunications provides a number of exciting possibilities. Among these are: the opportunity for students to monitor classes at other campuses, do research at distant libraries and other information centers, and access microfilm, card catalogs, and periodicals from their home, the classroom or study stations. In addition, telecommunications can enable them to request programmed or videotape lectures and work exercises tailored to each student's needs and interests. Work in process at research and educational institutions is developing various combinations of computers and communications to help drill students in reading, math, and science and to provide accelerated or remedial material to supplement class work for each student. The American Council of the Blind is also working with these and other computer communications systems to develop educational tools that would instantaneously produce class material in Braille for blind students.

In conjunction with several cable television systems in cities around the country, universities, free schools and continuing education programs are devising ways of using telecommunications to streamline enrollment procedures and to reduce the travel and waiting time involved.

The increased use of telecommunications in education would ease many problems for rural and other communities which have difficulty providing adequate educational facilities. However, such programs can only shore up weaknesses—they cannot replace teachers and they would work only for certain subjects. Physical education, lab courses, and counseling are courses that can make only marginal use of telecommunications.

Television can be an especially effective medium for children's education. The same is potentially true for teaching specialized material to particular groups. For example, television can disseminate updated information and improved techniques to professional

personnel. To serve highly specialized audiences, however, more channels and cheaper channel time than are currently available on over-the-air broadcasting would be necessary. Cable television shows some continuing promise for fulfilling this need.

Assistance in Ameliorating Social Problems

Cities require an increasing amount of telecommunications services. It is true that much central-city heavy manufacturing has been supplanted by modern plants scattered around the suburbs; retailing shops have also moved their branch stores with affluent customers to the suburbs. Most travelers use outlying airports in preference to city-centered railroad stations; and service-oriented professionals, such as doctors and dentists, are increasingly found near their suburban patients. But most city areas still retain many centralized functions. These include business and financial headquarters, and consulting and management offices such as engineering, law, and advertising, government institutions, apartment housing, and public service institutions such as law enforcement, fire protection, traffic control, and hospitals.

It is in the inner city cores that business telecommunication has become especially important. Firms and enterprises that locate their management centers in dense metropolitan areas use telecommunications as the nerve system that ties together not only their widespread sales, service, and distribution operations but also their interrelations with other firms. These offices use high-speed, large-volume teleprocessing networks and switching centers for management contacts with personnel (instructions, payroll, accounting) as well as for distribution of credit checks, client reports, and other data. Telephone and facsimile teleconferencing is widely used by executives. Some use is also being made of video teleconferencing between remote locations interconnected via coaxial cables.

Banks, loan companies, and other financial intermediaries are beginning to make extensive use of telecommunication networks for electronic distribution of monies between financial establishments, as well as for transfers of payment between payer and payee (payroll to bank customer to store, or home owner to mortgagor). Because financial institutions are immediately sensitive to swings in the stock market and in exchange rates, instantaneous telecommunications are far preferable to the time-consuming physical transportation means.

The potential for significant energy savings, by means of the "telecommunications-transportation trade-off" suggested by these transactions, is presently unclear. Some say that telecommunications contacts will spawn increased desire for face-to-face meetings; others say that some reduced travel has already been documented. Most probably, there is a correlation between the potential "trade-off" and the price elasticities of demand for energy and transportation. As travel becomes a more and more expensive budget item, telecommunications may increasingly be perceived as offering a viable low-cost option.

Telecommunications may also make a much larger contribution to amelioration of national growth problems. For example, satellite exurbia is receiving a new influx of people, but the innumerable small towns that have fallen into disuse are still awaiting revitalization. The economic development efforts of most States are directed toward attracting industries and other employment-generating enterprises to these regions but, except in cases where recreational facilities or natural resources have offered a magnet, successes are judged to have been modest.

Telecommunications could aid significantly in changing this picture. Research has shown that most people concentrate in cities because of a felt need to be "where the action is." But the action could conceivably be dispersed, and along with it some of the population. A combination of narrow-band and broadband telecommunications links could extend many advantages of metropolitan propinquity—face to face meetings, exchanges of documents, retrieval of information—to small villages and towns.

TELECOMMUNICATIONS POLICY INITIATIVES AND OPTIONS RELATED TO NATIONAL GROWTH

Federal government initiatives in the area of telecommunications that impact on national growth fall into two general categories: regulatory reform and financial support of research and operational systems.

Regulatory reform can have an impact on growth in the sense that marketplace forces, when permitted to operate without undue regulatory restrictions, can generally allocate resources to the production of telecommunications goods and services with maximum efficiency. The elimination of the costs of regulation, where possible, is also a spur to growth. Because telecommunications services are universally and heavily used in commerce, the benefits from regulatory reform are pervasively distributed in the economy.

Federal financial support, on the other hand, when judiciously selected and applied, can be a catalyst in helping the public obtain significant and early benefits from innovative telecommunications technology. The Federal government's role as a catalyst in this sense is often justified on the basis of existing Federal programs to support the conventional delivery of social and public services. When delivery of such services can be accomplished more efficiently through the use of advanced telecommunications systems, it means more effective use of the Federal dollars appropriated to support those services.

Regulatory Reform

During the last several years, increased use of telecommunications by both commercial and private entities has attracted new entrants for the provision of both communications hardware and services. The introduction of competition into the marketplace for a small portion of the goods and services produced by the telephone industry has been cautiously fostered by the Federal Communications Commission. Since 1959, FCC decisions have led to the entry of competitors to the established common carriers for the provision of private-line services between cities and for customized terminal equipment in business offices. Recent decisions have also led to multiple suppliers of satellite communications links, to the expansion of broadcast television service to millions of households through the cable television and television translator industries, and to the provision of new "pay TV" programming choices as supplements to advertiser-supported broadcast television.

The policy directions taken in these decisions have, more recently, been reinforced by Administration emphasis on reducing the burdens and the costs of unnecessary regulation. Some of the steps being considered are proposals to allow for greater competition in the provision of nonstandard telephone services and the removal of many of the regulations presently encumbering the cable television industry, so that it can develop as an information medium in its own right.

Some Federal Programs in Telecommunications Improvement

The Federal government has played a leading role in identifying and encouraging social benefits from telecommunications technology, mostly through the funding of research and development projects but also through assistance in establishment of state and local government services. The "911" emergency telephone system in operation in many cities is an example of the latter, while the ATS–6 satellite experiments completed last fall exemplify the research support role.

The National Science Foundation has established cable TV experiments in three cities; Reading, Pa.; Spartanburg, S.C.; and Rockford, Ill., to determine the effectiveness of interactive cable television for:

- establishing better community and govgovernment communications with the elderly;
- helping adults obtain high school equivalency diplomas:
- training firefighters without requiring them to leave duty stations;
- training day care nursery personnel who serve a growing number of households with working parents; and
- facilitating communications among municipal agencies that must coordinate assistance to individual welfare recipients.

One telecommunications project directly related to growth issues is the New Rural Society project sponsored by the Departments of Housing and Urban Development and Transportation. During recent years, the New Rural Society project team has conducted studies on the importance of communications in relocation of population and on community development processes.

The idea of extending the reach of highly specialized skills found only in large metropolitan general hospitals to outlying rural areas, through the use of telecommuni-

cations links and field paramedics, has been the basis of many experiments and demonstrations. In parts of Alaska, where the alternatives are few, it is more than an experiment. Paramedic treatment of outlying populations with radio consultation of hospital staffs is an operational reality.

Variants on the paramedic/telecommunications link have been used to demonstrate not only rural health care improvement, but inner city health care for people who do not, for many reasons, have the direct benefit of medical facilities that may be only a few miles distant. As mentioned previously, the Federal government has sponsored numerous projects in this field. The results of these efforts have implications for equalizing the level of care available to all segments of the population, including those in communities that cannot afford extensive medical facilities.

In some regions, the only feasible means of providing a communications link in the telemedicine applications discussed above is via satellite. Satellite links can also be used to distribute educational programs to rural communities. The National Aeronautics and Space Administration and the Department of Health, Education, and Welfare jointly sponsored a series of experiments in 1975, using the ATS–6 satellite to demonstrate how small, inexpensive community antennas could be used to distribute medical and educational information to remote localities in Appalachia, the Rocky Mountains, and in Alaska. The demonstration verified, as a technical matter, that use of satellite links to rural areas, in conjunction with widely dispersed, low cost community antennas, can serve to reduce the gap in the quality of services available between urban and rural areas. The cost-effectiveness of such a program is still being analyzed. Sufficient enthusiasm was generated by the experiment to create a privately organized Public Services Satellite Consortium. With the aid of Federal "seed money," it is seeking to determine whether satellite public services can be procured and financed on a commercial basis.

The above examples of Federal government initiatives in telecommunications research and development are illustrative of the breadth and depth of activities in this area. They also show how technological developments in telecommunications can improve the quality of life in both rural and urban communities, thereby mitigating problems that often accompany community growth and development, and helping to distribute the benefits of modern health and educational facilities equitably to all population segments.

X. Improving America's Housing and Neighborhoods

Changes in economic conditions have significantly affected the nation's housing picture and may warrant a thorough appraisal of the nation's policies concerning housing and neighborhood improvements.

While recovery has begun, it has been slower in housing than in many other sectors of the economy. Inflation has also dramatically affected housing, resulting in higher construction capital and occupancy cost. Today restoration of stability in the housing industry and relief from inflation compete for policy priority with housing assistance for low and moderate income families. Other objectives, including preservation and improvement of neighborhoods and dispersal of housing for low and moderate income families, require re-examination because of these new conditions.

DECLINE IN HOUSING CONSTRUCTION

Record Levels of Housing Production in the Early 1970's

In the early 1970's the nation's housing production reached record levels. In 1971 for the first time in history, housing production exceeded two million units per year, reaching a level of 2,085,000 conventional units and approximately 500,000 mobile homes. Housing production continued at record levels in 1972 and 1973 in all single family and multifamily housing categories. In sum, 15.0 million new housing units, including 3.1 million mobile homes were produced between 1969 and 1975 (Table X–1).

The boom period of housing construction of the early 1970's was stimulated by availability of capital, consumer optimism, and a surge of household formation from the maturing of the babies born after World War II. By October 1973, the nation had a total housing stock of an estimated 75.3 million units, of which 68.1 percent were single family homes, 27.5 percent multifamily units, and 4.4 percent mobile homes. Less than half of the construction of housing units between 1970 and 1973 were single family homes. Multifamily housing accounted for 35 percent, and mobile homes accounted for 17.7 percent. Some 44 percent of the construction in these years was in suburbs of metropolitan areas, 22 percent in central cities and 34 percent in nonmetropolitan areas.

The Mid-1970's: Emergence of New Problems for Housing

By late 1973, however, the picture had radically changed, influenced by Federal tight money practices designed to control general inflation and conditions of overbuilding in many areas. In the fall of 1973, housing production entered into its worst post-war slump, preceding other sectors of the economy into what became a major recession. Housing starts fell rapidly—by the fall of 1974 the rate of housing production was less than half of what it had been the previous year. The rate of new household formation also fell abruptly. Faced with uncertain economic conditions many people remained in their existing units.

Sales of completed units fell dramatically though recovery has now started. The unsold inventory of single family houses totalled 142,000 completed units by year end 1974. There was a large number of unsold new and converted condominiums which were estimated to total as high as 250,000 units. Unemployment in the construction industry became a major problem, and fulltime equivalent jobs in residential construction fell by 310,000 from mid–1973 to mid–1974. These jobs are gradually being recreated. In 1975, housing production was estimated to have reached less than 1.2 million housing starts, although by the last half of 1975 a general recovery had begun. Full-time year-long job equivalents required for residential construction during fiscal 1975 were approximately 580,000 jobs.

TABLE X–1

NEW HOUSING UNITS STARTED AND MANUFACTURERS SHIPMENTS OF MOBILE HOMES: 1969 to 1975
(thousands of units)

Year	Housing units started plus mobile home shipments	Privately Owned and Publicly Owned Housing Units Started					Manufacturer's shipments of mobile homes
		Total	In structures with				
			1 unit	2 units	3-4 units	5 units or more	
1969	1,912.2	1499.5	811.2	48.2	50.0	590.1	412.7
1970	1,870.2	1469.0	815.1	48.0	47.8	558.0	401.2
1971	2,581.1	2084.5	1152.9	63.6	69.6	798.5	496.6
1972	2,954.4	2378.5	1310.7	72.3	78.4	917.0	575.9
1973	2,624.4	2057.5	1133.2	57.7	66.3	800.3	566.9
1974	1,681.8	1352.5	889.1	38.8	37.7	386.8	329.3
1975P	1,387.8	1172.4	896.2	36.0	31.7	208.5	215.4

P-preliminary
SOURCE: U.S. Bureau of the Census Construction Report, Series C20–76–1, Housing Starts

Retrenchment of an Overextended Housing Industry

The rapidity and severity of the housing slump in late 1973 after the boom period of the early 1970's caught many participants in the housing industry overextended. Relying on the market expansion of the early 1970's, many small and medium-sized builders expanded the size and range of their activities, taking advantage of the new sources of debt capital. Their ability to meet their debt obligations depended on increased sales and rental income and continued new financing. By the Fall of 1974 builders and investors found themselves with growing inventories of unsold houses and unrented apartment units. Cash flow problems were brought on by rising interest rates, rising construction costs, marketing difficulties, and lack of lending sources. In a substantial number of cases, lenders were forced to foreclose.

Problems for the REIT's

Real estate investment trusts (REIT's) developed during the 1960's to take advantage of favorable tax provisions for trust entities investing in real estate and distributing 90 percent of their profits to shareholders. REIT's provided a major new source of access to the stock market for housing finance purposes. There are two types of trust: equity trusts, which purchase existing income producing properties, and mortgage trusts, which invest primarily in construction and development loans and long term mortgages. By the early 1970's, real estate investment trusts accounted for approximately 25 percent of apartment construction financing.

However, by the mid–1970's, many REIT's, particularly the mortgage trusts, and the commercial banks from which they obtained funds found themselves faced with serious problems. Builders had cash flow problems because of the sharp drop in demand, rising construction costs, and interest rates from three to five points above rapidly increasing prime lending rates. Many REIT's had to foreclose and take over the construction and operation of large commercial and residential projects. In 1974 and 1975 some REIT's went into bankruptcy. Others underwent drastic financial reorganization. In this light, loans to REIT's have become a major problem for bankers, and it is likely to be some time before REIT's recover. In the immediate future, most REIT's will be more cautious in lending than in the past.

The "No Frills" Basic House

In the mid–1970's, many active builders began to reverse the long-term trend toward bigger housing units. In order to bring new single family housing prices within reach of more families, builders began to cut the square footage in new homes and lot sizes, eliminate garages and extra bedrooms, provide fewer appliances and leave some rooms and basements unfinished. In this way some builders could offer new single family houses below $30,000.

Decline in Multifamily Housing Construction

Young families with small children or no children at all, older families, and single person households comprised a large portion of household growth in the 1960's. These new households, along with the growth of Federal subsidy programs, led to a dramatic increase in multifamily housing. In 1960 multifamily units accounted for 21 percent of total housing starts. In 1969 they accounted for 46 percent. Historically, multifamily units—primarily rental units in large buildings or complexes —could utilize smaller amounts of land per unit and offer economies in land, construction costs, fuel and utilities, operation and management. They permitted developers favorable income tax treatment. In 1973, multifamily housing units represented 45 percent of all housing starts, excluding mobile homes. Between 1970 and 1973, between 45 and 50 percent of new construction in suburbs and 70 percent of new housing construction in central cities were multifamily units. In 1974 and 1975 construction of multifamily units plummetted.

The fall responded to vacancies resulting from a period of overbuilding in some areas, an imbalance between costs and anticipated income resulting from escalating constructions costs, increased financing, utility and other operating costs, slow increases in rentals through threats of rent control, and a lack of confidence by builders and investors. In 1975, only an estimated 270,000 new multifamily housing units were started, less than 30 percent of 1972 and 1973 levels.

In the late 1960's condominiums emerged. Their share of housing construction increased steadily after 1970, from 5.4 percent in 1970 to 13.1 percent in 1974. Some 85 percent of the 1.25 million condominiums estimated to exist in April 1975 were built after 1970.

About half of all condominiums are located in California, Florida and New York. In many metropolitan areas existing rental apartment units were also being converted to condominiums. Condominiums provided a number of different advantages for owner-occupants and developers. Owner-occupants received the tax and potential capital appreciation benefits of ownership. Advantages of condominium ownership include less responsibility for maintenance, more amenities, and lower purchase prices. However, condominiums tend to be smaller and more expensive per square foot.

Rapid expansion did create some problems. Some condominium purchasers found poor construction quality and other problems. Some tenants In buildings being converted to condominiums faced pressure to purchase their unit or move out. Because of these problems, condominiums are increasingly coming under state and local regulations.

The economic slump of 1974 occurred at the peak of condominium production. At the end of 1974, there was a large inventory of unsold condominium units, representing 40 percent of the total unsold housing inventory. Some areas, particularly resort and vacation regions such as Florida, were confronted with the consequences of extreme overbuilding.

Condominiums are likely to play a significant role in multifamily residential construction as long as the relationship between interest and construction costs and prevailing rent levels make rental housing an unattractive investment. In the future, however, condominium construction will undoubtedly proceed more cautiously.

Recent Decline of Mobile Home Production

According to the Manufactured Housing Institute, production of mobile home units increased from 100,000 units in the early 1960's to almost 500,000 units in 1971. With an annual average growth rate of over 18 Percent from 1961 to 1972, production of mobile homes peaked at 576,000 units in 1972, an increase of over 80 percent above 1968. Mobile homes represented approximately 20 percent of all new housing produced in 1972 and 1973. By the beginning of the 1970's, the mobile home was virtually the only type of housing available for less than $12,000 and the dominant type of housing for sale under $20,000. It was the major source of new housing in rural and semirural areas. On a square foot basis mobile homes often cost as much as, if not more than standard housing due to higher interest rates and shorter term financing and site rent. But they make available a smaller housing unit than could be economically constructed using conventional single family housing construction methods.

In 1974, production fell sharply to 329,000. In the first eleven months of 1975 mobile home production was 202,000, well below the 1974 level.

Withdrawal of Corporate Builders

In the 1960's the high rates of return available for their capital and projections for continued growth of housing demand attracted many large corporations to the housing industry. They found, however, that their form of organization and large-scale production requirements could not adequately adjust to conditions of rapid contraction in demand and steadily increasing costs. Many companies have had to sell-off at considerable losses or cut back severely on their real estate activities.

By the beginning of 1975, the industry had entered a period of retrenchment. Builders and lenders returned to more cautious and flexible approaches and smaller operations. Some industry spokesmen expressed the view that the "day of the big builder is over." Builders placed increasing emphasis on smaller project commitments, limiting overhead, and maintaining liquidity rather than maximizing their leverage. Most analysts believe that the outlook is for continued instability in demand, rapidly rising construction and operating costs, continued high financing costs, more rent control, and unfavorable tax law changes. It is not clear how these factors will affect the future of housing in the long-term equity and debt capital markets and its competitive position relative to other long-term investments.

STIMULATING HOUSING PRODUCTION AND STABILIZING THE HOUSING INDUSTRY

The need to stabilize housing construction is being given high priority as an economic goal for the nation.

Federal Efforts to Stimulate the Housing Market in 1974 and 1975

In early 1974, the Administration responded to the deepening economic recession of the housing industry.

On October 22, 1974, the Government National Mortgage Association (GNMA) was authorized to issue commitments for an initial $3.0 billion of conventional mortgage loans at interest rates of 8.0 to 8.5 percent to implement the new "Tandem" Program authorized by the Emergency Home Purchase Assistance Act of 1974. By December 27, 1974, $1.4 billion had been committed, and by January 9, 1975, all $3.0 billion were committed. On January 22, 1975, another $2.0 billion were allocated for conventional loans and $1.0 billion for FHA-insured and VA-guaranteed loans.

Under a program announced by the President on June 24, 1975, the remaining $1.75 billion made available by the Emergency Home Purchase Assistance Act of 1974, along with $250 million from earlier releases, were released in August through the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation. The Emergency Housing Act of 1975 also provided $10 billion of new discretionary authority for GNMA mortgage activities and standby authorities to provide insurance for mortgage lenders against losses sustained on loans and advances made to forestall foreclosures of unemployed homeowners. The Emergency Housing Act of 1975 allowed GNMA to include condominium units as well as single family units in the program which enabled lenders to make 7.5 percent mortgages for the purchase or construction of sales housing. Up to 10 percent of the commitment for each lender could be used for existing homes.

The revised Section 202 loan program was reactivated during 1975. On September 24, 1975, private sponsors were invited to apply for fund reservations of $375 million for fiscal 1976 and an equal amount in fiscal 1977 for the construction or rehabilitation of housing for elderly and handicapped persons, with Section 8 subsidy funds set aside to cover operating costs which exceed rental receipts.

In early 1975, Congress enacted the Tax Reduction Act of 1975 granting a tax credit of up to $2,000 for buyers of new homes up to January 1976 to provide a stimulus for new home purchases. However, it has been estimated, in a report submitted to Congress by HUD in December 1975, that almost all of the 1975 sales would have occurred even if there had been no tax credit. On October 17, 1975, the Department of Housing and Urban Development reactivated a revised Section 235 homeownership subsidy program to spur construction and rehabilitation of single family houses. Estimated runout costs of $1.9 billion will reduce the effective interest rates of 250,000 home purchasers to as low as 5.0 percent, depending on the purchaser's income.

On January 6, 1976, a $3 billion program to finance the construction of FHA-insured multifamily apartment projects was announced, pursuant to the Emergency Housing Act of 1975. The program is expected to finance 120,000 units at a 7.5 percent interest rate, and spur the multifamily construction sector in its recovery.

The housing industry showed steady improvement in the last half of 1975, following the recovery of the general economy which began in the spring of 1975. Interest rates remained relatively stable in the summer. In addition, mortgage interest rates were reduced for many homebuyers by the Tandem Plan, under which mortgage loans have lower interest rates for qualified homebuyers. During the last half of 1975 the Government National Mortgage Association purchased almost $3.7 billion in mortgages, representing 122,663 units. The year 1975 also saw a record growth in savings inflows into thrift institutions.

For Federally assisted housing, it is estimated that during 1976 and 1977 there will be very significant increases in construction starts and rehabilitations, with totals for each of the two categories more than doubling the 1975 low points (Table X–2).

The Administration has proposed the Financial Institutions Act to increase the efficiency of the financial system. It would increase the flexibility of thrift institutions in

Table X–2

ANNUAL ASSISTED HOUSING STARTS
FISCAL YEARS 1969–1977

	Total Production (New Construction Starts Plus Rehabilitation Begun)					New Construction Starts					Rehabilitation[6]				
	1969-1974 Cumulative	1975	1976e	Transition quarter	1977e	1969-1974 Cumulative	1975	1976e	Transition quarter	1977e	1969-1974 Cumulative	1975	1976e	Transition quarter	1977e
Total Subsidized Production	1,952,960	138,780	250,360	93,700	347,730	1,724,890	120,950	206,640	78,530	305,630	228,070	17,830	43,720	15,170	42,100
HUD Programs	1,508,940	56,490	161,100	71,180	265,000	1,349,710	47,400	134,850	60,300	238,400	159,230	9,090	26,250	10,880	26,600
FmHA Programs	444,020	85,520	89,260	22,520	82,730	375,180	76,690	71,790	18,230	67,230	68,840	8,830	17,470	4,290	15,500
1-4 Family Total	863,230	70,100	89,660	44,350	162,170	732,870	58,070	61,870	33,660	136,970	130,360	12,030	27,790	10,690	25,200
HUD	451,570	5,080	19,600	27,180	100,000	389,300	1,540	9,000	20,700	90,000	62,270	3,540	10,600	6,480	10,000
Sec. 235	395,120	1,800	10,000[1]	23,000[1]	100,000[1]	389,300	1,540	9,000[1]	20,700[1]	90,000[1]	5,820	260	1,000[1]	2,300[1]	10,000[1]
Secs. 115/312	53,260	3,200	9,600	4,180	..	..	..	..	..	..	53,260	3,200	9,600	4,180	..
Sec. 221(h)	3,190	80	..	..	..	..	..	..	..	..	3,190	80	..	..	..
FmHA	411,660	65,020	70,060	17,170	62,170	343,570	56,530	52,870	12,960	46,970	68,090	8,490	17,190	4,210	15,200
Low Income	[2]	46,400	47,100	11,540	41,350	[2]	41,170	33,650	8,250	29,540	[2]	5,220	13,450	3,290	11,810
Moderate Income	[2]	18,620	22,960	5,630	20,820	[2]	15,360	19,220	4,710	17,430	[2]	3,270	3,740	920	3,390
Multifamily, Total	1,089,730	71,910	160,700	49,350	185,560	992,020	66,620	144,770	44,870	168,660	97,710	5,890	15,930	4,480	16,900
HUD	1,057,370	51,410	141,500	44,000	165,000	960,410	45,860	125,850	39,600	148,400	96,960	5,550	15,650	4,400	16,600
Public Housing	389,530	24,530	79,000	35,000	142,000	352,440	23,400	69,600	31,500	127,700	37,090	1,130	9,400	3,500	14,300
Traditional	389,530	24,530	35,000	10,000	19,000	352,440	23,400	30,000	9,000	17,000	37,090	1,130	5,000	1,000	2,000
Sec. 8	..	..	44,000	25,000	123,000	..	..	39,600	22,500	110,700	..	..	4,400	2,500	12,300
Sec. 236	404,580	19,420	60,000	8,000	20,000	365,730	15,480	54,000	7,200	18,000	38,850	3,940	6,000	800	2,000
Rent Supplement	84,710	2,650	2,500	1,000	3,000	76,040	2,370	2,250	900	2,700	8,670	280	250	100	300
State-assisted projects	74,650	4,610	[3]	[3]	[3]	74,650	4,610	[3]	[3]	[3]	..	..	..	..	..
Sec. 221(d)(3) BMIR	86,610	..	..	..	..	76,900	..	..	..	..	9,710	..	..	..	..
Sec. 202	14,650	..	..	..	8,000[4]	14,650	..	..	..	8,000[4]	..	..	..	..	..
Sec. 312	2,640	200	[5]	[5]	[5]	..	..	..	..	..	2,640	200	[5]	[5]	[5]
FmHA	32,360	20,500	19,200	5,350	20,560	31,610	20,160	18,920	5,270	20,260	740	340	280	80	300

Source: The Eighth Annual Report on the National Housing Goal

e = Estimate

[1] Projected starts under Sec. 235 in FY 1976, the transition quarter, and FY 1975 are under the revised Sec. 235 programs.

[2] Breakdown between low and moderate income FmHA starts was not available prior to 1972.

[3] Included in Sec. 236.

[4] Excluded from column total since it is expected that each unit will receive Section 8 assistance and is already counted under the Section 8 program.

[5] Included in Secs. 115/312 under 1–4 family totals.

[6] "Rehabilitation" in FmHA data are units "purchased old, needed repairs".

NOTE: Detail may not add to totals due to rounding.

managing their portfolios, by such steps as removal of interest rate ceilings, and it would also offer mortgage lenders tax credits on mortgage interest.

BASIC ISSUES IN FEDERAL HOUSING POLICY

Changing economic conditions and experience with Federal Housing programs also warrant a re-examination of Federal housing policy. Since the 1960's the Federal government has developed a series of complex programs for increasing the sources and stability of the flow of housing credit. With the enactment of the Housing Act of 1949, Congress set as a national housing goal the "realization as soon as feasible of the goal of a decent home and a suitable living environment for every American family."

The Housing and Urban Development Act of 1968, as amended in 1974, reaffirmed that goal and set forth quantitative targets for achieving national housing objectives. It called for the construction and rehabilitation of 26 million housing units over the following ten-year period, six million of them for low and moderate income families. These targets represented nearly a doubling of the overall rate of housing from the previous decade and a tenfold increase in the construction of housing for low and moderate income families. Annual housing production targets for each year of the decade from July 1, 1968, through June 30, 1978, to help meet the nation's housing goal were contained in the President's First Annual Report on the National Housing Goal submitted in 1969, and then revised in the Second Annual Report in 1970.

But the development of Federal housing programs to carry out these policies has proceeded on a piecemeal basis. Congress has initiated programs in response to the perceived needs of various clientele groups. By the early 1970's there were 40 subsidized and 20 nonsubsidized Federal programs of housing assistance, each with its own—but often overlapping—clientele, as well as differing program requirements and administrative procedures. Nearly a dozen Federal agencies played a direct role in administering and regulating housing assistance activities of numerous state and local agencies.

Reexamination of National Targets and Goals for Housing Production

The quantitative targets established for total national housing production and the production of housing for low and moderate income households need reconsideration in light of changing conditions since the passage of the 1968 Act.

Achieving the 1968 targets, moreover, would not have eliminated substandard housing for all American families. The targets failed to consider the extent of housing needs related to the inability of many households to afford adequate housing without paying excessive rent and the effects of neighborhood conditions and environment. Furthermore, the original targets failed to make provision for the more effective use of existing housing units.

The Eighth Annual Report on the National Housing Goal points out that on several occasions in recent years, HUD has stated its belief that precise numerical targets for the production of housing units have limited value in housing policy. While housing production targets, or similar goals for any sector of the economy, do focus on areas of special national interest, they tend to oversimplify the problem of allocating resources efficiently throughout the economy in order to achieve the highest possible level of overall economic well-being.

Numerical targets for new production may also serve to divert attention from the present housing conditions of those who most need better housing—the poor and others living in housing units in inadequate physical and environmental condition. The huge costs of new subsidized units, the locations of needy households, and a multitude of other factors make simplistic production targets an inefficient response to needs.

Some have questioned the need for any Federal goals for housing, maintaining that housing programs tend to be inefficient and primarily benefit housing producers rather than consumers. Some of these critics favor Federal withdrawal from housing, leaving the problems to the private market. Others contend that the major cause of housing problems is the lack of adequate income. They believe that the needs of families with inadequate resources can best be served by income assistance rather than through subsidies tied to housing alone. This approach,

they maintain, would provide greater freedom to consumers in choosing housing and would reduce administrative red tape. On the other hand, advocates of housing related assistance argue that income assistance would not improve housing conditions, and would fuel inflation in housing costs. Taxpayers, they suggest, have a right to direct the use of assistance to socially desirable objectives.

There is a considerable range in estimates of housing needs. Studies of the last several years differed in their estimates of housing construction needs in the periods from 1968 to 1978 or 1970 to 1980. Estimates have varied from 1.8 million new units per year to 2.9 million new units per year, reflecting a difference of about 60 percent, depending upon the assumptions used. In mid–1975, HUD estimated that from 1.9 million to almost 2.4 million new housing units would be needed annually just to respond to net additional household formation, household mobility and replacement of net housing inventory losses.

Middle and Upper Income Families as the Primary Beneficiary of Federal Housing Policy

The historic emphasis of Federal housing policy has been on measures for stimulating new housing production. Federal housing policy has focused on stabilizing the flow of credit, creating more favorable home mortgage loan terms and providing assistance for home ownership. Despite substantial increases in assistance for production of housing for low and moderate income families in the late 1960's and early 1970's, direct aid for these groups has always represented only a small portion of Federal housing assistance.

On the whole, housing assistance has not been allocated solely according to need. The largest single housing subsidy—in the form of Federal income tax benefits for housing —flows primarily to middle and upper income families. Historically, Federal mortgage insurance programs have primarily aided lower middle and moderate income families and they have provided, in turn, benefits to all homeowners through their secondary effects on improving the terms of home mortgage financing in general. A large proportion of the benefits of the below market interest subsidy program and interest credit assistance has gone to lower middle and moderate income families at the top of income eligibility limits that have been set above the government's poverty level. Among Federal programs, only public housing, rent supplement assistance, and Section 8 have primarily served lower income groups.

Suspension of Subsidized Housing Programs in 1973

In January 1973 the Administration temporarily suspended new commitments under the major Federally subsidized housing programs while it undertook a review of Federal housing policies. There was increasingly widespread concern about the efficiency, equity and impact of these programs. In early 1971, a Congressional report had exposed cases of corruption and inefficiency in the Section 235 housing program involving speculators making excessive profits, especially on existing housing, and illegal collusion with appraisers. The program offered homeowners little incentive to limit initial housing price or monthly housing costs. The Section 235 and 236 programs, by providing uneven benefits to equally needy groups, had resulted in considerable resentment. In some areas, FHA had begun to experience problems of over-building and increasing default rates for 236 projects and 235 units.

On September 9, 1973, the Administration announced that the suspension of subsidy programs would continue for the balance of the fiscal year, noting that the programs were inordinately costly, had basic inequities, and were capable of reaching only a small proportion of the poor. A HUD study concluded that administrative action could correct some problems, but that some programs contained basic structural flaws. In April 1973, HUD initiated an Experimental Housing Allowance Program to test the feasibility of direct cash payments as a means of improving housing quality for low-income families.

Section 8 Leased Housing Assistance Payments Program

While the Administration experimented with the housing allowance approach, it also proposed that emphasis be placed on a reconstituted and expanded program of leased hous-

ing. This proposed program was enacted in 1974 as Section 8.

Section 8 authorizes states and local agencies, and in some instances HUD itself, to make assistance payments for tenants who lease existing, new or rehabilitated private housing or publicly owned units at fair market rentals plus up to 20 percent under "special circumstances." Assistance payments contract terms are proposed of up to 15 years in existing units, 20 years in new and substantially rehabilitated units, and 40 years for projects owned or financed by a loan made or guaranteed by a state or local agency. Preference is to be given to projects in which no more than 20 percent of the units are assisted unless the project has less than 50 units or is designed primarily for handicapped or elderly persons. Families with incomes of up to 80 percent of the area median are eligible. Participating families contribute from 15 to 25 percent of their total family incomes for rental payments.

Reactivation of the Section 235 Homeownership Program

In October 1975, HUD announced the reinstatement of the Section 235 mortgage subsidy program to stimulate new home construction, but revised the program to channel assistance to produce new or rehabilitated homes for families earning between $9,000 and 11,000 per year. Under the program, the Federal government will subsidize interest costs to as low as five percent provided that monthly payments equal at least 20 percent of the purchaser's adjusted gross income. The purchaser is required to pay between $1,000 and $1,500 in initial costs. HUD expects the program to support more than 250,000 families.

Changes were made to eliminate problems under the previous program which provided assistance to lower income families in the $5,000 to $7,000 income range. The previous program, which required as little as $200 or less in down payments, and subsidized interest costs to as low as one percent, gave inexperienced owners little financial incentive to maintain their homes and led to high default rates.

Requirements for Housing Assistance Plans

Recent Federal housing legislation provides a greater role for local and state governments in the identification of housing needs and coordination of housing assistance. The 1974 Act requires, as a condition of eligibility for Section 8 housing assistance, that state, regional agencies and local governments prepare housing assistance plans for improving the supply of their housing. A housing assistance plan is also required as a condition for localities to receive community development block grants. Under this plan, communities are required to survey the condition of their housing stock and assess housing needs. The community development block grant and Section 8 leased housing programs have given considerable flexibility to local governments in identifying needs and coordinating housing assistance.

In addition, since 1968, a housing element has been a required part of planning activities carried out with Federal comprehensive planning assistance. These plans, especially those focusing on "fair share" problems, serve only as guides to local, voluntary action, since there are no mandated incentives or sanctions to implement them. Title IV of the 1974 Act sets a deadline of August 1977, after which completion of housing elements under the comprehensive planning assistance program is a condition of further planning assistance.

There are differing views on the role that the Federal government should play in reviewing the Housing Assistance Plans (HAP) required under Titles I and II of the 1974 Act. Practically all of the plans submitted to HUD with application for the first year community development block grants were approved. Some groups and reviewers, though, feel the Department should impose strict requirements. On the other hand, many proponents of greater local control and less Federal stipulation on grant-in-aid assistance oppose more Federal criteria.

The Debate Over the Appropriate Form of Housing Assistance

Underlying this reassessment of housing assistance programs has been a continuing debate over the form that housing assistance should take: whether aid should be provided by subsidies to housing producers who provide low and moderate income units or directly to the families requiring assistance in the form of cash.

The Administration's continued suspension of production subsidy programs in September 1973 was based at least in part on the view that the problems of low and moderate income families were primarily the result of lack of income. A new approach—direct cash assistance through household allowances—was to be explored, which would give the poor the freedom and responsibility to make their own choices about housing and other goods. As a limited test of direct cash assistance, the Experimental Housing Allowance Program is testing the impact of housing-directed assistance.

In 1974, the Congress enacted the Section 8 Program which subsidizes housing in both new and existing privately owned buildings.

Housing Allowances

Support for direct cash assistance through housing allowances is based on the view that the housing problems of low and moderate income families are primarily the result of lack of income. Supporters maintain that under a housing allowance program twice as many families can move into decent standard housing for any given Federal dollar commitment. Moreover, they argue that such a program could stabilize and upgrade declining inner-city neighborhoods and disperse low income families outside blighted areas. Tying the subsidy to a family rather than a dwelling, they contend, permits a flexible response to changing local market conditions and programmatic needs. Using the existing supply of older housing minimizes inequities between households of different income levels and between tenants and landlords. Moreover, it reduces the inequities among families at a given income level.

The housing allowance program would tailor benefits to the needs of households, operating more efficiently to meet their needs than a production-oriented policy. The government would not assume the risk of repossessing housing units and sustaining foreclosure costs and resale losses. Housing allowances could complement a national system of income supplements, providing a means of adjusting assistance to regional variations in the cost of living, which primarily reflect variations in the cost of housing.

Assessments of the concept of housing allowance programs have suggested that they have their drawbacks, however. Once initiated, allowances could well become a continuing and inflationary budget item. They involve continuing administration costs and frequent certification of the income of participants in a form of government scrutiny that some consider demeaning to those in need, but these are also problems in many housing production programs.

Moreover, some analysts believe that even if housing allowances were introduced, production subsidies might still be necessary in many areas. Unless coupled with the production of new units, a large-scale housing allowance program could inflate housing costs, especially in housing markets with low vacancy rates. They maintain that dispersal of poor families from central cities to outlying growth areas may require the provision of new housing in these areas, suited to their needs and within their price range.

The Department of Housing and Urban Development's Experimental Housing Allowance Program has been testing the housing allowance concept for the past 2 1/2 years to shed light on many of these questions. Three experiments focusing on supply, demand and administrative issues are being conducted at 12 locations throughout the country. Some 14,000 households have joined the program and HUD has made over 175,000 monthly payments since the program's inception. In general, the housing allowances concept appealed to the eligible population. Participants are able to make their own way in the private market, administration went forward without major stumbling blocks, and there was acceptance in local communities.

This experience established that a housing allowance program is able to attract a broad spectrum of eligible applicants within a short time period. The outreach effort employed, however, seemed to play an important role in determining the extent of the response from the eligible population. Interest in the program is not universal, as witnessed by the one-third of the individually contacted households (the most intensive form of outreach) in the Demand Experiment who declined to participate.

Some of the eligible population proved more difficult to reach and enroll than others, the elderly in particular. Many enrollees succeeded in making their own housing decisions in the private market and in meeting

requirements for obtaining allowance payments. This process, however, has not worked as well for households that are in the racial minority or elderly categories. To date, the most difficult participation problem has been that of black households in the Jacksonville, Florida experimental site. There a particularly poor housing stock coupled with a segregated housing pattern made minority participation difficult.

There were no major crises, scandals or obstacles at any experimental sites. It was as easy to deal with homeowners as with renters at the Green Bay, Wisconsin, site even though the income certification process for homeowners is more complex. The special housing inspections, peculiar to a housing allowance program as opposed to other transfer programs, work smoothly as a means of assuring adherence to standards.

Although there were difficulties in informing the public of the program, there was no evidence of large-scale or continuing opposition in any community. In those few instances where initial suspicion or skepticism arose, those feelings subsided once the program began to operate.

No specific problem created any insurmountable difficulties for the program. For example, in housing markets with an abundance of standard housing units, local landlords have been happy to have housing allowances provided in their community, although where a high proportion of the stock is substandard and the market tight, some landlords have resisted the program. In locations not familiar with the program, the requirement of a lease created some resistance among landlords and tenants alike. Inspections of housing were sometimes unpopular, particularly on the part of owners of substandard dwellings. Outreach methods which utilized the media and involved an expenditure of public funds were objectionable to some local groups.

Only preliminary findings of the experiment are available on issues such as the extent of improvement in housing quality, price effects, and participants' locational outcomes. But in the first year, experience with housing allowances seemed to have acted primarily to reduce housing cost burdens rather than to increase expenditures for better housing. Interestingly few households in the demand experiment moved from the central city to the suburbs or vice versa as a result of an allowance. However, many suburban households are participating—a total of 35 percent of the recipients at the two Demand Experiment sites were suburban households.

In a year and a half of program operation in Green Bay, one of the Supply Experiment sites, there has been little or no visible effect on housing prices. General inflation or improvements in housing quality accounted for those price increases that did occur for units tenanted by participants in the program.

As to administration, more stringent verification of participants' incomes did not appear to result in substantial savings in payment costs. Such savings as did occur resulted primarily from exclusion of ineligible applicants rather than from payment adjustments for eligible participants.

Housing Production Subsidies

Program modifications may help eliminate problems encountered in some past production programs. Tighter administrative procedures could make cost and market estimates more realistic, reduce foreclosures, help ensure that participating households can meet continuing obligations, and limit the potential for error and fraud. Review of program guidelines would encourage units where need is greatest.

But production subsidies are expensive in terms of cost per assisted family. They are cumbersome, costly to administer, and relatively slow in producing benefits. Considerable inequity in providing assistance is unavoidable. The location of vacant sites and market demand makes it difficult to coordinate construction locations with the areas of greatest housing and employment needs. Coverage will inevitably be incomplete, and low and moderate income families that are provided with subsidized units may receive better housing than those who do not receive assistance. Those directly assisted are likely to be the most upwardly mobile families among those who are eligible; housing needs in areas with concentrations of low income families will be only indirectly relieved.

Section 8

Section 8 which provides subsidized housing in privately owned new and existing buildings is a third alternative. It combines the advantages of both allowance and production approaches.

The Uncertain Future of State Housing Finance Agencies

There is considerable uncertainty surrounding the future of state housing finance agencies. Only six states had such agencies in 1968, but by 1973, 31 states had created some housing financial agency, 18 of them in the preceding 18-month period. These agencies financed the development of more than 50,000 subsidized housing units between 1969 and 1973. The state housing finance agencies provide mortgage financing to limited dividend and non-profit developers of low and moderate, and in some states, middle income housing. Their loans provide below-market interest rates and longer terms than conventional mortgages, permitting reductions in monthly rentals. In some cases, state financing has been combined with cash subsidy assistance under either the Section 235, 236 rent supplement or leased public housing programs, and, in some states, with Section 8.

CONSERVING AMERICA'S EXISTING HOUSING STOCK AND NEIGHBORHOODS

The rapid increase in the costs of new housing and the potential environmental and economic benefits of more compact development mandates greater emphasis on effective use and upgrading of existing housing stock.

Market Recognition of the Value of Existing Housing

During the 1960's, the value of existing housing climbed steadily except for the lowest quality housing located in the poorest neighborhoods. Since 1973, rapidly climbing construction costs, the drop in housing production and reductions in vacancies have exerted added demand pressure on the existing supply. This occurs despite declining real per capita income and rising occupancy costs. The median sales price for existing single family homes in December 1975 was $35,800, up 9.4 percent over the median price in December 1974.

In 1974, American homeowners spent an estimated $21.1 billion in improvements, maintenance and repairs to their properties, representing an increase of 43 percent over the 1970 level. Some 38 percent of this was spent in major additions or structural alterations. An estimated 55 percent of non-farm residential construction was devoted to remodeling and repair of the existing stock during the 1960's.

Barriers to Effective Housing Rehabilitation

Reliance on rehabilitation and remodeling as a major method of upgrading the nation's housing stock has not proved to be realistic. Federal and private experiments have stimulated large-scale rehabilitation only in a few localities predominantly for middle and upper income urban neighborhoods.

The costs of rehabilitation, like those of new housing, have increased substantially. Costs involved in rehabilitating a given unit are subject to major uncertainties. Administrative and design costs are higher than new construction because each unit has unique problems. Declining neighborhood environments, problems in assembling enough units to permit efficient rehabilitation and the labor intensive nature of rehabilitation have also been major barriers. Upgrading a neighborhood often requires more than housing assistance. Also needed in most cases are better crime protection, improved neighborhood services, and expanded job opportunities. In addition, the housing rehabilitation must be on a scale large enough to improve the overall neighborhood. In many areas, market conditions for successful, widespread rehabilitation simply do not exist.

The Acceleration of Housing Deterioration and Abandonment

The pace of new housing production that made possible a substantial upgrading of the nation's housing stock over the last decade also created a surplus of housing units in certain areas. Portions of the lowest quality housing in the worst locations have been vacated and demolished. Slow population increase or actual decline and high rates of new subsidized housing construction eased market pressures in inner cities. Rent levels and housing costs in older areas of central cities did not increase in the 1950's and 1960's as rapidly as those in other parts of the metropolitan area. Public and private demolition programs demolished an estimated average of 575,000 units annually in the 1960's.

Declining demand combined with continuing increases in operating costs, created conditions which increased the rate of deterioration of many older housing units in central city neighborhoods. Faced with rising costs and unable to retain tenants at higher rents, owners began to defer basic maintenance and to cut down services in order to maintain an investment return on their property.

In the late 1960's, abandonment emerged on a major scale in a number of large cities, reflecting the ultimate extension of deferred maintenance. By the 1970's a number of vacant sections of Woodlawn in Chicago, Brownsville and the South Bronx in New York, and neighborhoods in Detroit, Cleveland and Washington became vandalized wastelands. If the costs of operations and maintenance continue to outpace the rise in incomes, abandonment is likely to continue in these areas, despite the need for housing among low income families in these areas.

Since the late 1960's a number of cities, in a measure to protect tenants from rent increases, have instituted rent control. Rent control, while offering relief to tenants from the tendency of landlords to pass along rising costs or to seek increased profits out of a tightening housing market, also discourages landlords from maintaining or upgrading their buildings. The consequent lack of maintenance accelerated deterioration and eventual abandonment, and created a negative climate for new housing investment.

Maintaining an adequate supply of decent housing units at prices that families can afford is important particularly in inner city neighborhoods which will continue to house a high proportion of low and moderate income families and minority groups. These neighborhoods offer services and facilities that would be prohibitively expensive to replicate in outlying areas.

Promising Approaches for Creating Conditions for Housing Rehabilitation and Better Use of Existing Housing Units

Changing costs and market factors, reduced levels of new construction, and surplus construction capacity may now provide more favorable conditions than have previously existed for stimulating large-scale housing rehabilitation.

One creative and interesting experiment—"urban homesteading," has been introduced in several cities, including Philadelphia, Wilmington, Baltimore and Washington. To evaluate the potential of urban homesteading as a neighborhood preservation tool, the Department of Housing and Urban Development has undertaken a $10 million demonstration program to support homesteading efforts in 23 cities. Under this approach, abandoned homes within the inner city are given or sold for a nominal price to persons who will live in them and upgrade them to meet city code standards.

More support from public and private sources may be needed for the development of improved technology and labor force skills for cost-efficient large and small sale rehabilitation. Where housing rehabilitation seems feasible, the existing Community Development Block Grant program can provide assistance. Section Eight and Section 235 funds can help stabilize and upgrade existing housing in these neighborhoods.

In many areas, there is a need for upgrading existing stock of multifamily housing. Long-term mortgage refinancing could provide funds for improvement without greatly increasing debt service costs and rent levels. Private lenders, however, are often reluctant to finance projects in declining inner city areas. The recently enacted Section 223(f) program addresses this problem. It authorizes mortgage insurance for purchase or refinancing of existing multifamily property primarily in older declining areas, provided rent increases are used only to offset actual and reasonable increases in operating or other necessary costs. In addition, improved housing management methods for public and private multifamily housing can help achieve more efficient use of existing housing.

RECYCLING THE AGING CITY

The new emphasis on conservation underscores the need for reversing, so far as possible, the incentives that lead to disinvestment in older cities.

There are several promising signs of a renewed interest in the central cities as places to work and live, although it is on a small scale. For example, a recent Urban Land Institute survey discovered a significant amount of unsubsidized, private market reno-

vation in two-thirds of all cities with populations over 100,000. The explanations commonly given for a possible inner city revival include:

- demographic trends such as later marriages, declining birth rates, and an increased proportion of single and childless couples, and the changing life styles associated with these trends, may have several significant implications for residential market behavior: a lessened need to be concerned with school quality, secure and spacious play areas, etc., and increased demand for the cosmopolitan attractions traditionally offered by central cities (theaters, restaurants, entertainment, a high degree of convenience, diversity, and social interaction);
- the effect of energy shortages and increased fuel costs, giving greater weight to mass transit access, shorter commuting distances, and lower costs of multifamily dwellings, which favor more centralized locational decisions; and
- construction and financing cost factors leading to a new interest among some consumers and investors in more efficient utilization of the existing stock of both commercial and residential structures.

Consolidation of Community Development Functions

The Housing and Community Development Act of 1974 was signed into law on August 22, 1974. Title I of the Act, the Community Development Block Grant program (CDBG), consolidated seven existing categorical grant-in-aid programs (Urban Renewal, Model Cities, Water and Sewer Facilities, Open Space, Neighborhood Facilities, Rehabilitation Loans, and Public Facilities Loans) into an annual block grant for community development. These block grants can be used by localities according to their own priorities for a wide variety of services.

Of the seven objectives of the Act, *the prevention of slums and blight* and *the conservation and expansion of housing stock* received greatest first year emphasis in funding priorities of the localities. Key approaches:

- emphasize improvements to the existing neighborhood infrastructures;
- concentrate efforts in areas showing early signs of decay; and
- concentrate efforts in residential areas.

In 1307 first year applications for funding approved for entitlement cities and counties, public works, facilities and site improvements will get 29 percent of the $2.1 billion authorized. Acquisition of real property will receive 13 percent of the funding, rehabilitation loans and grants ten percent, and completion of urban renewal projects and continuation of model cities activities will receive seven percent each. Minority neighborhoods have directly been allocated 57 percent of the CDBG funds by their respective local governments.

Low or moderate income areas directly receive 71 percent. The 29 percent balance meets other legislative objectives of preventing or eliminating slums and blight, or meeting other priority activities.

The substitution of community development block grants for other categorical programs has prompted many cities to reassess their current organization for performing basic community planning and development functions. An option adopted with increased frequency over the past few years, generally in those cities with populations of 250,000 or more, is the transferral of renewal and model city activities from independent or semi-independent agencies to a citywide department of community development. In many instances, this type of department combines functions such as planning, housing, model cities, code enforcement, and urban renewal, all presided over by a single development administrator. Experience with this form of organizational form is limited. However, its adherents feel it promises to overcome the obstacles that prevented Model Cities agencies from effectively mobilizing the resources of those programs and agencies whose resources are essential to any coordinated assault on urban ills.

Re-Emphasis of the Target Area Approach

Recognizing that in the immediate future no city will receive sufficient Federal and state aid and raise enough revenues of its own to eradicate slum conditions and modernize its physical plant, each locality confronts a series of trade-offs in allocating whatever resources are available. The urban renewal, model cities, and code enforcement pro-

grams confined expenditures within the boundaries of designated project areas, generally the hardest-core, slum neighborhoods. Today the target area approach implicit in these categorical programs appears to be giving way to programs characterized by a wider dispersal of funds among a larger number of neighborhoods and a greater emphasis on residential conservation than on large-scale slum clearance and downtown redevelopment projects.

In the interest of increased local flexibility, the block grant program changes the geographical restrictions on where funds can be spent, in effect converting greater portions of the community into "program areas." As anticipated, local governments appear to be using this freedom to place proportionately greater emphasis on neighborhood improvement programs designed to prevent deterioration in lower and moderate income neighborhoods in the incipient stages of decline as well as existing renewal and model cities areas, rather than massively concentrating efforts in those few neighborhoods in the most advanced stages of decay and abandonment.

The explanation of the movement away from target area programs and large-scale capital projects lies in fundamental changes in local political and economic circumstances rather than simply in the specifics of Federal guidelines requirements and funding levels. There are several reasons:

- Cities have become leery of large-scale projects, either involving substantial relocation of residences or businesses, or having visible environmental consequences. Most of the more dramatic public sponsored inner-city development projects initiated in recent years—Park Plaza in Boston, Yerba Buena in San Francisco, for example—have become embroiled in political controversy and litigation. To some extent local officials have become aware of this new set of concerns, and are alert to the risks of pursuing proposals opposed by citizen groups having increased political sophistication and new legal tools, such as the environmental impact process, at their disposal.
- The glutting of the office market in many downtown areas, prohibitive land costs, and general economic conditions have undercut the financial feasibility, at least in the short run, of many of the more ambitious downtown development proposals.
- The increased cost of borrowing in the municipal bond market has had the effect of limiting the planning horizon for capital projects.

New Approaches to Neighborhood Preservation

Despite the setbacks caused by the credit shortage and recession, planning for large-scale multi-use projects continues in some localities. Examples include the Illinois Center proposed for downtown Chicago and the Bedford Pines project in Atlanta. The Los Angeles City Council voted in July 1975 to move ahead with the largest redevelopment project ever undertaken in the United States, encompassing virtually the entire portion of the downtown area—almost 2½ square miles, or 255 square blocks. However, in early 1976 continued Council support for this project was less sure and deferral of full-scale redevelopment is probable.

Smaller cities—in the 25,000 to 100,000 population range—appear more likely than larger cities to allocate the lion's share of their available community development funds to downtown commercial development projects. However, the most innovative and active community development efforts at present appear directed more towards the preservation and "recycling" of existing neighborhoods and structures. A recent HUD sponsored survey of locally initiated preservation efforts has catalogued new approaches to:

- code enforcement such as the apartment licensing programs in Lincoln, Nebraska and the University City Occupancy Program, Madison Heights, Wisconsin, which mandate inspection at tenure change;
- the management of abandonment to limit and reverse this process through measures such as the homesteading programs in Philadelphia, Baltimore, and Washington; Newark's Municipal Land and Building Action Programs, etc.;
- Historic preservation, particularly the use of new legal tools designed to protect and restore entire districts of historic value, not simply landmark struc-

tures; with increased frequency—as in the Old West Side in Ann Arbor, Michigan and the Butchertown, Inc. Program in Louisville, Kentucky—historic preservation efforts have attempted to retain existing low and moderate income families traditionally displaced by preservation activities;

- rehabilitation financing, including revolving funds such as the Public Interest Lenders Program in Portland, Oregon; high risk loan indemnification plans such as the Fort Worth Housing Trust; local loan guarantee programs;
- focused community services designed to strengthen neighborhood cohesion and compensate for deficiencies in basic services, such as the volunteer security patrols provided through Dayton, Ohio's Neighborhood Assistance Officers Program, the housing counseling activities of the PACE Program in Providence, the Little City Halls Program in Boston;
- comprehensive efforts, attempting to treat the social, physical, and economic problems of a specific neighborhood, such as the Hill 2,000 Program in St. Louis which stemmed out-migration from an old ethnic neighborhood, and the well-known Neighborhood Housing Services Program, which originated in Pittsburgh and has been duplicated elsewhere through the Urban Reinvestment Task Force, a joint venture of HUD and the Home Loan Bank Board.

These approaches reflect a widespread perception among local officials that massive capital investments in the most deteriorated neighborhoods have yielded marginal returns and that timely intervention in those neighborhoods can, with more modest expenditures, achieve stability.

In line with the wider use of the new types of approaches described above, a number of cities have also moved recently to reorient their planning and capital budgeting on a neighborhood by neighborhood basis. This contrasts with the more traditional approach based on city-wide systems and facility components like transportation and recreation, etc.

Salutory as the new attention to small-scale, preservation-focused strategies may be, citywide interests remain that must balance with neighborhood preferences in allocating available resources and determining the appropriate balance between redevelopment and conservation in any given community.

The Link Between Development Capability and Fiscal Reform

The ability of inner cities to finance their long-term development needs is linked inextricably to fiscal and tax reforms and more cost-effective management at both the state and local level. Perhaps the most dramatic of the options proposed would be greater state assumption of responsibility for the cost of basic community services such as education, welfare, and health. Structural innovations, such as the region-wide government recently established in Indianapolis or the regional-cooperative arrangement to share social burdens negotiated in the Minneapolis-St. Paul area, also have comparable consequences for core area development.

Whatever the means, the achievement of a workable fiscal structure at the municipal level is a prerequisite for maintaining a climate conducive to private investment that already exists. Moreover, without any dependable surplus of revenues over operating expenses, cities will simply have to forego any capital improvement activities that require major local contributions for startup costs or debt amortization.

Impact of the Community Development Block Grant Allocation

The magnitude of program impacts on blight and poverty will not be evident overnight, regardless of the effectiveness with which local communities expend their block grant funds. The essential need for a healthy economic recovery without spiraling inflation dictates a controlled level of Federal investment in renewal of the nation's communities. As has been true in the past, cities must employ those strategies that encourage private investments for community development. The Community Development Block Grant Program offers opportunities to local officials in rationalizing and coordinating public expenditures with private investments in community development. A major objective of the block grant approach is to provide, "assistance on an annual basis, with maximum certainty and

minimum delay, upon which communities can rely in their planning." Because metropolitan cities and urban counties receive funds through a formula distribution, the relative magnitude of Federal investment is predictable. Local officials are thus able to involve their business communities, builders, developers, industries, and financial institutions with a greater level of confidence.

The present projected budget allocations for block grants of $2.8 billion for fiscal year 1976, and $3.2 billion for fiscal year 1977 reflect the priority given by the Administration and the Congress to holding program growth to noninflationary levels. Actual total Federal outlays for community development by all domestic departments has risen from $2.17 billion in fiscal year 1970 to $3.15 billion in fiscal year 1975. The fiscal year 1977 budget authority is recommended at $4.11 billion; a level intended to meet national objectives for community development at a realistic rate.

Structuring Incentives for Private Investment

Whatever level of resources the Federal and state governments can make available to the cities, progress towards modernizing and revitalizing urban centers will depend on the success of municipalities, first, in improving their direct access to private capital markets and, second, in removing the obstacles that discourage private land assembly and capital investment. Local governments would prefer to explore lower cost alternatives than the traditional urban renewal approach for channeling private investment into desired forms of development. Among the specific types of incentives that have been proposed are the following:

- conferral of eminent domain powers on specially constituted "private" redevelopment entities, with legal safeguards to insure against misuse and assure a high degree of consistency with city land use policies, as exists in Missouri where several privately sponsored commercial renewal projects have been carried out under such authority; and
- "pooled contracts" linking participation in low risk projects like garages and schools and financing to participation in higher risk projects in low income areas.

The House Ways and Means Committee is considering reforms in the favorable tax treatment now accorded to income from real estate holdings. Likely reforms would involve either imposing a minimum tax or strict limits or artificial losses. If enacted, these provisions would alter the attractiveness of real property compared to other types of investment opportunities, and, in consequence, could have significant implications for community development policies aimed at securing private sector participation in rebuilding the nation's cities.

In recent years there has been increased reluctance, particularly within the Treasury Department, to finance societal objectives indirectly through "tax expenditures" as opposed to direct budgetary appropriations. The Congressional Budget and Impoundment Control Act of 1974 required for the first time that the President's budget systematically list such expenditures, i.e., exceptions to normal corporate and individual income taxes that reduce liabilities for particular groups.

XI. Toward Balanced Economic Growth

THE GOAL OF NATIONAL ECONOMIC RECOVERY

Recent economic growth patterns show that the gap between rich and poor sections of the United States has closed significantly. The South—historically the region that lagged most conspicuously behind other areas of the country—is today enjoying a comparatively high rate of economic growth. The exodus of rural southerners to the metropolitan areas of the North and West has tapered off and southern areas are now among the major recipients of today's migrants. Moreover, the gaps in per capita income among regions of the country have been narrowing.

The recent recession has shifted attention from the elimination of hardcore "pockets" of poverty to the restoration of overall economic health and higher rates of national productivity. Ambitious Federal efforts to solve problems of chronic structural unemployment on a geographic basis—the Appalachian and Title V Regional Commissions and the Office of Economic Opportunity—originated at a time when some locations were experiencing chronic poverty despite unprecedented national prosperity.

The facts that South to North migration has receded, that urban growth has materialized as a southern phenomenom, and that income equalization among multi-state regions has progressed by no means negate the continued importance of regional problems in the years immediately ahead. Stubborn concentrations of poverty, both rural and urban, still persist in virtually every section of the country. A number of future area and regional declines related to regional changes in energy costs, water availability and other resource problems are predictable.

MODIFICATIONS IN FEDERAL ASSISTANCE FOR URBAN AND RURAL ECONOMIC DEVELOPMENT

At the present time, the Federal government's commitment to subnational economic development is represented primarily by the activities of the Economic Development Administration, Title V Regional Commissions, the Appalachian Regional Commission, and selected community and human development programs administered by the Departments of Agriculture, Housing and Urban Development and Labor. Over the past few years, several important changes have occurred in legislative authorities and administrative policies through which these programs are carried out. Among the more important of these changes are:

- the new authorities provided through the Public Works and Economic Development Amendments of 1974;
- the enlarged scope of the Title V Multi-state Regional Commissioners and strengthened role of local development districts under the Regional Development Act of 1975;
- consolidation of categorical programs for manpower and community development into block grant programs through the Comprehensive Employment and Training Act of 1973 and the Housing and Community Development Act of 1974 and
- a partial shift of emphasis in rural economic development away from public investment in infrastructure and towards investment in directly productive activities, made possible in part through the Rural Development Act of 1972, as well as a variety of innovative departures in economic development strategies at the state level.

The Public Works and Economic Development Amendments of 1974

The Economic Development Administration (EDA) was created in 1965 as the successor agency to the Area Redevelopment Administration. EDA's missions include distressed area assistance, regional development and counter-cyclical adjustment. EDA has a broad assortment of tools including public works, business loans, technical assistance, economic adjustment assistance, economic research and planning assistance for small local governments, state governments, and major urban governments.

The Public Works and Economic Development Amendments of 1974 established significant new authorities for EDA and broadened the range of redevelopment areas qualified on the basis of substantial unemployment over the preceding year. The legislation retains the basic funding mechanisms and organization for delivering Federal economic development assistance, but responds in part to previous Administration concerns about EDA programs, particularly the need for strengthened state and local capacity to anticipate rather than react to structural changes in their regional economies.

The Amendments of 1974 gave EDA responsibility and funds to encourage economic development planning at the state government level and within major urban governments. In approximately one year of operation, this program has been accepted and initiated in 47 state governments and in 33 major urban governments. In concert with the ongoing economic development district effort, this program provides a major building block for future regional and national development programs. Over the past decade, EDA has created economic development districts in 1,310 counties. Additionally, EDA has received applications and has authorized funding for 86 new economic development districts and 486 counties. The basic program instructions for local economic development planning now operate in approximately one-half of the counties in the U.S. The economic development districts directly involve local elected officials and private sector leadership in forming and implementing economic development efforts.

The 1974 Act also created a highly flexible form of funding, where no local share is mandated from states, Indian tribes, cities, redevelopment districts, and other jurisdictions confronting severe problems of economic adjustment. The Act's primary intent is to help communities anticipate threatened economic dislocations early enough to plan and take remedial actions which reflect local priorities. The Act potentially applies to many local situations, but it particularly addresses severe structural unemployment likely to result from public decisions, such as the enforcement of environmental regulations or the closing of a Federal facility. The main thrust of EDA's overall program, however, is still aimed at the revitalization of depressed areas which evidence some long-term growth potential.

The Regional Development Act of 1975

The Public Works and Economic Development Act of 1965 authorized Multi-state Regional Commissions to prepare long range development plans and programs and to assist in their implementation through the coordination of Federal, state, local and private activities.

The Regional Development Act of 1975 directed Multi-state Regional Commissions involvement into four new areas: energy, transportation, vocational education, and health. Although the Commissions have always had authority to deal with regional development, the new Act gives clearer direction and authority to broaden their capabilities.

The plans typically required of each Commission inventory the region's assets and problems, delineate barriers to overcoming problems, set forth a strategy for assembling resources needed to surmount those problems, and identify programs and projects suited to meeting development needs. Since the Commissions represent both the member states and the Federal Government, plans and programs which they develop reflect these joint interests. States are afforded opportunity to participate in and influence Federal resources allocated in behalf of regional development.

Another important provision of the Regional Development Act of 1975 strengthens the role of local development districts in the preparation of state development plans. It directs the states to consult with the dis-

tricts, local units of government and local citizen groups, and to take their goals, objectives and recommendations into consideration in determining and coordinating areawide programs and projects to be included in the state development plans. Districts may receive financial and technical assistance for developing programs on an areawide basis.

Use of CDBG Funds for Urban Economic Development Purposes

In most urban communities, the funds now available through the Community Development Block Grant program represent a flexible, assured source of Federal funds for economic development purposes. They are flexible in that communities may define their own community development projects within the range of statutorily defined eligible activities. Entitled cities and urban counties are assured of a certain level of funding from annual appropriations, based on the proportion which are apportioned on the basis of each entity's population, poverty and overcrowded housing.

Local Funding Priorities

Under more flexible funding provided by the introduction of block grants, communities have greater discretion than before to concentrate Federal aid to support activities having high local priority. The Congress, in order to capitalize fully on the potential of the block grant approach for reducing costly and cumbersome red tape and for broadening local flexibility, relaxed the traditional, detailed front-end review of applications in favor of a monitoring program that will, in effect, serve as a post-audit of results and impacts.

Preliminary returns on the use of block grants indicate that many communities are assigning a high priority to neighborhood improvements and less priority to major capital intensive efforts, such as downtown redevelopment projects. Analysis of first-year funding programs indicates that 45 percent of the recipients have allocated five percent or more of their funds to economic development-linked activities and 12 percent of the cities surveyed have devoted over a quarter of their funds to that purpose.

Adequacy of Local Powers For Economic Development Purposes

There may be a need for some states to increase the authority of local communities to perform key community development functions which are currently restricted or prohibited by state law. A Community Development Capabilities Study conducted by the National League of Cities and U.S. Conference of Mayors found that a substantial percentage of the cities surveyed lacked certain necessary powers, although on the balance local governments possessed sufficient authority for the tasks at hand. The specific limitations most frequently identified included:

- timing and sequential control powers and flood plain control powers;
- renewal powers such as the ability to write down land costs, clear privately owned land, lease land to private developers, or sell or donate property to individuals;
- authority to pay requisite costs for relocation assistance and provision of replacement housing; and
- direct legal authority to provide various types of housing subsidies, such as cash rental subsidies. In many instances, however, these functions can be performed by an independent authority or district.

The limitations that constitutions or home-rule charters in 20 states place on the ability of localities to extend credit to individuals, corporations or other organizations inhibit the ability to leverage Federal funds by establishing revolving funds for rehabilitation, land development, and business development loans or certain types of special purpose land banking. However, removing these limitations must be weighed against the need to insure local fiscal soundness and managerial capability, which is a responsibility of the states.

Implementation of the Rural Development Act of 1972

In addition to the assistance available through EDA and the Title V regional commissions, a significant source of economic development funds for non-metropolitan communities is the programs authorized by the Rural Development Act of 1972.

Among this Act's provisions are a number of programs explicitly addressed to the economic concerns of rural areas, including "rural enterprise loans" for both establishing and operating non-farm businesses as supplements to farm income, business and industrial loans and grants, and community facility loans. The 1972 Act also modified and expanded existing programs such as water and waste disposal grants and rural development planning grants. These can support economic development activities, ensure coordination with other rural development programs, and provide the community infrastructure necessary for attracting private business investment. In fiscal year 1976 the Federal Government appropriated $350 million for industrial and business loans and $670 million in loans and $262 million in grants for water, sewer, and other community facilities. These funds are dispersed to eligible political subdivisions, based on a state's share of rural population and low income families.

SOME INNOVATIVE DIRECTIONS FROM THE STATES

New Instruments for Broadening State Finances

The State financial inducements developed in the 1970's generally have been intended to increase the profitability of formerly neglected investments through pooling risks, reducing transactions costs, and increasing the liquidity of small debt issues.

However, experience with these approaches is still limited, and the anticipated positive effects remain to be seen. The new instruments adopted by the states over the past five years also broaden the range of state incentives for financing the expansion of plant and equipment and of municipal infrastructure that may be a prerequisite for developmet (See Table XI–1).

Some Specific Precedents

The innovative approaches with which some states have been experimenting include incentives for the following types of activities.

- *New product development.* To fill a perceived gap in venture capital, the state of Connecticut has created a Product Development Corporation which enters into 50–50 joint financing arrangements with private businesses. Financed by grants from the State Department of Commerce and loans from the state, the PDC hopes to capture the benefits from its investment in new products through royalties on sales. Other states are considering a similar move.
- *Expansion financing.* Contrary to common belief, employment changes among states are more affected by the expansion and contraction of existing businesses than by movements of industries into or out of state. While large corporations can finance expansion by issuing debentures in national securities markets, smaller companies usually depend upon medium-term (three to eight year) loans from local banks. In periods of fluctuating interest rates, commercial banks have become less willing to tie up their funds for such terms, even with the 90 percent guarantees available from the Small Business Administration (SBA). To increase the willingness of banks to make such loans, the Kansas Development Credit Corporation, a privately funded but public-purpose financial intermediary, began in the late 1960's to purchase the guarantee portion of these loans for resale to the state pension fund.
- *Pooling of small business debt issues.* In order to redress the imbalanced accessibility of large and small firms to capital, Connecticut has created and "umbrella" revenue bond program that essentially pools issues of less than one million dollars in a large moral obligation bond of the state development authority. As a result, the market for securities of small companies is effectively broadened and the high costs of borrowing reduced.
- *Municipal bond banks for financing infrastructure.* As indicated above, infrastructure such as schools, sewer systems, and feeder roads, have generally been viewed as a prerequisite for directly productive investment. With the rise of Federal water quality regulation, the availability of sewer facilities will

Table XI–1

AVAILABILITY OF CAPITAL MARKET INCENTIVES BY STATE

	FRONT END		WORK. CAP.	MEDIUM TERM	LONG-TERM FINANCING FOR LAND, PLANT & EQUIPMENT								MUN. INFRA	TOTAL
	Prod. Devel.	Bus. Devel.		Dev. Credit Corp.	Direct Loan		Loan Guar.		Revenue Bonding		Spec. Bldg.		Bond Bank	
					st.	lo.	st.	lo.	st.	lo.	st.	lo.		
Alabama										●		●		2
Alaska					●				●	●				3
Arizona									●	●		●		3
Arkansas				●			●			●				3
California			●	●			●							3
Colorado				●						●		●		3
Connecticut	●			●	●*		●		●					5
Delaware									●					1
Florida				●						●				2
Georgia				●					●	●		●		4
Hawaii					●									1
Idaho														0
Illinois			●		●					●				3
Indiana							●			●				2
Iowa				●						●				2
Kansas		●		●						●				3
Kentucky				●	●					●				3
Louisiana										●				1
Maine				●			●			●	●		●	5
Maryland				●			●			●				3
Massachusetts				●						●	●			3
Michigan										●				1
Minnesota					●b					●				2
Mississippi				●						●		●		3
Missouri				●						●				2
Montana				●						●				2
Nebraska				●						●		●		3
Nevada										●				1
New Hampshire				●	●		●		●		●			5
New Jersey					●c		●c		●					3
New Mexico										●		●		2
New York				●	●	●	●		●	●				6
No. Carolina				●										1
No. Dakota			●	●		●	●		●	●				6
Ohio							●			●				2
Oklahoma				●	●	●			●	●		●		6
Oregon										●				1
Pennsylvania				●	●	●			●	●		●		6
Rhode Island				●			●		●	●	●			5
So. Carolina				●						●				2
So. Dakota										●				1
Tennessee										●		●		2
Texas					●				●	●				3
Utah				●					●	●				3
Vermont				●	●		●		●	●	●		●	7
Virginia				●						●		●		3
Washington		●		●						●				3
West Virginia				●	●					●				3
Wisconsin										●				1
Wyoming				●						●				2
TOTAL	1	2	3	30	14	4	13	0	15	42	4	11	2	

NOTE: *"Umbrella bonding" is considered a direct loan because the full faith and credit of the state provides the ultimate backing.
st. = state operated
lo. = locally operated, state-authorized
b. = EDA areas only
c. = designated areas

SOURCE: Report to the New England Regional Commission, September 1975.

acquire even greater significance in determining the suitability of a site for development. The experiences of Vermont and Maine, which established Municipal Bond Banks in the 1970's, suggest consolidation of financing increases the ratio of borrowing to capital expenditures especially for small issuers with less than prime rating, i.e., for small towns.

- *Other innovations.* Several states are considering more aggressive use of their own deposits for public purposes. North Dakota, which places deposits in its own bank, has provided a unique model of a state "central bank" that is being seriously considered by New York State, among others. Such a central bank would use state deposits to provide additional liquidity to commercial banks and savings and loan associations in times of tight money. In addition, Illinois's "linked-deposit" plan provides a distribution of deposits to banks in proportion to their investment in "meritorious" projects, such as housing for the elderly or minority business.

INCREASING THE AVAILABILITY OF CAPITAL FOR REGIONAL ECONOMIC DEVELOPMENT

Authorized in 1966, Title V Regional Commissions are now more numerous and have greater funding than before. With their new resources, the Commissions are undertaking a more intensive search for new programming initiatives.

While substantive problems are particular to each region, there are two basic institutional issues that are being widely raised: the possible transformation of development finance agencies from government bureaus into autonomous financial intermediaries; and the tighter linkage of local, state, regional, and Federal agencies through the creation of a hierarchical development finance system.

These issues are particularly relevant now, given the general concern with availability of capital for subnational development, particularly in chronically depressed regions and urban areas.

Independent Development Finance Institutions

The three major Federal units for financing regional development, EDA, the Small Business Administration and the industrial development program of the Farmers Home Administration, are all operated on the basis of annual appropriations or authorizations from Congress.

This contrasts with the independent development finance institutions established by the Federal government, particularly in the fields of agriculture and housing. For example, the Farm Credit System for financing farm mortgages and providing working capital was initially funded by a loan from the Treasury. Upon borrowing from the Farm Credit System, farmers had to purchase stock in their local Land Banks or Intermediate Credit Banks, which eventually turned the stock into user-owned units. The local banks in turn borrowed from regional Federal Land and Intermediate Credit Banks, which could borrow from a central bank. The Farm Credit System was able to repay its seed loan to the Treasury in the 1960's.

State development finance institutions also tend to be organized as public-purpose corporations. These include industrial loan-guarantee authorities, as well as housing finance authorities.

Some observers, however, view the insulation from political influence of public financial corporations as a potential liability, bringing with it a lack of accountability to basic public interests. The independence of such entities from the annual appropriation process, their financial self-sufficiency, and their consequent preoccupation with remaining solvent, is seen as making them unresponsive to changing local needs and reluctant to fund projects that promise substantial social benefits but also entail significant risks.

Those who question using autonomous financial intermediaries to finance regional economic development emphasize that such initiatives would be inconsistent with Congress' desire to oversee the budget more carefully. They also question the success rate of those financial intermediaries already in existence and note that any such entity would require some form of regulation to ensure accountability.

A MORE EFFECTIVE UTILIZATION OF EXISTING HUMAN RESOURCES

Federal policy recognizes the need to increase the utilization of human resources as a component of economic growth and development policy at both the national and subnational levels. This recognition is evidenced by the diverse array of programs that have been initiated.

In 1968, Federal manpower program assistance accounted for 930,000 man-years. By fiscal year 1976, there were over 2 million man-years of comparable activity. Federal expenditures of manpower training, vocational education, employment services, and other human resource training (not including public service jobs) underwent a comparable increase, rising from $2.1 billion in 1968 to approximately $5.6 billion for fiscal year 1976.

The sharp rise in unemployment during the second half of 1974 was alleviated for millions of workers by the unemployment insurance system which provided substantial income replacement while they sought work. A series of temporary laws were enacted which provided coverage to more workers and extended the maximum number of weeks for which the benefits were available.

The economic development and manpower programs underway today reflect three general types of labor market policies that effect the utilization of existing human resources:

- those that "open doors" for individuals who have been excluded from the labor market;
- those that enhance the training and education of "disadvantaged" groups; and
- those that operate to improve the functioning of the labor market.

These categories provide the general framework within which the efficacy of existing programs and the issues in respect to future policy directions are being developed.

Opening Doors for Individuals

One of the most serious wastes of human resources results from employment discrimination. Job discrimination persists for women, the aged, the handicapped, and other minorities despite improvement in recent years.

Since the passage of the Civil Rights Act of 1974, both private and public sector commitments to equal opportunity employment have resulted in improvement in employment opportunities. Since that time the Federal Government has continued to enlarge the scope of its efforts directly related to civil rights objectives.

Training and Education of "Disadvantaged" Groups

A number of Federal programs are designed to increase the productivity of individuals from economically disadvantaged groups, thereby strengthening their ability to participate in the labor market and compete for better paying jobs.

The Transition to CETA

One of the major innovations in Federal employment assistance strategy in recent years was the enactment in 1973 of the Comprehensive Employment and Training Act. CETA replaced the pre-existing Federally directed categorical programs with grants to States and localities. Local governmental units were given flexibility, within Federal guidelines, to plan and operate manpower programs tailored to their perceptions of needs within the local labor market. Given the recent implementation of CETA (fiscal year 1975 marked the program's first completed annual funding cycle), relatively little data is as yet available to assess the program's impact. A number of studies are now being conducted in order to evaluate experience with this new approach to manpower programs. In addition, the impact of the recession of 1974 and 1975 diverted program attention, both at the national and local level, from the implementation of CETA mechanisms.

Because many prime sponsors were new to manpower activities, it appears that many of them have elected to retain existing programs and services until evaluation of local needs and delivery potential could be made. Still, as illustrated by Table XI–2, a number of areas have made changes during the transition to CETA.

Public Service Employment Under CETA

A program of public service employment was established under Title II of CETA that emphasizes transitional employment in the

TABLE XI-2

COMPARISON OF LOCAL MANPOWER EXPENDITURES UNDER FY '74 CATEGORICAL PROGRAMS AND CETA TITLE I

	FY '74 Categorical (percent)	FY '75 CETA Title I (percent)
Total	100.0	100.0
Institutional Training	28.0	31.0
Work Experience	50.0	61.0
On the Job Training	22.0	8.0

Source: Department of Labor

public sector for the unemployed and disadvantaged. One response to the recent recession was to increase funding of public services under a new temporary employment add-on to CETA. Through much of fiscal 1975 and 1976, about 310,000 public service jobs were supported from CETA Title II and Title VI sources.

Youth Training and Employment

The Job Corps, operated directly by the Department of Labor, has enrolled approximately 500,000 disadvantaged young men and women (aged 16 to 21). It was first established in 1965 as a residential program providing a wide range of education, training, counseling, and health services to facilitate job placement. Although this approach provides a more supportive environment for training, especially for severely disadvantaged youth, than they are likely to have at home, the cost of providing the services is a major obstacle to the expansion of the program.

Under Title I of CETA, prime sponsors also provide employment assistance and work experience programs to enable youths to remain in school while preparing to enter the job market. In FY 1975 approximately three out of five participants served by Title I programs were under age 22.

Each summer there has been a major effort to provide jobs to needy youths. In 1975, for example, the Department of Labor and other agencies made available about 1.6 million job opportunities at a cost of $567 million. About ½ of these jobs were funded from CETA programs (mostly from Title III) and the rest were activities sponsored by the Civil Service Commission, the Departments of Agriculture and Interior, the Employment Service and the National Alliance of Businessmen.

Improving the Functioning of the Labor Market

A number of current policies have as one of their objectives an improvement in the functioning of the labor market, including increases in the efficiency with which workers obtain jobs. This involves providing information to workers on job availability. Although most workers seek and obtain work on their own, through friends, or other devices, the Employment Service also assists many workers and employees.

The Federal-state employment service system has developed a computer-assisted method for exchanging job vacancy information between state employment agencies. Employer requests for workers which remain unfilled for a month are made known to all State Employment Service agencies to facilitate the referral of qualified job seekers to the appropriate employers outside of the worker's geographical area. The Department of Labor has recently initiated a program to explore additional possibilities for mobility programs. The activities of employment services are of course primarily directed to meeting the needs of workers and employers within a community or state before broadening the search over a larger region.

XII. Guiding and Controlling Land Development

In recent years, as developable urban land has become a scarcer resource, communities have become more concerned about both the man-made and natural environment. In addition to other results, this concern has evolved into a more acute sensitivity to the implications of development patterns for energy use and for the provision of basic municipal services.

Today many communities desire to reconcile this new environmental and even newer resource conservation ethic with a number of other important and sometimes conflicting concerns. These latter concerns include the need to maintain employment and tax bases, the pressures to make homes available to a "fair share" of low and moderate income families and the need to reduce the residential isolation of minority groups.

At the same time, the areawide nature of many of these concerns has prompted the innovative efforts in land use management at the state level and raised a number of critical issues on the proper division of labor in planning and directing growth within the Federal system.

The degree of local, state and Federal involvement in the control of land development has been extremely varied. County and local governments have undertaken diverse initiatives to manage land development in a more comprehensive and forceful manner. Historically, local police powers (in the form of zoning and other land use controls) and local capital investment programs have been the most important instruments through which public interest in the form, quality and timing of new development is expressed. Over the past few years, the states as well have moved to assume responsibilities for certain types of land use decisions, particularly where the potential areawide impacts are substantial. On the whole, the Federal government has remained relatively aloof from local land use planning and development because the issues involved are more properly addressed by the states and localities and the private sector.

The Environmental Protection Agency recently surveyed the enactment of local land use controls by cities of differing sizes. The findings suggest that an impressive percentage of localities, both large and small, have supplemented traditional zoning and subdivision regulations to some extent with special controls designed to improve their local capabilities for dealing with the fiscal and environmental consequences of new growth (Table XII–1).

Innovative Growth Management Techniques

Thus far, the more sophisticated innovative efforts at comprehensive growth management have usually been used by communities on the urban periphery that are primarily residential in character, composed of a relatively affluent, well-educated population and subject to intense growth pressures. Over the past few years, several such communities around the nation have shown considerable ingenuity in structuring and implementing new techniques for managing and limiting their growth. Examples of these techniques can be categorized in terms of their primary purpose:

- **Purpose:** To immunize certain land uses such as open space, farm land, and districts of historic or architectural interest from development pressures.
- **Measures:** Transfer, purchase, or donation of development rights, tax inducements such as tax on present use; roll-back penalties; contracts to provide preferential tax relief for nondevelopment guarantees.
- **Purpose:** To limit, delay, or control the rate and location of development.
- **Measures:** Development timing ordinances, conditional zoning moratoria on sewer and building permits, growth ceil-

Table XII-1

CITY ENACTED LAND USE CONTROLS, BY POPULATION SIZE OF CITY AND OTHER CHARACTERISTICS

Type Of Land-Use Control

	No. of Respondents	Architectural Appearance[1]		Flood Plain Zoning		Growth Limitation		Historical Preservation		Marshland Controls		Open Space Zoning		Instaltn of Public Facilities[2]		Dedic of Land For Pub Purpos[3]		Zng to Protect Natrl Resources[4]	
	(A)	No.	%(A)	No.	%(A)	No.	%(A)	No.	%(A)	No.	%(A)	No.	%(A)	No.	%(A)	No.	%(A)	No.	%(A)
Total, All Cities	1115	297	27	507	45	258	23	262	23	132	12	531	48	921	83	519	47	390	35
Population Group																			
Over 500,000	10	3	30	5	50	2	20	8	80	2	20	6	60	8	80	4	40	2	20
250,000-500,000	18	4	22	12	67	1	6	9	50	4	22	7	38	14	78	8	44	1	6
100,000-250,000	61	15	25	33	54	14	23	30	49	11	18	23	38	51	83	33	54	17	28
50,000-100,000	142	43	30	61	43	38	27	37	27	16	11	70	49	127	89	75	53	51	36
25,000- 50,000	282	71	25	131	46	66	23	62	22	30	11	142	50	226	80	128	45	99	35
10,000- 25,000	602	161	27	265	44	137	23	116	19	69	11	283	47	495	82	271	45	220	37
Geographic Region																			
Northeast	252	58	23	130	52	74	29	72	29	61	24	119	47	189	75	101	40	91	36
North Central	327	84	26	163	50	56	17	69	21	36	11	163	50	264	81	162	50	112	34
South	.274	46	17	121	44	62	23	61	22	17	6	114	42	232	85	99	36	89	32
West	262	109	42	93	35	66	25	60	23	18	7	135	52	236	90	157	60	98	37
Metro/City Type																			
Central	195	41	21	89	46	37	19	75	38	23	12	78	40	169	87	84	43	50	26
Suburban	592	206	35	285	48	170	29	114	19	81	14	302	51	481	81	297	50	220	37
Independent	328	50	15	133	41	51	16	73	22	28	9	151	46	271	83	138	42	120	37
Form of Government																			
Mayor-Council	279	72	26	123	44	65	23	73	26	35	13	141	51	213	76	124	44	99	35
Council-Manager	769	214	28	348	45	180	23	171	22	75	10	360	47	664	86	366	48	266	35
Other	67	11	16	36	54	13	19	18	27	22	33	30	45	44	66	29	43	25	37

[1] Regulates aesthetic element of the environment.
[2] Requires installation of public facilities (such as sewers) by developers.
[3] Requires dedication of land for public purposes (such as schools and parks) by developers.
[4] Protects natural resources or ecological systems.

Source: U.S. Environmental Protection Agency, Environmental Management and Local Government, 1974.

ings, rationing of building approvals.

- **Purpose:** To make zoning a flexible tool for negotiating a high standard of environmental quality and urban design in large-scale, privately financed developments and to grant local officials more, yet structured, discretion when making planning decisions in areas undergoing rapid and unpredictable types of change in their land use.
- **Measures:** Planned unit development (PUD) ordinances, planned commercial districts, contract zoning, incentive zoning, interim zoning controls, new community development districts, design review and site plan review procedures, environmental performance controls.
- **Purpose:** To increase housing opportunities for low and moderate-income families.
- **Measures:** So-called "inclusionary zoning" techniques such as requiring residential developments above a given size to include a given percentage of units for lower income occupancy.
- **Purpose:** To insure that new development pays a fuller share of its own infrastructure and public service costs.
- **Measures:** Mandatory dedication of sites for public facilities; requirements of capital facility advances or equalization fees, special pricing policies for utility connections.

A few communities and metropolitan regions have made some progress toward establishing comprehensive programs of growth management and control. Such programs seek to integrate the types of legal techniques described above with advanced impact assessment and development information systems, with traditional planning and regulatory activities, and most important, with the programming of major public investments which shape the pattern of private development decisions.

The Courts and Growth Control

Many new growth control measures have been challenged in the state and Federal courts.

Major judicial developments in land use law affecting local growth policy have come from state courts, whereas Federal courts have, in large measure, limited their intervention in local land use decisions to cases of racial discrimination. State courts have generally given great deference to local zoning and land use decisions but have reserved the possibility of invalidating a land use regulation because:

- it unreasonably restricts the use of private property in relation to the public benefit to be achieved, thus denying property rights without due process of law and "taking" of private property without just compensation;
- it is not within the authority of the local government under the state's zoning enabling legislation; or
- it denies the landowner equal protection of the law by discriminatory treatment of two similarly situated parcels.

In recent years, the extent to which a local land use policy discriminates against lower income families emerged as a major concern in several state courts. The Supreme Court of New Jersey in 1975 held that every developing municipality in that state must, by its land use regulations, presumptively make possible an appropriate variety and choice of housing. The New Jersey court stated that local regulations must permit the development of lower income housing, to the extent of the municipality's fair share of the present and prospective regional need for lower income housing.

It is too soon to say whether the New Jersey precedent will prove influential in other states. Pennsylvania, Ohio, and Virginia already have strong precedents overturning various forms of exclusionary zoning. Litigation is continuing in other states.

Other growth management programs have been upheld in state appellate courts. For example, a divided New York Court of Appeals upheld a plan by the town of Ramapo, New York to phase the rate of development to coincide with the provision of necessary public services over an eighteen year period. The substance of the Ramapo plan and its legal basis is still a controversial discussion topic among lawyers and planners.

Other Local Responses to Growth Management

Making Land Available for Redevelopment—One of the principal characteristics of deteriorating neighborhoods and communities is that they are previously built environments. Frequently, they have been designed to

serve a former era and have represented less than full utilization of a neighborhood's present economic potential. Within this context, the public sector has intervened in the marketplace by acquiring and clearing developed properties and making them available to the private sector for redevelopment.

Historic Architectural Districts—Some communities have begun to upgrade existing neighborhoods by the creation of historic architectural districts. One approach is the formation of a historic preservation district and an architectural review board with powers which vary from making recommendations to the local planning board to the vetoing of proposed architectural changes. A number of communities have encouraged private sector actions to restore the charm and character of historical areas.

Encouraging Full Use of Vacant Land and Buildings—Deteriorating areas often have the potential to support more intense usage which could increase the tax base and diversify employment. Tax incentives, urban homesteading, housing subsidies, and below-market financing are some of the techniques which localities have used to encourage better use of vacant land and buildings in certain neighborhoods.

Upgrading Existing Neighborhoods—Communities have used a variety of rehabilitation, public capital improvements, financial assistance and preservation techniques to preserve, restore and upgrade existing neighborhoods.

The most common programs are subsidized below-market interest rate rehabilitation loans and rehabilitation grants to encourage property owners to upgrade their properties. Some communities link these grant and aid programs with local code enforcement programs. In some cases, the local governments upgrade public services including streets, sidewalks and schools to encourage residents to improve their properties.

The Neighborhood Housing Services (NHS) concept is an important public-private collaborative effort to encourage private sector investments in deteriorating neighborhoods. The program is now being implemented in over 30 communities throughout the Nation. The Urban Reinvestment Task Force, a joint HUD and Federal Home Loan Bank Board effort, provides assistance and limited funding. The important steps in the NHS effort include:

- organization of a private, nonprofit corporation to direct the program, with staff responsible to a board of directors comprised of area residents and directors of participating community lending institutions;
- commitment by the public sector to make improvements in public services and facilities and to coordinate a concentrated code enforcement program with NHS activities;
- agreement by financial institutions to reinvest in the neighborhood by making loans at market rates to all homeowners who meet normal credit standards and at the same time meet its operating costs; and
- establishment of a high-risk revolving loan fund to make loans at flexible interest rates and terms to residents who do not meet commercial credit standards; funds as provided by foundations, local corporate sources or local government allocations of Community Development Block Grant or from other sources such as the Urban Reinvestment Task Force.

PREVENTING SPRAWL IN RURAL AREAS AND IN "EXURBIA"

There are special needs for planning in the rapidly growing communities located in rural counties and on the fringes of major metropolitan areas in what is now called "exurbia". The figures on non-metropolitan growth presented in Chapter Two suggest that for the first time many such communities are confronting urban development pressures similar to those with which metropolitan cities and towns have been dealing throughout much of the post-war era. Federal highway programs, and more recently the water and sewer funds available through the Farmers Home Administration, have accelerated this urbanization process. Despite the trend towards state assumption of some land use management functions, in most rural areas the authority for ordering new growth will still rest in community hands. Local governments in many rural areas will have to move promptly if they are to establish ongoing planning processes and draft land use regulations in time to protect themselves from

ill-conceived development, rather than responding after the fact.

The development in rural areas is not of a kind requiring a totally new regulatory approach. For the most part, the severest negative economic and environmental impacts—pollution of surface and ground water supplies, soil erosion, burdensome per capita tax increases, etc.—can be precluded by effective application of conventional techniques such as building and health codes, zoning and subdivision ordinances, and community facility requirements. However, the experience of urban communities which have relied exclusively on these traditional regulatory techniques reveals that they have inherent limitations when administered in a parochial manner, particularly when applied to areas undergoing rapid development.

Among these limitations are the regulators' inflexibility, their proscriptive rather than prescriptive character, and their general inability to shape a highly efficient and amenable living environment. The results are indelibly recorded for all to see in the contemporary urban and suburban cityscape. Hopefully, rural growth areas will not be condemned to re-enact this experience.

As is more likely the case, few rural or urban fringe communities will have the resources to establish and maintain such programs on their own initiative. Given this situation, many rural development experts view the encouragement of areawide approaches as essential to assembling a locally-based constituency capable of supporting full time, professionally staffed planning operations. An areawide approach is also seen as essential if rural communities, as they grow, are to avoid duplicating the types of irrational land use patterns attributable to political fragmentation within metropolitan areas.

THE STATE PERSPECTIVE

In varying degrees all states are taking steps to plan for the use of land and the control of growth. All have local zoning and enabling acts delegating various degrees of responsibility to municipalities, counties and regional planning councils. Most provide funding or technical assistance to supplement Federal funding for local planning. All have a type of state level agency, program, or control mechanism dealing with some land use activity. (Table XII–2).

Table XII–2 STATE LAND USE PROGRAMS

	TYPE OF STATE PROGRAM										
STATE	Comprehensive Permit System[1]	Coordinated Incremental[2]	Mandatory Local Planning[3]	Coastal Zone Management[4]	Wetlands Management[5]	Power Plant Siting[6]	Surface Mining[7]	Designation of Critical Areas[8]	Differential Assessment Laws[9]	Floodplain Management[10]	Statewide Shorelands Act[11]
ALABAMA				X		X	A			X	
ALASKA		X		X		X			B		
ARIZONA		X				X			A	X	
ARKANSAS						X	A, B		A	X	
CALIFORNIA		X		X		X	X		C	X	
COLORADO						X	X	X	A	X	
CONNECTICUT		X		X	X	X			B	X	
DELAWARE		X		X	X				A		X
FLORIDA	X	X	X	X	X	X	A	X	A, C		
GEORGIA		X		X	X		A, B				
HAWAII	X	X		X		X	X	X	B	X	
IDAHO			X				X		A		
ILLINOIS				X		X	A, B		B	X	
INDIANA		X		X			A, B		A	X	
IOWA							A, B		A	X	
KANSAS							A, B				
KENTUCKY						X	A, B		B		
LOUISIANA				X	X						
MAINE	X	X	X (LTD)	X	X	X	A	X	B	X	
MARYLAND		X		X	X	X	A, B	X	B	X	
MASSACHUSETTS				X	X	X			B		

Table XII-2 (cont.)

STATE	TYPE OF STATE PROGRAM: Comprehensive Permit System[1]	Coordinated Incremental[2]	Mandatory Local Planning[3]	Coastal Zone Management[4]	Wetlands Management[5]	Power Plant Siting[6]	Surface Mining[7]	Designation of Critical Areas[8]	Differential Assessment Laws[9]	Floodplain Management[10]	Statewide Shorelands Act[11]
MICHIGAN				X			X		C	X	X
MINNESOTA		X		X	X	X	X	X	B	X	X
MISSISSIPPI				X	X					X	
MISSOURI					X	X	X		A	X	
MONTANA		X	X			X	A, B	X	B	X	X
NEBRASKA			X			X			B	X	
NEVADA		X	X			X		X	B		
NEW HAMPSHIRE				X	X	X			B, C		
NEW JERSEY				X	X	X			B	X	
NEW MEXICO		X				X	A		A		
NEW YORK	X	X		X	X	X	X	X	B	X	
NORTH CAROLINA		X		X	X		X		B	X	
NORTH DAKOTA						X	A		A		
OHIO				X		X	A		B		
OKLAHOMA							X		A	X	
OREGON		X	X	X		X	A	X	B		
PENNSYLVANIA				X	X	X	A	X	B		
RHODE ISLAND		X		X	X	X			B		
SOUTH CAROLINA				X		X	A		B		
SOUTH DAKOTA							A	X	A		
TENNESSEE						X	A, B				
TEXAS				X	X		X		B		
UTAH		X					A		B		
VERMONT	X	X			X	X	X		C	X	
VIRGINIA			X	X	X		A, B		B		
WASHINGTON		X		X	X	X	A		B	X	X
WEST VIRGINIA							A, B			X	
WISCONSIN		X		X	X	X	X	X		X	
WYOMING		X	X			X	A		A		

[1] State has authority to require permits for certain types of development.
[2] State-established mechanism to coordinate state land use-related problems.
[3] State requires local governments to establish a mechanism for land use planning (e.g., zoning, comprehensive plan, planning commission).
[4] State is participating in the federally funded coastal zone management program authorized by the Coastal Zone Management Act of 1972.
[5] State has authority to plan or review local plans or the ability to control land use in wetlands.
[6] State has authority to determine the siting of power plants and related facilities.
[7] State has statutory authority to regulate surface mines. (A) State has adopted rules and regulations; (B) State has issued technical guidelines.
[8] State has established rules, or is in the process of establishing rules, regulations, and guidelines for the identification and designation of areas of critical state concern (e.g., environmentally fragile areas, areas of historical significance.
[9] State has adopted tax measure which is designed to give property tax relief to owners of agricultural or open space land. (A) Preferential Assessment Program—Assessments of eligible land is based upon a selected formula, which is usually use-value. (B) Deferred Taxation—Assessments of eligible land is based upon a selected formula, which is usually use-value and provides for a sanction, usually the payment of back taxes, if the land is converted to a non-eligible use. (C) Restrictive Argreements—Eligible land is assessed at its use-value, a requirement that the owner sign a contract, and a sanction, usually the payment of back taxes if the owner violates the terms of the agreement.
[10] State has legislation authorizing the regulation of floodplains.
[11] State has legislation authorizing the regulation of shorelands of significant bodies of water.
* SOURCE: Prepared by the Council of State Governments, based on information collected by the Council of State Governments, *Land Use Planning Reports 1974 and 1975;* and the U.S. Department of the Interior, Office of Land Use and Water Planning; and the Resource Land Investigations Program. Data compiled October 1975.

An example of state action which directly affects land use is the financing of community development. Local governments' problems in accommodating new growth pressures and in discouraging community decline are as much a matter of financing as they are an ability to develop plans and programs. The forces contributing to community growth or to community decline are regional or national in scope; yet most communities

have a fixed economic base from which revenues are generated and a state constitutionally or statutorily set debt celling. Local governments have often responded to these constraints by creating special financing districts—a trend which has led to the fragmentation of local government accountability in many areas.

Several states are responding to this financing dilemma through direct or indirect financing programs. The state's assumption of a greater share of public facilities costs by partially or wholly matching Federal grants can relieve the capital burden of communities. Thirty-two states have matching provisions to various Federal grant programs, while 21 states have state funded revenue sharing. Vermont, Maine, and Alaska attempt to improve the credit ratings of municipal bonds and thus reduce interest rates by channeling local issues through a state level municipal bond bank.

Significant state action during 1974–1975 to assist communities in financing community development included legislation to expand the powers of communities to finance development and redevelopment projects. Washington and Colorado followed the example set earlier by Ohio and California by authorizing local tax increment financing of urban redevelopment. More common was state legislation broadening the authority of local public agencies to issue revenue bonds. Colorado in 1975 expanded the activities eligible for local revenue bond financing to include low and middle income housing, utilities, recreation facilities, airports, and mass transit facilities.

New legislation in California permits all cities and counties to issue revenue bonds for rehabilitation programs. Illinois adopted legislation in 1974 to permit municipalities to issue revenue bonds for commercial redevelopment projects, while recent laws in Connecticut and Michigan give local governments sweeping financing powers to renovate center cities and attract industry through revenue bonds, special taxes, and tax concessions. New Jersey has an active loan program within the Department of Community Affairs for neighborhood preservation, and a similar program was proposed in Texas.

Several states have dealt with the coordination of growth on a comprehensive basis. Some 17 states have some form of official growth plan or policy guideline, and 21 states have established state level growth commissions or processes (Table XII–3). Rel-

Table XII–3

STATE GROWTH PLANNING STATUS

1. **Completed Growth Plans or Policy Guidelines** [1]
   Connecticut (1975)
   Florida (1975)
   Hawaii (1975)
   Iowa (1974)
   Kansas (1975)
   Kentucky (1974)
   Louisiana (1974)
   Maryland (1975)
   Missouri (1974)
   North Carolina (1975)
   Oregon (1975)
   Pennsylvania (1975)
   Rhode Island (1975)
   South Dakota (1975)
   Vermont (1973)
   Washington (1975)
   Wisconsin (1974)

2. **On-going Public Commissions and Processes**
   Alabama
   Alaska
   Arizona
   Connecticut
   Delaware
   Hawaii
   Idaho
   Illinois
   Indiana
   Iowa
   Maine
   Massachusetts
   Minnesota
   Mississippi
   Montana
   New Jersey
   North Carolina
   South Dakota
   Utah
   Wisconsin

3. **On-going Private Commissions and Processes**
   California Tomorrow
   New Hampshire Tomorrow
   Institute of Public Alternatives (New York)
   Oregon Tomorrow Foundation
   Vermont Tomorrow

[1] Complete plans or guidelines have not been officially adopted in all States.

Source: Council of State Governments survey. Data compiled October, 1975.

atively few of these statements or studies, however, have gone far beyond the recognition of need and the identification of some key components over which states may exercise initiative.

FEDERAL PLANNING ASSISTANCE AND REQUIREMENTS

As mentioned above, every state in the Union has enacted at least some preliminary land use control legislation applicable to specific problems such as coastal zone management, wetlands management, power plant siting, surface mining, critical area designation, tax incentives to preserve open space, and flood plain management. There are those who feel that these types of unilateral actions in respect to growth management, no matter how sporadic or tentative such actions may be thus far, indicate a willingness to move in the right direction and preclude the necessity for elaborate new forms of Federal encouragement, direction, and planning subsidy.

Others emphasize that despite the impressive variety and nationwide scope of this activity, the overwhelming majority of states have opted not to implement their powers on an effective basis or to insure that all growth issues of areawide concern are addressed in a forceful manner on an appropriate state or regional basis. Much of the legislation that is on the books either is selective in the types of development activity subjected to review or is administered through agencies that lack the funds, the staff, the regulatory authority and the political base to exercise any real control over the quality of land use decisions in either the private or public sectors. Development standards are often minimal or weakened by statutory or administrative loopholes. Despite the fact that states have it within their power to overcome these problems, many commentators have argued for the need of more incentives and direction from Federal government in order to accelerate the institutionalization of effective growth management systems at the state, regional, and local levels.

Land Use

For three years, the most conspicuous subject of debate in respect to the proper roles of the Federal and state governments in managing growth has centered on competing legislative proposals for a national land use plannig bill. Although a national land use bill has passed twice in the Senate, last July the Congress once again declined to enact such legislation.

To some degree, the proposed national bills all require that a state's comprehensive land use planning process include methods to:

- "guide" or, in stronger versions, "control", the use of land around areas impacted by key facilities;
- regulate land sales, subdivisions, and large-scale private development projects. (The American Land Institute's Model Land Development Code—now complete after ten years of preparation—provides a codification of the most advanced legal thinking in this area and has begun to inform land use policy debate in some state legislatures);
- assure that local regulations do not arbitrarily exclude utilities and facilities of regional benefit. (Some versions insert stronger language in reference to housing development and the consistency of local programs with state plans);
- protect areas of critical environmental concern from incompatible forms of development; and
- plan for special hazard areas such as flood plains and fault zones.

Other Federal Legislation Affecting Land Use

Land development proposals for a national land use planning act will undoubtedly resurface in Congress, if not this year then next. Some observers note that by that time the goals of such legislation may have been already achieved in part, pointing to a number of more *ad hoc* initiatives now underway that may serve to accomplish many of the same ends.

An important provision of the Housing and Community Development Act of 1974 amended the 701 program to require that all recipients of 701 assistance shall have established by 1977 an "ongoing comprehensive planning process," which includes housing and land use elements.

Many urban areas are subject to local flood plain managerial requirements as pre-

conditions for benefits under the National Flood Insurance Act as broadened in scope at the close of 1973. Other legislative actions over the past two years provide important support for metropolitan or areawide planning in programs with growth police implications: The Health Planning and Resources Development Act of 1974, the Community Development Block Grant legislation with its requirements for A-95 review by regional and state clearinghouse, and the National Mass Transportation Assistance Act of 1974, with its provisions that governors designate a single Metropolitan Planning Organization in each urban area.

As discussed earlier, local officials now enjoy increased flexibility in the use of Federal aid to urban transportation funds. This in large part has removed an important constraint on integrating transportation investment programs into overall land-use planning and decision-making on a regional and metropolitan basis. The main barriers to such integration today are primarily at the local level, where responsibility for implementing programs that affect land use are often still dispersed in ways that impede coordinated decision-making.

The Environmental Protection Agency (EPA) has also begun making designations and grant awards under its Section 208 program, which supports waste treatment planning in areas with water pollution problems that result from urban-industrial concentrations. Moreover, a number of other Federal programs with land use implications mandate state plans as a precondition for receiving assistance. Examples include: EPA's Grants and Loans for Public Work and Development Facilities, the Air Pollution and Water Pollution Control Grants and Environmental Protection Consolidated Program Grants administered by EPA, and the Historic Preservation Grants funded by the Department of the Interior.

Other Federal legislation and programs affecting growth management include the Rural Development Act of 1972, the Appalachian Regional Commission Local Development District Program, the Economic Development District Program, the Farmers' Home Administration water and sewer grants, the Coastal Zone Management Act of 1972 and the Department of Health, Education, and Welfare's human services planning policies.

THE FEDERAL ROLE IN PROMOTING LARGE-SCALE PLANNED DEVELOPMENT: THE UNCERTAIN FUTURE OF NEW COMMUNITIES

The Federal government's post-war involvement in new community development has taken the form of three assistance programs, commonly known as Title X, Title IX, and Title VII, enacted in 1965, 1968 and 1970, respectively.

Under all three Acts, the basic device for improving the availability of capital to new town projects is the same: a Federal guarantee of the developer's debt obligations. In effect, this guarantee converts such obligations from what would normally be a highly speculative real estate investment into a readily marketable security that is analogous in many respects to a corporate or government bond.

However, it was not until enactment of the Urban Growth and New Communities Act of 1970 (Title VII) that the terms of the guarantees were made attractive enough to launch a significant level of development activity. The legislation was designed to overcome the perceived barriers to new community development on a national scale: financing the tremendous front-end investment required assembling land on an appropriate scale, postponement of cash returns for a decade or more, and coordinating approvals for site and relate improvements.

There are 13 new community projects supported by federal assistance. Before any of these projects achieved a sustained development and marketing pace, the onset of the national economic slump in 1973 brought with it inflation, soaring interest rates, and a resultant collapse in the effective demand for housing—a set of circumstances to which the new community developers, wit htheir enormous front-end debt and limited liquidity, proved particularly vulnerable. By the end of 1974, several of the projects were encountering serious financial difficulties, in a few instances severe enough to compromise the feasibility of their original planning concept. These difficulties, as well as management problems unique to the projects themselves, contributed to HUD's decision, in January 1975, to impose a moratorium on issuing any new commitments under the program so that all available staff and resources could be de-

voted to aiding those communities already in progress.

Observers of the new community experience all differ on the causes behind the faltering progress of the 13 communities that have received Title VII guarantees thus far and draw differing implications for future growth policy from their analysis. To some extent these difficulties are seen as inherent in the new town approach itself: not only the scale of activity involved, but also the ambitious attempt to provide a managed solution to a broad range of housing, environmental, and other societal concerns within the confines of a single site.

On the other hand, in many instances the problems encountered have been attributed to circumstances amenable to correction, for example:

- the failure to allow for the cyclical nature of the real estate market;
- the acceptance of projects that were economically unsound from the outset (i.e., based on unrealistic projections of capital requirements, sales revenues, and time factors);
- specific deficiencies within the sponsor's organization and on the part of HUD; and
- a failure to obtain anticipated local approvals for site and related improvements.

The immediate short-term issue confronting HUD is how to handle the most financially troubled of the new communities that have already received guarantees. A determination of the best course of action will have to be made for each project individually, taking into consideration the project's long-term economic soundness and the cost of remedial action to the government, as balanced against benefits to the neighboring area and the nation as a whole of seeing the given community through to completion.

XIII. Strengthening the Fiscal and Management Capacity of State and Local Governments

Changing economic conditions, population pressures, and growing concerns about energy and the environment have brought into sharp focus critical questions about the fiscal and management capacity of state and local governments. The slowdown of population growth and development in the mid–1970's brought at least a temporary relaxation of pressure for continued expansion of basic government facilities and services such as education, health and transportation. However, continuing inflation resulted in a steady upward pressure on government spending. Income maintenance and social welfare service costs grew as unemployment and dependency needs increased. Rising unemployment put downward pressure on revenue sources and, while inflation induced some revenue increases, they were not sufficient to keep pace with expenditures. The growing complexity of the nation's economy and rising expectations in areas such as environmental protection, consumer affairs, and occupational and safety resulted in more expansion of governmental regulations at all levels.

Reflecting these changes, public attention has shifted from issues relating to provision of expanded facilities and services to questions about the rising costs of government, balancing revenues and expenditures, and improving the efficiency and responsiveness of the public sector.

FEDERAL AID TO STATE AND LOCAL GOVERNMENTS

The Federal government has traditionally helped state and local governments provide facilities and services to their residents, consistent with such broad national objectives as maintaining an adequate level of health and welfare, promoting equal opportunity, and protecting the environment. Financial assistance, in the form of categorical or block grants, technical assistance, and personnel sharing arrangements are some of the means by which support is provided to strengthen the capacity of state and local governments. General revenue sharing has evolved as one of the more recent and effective approaches for providing such aid.

General Revenue Sharing

Although the current general revenue sharing program accounted for only 12 percent of total Federal grant assistance in 1975, it represents a major source of federal aid to state and local governments. Congress enacted the State and Local Fiscal ssistance Act of 1972 after eight years of debate. The Act authorized the distribution over a five-year period of $30.2 billion to states, counties, cities, and other units of general government. One third of the appropriations were allocated to states and two-thirds to localities.

Local governments were allowed to use revenue sharing funds for any capital purpose but were restricted to eight priority areas in the use of funds for operating and maintenance expenses. These priority areas were public safety, environmental protection, public transportation, health, recreation, libraries, social services for the poor and aged, and financial administration. State governments were allowed to use revenue sharing funds for any operating or capital expense.

The general revenue sharing program introduced three major innovations to federal grants-in-aid: it created a trust fund assuring appropriations for five years, although Congress retained the right to terminate the appropriations at any time; it provided state and local governments with broad discretion in the use of funds; and payments were made automatically on a quarterly basis to

eligible recipient governmental units rather than in response to applications for them.

General revenue sharing provides for a transfer of funds with minimal administrative costs and red tape. It permits states and localities to design program approaches tailored to their own priorities and conditions to a greater extent than more restrictive categorical grants and with greater predictability in the level of funding.

In assessing the impact of general revenue sharing, it should be noted that the initial years of the program have coincided with a period of rising pressures on expenditures and costs and a slowdown of revenue growth for state and local governments. The newness of the program, along with the fungibility of program funds have obscured the results. Available evidence, however, suggests that the program has served many of the objectives established for it. It has transferred resources and relieved local tax pressures. According to information from recipients, in the initial year, 45 percent of general revenue sharing funds were used to reduce property taxes or prevent a tax rate increase. The funds have enabled some fiscally stressed governments to meet budgeted expenditures during severe inflation. For most governments, the funds were a significant percentage, 38 percent on the average, of the increase over the previous year's budget.

A five-year advanced appropriation has been recommended by the Administration in its request for Congress to extend authority for the program. An appropriation totalling $39.85 billion has been proposed to finance the extension of general revenue sharing for an additional five and three-quarter years through September 30, 1982. Disbursements would gradually increase each year up to $7.2 billion in fiscal 1982 in order to allow for inflationary price rises.

Categorical and Block Grants

Expansion of categorical or block assistance represents another means of providing Federal assistance to state and local governments. Categorical grants accounted for 75.7 percent of the Federal assistance to states and localities in fiscal 1975; block grants accounted for ten percent.

Categorical grants-in-aid may be directed to particular jurisdictions meeting specific criteria of need or other conditions. They provide incentives to induce desired state and local actions and organizational and programmatic changes. Expenditures are readily subject to Congressional scrutiny and control. Those who stress the extension of state and local government services, rather than the relief of local revenue pressures, favor this approach.

Block grant programs of categorical assistance fall somewhere between general revenue sharing and specific narrow purpose categorical grants. Block grants can have much the same effect as general revenue sharing in providing intergovernmental transfers of resources for flexible state and local use. But at the same time they permit Federal guidance of the broad uses to which the funds are to be put. Different distribution formulas can be used for each public service function. Special revenue sharing forms of block grants, like general revenue sharing, do not require matching funds.

Consolidation of categorical Federal assistance into broad functional block grants began in the mid 1960's. The Partnership for Health Act of 1966 merged 16 categorical programs. The Omnibus Crime Control and Safe Streets Act of 1968 provided a broad range of assistance for law enforcement, correctional and other criminal justice activities to be allocated in accordance with the state law enforcement and criminal justice plans. In the 1970's, the movement towards block grants has been extended and directed toward increasing the control of elected state and local officials over the expenditure of Federal assistance.

Experience so far suggests that block grant programs have altered the distribution of assistance, enabling smaller and medium sized communities that did not necessarily participate before in certain programs to receive Federal aid for the first time. Other communities that benefited substantially in the past eventually have to adjust to a smaller proportion of Federal assistance. It also appears that elected state and local legislative officials are playing a greater role in allocating funds for local purposes. Generally, funds are being dispersed more widely within a recipient community rather than being targeted on specific project areas.

IMPROVING THE MANAGEMENT CAPACITY OF STATE AND LOCAL GOVERNMENT

The Fragmented Structure of Government

Public fiscal problems remain complicated by the fragmented structure of governments that has evolved. In the 19th century most American cities grew through annexation of fringe areas. In the early 20th century state legislators responding to the growing political strength of outlying areas and concerned about municipal corruption made it easy for fringe areas to incorporate as new, independent municipalities and difficult for large cities to annex adjoining territories. Most of these independent municipalities acquired their own powers of taxation, land use regulation, school district adjustment and provision of municipal services.

The mass migration out of rural areas and small towns into metropolitan centers that characterized the first two-thirds of the 20th century left rural areas with a multitude of governmental units to serve a declining population. Thousands of towns and small cities have fewer than 2,500 population; hundreds of counties contain fewer than 5,000 people; and thousands of special districts serve only few hundred persons. Serious problems exist in developing administrative capacity and efficient services on this scale, but prevailing attitudes in small towns and rural areas emphasize the preservation of local identity and make consolidation and intergovernmental cooperation difficult to achieve.

Some consolidation has occurred. Over 90,000 school districts disappeared between 1942 and 1972 as a result of consolidation; but simultaneously, other units were created; 2,600 special districts were added between 1967 and 1972. Overall, in 1972 there were in excess of 78,000 governmental entities.

In part, it was the problems caused by the proliferation of local jurisdictions as well as efforts to bypass rigid state regulation of local government taxing powers, service levels and organization that led to the creation of special districts. Many of these were established to perform individual public service functions supported by a tax levy, service charges or benefit assessment. There are now approximately 25,000 special districts and authorities, three-quarters of which overlap municipal and county boundaries. Most are outside the control of locally elected general government officials.

These special purpose agencies include tunnel, bridge and airport authorities as well as park, water supply and soil conservation districts. Some have access to considerable revenues through user fees, such as the New York-New Jersey Port Authority, and have become highly successful enterprises providing public services on a business-like basis. Too many others, however, were poorly conceived, poorly managed, or have fallen victim to changing economic conditions.

Federal grants-in-aid have required the creation of a variety of other regional and metropolitan districts for comprehensive and functional planning and review purposes. There are approximately 1,800 specialized regional planning districts. 40 states have established sub-state districting systems, embracing 488 regional areas, two-thirds of which are now organized. A wide variety of multi-state regional compacts and authorities have been formed.

Other regional units have developed out of the cooperation between State and local governments. In many non-metropolitan areas, expensive medical services such as cancer treatment centers and emergency ambulance and rescue teams have been supported by several governments pooling their funds.

According to the Advisory Commission on Intergovernmental Relations, a "typical" metropolitan area contains 85 units of general and special purpose levels of governments, including; two counties, 13 townships, 12 municipalities, 18 school districts and 31 special districts and authorities for such purposes as fire protection, water supply and sewers, and housing. Imposed on this assemblage are three to four Federally supported areawide planning districts, such as law enforcement, comprehensive health, manpower, transportation, and a council of governments or similar regional organizations composed of elected officials of the municipalities, towns and counties comprising the metropolitian area.

The Chicago area has over 1,000 separate local governments or over 180 per county; Pittsburgh more than 700, over 170 per county; and New York over 550, or 110 per county. Most of these governments are small; half of the municipalities within metropolitan areas cover less than a single square

mile. One-fourth of the 5,000 school districts in metropolitan areas have fewer than 300 pupils; and one-third operate only a single school.

Although the multiplication of special purpose governmental units often provides benefits, it also has liabilities. Citizens grow confused by the maze of institutions providing services. Problems of program coordination, already difficult to achieve among general-purpose governments, are compounded by the proliferation of special-purpose units with differing but overlapping responsibilities, constituencies, principles of operation and revenue sources. Special districts, often designed to be insulated from traditional pressures of politics, have sometimes become unaccountable to public constituency and slow to respond to changing needs, except through major changes in their charters.

Benefits of public services often spill over the boundaries of the units that provide them. Action or inaction in one jurisdction may impose costs on another, which must deal with the consequences. The external effects some public services have are often large compared to internal ones. Education, health, welfare, manpower training programs, for example, provided to children residing in one area will affect the level of dependency, self-sufficiency, productivity, health, educational attainment in the jurisdictions they will live in later on due to migration. Environmental conservation, solid waste treatment, transportation, major parks and recreation facilities and other activities most efficiently provided on a large scale have affected smaller geographic areas that have little to do with local political boundaries. On the other hand, special districts can be designed to coincide with an area large enough to encompass external effects, improving efficiency over traditional local government forms.

The fragmented system of government often has created a parochialism among state and local governments that has resulted in a "beggar thy neighbor" approach. For many years states and localities have competed with one another for industrial plants and economic development by providing tax relief and other incentives. Some jurisdictions have erected barriers—most recently in the form of growth controls and minimum lot zoning—to keep out low and moderate income families with their large numbers of children and high consumption levels of costly local services. Cost sharing programs for metropolitan-wide and regional services are difficult to enact. Wasteful duplication can result from competition by neighboring localities in provision of medical or educational services, where joint facilities may be more efficient. Few localities appear to have been willing to accept voluntary, allocated shares of low and moderate income families, or minority school children.

Steps to Improve Area-Wide Coordination

States and localities have also taken steps to upgrade their capabilities and to encourage area-wide planning and coordination to respond to some of these problems. Regional cooperation and coordination has received some impetus from state actions, as well as recent Federal requirements—including the Clean Air Act Amendments of 1970, the Federal Water Pollution Control Act Amendments of 1972, the Coastal Zone Management Act of 1972, the Housing and Community Development Act of 1974, the Urban Mass Transportation Act of 1974, and extension of the A-95 metropolitan and state review procedures to cover civil rights and environmental impact statement procedures. Little progress has been made, however, in implementing the most comprehensive of these proposals, such as the recent recommendation of the Advisory Commission on Intergovernmental Relations for the creation of umbrella multi-jurisdictional organizations. Only a few metropolitan areas have adopted working forms of metropolitan government or regional planning. In most metropolitan areas, councils of governments, which proliferated as a result of Federal requirements, have received limited support as a means of resolving difficult regional issues. Areawide cooperation has focused primarily on less controversial activities.

The rationale for improved areawide cooperation and coordination is that it would avoid wasteful duplication: elimination overlapping layers of independent special purpose units and small, inefficient governments: and strengthen the ability of elected state and local officials to implement local policies. It has been suggested, however, that the current fragmented system, despite its appar-

ent inefficiency, many have compensation advantages. Special districts or agencies with a single purpose may be more effective and more easily held accountable. Fragmentation promotes diversity in responses to problems and increases the likelihood that an individual will find an agency that provides the service he or she wants. Competing and overlapping government agencies may serve an advocacy function, protecting particular interests as well as promoting greater responsiveness in the political process.

Improving the Performance of State and Local Governments

One of the most difficult and controversial areas of government modernization has been improvement of the productivity of the public sector.

The Productivity of Public Employees

Recent proposals to improve public employee productivity include more stringent hiring and promotion standards, reorganization of jobs, revisions or adjustments of wage levels, and the elimination of unnecessary jobs. These proposals are often opposed by increasingly powerful and organized groups of public employees.

Several measures have recently been enacted that establish job rights for public employees. In 1974, the Federal Fair Labor Standards Act was extended to state and local employees. It provides that many government workers must be pai dat least time and one-half for over-time work. Several states have adopted statutes giving public employees the right to organize and to bargain collectively. Federal statutes have been suggested to regulate labor relations in state and local governments. Some of the proposals would require an agency shop, an irrevocable dues checkoff, compulsory arbitration of grievances, and authorization of strikes under certain circumstances. Many believe, however, that collective bargaining is not an appropriate model for the public sector since public employees are insulated from the effects of the marketplace that affect working conditions and compensation levels in private employment. Civil service requirements provide job security, due process, and other rights not shared by private workers. And many of the services of public employees are critical to health, safety, and welfare of the community, significantly increasing the social costs of a strike or other job actions.

A variety of proposals have been made in response to these problems, including improved manpower planning and forecasting for governments, more efficient and less restrictive procedures for defining jobs and classifying employees, continuous salary review to maintain public and private pay scale comparability, and improvements in government pension plans to attract better personnel and permit greater mobility. Whatever improvements are made, however, it is evident that the personnel procedures of governments and the productivity of public workers will continue to be a subject of major concern.

Many of these measures for improving productivity and performance involve state and local issues, rather than policy questions that can be addressed at the national level. The Federal government, however, has provided some assistance to aid the local and state improvements. More than $600 million in federal funds were made available during fiscal 1974 for strengthening the program management capabilities of state and local governments, improving technology transfers, and providing technical assistance.

Organizational Measures for Improved Efficiency

There are a variety of other proposals for Federal activities to require state and local governments to carry out civil service reforms and other modernization programs as a condition for receiving Federal grants-in-aid, including general revenue sharing funds. Expansion of Federal technical assistance and increased use of the Intergovernmental Personnel Act to provide for more transfers of employees between levels of government have also been proposed. Critics of these recommendations maintain, however, that different governmental units have such widely varying problems that no single approach can be effective. Flexible financial assistance that can be used for management upgrading is already available, for example, through general revenue sharing, the Comprehensive Planning Assistance Program, and other programs.

At the Federal level, changes in the last several years have improved the efficiency and clarity of Federal government administration and budgeting processes and the improvement of Federal capability for coordination with state and local governments. Among these steps were the establishment of a division of intergovernmental relations in the Office of Management and Budget in 1973 and the initiation of a management by objectives program. OMB's Integrated Grant Administration Program resulted in the replacement of an estimated 150 different application forms for Federal assistance with two basic forms. Standards have been issued and steps taken to simplify grant reporting requirements. The Joint Funding Simplification Act of 1974 authorized the President to seek Congressional approval to consolidate Federal grant programs, permitted states and localities to submit combined applications for projects requiring funds from more than one Federal program, and allowed them to use simplified auditing and accounting procedures. Decentralization of Federal grant administration into ten standardized regions presided over by Federal Regional Councils has enabled state and local officials to work more closely with Federal agencies and has helped coordinate regional offices of Federal agencies.

The Congressional Budget and Impoundment Act of 1974 strengthened the legislative budget process and is intended to enable Congress to coordinate its tax and spending measures and to complete action on the budget before the beginning of each fiscal year. This will allow Federal agencies and state and local governments to plan their activities with greater certainty. The House and Senate Budget Committees, also created by the Act, provide Congress with the new capability for fiscal and budgetary analysis. Further Federal steps have been proposed to consolidate and make uniform planning, environmental review, citizen participation and other requirements of various Federal assistance programs.

XIV. Role of Government

Growing public concern with the performance of government has become a major factor in determining the form and extent of the public sector role in guiding the nation's growth and development. There has been increasing recognition that certain activities of the Federal, state and local governments have themselves contributed to many national problems. Government responses to changing problems and needs have often created unrealistic expectations that have not been fulfilled in performance. In the future, public sector responses to growth issues need to be more realistic in their objectives, more consistent in their commitment of resources, less disruptive in their procedures and must respond more effectively to the needs of individual citizens for a voice in government policy.

Government actions themselves are not the most important in shaping growth. The private sector has by far the greatest impact on the distribution of people, jobs, goods and resources in the United States. Nonetheless, the effects of government actions and programs are sweeping.

Local and state governments take the lead in public efforts to plan for growth and development. Local governments plan for land use and physical development and provide community facilities and services which affect the distribution of people and jobs according to local community goals. These governments have the power to zone, to issue permits, to tax and to invest. They also have demonstrated increasing capabilities to exercise such powers in order to manage community growth.

The states are also particularly well suited to guiding and managing growth because of their special place in our Federal system. The states combine metropolitan perspectives, decisive powers to influence local community actions which affect larger interests, and sufficient knowledge and local political roots to make effective use of these tools. The states can tax, regulate and invest in ways that will induce new industry to develop in particular areas and to influence where land development and economic growth may take place within a state.

Another important consideration in determining the appropriate level of government is the role of multi-state regional groupings. Economic, natural resource and other considerations have led to the formation of region-based associations cutting across state boundaries. Regional associations such as the Appalachian Regional Commission offer opportunities for the states to cooperate in establishing regional growth framework, with each state implementing a regional planning process in accordance with local requirements.

The Federal role has been to support state and local efforts in growth management. This century has seen the broadening of the powers and activities of the national government. This kind of government action has the two-edged potential to be oppressive and disruptive as well as beneficial and humane. Forceful arguments have been made for deregulation on the one hand and for further centralization of government influence on the other.

The Federal government will continue to play several roles in national development. Many of these are discussed in various chapters of the Report.

The Federal government will be held responsible by the citizens for continued national economic vitality and expansion. Redressing the capital shortage described in Chapter I will be in part the responsibility of the national government. Taxation policy is one means, but fiscal policy is also important to reduce government pressure on the capital market. Traditional monetary and fiscal policies including Federal Reserve Board policies and budget deficits or surpluses will

be used to stimulate real growth In the GNP and restrain inflation. The recent unprecedented combination of inflation and high unemployment may well give rise to new approaches in Federal management of the economy. To receive serious consideration, policy proposals directed toward regional, state and local economic problems will have to complement Federal monetary and fiscal policies designed to sustain the present economic upswing and manage inflation. The formulation and implementation of these policies are certain to be a primary forcus of public policy debate.

Chapter XI discussed the Federal and state programs which encourage economic development of specific areas in the country. These programs basically provide financing for capital construction in areas which otherwise do not have access to investment funds. Chapter III and Chapter XI addressed unemployment, one of the most serious national economic problems. Policies are being proposed and developed to deal both with the recent high levels of out-of-work heads of households and with the longer term problem of the chronically unemployed.

Economic health is important in that it serves the basic human needs of Americans, such as food, shelter, and essential goods and services. Economic development is especially important because these needs have not yet been satisfied for many of the nation's people. Yet not all social needs are met by the economic system alone. In order to promote the general welfare, Congress has enacted legislation which attempts to redress the inequities in the distribution of benefits to individual citizens and to units of state and local government. In the last decade, the government declared that a country as rich as the United States should not tolerate large numbers of its citizens living in poverty. As described in Chapter IV, the rhetoric of the decade and the gap between expectations and accomplishments have fostered disillusionment with the ability of Federal programs to eradicate promptly deep social problems. However, there remains a strong national commitment to equality of opportunity and compensation for extreme inequities in standards of living. The issues in regard to this role of government revolve around two basic questions which were discussed In Chapters V through XIII.

The first question is the level of resources to be allocated to government services and regulatory activities. Chapter III discussed the decline in real disposable income of the middle class. Finding the balance point between taxation of the employed and the provision of equitable social services to the disadvantaged, as well as meeting expectations of all income groups, will remain central to Federal, state and local policy-making for years to come.

The second basic question concerns the level of government, if any, which can most effectively provide a particular service. Chapter XIII discussed in detail three types of Federal programs for assisting other government units to provide facilities and services: categorical programs, in which Federal funds are disbursed to their governments or groups, generally under an allocation formula, for the recipients to carry out programs within broad guidelines; and revenue sharing, in which Federal funds are paid to recipients to be spent largely at their discretion. Both block grant and revenue sharing programs are experiments of the last several years. Analyses of their effectiveness are in progress and may help shape not only future Federal domestic programs but also the relationships among the levels of government in the Federal system.

The government will also be responsible for research and development which the private sector will not risk or cannot fund, but which is essential to the vitality of the nation. Research areas will include the high-cost, high-risk energy technologies discussed in Chapter V. Another area of Federal responsibility is helping ensure the continued availability of critical non-energy raw materials. Projects such as economic stockpiling and encouraging the exploitation of lower-grade domestic mineral ores can only be initiated by the national government at short-term expense in the interest of long-term economic stability and development. Maintenance and development of the national transportation network is a traditional government responsibility. Chapter VIII discussed the issues and policy options in this area. Another trend which will increase the role of the Federal government in the economy Is the increasingly interlocking nature of the world's economies. Economic conditions such as crop failures In other parts of the world will have an increasingly profound Impact on the United States domestic econ-

omy and it will be a responsibility of the Federal government to anticipate these problems and work to solve them with other nations.

In most of the issues just discussed, the Federal government gives incentives for public and private actions or penalties for lack of actions. One reason for the current skepticism about government and its ability to act for the public good is that many people see the government as an adversary. By doing so, the American people are overlooking one of the country's greatest resources: national government.

Government itself is a resource which must be constantly refined to remain useful. The management of the resource of the national government—a responsibility which rests squarely on the people and their representatives—is as important as the management of such resources as land, water, minerals, housing and energy. The management of the government may, in fact, be most important of all because government is often the people's agent for managing the other national resources.

National growth in the fullest sense is the protection of the rights and liberty of citizens and the encouragement of their material well-being. In this respect, national growth is progress towards the attainment of the Preamble to the Constitution.

The dynamic balance between the people and their government was central to the conception of the Constitution, and continues to suggest creative roles for government today. Planning and guiding growth can give a policy framework while assisting individual and community self-determination. The concept of government as a valuable national resource for the people to develop—in place of the more common notion of the human and physical environment as the government's resource to develop—provides a sound basis for planning the development of the United States in its third century.

The definition of the proper role for government in managing national growth will come not primarily through the work of management consultants or Presidential commissions, but will be accomplished in the political processes by which the country has always grappled with and solved its most important problems. Alexander Hamilton, one of the staunchest supporters of centralized government, articulated the idea in his final Federalist Paper:

"To balance a large state or society, whether monarchial or republican, on general laws, is a work of so great difficulty that no human genius, however comprehensive, is able by the mere dint of reason and reflection, to effect it. The judgements of many must unite in the work: EXPERIENCE must guide their labor; TIME must bring it to perfection, and the FEELING of inconveniences must correct the mistakes which they *inevitably* fall into in their first trials and experiments."

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Berkeley, California
William Mitchell
Northern Plains Resource Council
Billings, Montana

ADDITIONAL COMMENTS

A number of groups and individuals also submitted comments and suggestions:

James Bell, Professional Engineer, Omaha, Nebraska

Hawaii, Governor's Committee on Growth

Hubert Humphrey, Chairman, Joint Economic Committee, U.S. Congress

International Society for Community Development

League of Women Voters of the United States

McGauchon and Johnson, Architects, Washington, D.C.

Metropolitan Council, Minneapolis-St. Paul, Minnesota

National Association of Homebuilders

The Population Institute

Princeton Center for the Study of Alternative Futures

The Sierra Club

Zero Population Growth, Inc.

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