

AN INFORMATION REPORT

*Performance of
Urban Functions:
Local and Areawide*



ADVISORY COMMISSION ON INTERGOVERNMENTAL RELATIONS
SEPTEMBER 1963
M-21-REVISED

ADVISORY COMMISSION ON INTERGOVERNMENTAL RELATIONS
Washington, D. C. 20575

Frank Bane	Chairman
Don Hummel	Vice Chairman
John Anderson, Jr.	Governor of Kansas
Neal S. Blaisdell	Mayor, Honolulu, Hawaii
Howard R. Bowen	Citizen Member, Grinnell, Iowa
Anthony J. Celebrezze	Secretary of Health, Education, and Welfare
Edward Connor	Supervisor, Wayne County, Michigan
C. Douglas Dillon	Secretary of the Treasury
Clair Donnerwirth	Supervisor, Plumas County, California
Florence P. Dwyer, Mrs.	Member of the House of Representatives
Sam J. Ervin, Jr.	Member of the Senate
L. H. Fountain	Member of the House of Representatives
Eugene J. Keogh	Member of the House of Representatives
Harry King Lowman	Speaker of the House, Frankfort, Kentucky
Karl E. Mundt	Member of the Senate
Edmund S. Muskie	Member of the Senate
Arthur Naftalin	Mayor, Minneapolis, Minnesota
Graham S. Newell	Member of the Senate, Montpelier, Vermont
John E. Powers	President, State Senate, Boston, Massachusetts
Carl E. Sanders	Governor of Georgia
Terry Sanford	Governor of North Carolina
Arthur L. Selland	Mayor, Fresno, California
Robert E. Smylie	Governor of Idaho
Raymond R. Tucker	Mayor, St. Louis, Missouri
Robert C. Weaver	Administrator, Housing and Home Finance Agency
Barbara A. Wilcox, Mrs.	Commissioner, Washington County, Oregon

Wm. G. Colman, Executive Director

AN INFORMATION REPORT

PERFORMANCE OF URBAN FUNCTIONS:
LOCAL AND AREAWIDE

ADVISORY COMMISSION ON INTERGOVERNMENTAL RELATIONS

September 1963

M-21-Revised

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C., 20402 • Price \$1.50

P R E F A C E

The Advisory Commission on Intergovernmental Relations was established by Public Law 380, passed by the first session of the 86th Congress and approved by the President September 24, 1959. Sec. 2 of the act sets forth the following declaration of purpose and specific responsibilities for the Commission:

"Sec. 2. Because the complexity of modern life intensifies the need in a federal form of government for the fullest cooperation and coordination of activities between the levels of government, and because population growth and scientific developments portend an increasingly complex society in future years, it is essential that an appropriate agency be established to give continuing attention to intergovernmental problems.

It is intended that the Commission, in the performance of its duties, will--

"(1) bring together representatives of the Federal, State, and local governments for the consideration of common problems;

"(2) provide a forum for discussing the administration and coordination of Federal grant and other programs requiring intergovernmental cooperation;

"(3) give critical attention to the conditions and controls involved in the administration of Federal grant programs;

"(4) make available technical assistance to the executive and legislative branches of the Federal Government in the review of proposed legislation to determine its overall effect on the Federal system;

"(5) encourage discussion and study at an early stage of emerging public problems that are likely to require intergovernmental cooperation;

"(6) recommend, within the framework of the Constitution, the most desirable allocation of governmental functions, responsibilities, and revenues among the several levels of government; and

"(7) recommend methods of coordinating and simplifying tax laws and administrative practices to achieve a more orderly and less competitive fiscal relationship between the levels of government and to reduce the burden of compliance for taxpayers."

Pursuant to its statutory responsibilities, the Commission from time to time singles out for study and recommendation particular problems, the amelioration of which in the Commission's view would enhance cooperation among the different levels of government and thereby improve the effectiveness of the Federal system of government as established by the Constitution. One subject so identified by the Commission relates to the problem of which specific urban functions are most appropriately performed on an areawide basis, and which on a local or intermediate area basis. The problem arises from the fact that some urban services require areawide performance to be effective, while most local governments in urban areas have less than areawide jurisdiction.

In the following report the Commission attempts to develop and demonstrate one approach to the problem. The report describes 15 major urban functions, and indicates current practice as to jurisdiction of performance, the roles of the State and Federal governments, and the views of specialists as to standards of service and the most effective jurisdictions for carrying on the functions. It develops a number of economic and political criteria which may be useful in evaluating the 15 functions from the standpoint of appropriate area of jurisdiction for each of the functions. On the basis of the analysis, the Commission presents its findings as to the appropriate jurisdictional scale for providing the 15 functions, and a number of general observations on steps toward more effective performance of urban services.

This report was adopted at a meeting of the Commission held on September 27, 1963.

Frank Bane
Chairman

ACKNOWLEDGMENTS

The staff work for this report was conducted by Albert J. Richter and Sally Oleon Shames, staff members of the Commission. They were assisted by Marjorie Cahn Brazer, under contract with the Commission.

The Commission and its staff profited from an informal review of an early draft of the report by a number of individuals including George Basich, Alan Beals, Harvey E. Brazer, Alan Campbell, William Cassella, Ted Driscoll, W. C. Dutton, Jr., Lyle C. Fitch, Daniel Grant, John Gunther, Robert J. T. Longabaugh, Vincent Ostrom, C. D. Ward, Melvin Webber and Lowdon Wingo. Sections of the report dealing with specific urban functions were submitted for review and comment by functional specialists in national professional organizations and agencies of the Federal Government.

Appreciation is expressed for this assistance. Final responsibility for the report and its contents, of course, rests with the Commission and its staff.

Wm. G. Colman
Executive Director

Norman Beckman
Assistant Director
Metropolitan Areas

TABLE OF CONTENTS

	<u>Page</u>
I	
Summary of Findings	
A. Introduction	3
Purpose of Study	3
Organization and Method of Study	5
B. Findings as to Allocation of Functions	8
C. General Observations	23
Examination of Local Performance and State Laws ...	24
Establishment of Metropolitan Planning Agencies ...	27
Developing and Achieving Areawide Goals	28
II	
Determining the Optimum Jurisdiction for Handling Urban Functions	
Chapter 1. Introduction	33
Chapter 2. Economic and Political Criteria for Allocation of Urban Functions	41
Economic Criteria	42
Benefit Area	42
Economy of Scale	45
Political Criteria	50
Geographic Adequacy	50
Legal and Administrative Ability	52
Comprehensiveness of Governmental Unit	54
Controllability and Accessibility	56
Citizen Participation	58

TABLE OF CONTENTS
(Continued)

	<u>Page</u>
Chapter 3. Description of Functions and Application of Selected Criteria	61
A. Education	61
B. Libraries	82
C. Parks and Recreation	91
D. Fire Protection	108
E. Police	117
F. Public Welfare	132
G. Public Health	144
H. Hospitals and Medical Care Facilities	157
I. Air Pollution Control	171
J. Refuse Collection and Disposal	183
K. Water Supply and Sewage Disposal	193
L. Planning	213
M. Housing	226
N. Urban Renewal	241
O. Transportation	252
Chapter 4. Application of Remaining Criteria	266
Appendices	
A. Selected Functions Affecting Physical Development for Which States Made Payments to Local Governments. by State: 1957	275
B. Federal Grant and Loan Programs Containing Local or Areawide Planning Requirements	277
C. Bibliography	279

I

SUMMARY OF FINDINGS

SUMMARY OF FINDINGS

A. Introduction

Purpose of Study

Americans are living in an age of accelerating change. We have become an urban nation, and growth is one of the facts of urban life--fostered by an increasing birth rate and declining death rate and the movement of people from farms to cities. Another fact of urban life is technological change that raises standards of living but often creates new challenges in providing such urban services as hospital facilities, air pollution control, water supply and transportation. Still another dynamic factor arises from the aspirations of minority groups coupled with increasing racial and economic disparities between the central city and the suburb.

In the face of these changes, existing methods of performing public services must be continually appraised and modified to meet new circumstances. We know that we are going to have to build new sewers, water lines, highways, and transit, and we must provide adequate schools, a healthy environment and everything else necessary to meet the needs of urban populations. This is a concern of all levels of government and can no longer be dismissed as a "local problem."

Few would claim that we have borne the burden of recent urban expansion and change as well as we might. Can we do better in the future? With these challenges in mind, this study was undertaken to identify those urban functions which are most appropriately performed on an areawide basis and those which are better performed by individual local governments.

Many communities have met the problem of service expansion beyond original political boundaries by creating special districts (some 18,000 were counted by the 1962 Census of Governments). These districts often are at best only a patch on the old framework. A few communities have conducted studies and considered ballot proposals for a complete or partial readjustment of functions and political boundaries, but only a handful of these proposals have successfully run the gamut of public apathy and entrenched opposition.

The focus of this study is on the optimum handling of typical urban services rather than on local government organization or the need for reorganization. The stake of the local governments in the subject is clear. If the cities, counties, and other general units of local government should fail to meet the challenges posed by population growth, scientific breakthroughs, and citizen expectations, other expedients--in the form of the special district, defensive incorporations and increased State and Federal controls--will be used to forestall a breakdown in the provision of urban services.

Optimum scales of operation in the performance of urban services are not the concern of local governments alone. **As** State governments and Federal agencies become more involved in providing financial and technical assistance to urban areas, they too will become increasingly interested in the issue. The States and the Federal Government are concerned with achieving maximum results from resources they invest in assistance programs. Consequently, they will be desirous of assuring that their programs do not encourage the growth, sustenance and performance of urban services at jurisdictional levels or on scales which are ineffective and uneconomical.

The report is designed to encourage a fresh look at the handling of urban services separate from the existing local patterns of government. **It** outlines a method by which citizens and public officials in large urban areas might analyze urban functions and draw conclusions as to whether they should be performed on a local, areawide, or intermediate area basis. The emphasis in this report on the administration of urban services and on methodology for self-evaluation rather than governmental structure is designed to stimulate new and different avenues for consideration by public officials, charter groups, civic associations and others concerned with fragmentation and inefficiency of municipal services. **It** also provides a fact **book** or compilation of information on urban services, describing current practice in administering these urban services, the effect of State and Federal programs on local performance, a **summary** of the technical literature on desirable standards of service, and the views of professional specialists as to optimum scale and level of performance. The report also makes a number of findings with respect to improvement in handling urban services.

Organization and Method of Study

The functions studied--ranked according to our findings on a scale of "most local" through "most areawide" in character--were fire protection, public education, refuse collection and disposal, libraries, police, health, urban renewal, housing, parks and recreation, welfare, hospitals and medical care facilities, transportation, planning, water supply and sewage disposal, and air pollution control. These functions represent 85 percent of total local government expenditures.

The heart of the study is the use of a number of economic, administrative, and political criteria in evaluating the optimum performance of these 15 governmental functions. **Two** criteria are essentially economic in nature:

(1) The governmental jurisdiction responsible for providing any service should be large enough to enable the benefits from that service to be consumed primarily within the jurisdiction. Neither the benefits from the service nor the social costs of failing to provide it should "spill over" into other jurisdictions. For example, the central city should not be expected to pay all of the very high capital costs of constructing a subway system which primarily benefits the suburban commuter .

(2) The unit of government should be large enough to permit realization of the economies of scale. For example, it costs \$58 per million gallons to provide primary sewage treatment in a million gallon capacity facility, but less than half this amount in a ten million gallon capacity facility.

Economic efficiency is only one of the criteria germane to the allocation of a particular function. Political, administrative and social considerations must also bear heavily in such a determination. The remaining five criteria for judging the proper scale of performance are intended to reflect these considerations.

(3) The unit of government carrying on a function should have a geographic area of jurisdiction adequate for effective performance, as illustrated by the desirability of a sewage disposal system's conforming to a natural drainage basin.

(4) The unit of government should have the legal and administrative ability to perform services assigned to it. If it is going to provide modern health protection, for example, it needs to have both adequate regulatory authority and the ability to attract and hold a trained staff capable of administering a public health program.

(5) Every unit of government should be responsible for a sufficient number of functions so that its governing processes involve a resolution of conflicting interests, with significant responsibility for balancing governmental needs and resources. Thus, in the jurisdictional allocation of individual functions, there is an ever present danger of creating so many separate entities as to result in undemocratic, inequitable, and inadequate assignment of priorities. Elected officials should be responsible and held accountable for balancing governmental needs and resources.

(6) The performance of functions by a unit of government should remain controllable by and accessible to its residents. This is an essential condition of responsible government and one that is too often violated by creation of special districts whose decision-making power and purse strings are not susceptible to direct control by the voters.

(7) Functions should be assigned to that level of government which maximizes the conditions and opportunities for active citizen participation and still permits adequate performance. This is another guarantee for keeping government sensitive to the citizens, as well as a way of assuring attraction of the community's best talent into positions of leadership.

Taken together, the economic, administrative, and political criteria may yield conflicting and competing results. Necessarily, they represent interests of competing groups, as well as interests of the community as a whole. If all were in agreement indicating one voice within an area, there would be no stumbling block to change. However, it is seldom possible or desirable to weight each criterion equally in every instance. Instead they must be balanced, one with the other, to decide in each case which are important for the particular function or situation. (The criteria are described in detail in Part II, Chapter 2.)

Each urban function was evaluated in the light of these criteria to answer the question: How is a given urban function most adequately and effectively provided? Part I presents a

summary of findings as to appropriate jurisdictional allocation of the 15 functions ranking them generally according to the degree to which they are best performed on a local basis. In making these allocations, it is recognized that great variation in population size and density, laws and customs among the States and their metropolitan areas will make it necessary for those directly responsible to decide the best manner of planning and administering these urban functions. The findings as to jurisdictional allocation of functions are largely illustrative, based on the Commission's interpretation of the criteria and its judgment in applying them to the 15 functions.

The remainder of Part I makes some general observations, derived from the functional analysis, on steps toward more effective performance of urban functions. Since the Commission does not here suggest any particular forms of reorganization needed to accomplish a reallocation of urban functions in metropolitan areas, nor reach conclusions as to political strategy necessary to effect structural change, the reader is referred to earlier studies of the Commission: Alternative Approaches to Governmental Reorganization in Metropolitan Areas for a discussion of the alternatives available, and Factors Affecting Voter Reactions to Governmental Reorganization in Metropolitan Areas for comment on political factors affecting efforts to prepare and secure adoption of reorganization proposals.

Part II of the report contains a more detailed analysis of the 15 urban functions studied. Chapter 2 develops and examines the seven economic and political criteria used as guidelines in evaluation. Chapters 3 and 4 describe briefly (a) the nature of each function as generally practiced throughout the country, (b) the roles of the State and the National governments in the performance of the function, (c) standards of service suggested by the specialists and their preferred scale of performance, (d) the application of the economic, administrative, and political criteria to the respective functions, and (e) examples of experience with larger-area performance.

An analysis of governmental functions from the viewpoint of the optimum area of administration necessarily contends with several complications. First, each of the 15 functions studied is not homogeneous and indivisible. Rather, each such function, be it education, libraries, or air pollution, consists of a number of subfunctions or specializations, which must be examined individually. For example, police administration includes such aspects as foot and car patrol, traffic regulation and crime prevention, all of which may be performed on differing geographic jurisdictional bases.

The second complication is that each function must be viewed from at least four different time phases of administration: planning, decision-making, actual administration or execution, and finally, evaluation. For example, there could be areawide planning and agreement on minimum air pollution standards for the entire area, but each municipality might retain responsibility for financing and administering an enforcement program with discretion to enforce a higher standard at its own option. Although certain subfunctions and certain phases of the urban functions studied could be administered adequately on a local basis almost all would benefit substantially from some form of areawide coordination, particularly in the planning phase.

A third complication stems from the already heavy involvement of State and Federal governments. Hardly any urban service is performed purely by a local government. To varying degrees State or Federal governments or both are involved. Indeed, State and Federal governments may be influential in determining which jurisdiction--local, areawide, or intermediate--shall perform a function. For this reason, the description and analysis of the functions gives important attention to the roles of State and National governments.

Finally, decision as to the most suitable jurisdiction for performance of any particular function will be affected by the jurisdictional allocation of other functions. The technology, personnel, and clientele of two or more functions may be so closely related that there are real advantages in having the functions performed by the same jurisdiction, even though other considerations might suggest performance by other jurisdictions or districts.

B. Findings as to Allocation of Functions

The results of applying the economic, administrative, and political criteria to the 15 urban functions are summarized below from the detailed analysis in Part II, Chapters 3 and 4. The order in which the functions are listed roughly follows the degree to which application of the criteria indicates that they should be handled on a local basis. Thus, the "most local" function is discussed first and the "least local" last. It is recognized, however, that the same order would not necessarily apply to any particular metropolitan area, due to the host of varying factors which affect application of the economic and political criteria.

The Commission emphasizes that the findings made in this analysis are not to be construed as calling for any particular kind of reorganization of local governments in metropolitan areas. This subject has been dealt with in other reports of the Commission. 1/

Fire Protection

Traditionally, each municipality has a fire department. Costs and benefits arising from fire service provided by individual localities do not "spill over" very much to other localities. From a "benefit area" standpoint, therefore, this function is well suited to administration at the local level. Furthermore, fire companies need to be close to the scene of potential fires, making it necessary to have fire units decentralized. This reduces the possibility of "economies of scale." Even so, the planning of total fire fighting resources and the conduct of personnel recruitment and training benefit from cooperation on an areawide basis. Also, some savings can be realized where there is coordination of fire stations at community boundaries. A community's lack of legal ability to render outside aid to another may prevent such cooperation, however. An increasingly important aspect of the fire protection function--fire prevention--is not tied to a small area as is fire fighting, and therefore can benefit from areawide administration.

Localized fire service has the advantage of providing opportunity for citizen participation through volunteer departments. However, volunteer departments are less able to provide adequate services as population density increases. (For detailed analysis, including references to experience with areawide coordination in Buffalo, Cincinnati, Detroit, Portland (Ore.), Rochester (N. Y.), and Seattle (Wash.) areas, see Part II, Chapter 3, Section D.)

1/ Advisory Commission on Intergovernmental Relations, Alternative Approaches to Governmental Reorganization in Metropolitan Areas, (Washington: Government Printing Office, 1962).

Public Education

The direct effects of education on an individual become indirect benefits or costs to a community according to whether, as a result of that education, he contributes to the general economy through his productive skills, demand for goods and services, and creation of property values, or whether he burdens community health, welfare and police services because of his inability to provide for himself. These kinds of spillovers extend far beyond the confines of a single school district. The type and quality of education provided by each district determine the quality of the labor force available to employers throughout a labor market area and affect the attraction that area holds for industry. Because a metropolitan area is essentially a single labor market, each school district within that area has a strong economic and social motivation to supply the kind of educational training employers require.

Quality of education is often directly commensurate with specialization of teaching and curriculum. Specialization of personnel and curriculum, in turn, are directly related to the size of the school system. A district serving a **small** population may not have a sufficient number of pupils enrolled in any one vocational training or college preparatory program to justify the cost of providing specialized teachers or separate classes for them. When the unit costs of specialized education are prohibitive, the **small** district can offer only a general, common-denominator curriculum that prepares none of its graduates adequately for either employment or college; the physically and mentally handicapped are virtually abandoned. Quality of education is a function also of the level of teacher salaries, including prospects for advancement, and the quality of school plant and equipment. These, too, tend to be affected by the size of the school district.

Common acceptance of a minimum desirable size of school district is based on consideration of economic operation as well as educational adequacy and local interest and control. Increasing the size of the school district above the minimum point produces lower unit cost of instruction, administration and supervision, and business operations. The point at which diseconomies of scale set in is uncertain, but there seems to be general agreement that city school systems can be too large for economic and administrative efficiency.

In short, the metropolitan character of the benefit area, standards of educational quality, and economies of scale indicate that a school system responsible for elementary and secondary education should be large enough in population and encompass a sufficiently broad tax base to (1) permit offering specialized high school training to meet both the requirements of diverse area employers and the admission qualifications of high standard colleges; (2) attract qualified teachers through a competitive salary scale; and (3) meet the minimum curriculum standards established by the teaching profession and the State. If in addition the system is to provide a community college program, its tax base and population will need to be correspondingly larger. How much larger will depend on whether the district wants to maintain the college on its own, contract to send its students to community colleges in neighboring districts, or operate such a facility jointly with other districts.

Specialists have suggested that a school system needs to have at least 1,500 to 2,000 pupils to warrant the diversification of staff and curriculum necessary for an acceptable elementary-secondary educational program. The 1962 Census of Governments findings raise serious questions as to the extent to which school districts in metropolitan areas meet even this minimum standard.

About 65 percent of the school districts in Census-defined metropolitan areas in the United States, serving less than 10 percent of the school population, had enrollments of less than 1,800 pupils. Many of these were nonunified districts, however, that is, they provided either elementary or secondary education, but not both. Unified districts are considered preferable because they provide coordination of educational programs through all grades, simplification of educational control, and facilitation of public voice in the total educational program. Consolidating school districts to handle both elementary and secondary education would provide the advantages of a unified system as well as the elimination of many undersized districts.

Even after such action, census figures show, some school districts in metropolitan areas would be too small to provide an adequate educational program. The 23 States which have succeeded in establishing school districts of adequate minimum size have used positive measures for district consolidation, such as statutory enactments or compulsory joint State and county action under strong State authority. Their success provides a useful guide to needed State and local action.

From the standpoint of citizen accessibility and control and citizen participation, size of a school system is much less significant than the depth of citizens' interest and participation in the educational program offered their children. However, concerns expressed in large city school systems indicate that effects of bureaucracy associated with large size tend to lessen sensitivity to the public. Sheer size tends to diminish citizen interest and participation, despite the fact that parents' interest in their children's education is largely school-oriented rather than district-oriented, and large districts can have small schools as well as large schools. (For detailed analysis, including reference to experience with areawide coordination in Albuquerque, Baltimore, Charlotte, Honolulu, Jacksonville, Memphis, Miami, Ogden, Richmond, Shreveport, and Washington, D. C. areas, see Part II, Chapter 3, Section A.)

Refuse Collection and Disposal

There is little spillover of costs and benefits among communities in a metropolitan area from the administration of refuse collection by individual municipalities, so from this standpoint collection can be handled most adequately on a local basis. There is some spillover of cost from refuse disposal, most commonly where cities dispose of their refuse outside their boundaries and feel minimal compulsion to provide proper operation of the disposal site. Economies of scale accrue in operation of dumps and in refuse pickup, but the latter economies are limited by the increased cost of hauling refuse longer distances. Even these limitations can be modified, however, by using transfer stations for combining pickup loads in larger carriers for transport to distant dump sites.

Where **many** communities are forced to use community incinerators, the economies of having a few large incinerators instead of many **small** ones, and the desire of residential suburbs to exclude **community** incinerators make it desirable to enlarge the administrative area for the refuse disposal function.

The availability of alternative disposal methods tends to reduce the problem of geographic adequacy, since a community which exhausts its landfill site space, for example, can turn to incineration. On the other hand, every locality's dislike for having any kind of **community** disposal facility within its boundaries is a factor in favor of a larger area for planning, locating, acquiring, and managing a disposal facility. (For

detailed analysis, including reference to experience with area-wide coordination in Binghamton, Hartford, Los Angeles, Paterson, Philadelphia, Pittsburgh, and Rochester (N. Y.) areas, see Part II, Chapter 3, Section J.)

Libraries

The characteristics of library benefits are very similar to those of education in that direct beneficiaries are readily located among users--in this case, borrowers of books and people attending library programs. To the extent that library use contributes to skill, knowledge, and earning power it confers indirect benefits upon individuals and the community, but the relationship is not as strong as in the case of education. Yet the social purpose of providing free public libraries in order to equalize opportunities for knowledge through a transfer of economic resources within the community is precisely the same as for education.

To the extent that a library's service is "free" to the users, even its direct benefits spill over community boundaries to nonresidents **who** care to enter its doors. The amount of spillover varies with the nature of the service: users of juvenile collections are geographically concentrated; research collections and special exhibits attract people from longer distances; and vast research collections, such as the Library of Congress, and specialized collections attract users from far and wide.

As is true for education, the quality of libraries is often directly related to the degree of specialization they can offer. Ability to provide specialized research facilities is directly related to economies of scale, and requires a large service area in terms of population.

Variation in benefit area associated with type of service and inherent economies of scale, particularly in research facilities, suggest the desirability of areawide library "systems," consisting of individual libraries formally or informally banded together. Library systems permit independently operating small community libraries or neighborhood branch libraries to meet the needs of nearby residents for books of juvenile, school and general interest, while larger generalized or specialized research libraries serve a progressively larger geographic area associated with a greater concentration of population. Such library systems are better able to attract and retain highly specialized personnel.

The community library often has its origin in the work of a group of public spirited citizens. Continuing citizen participation and control of policy are reflected in Boards of Trustees. Often the library is the center of much of the community's activities. Retention of the community library within the structure of the library system permits continued functioning of the local library as a focus of citizen participation and interest. (For detailed analysis, including reference to experience with areawide coordination in Buffalo, Cincinnati, Detroit, Portland (Ore.), Rochester (N. Y.), and Seattle areas, see Part II, Chapter 3, Section B.)

Police

Strong local responsibility and control with respect to law enforcement is traditional in the United States. The desirability of easy citizen access to the police and reflection of community values in enforcement are strong points in favor of keeping police patrol activity local, although specialization of police work is increasingly removing many aspects of policing from the traditional patrol activity. Traffic and parking regulation are also best administered locally when they concern basically locally generated traffic.

On the other hand, the spillover of costs and benefits from most aspects of police service points to areawide performance. Also, many police services are amenable to substantial economies of scale, thereby favoring larger-area handling. Specialized services of all kinds, including laboratories, communication systems, record systems, homicide, vice, detective, and other specialized squads, impose prohibitive unit costs unless they serve a population large enough to utilize their capacity fully. Large scale administration of these activities is also more effective since it is better equipped and staffed, and facilitates overall planning and deployment of resources. Jails and penal institutions can usually be operated more efficiently on a larger scale. Traffic control on intercity expressways, as distinguished from local and neighborhood streets, can be handled more efficiently on an areawide basis. (For detailed analysis, including reference to experience with areawide coordination in Buffalo, Los Angeles, Miami, Philadelphia, Rochester (N. Y.), Syracuse, and Washington, D. C. areas, see Part 11, Chapter 3, Section E.)

Health

Dispersion among communities of benefits and costs from environmental health services (e.g., supervision of water supply, sewage disposal systems, and food establishments, and regulation of milk and food sanitation and housing standards) and communicable disease control suggest the county or larger area as the appropriate jurisdiction for these health activities. The intercommunity spillovers of health education and maternal and child care services are less obvious and extensive and are therefore more amenable to local administration, although economies of scale require a minimum service area to provide a given quality of service.

Economy of scale considerations support administration of public health laboratories on a county or areawide basis, or in less densely populated areas, by the State. Similarly, vital statistics benefit from large-area administration, although for this service, economy of scale will be determined largely by the extent to which automatic data processing is utilized. The shortage of specialized public health personnel also is a factor in favor of larger scale administration, since larger units are more likely to have financial resources and administrative challenges capable of attracting and holding such personnel and at the same time make better use of their skills,

Strong sentiment exists for retaining local responsibility for health activities which involve a patient-doctor/nurse relationship, particularly activities connected with maternal and child health services. (For detailed analysis, including reference to experience with areawide coordination in Decatur, Las Vegas, Omaha, Rochester (N. Y.), Salt Lake City, and South Bend areas, see Part II, Chapter 3, Section G.)

Urban Renewal

In the broadest sense, urban renewal is a continuous process whereby a local government strives to carry out whatever public measures and techniques are needed to restore and maintain economic and social health. In the restricted and more commonly accepted meaning of neighborhood conservation, rehabilitation, and redevelopment, urban renewal comprises chiefly the functions of planning and zoning, code enforcement, relocation of displaced persons and businesses, and the acquisition, clearance, and disposal of land. As carried on in most cities, it is a joint national-local activity, shaped largely by the National Government's policies and programs.

While the indirect benefits and costs of urban renewal pervade the entire metropolitan area, the immediate, dominant benefits accrue mainly to residents of the locality through stabilized or enhanced property values, and reduction in the costs of crime, delinquency, substandard housing, and social dependency. In carrying out renewal a central city suffers spillover of costs of suburban residential exclusion policies, which tend to aggravate its housing and renewal problem by making it difficult to relocate persons displaced by renewal projects. Elimination of these spillovers would require area-wide housing measures.

Benefits of neighborhood renewal are largely confined to the locality. Redevelopment projects affecting the location and development of major commercial and industrial enterprises clearly create spillovers of benefits and costs beyond political boundaries.

Large jurisdictions for urban renewal have the advantage of lower unit cost of administration from experience gained by repetition in planning, housing, and building code preparation and enforcement, acquisition, assembly, and disposition of land, and relocation of families, businesses, and industries. However, the size of jurisdiction for urban renewal decision-making and execution seems to have little bearing on likely success in obtaining citizen support and participation as required under Federally aided renewal programs. (For detailed analysis, including reference to experience with areawide coordination in Birmingham, Cairo, Dallas, Des Moines, Detroit, Kansas City (Mo.), Louisville, Macon, Miami, Pittsburgh and San Jose areas, see Part II, Chapter 3, Section N.)

Housing

The housing function comprises the activities conducted to assure provisions of safe and sanitary housing for residents of the urban area. Primary reliance is on private industry to meet residents' needs for standard housing. To the extent that the industry does not meet the needs of the lower income groups, the housing function becomes a welfare function, and therefore has been participated in by some States and the National Government for the past 30 years. However, actions of local governments also affect the private housing industry's efforts to meet its primary responsibility, principally through such activities as planning, subdivision regulation, zoning, and building and housing code regulations.

The private housing market is areawide: housing consumers, within the limits of restrictions imposed by income and discriminatory practices, look for housing wherever it is provided in the area, so long as it is within reasonable access of their employment, and necessary shopping, recreational, religious, and cultural facilities. Similarly, the housing industry, subject to governmental regulations and private or governmental policies of discrimination against minorities, builds and maintains housing to satisfy consumers from the entire area.

Local zoning restrictions on lot size or land use restrict the housing consumer's freedom of choice. Areawide generalized zoning can help assure an adequate supply of all varieties of standard homes and lot sizes. Builders who operate areawide feel the effects of higher costs caused by wide variations in local building codes. Higher costs tend to reduce the supply of available housing. Communities with inadequate building codes create spillovers of social costs in terms of health standards and difficulty in maintaining property values. These communities are commonly found in outlying unincorporated areas where, uncontrolled by zoning, building, and sanitation requirements, people build housing which may be substandard at the outset, or easily becomes so. Areawide determination and administration of minimum building and housing codes can help combat these effects of variations in building codes and substandard codes, and still leave latitude for individual localities to establish higher standards.

Suburbs' residential controls, including unusually strict zoning and housing standards, create social costs in central cities, and financial costs of public housing, by confining lower income and nonwhite families to the central cities. Central cities' actions to provide for the excluded low income and minority groups create benefits in the suburbs by reducing pressure to admit these groups. (For detailed analysis, including reference to experience with areawide coordination in Cincinnati, Cleveland, Dayton, Fresno, Pittsburgh, St. Louis, Wilmington (Del.) and Youngstown areas, see Part II, Chapter 3, Section M.)

Parks and Recreation

Playlots, playgrounds, playfields, and neighborhood parks basically benefit the residents of immediately surrounding areas, while the large "recreation" parks, reservations, and parkways create benefits extending to a wide geographic area. A wide geographical area has the advantage of economy of scale in

providing financing for large parks. Benefits of recreation programs are largely confined to participating individuals, who ordinarily are local residents. Such programs therefore are properly the responsibility of local units. Special recreational facilities, such as swimming pools, golf courses and tennis courts, are like utility services, with benefits largely confinable to the users who can be charged for the service on a fee basis. The large capital outlay needed for these facilities, however, requires a large enough scale of operation to keep down unit costs.

Most municipalities have inadequate area for acquiring and maintaining natural and large-area types of park facilities, because these require large packages of land, and land in its natural state. Similarly, municipalities sometimes are not able to control the use of open space effectively, because much of it lies outside their boundaries.

There is merit in keeping ownership and administration of neighborhood parks and playgrounds in the hands of local communities from the standpoint of local control and accessibility, although proper organizational arrangements might provide adequate responsiveness to public demands in larger area administrative units. (For detailed analysis, including reference to experience with areawide coordination in Buffalo, Detroit, Minneapolis, Rochester (N. Y.), San Francisco, and Syracuse areas, see Part II, Chapter 3, Section C.)

Public Welfare

The public welfare function consists of government's furnishing such benefits and/or social services as are needed to maintain the minimum level of economic and social protection for particular individuals that society is willing and able to guarantee. More than any function, the welfare function epitomizes the interdependence of local governments in large urban areas. The social cost imposed upon a community by the presence of a substantial number of needy persons provided justification for the earliest public welfare programs. As a result, all but a **small** proportion of public welfare expenditures are financed out of State and Federal revenues. Furthermore, that small proportion of the total spent by local government is accounted for mainly by large cities.

The county has been accepted as the local administrative unit for carrying out the categorical assistance programs of the Federal and State governments, which constitute about 90

percent of total public welfare expenditures in the nation. "General assistance," the other ten percent, is administered to a great extent by municipalities and townships, although the county administrative framework has been adopted by some States for use by local "general assistance" programs.

Administration of both "general assistance" and categorical assistance programs by the county has administrative advantages of treating the problems of a single family on a unified basis, more efficient use of scarce professional personnel, and increased opportunities for mechanizing the processing and keeping of records. (For detailed analysis, including reference to experience with areawide coordination in Birmingham, Charleston (S. C.), Denver, Des Moines, Fargo, Great Falls, Harrisburg, Little Rock, New Orleans, Oklahoma City, Omaha, Portland (Ore.), Topeka, Salt Lake City, Wheeling, and Winston-Salem areas, see Part II, Chapter 3, Section F.)

Hospitals and Medical Care Facilities

Coordinated planning on a metropolitan area basis of the location, size, and nature of hospitals and other medical care facilities has many advantages: a closer coincidence of service area and benefit area; greater realization of the full benefits of technical progress in medical and hospital facilities through increased scale of operation; better distribution and use of specialized single purpose facilities; more effective use of scarce technical personnel; and likelihood of greater support of civic leadership.

Nongovernmental hospitals, accounting for about two-thirds of the country's hospitals and about one-third of its hospital beds, derive their leadership and financing without regard to local government boundary lines, and serve patients without respect to jurisdiction of residence. In metropolitan areas, this means that nongovernmental institutions are essentially areawide institutions, from the standpoint of their support, direction, and patients. The ways in which local governments discharge their responsibilities for hospital care are closely intertwined with the policies and programs of nongovernmental hospitals. It follows that governmental hospital services should be planned in relation to nongovernmental hospital services, and that nothing less than the metropolitan area is adequate for such planning and coordination if economical and effective hospital service is to be achieved. Within such areawide planning, individual hospitals financed and maintained on a local government basis can retain independence in determining internal policy and controlling operations.

The Federal Hospital Survey and Construction Act (Hill-Burton) already requires a State plan as a condition of construction grants for hospital and related facilities to States for allocation among voluntary and governmental institutions in their jurisdictions. Some State agencies develop their Hill-Burton plans on a metropolitan area basis. The great majority do not.

The Hill-Burton program has promoted comprehensive local planning on an areawide basis through technical assistance activities and by awarding service demonstration grants to create and support areawide health facility planning agencies. Stimulated by these demonstration grants, more than 20 such agencies have been established in some of the major metropolitan areas. Expanded efforts by the Public Health Service, State hospital agencies and local health facility planning agencies can contribute to accelerated development of coordinated hospital and medical facility programs on a metropolitan area basis to reduce the chances of duplication of services and facilities and waste of scarce professional and financial resources. (For detailed analysis, including reference to experience with areawide coordination in Columbus (Ohio), Detroit, Kansas City (Mo.) and New York City areas, see Part 11, Chapter 3, Section H.)

Transportation

The function of metropolitan transportation is to move persons and goods into, out of, around, and through cities and their suburbs. There are a number of modes of transportation, i.e., auto, truck, bus, railway transit, railroad, plane. The intercommunity spillovers of their benefits are widely recognized and have long provided the rationale for State and Federal participation in local highway construction. The need for a similar broad area approach to bus and rail transit is also being recognized, as in the San Francisco Bay and Pennsylvania-New Jersey-Delaware areas.

The benefit area criterion for metropolitan area provision of transportation services is strongly supported by potential economies of scale. Capital investment in highways, railway lines, rolling stock and land requires large outlays in most metropolitan areas.

While planning and construction of a transportation system is basically areawide in nature, certain aspects of the total transportation service benefit only the local resident. The principal services of this nature are construction and maintenance of local streets, curbs, gutters, and sidewalks. These facilities

are proper municipal responsibilities. The provision of parking facilities is a difficult function to assign: some are terminals for areawide highways, while others primarily serve residents of the community in which they are located.

Localities may achieve economies of scale from having construction and maintenance of their local streets, sidewalks, and parking facilities performed under contract by a larger jurisdiction. (For detailed analysis, including reference to experience with areawide coordination in Boston, Chicago, Miami, Minneapolis, New York, Philadelphia, Pittsburgh, Salem (Ore.), and Seattle areas, see Chapter 3, Section 0.)

Planning

The task of guiding and helping coordinate urban development decisions in metropolitan areas has grown beyond the ability of municipal planning agencies as factors affecting development have extended beyond the municipal boundaries, and special districts have been created to provide urban services among a number of municipalities. At the same time, the need exists for the local municipal planning activities of land use, streets and highways, mapping and zoning, capital programming and budgeting, and platting and subdivision control.

There are major interjurisdictional benefits from sound metropolitanwide planning and costs resulting from the lack of it. Thus, insufficient land for industry and commerce discourages development of these enterprises while overzoning for commercial or industrial land use causes an unhealthy rivalry among municipalities. By providing for orderly urban development, the metropolitan planning agencies can increase the efficiency by which most other public services such as recreation, water supply, sewage disposal and transportation can be provided.

Geographic factors not contained within the boundaries of individual municipalities determine the direction and intensity of planning and physical development in metropolitan areas. Thus watershed and drainage basins affecting water supply and sewage disposal, mass transit lines, highways and air pollution are not respecters of legal boundaries and their effects can be dealt with effectively only by concerted areawide planning and action.

To be effective, metropolitan planning must be comprehensive so that it can provide a forum for the resolution of conflicting interests and needs in providing specific urban services. Thus street and highway decisions have an impact on public and private transit planning. Subdivision control is closely related to

decisions on utility lines. Adequate provision of housing is dependent upon decisions respecting sewage disposal, water supply and highways. The metropolitan planning agency provides an effective forum for integrating plans for these functions.

Localized planning is also needed for coordination of urban functions of a locality in order to produce an effective overall local program and for the guidance of local development within accepted areawide guidelines prepared by the metropolitan planning body.

Counties are becoming increasingly important providers of services in metropolitan areas, particularly services which extend beyond the capabilities of cities and smaller units, such as water supply and sewage disposal, natural park and recreation areas, and community colleges. Planning is therefore a growing necessity in county government. Under the Federal law establishing the 701 program of financial grants to assist urban planning, however, counties of 50,000 or more population that do not constitute an entire standard metropolitan area are not entitled to such planning assistance. (For detailed analysis, including reference to experience with areawide coordination in Atlanta, Chicago, Denver, Portland (Ore.) and Washington, D. C. areas, see Part 11, Chapter 3, Section L.)

Water Supply and Sewage Disposal

Suburban development has complicated enormously the task of supplying the urban dweller with water and removing and treating his sewage wastes. Providing these services can involve complex conservation problems, creating costs and benefits accruing to the population of the entire watershed and drainage basin. The layout of water and sewage systems can affect the direction and intensity of economic development of an entire metropolitan area.

Water and sewage service can be provided at a lower unit cost on an areawide than a locality-by-locality basis due to (1) lower unit cost of fixed charges, (2) avoidance of duplication of facilities, such as sewer and water lines and pumps, and (3) taking advantage of gravity flow by following the contours of natural basins and thus avoiding costly pumping. Indeed, the advantages of economies of scale frequently determine whether a community will be served at all by public water or sewage facilities.

Small communities often find their area inadequate because they cannot find sufficient water resources and safely dispose of their sewage within their boundaries. However, where major water supply and distribution and major sewer collection and treatment facilities are handled on an areawide basis, there remain advantages in retaining local responsibility for local water distribution and sewage collection facilities. (For detailed analysis, including reference to experience with areawide coordination in Chicago, Denver, Los Angeles, Minneapolis, Philadelphia, St. Louis, Salem (Ore.) , Seattle and Washington, D. C. areas, see Part II, Chapter 3, Section K.)

Air Pollution Control

Air pollution is the presence in the outdoor atmosphere of contaminants, such as dusts, fumes, gas, mist, odor, smoke or vapor, in quantities, of characteristics, and of duration such as to be injurious to human, plant, or animal life or to property, or which unreasonably interfere with comfortable enjoyment of life and property. Application of the criteria of benefit area, economy of scale, and geographical adequacy points to the desirability of providing air pollution control on an "air basin" basis, which is likely to be much larger than the jurisdiction of an individual local government. If the air basin is encompassed within the metropolitan area, the State probably is the most appropriate unit. It can conduct air pollution control either through direct administration or establishment of minimum standards of performance for localities in the "air basin" to follow, perhaps with State financial assistance and regulation. In areas where urban development substantially overlaps State lines, especially in major portions of the Northeast, interstate action may be the only effective way to control air pollution. (For detailed analysis, including reference to experience with areawide coordination in Bethlehem, Boston, New York and San Francisco areas, see Part II, Chapter 3, Section I.)

C. General Observations

A review of the prerequisites of effective administration of urban functions confirms that the existing fragmented local government structure labors under handicaps. Political realities, however, preclude shattering the existing system in order that it might be remolded in conformity with an updated model. That line of action is not feasible and may not even be

desirable. Many steps can be taken within the present general framework itself by revising arbitrary and outmoded restrictions and making bold use of such tools of intergovernmental relations as metropolitan planning, interlocal contracting, adequate standards to control new incorporations, reasonable annexation laws, and responsible areawide agencies or contractual arrangements to provide certain services that by nature cannot be handled on a strictly local basis. A number of general observations have emerged from this study concerning the nature and direction of such steps.

Examination of Local Performance and State Laws

The first of these observations is the importance of self-examination and review of present practices by local officials and citizens themselves; review in the light of new technological developments and current and future needs to determine if there are certain urban functions which might be better handled on the basis of different areas of jurisdiction than those which have grown up in the past.

A willingness to look at new ways of meeting not only today's, but tomorrow's problems has been recognized and endorsed by the major organizations of local government officials. Thus, the delegates to the Second Urban County Congress of the National Association of Counties on February 9, 1963, adopted the following statement: "We must work cooperatively with municipal and other officials and adopt a multi-governmental, multi-county approach to our areawide problems." In the same vein the National Municipal Policy--1963 adopted by the 39th annual Congress of the American Municipal Association stated: "As the national organization representing more than 13,500 municipal governments, the American Municipal Association encourages these experiments (cooperative metropolitan planning, consolidated city-county government, federations of existing local governments, etc.) in the belief that the solution of metropolitan problems requires new concepts in local government organization, functions, and finances."

The concern of the State and Federal governments in effective and efficient administration of urban services is such that they must increasingly provide the attention and assistance necessary to help local governments meet these areawide problems. The State and Federal governments must be satisfied that their own laws and administrative actions are positive rather than negative forces for achieving better relationships between costs

and benefits, achieving economies of scale, assuring adequate geographic areas of jurisdiction, providing necessary legal and administrative authority to local governments, preserving and extending general multiple-purpose units of government, and promoting maximum citizen participation.

In making studies of urban services and considering measures for more appropriate jurisdictional allocation of responsibility, local governments in metropolitan areas frequently encounter the retarding effects of State laws and practices. These laws and practices restrict opportunities and hamper efforts of localities to adjust governmental structures and boundaries. Sometimes they prescribe in detail how urban functions shall be performed.

The Commission has previously stated its conviction that States have a fundamental responsibility for enabling and assisting their metropolitan areas to deal with the difficult problems they face. To this end, the Commission has in the past (1) recommended some legislative measures to broaden the ability of localities to improve their organization, procedures, and finances; (2) suggested that the States provide their localities with technical and financial assistance; and (3) urged the States to take direct action to help solve metropolitan problems where the State's general interest is clearly paramount and localities cannot, or will not, act in concert to solve the problems (as in water pollution), or where State policies create the problems (as in overly permissive incorporation policies).

States therefore need to cooperate with their local governments in taking a fresh look at performance of urban functions in their metropolitan areas. Such studies would have the objectives of (1) identifying urban functions, or parts of functions which are most effectively performed on a State, metropolitan area, county, or municipal basis, or some combination; and (2) revising laws and practices affecting the level of performance, to achieve the most effective performance. With regard to the latter, some elements of a general State legal and policy review could include (1) promoting conformity of State and State-aided projects with locally prepared comprehensive development plans and programs for the metropolitan area; (2) encouraging coordination among State agencies administering interrelated direct, or State-assisted, projects within metropolitan areas; (3) avoiding the creation of State impediments to restructuring local governments into more adequate units for meeting areawide urban service needs, and discouraging the creation of single-purpose authorities which add to fragmentation of local government structure in urban areas; and

(4) promoting appropriate cooperative or joint implementing action by local units of government within metropolitan areas through the use of financial and other incentives or requirements.

Apart from perfecting their planning enabling legislation, the States can do much to improve coordination of decision-making and administration among urban governments of metropolitan areas, particularly in matters affecting physical development. Such measures as financial aid to metropolitan planning agencies and technical planning assistance are referred to in Part II, Chapter 3. Another step States might consider would be the attachment of performance requirements as a condition of financial grants to local units of government.

Traditionally the States have attached minimum performance requirements as a condition of local grants, notably in the fields of public education, highways, hospitals, and welfare. The range of possibilities for setting such requirements on functions affecting physical development varies among the States--with greatest range occurring in the more urbanized States--and from function to function. Appendix A shows by State and function the extent to which States were providing selected functional aids to local units of government in 1957. As of that time, three States provided aid for parks and recreation, 29 for hospitals, three for water and sewage, three for housing, and virtually all for highways.

Since 1957 the States have expanded the number and size of their financial grant programs to localities, as reflected in the summaries of the role of State governments in Part 11. Additional State activity has occurred in the fields of parks and recreation, water supply and sewage disposal, planning, and urban renewal.

Among more recent grant programs specifically affecting physical development, the New Jersey Green Acres program requires that in order to receive State grants for open land acquisition, localities must submit evidence that there is a **comprehensive development plan** in the area and that they have regulations governing administration, use, and development of the **lands**. **Some** States approve a locality's application for a Federal 701 planning grant only if the locality's program includes a complete master plan or if the locality has trained planners on its staff. Other States provide financial incentives to ~~library systems set up on an areawide~~ basis.

Adapting the technique of performance requirements as a condition for financial grants, the States might, for example, require that applications from governmental units within metropolitan areas for grants for functions affecting area development be referred for review and comment by the areawide planning agency. They might, on the other hand, make certain functional grants contingent on existence of areawide functional plans, or they might require consistency of a proposed project with a Statewide plan prepared by an agency of State government. Use of minimum performance requirements to stimulate more effective planning and coordination in metropolitan areas in any case would have ample precedent.

Establishment of Metropolitan Planning Agencies

Another general observation emerging from this study is that for many urban services it is more important that their performance be coordinated with the planning and performance of other functions in the metropolitan area than that they be administered by an areawide jurisdiction. This is especially true for functions affecting physical development.

Areawide planning can be an important influence in achieving such consistency among functions. For the principal role of areawide planning is to develop recommendations for areawide goals for physical development, and to propose plans for coordinating public and private actions toward attainment of the goals. Thus metropolitan planning can go a long way, short of structural reorganization, toward helping achieve some of the benefits of areawide performance of functions affecting physical development, the desirability of which might be indicated by a community's own analysis of its urban services.

The effectiveness of areawide planning depends to a crucial degree on the extent its output is of real use to governmental policymakers in the area. It is therefore vital, as the Commission has emphasized previously, that planning be integrated into the decision-making process. One step in this direction is to provide, as the Commission has previously urged, that local officials--mayors, councilmen, and county commissioners--constitute the planning body, with authority to appoint additional members from the general public if they so desire.

Despite the widespread availability of State enabling legislation, a majority of the 212 metropolitan areas of the country still do not have an effective areawide planning process in operation. It may be anticipated, however, that an increasing number of communities in metropolitan areas will take advantage of State enabling legislation and Federal two-thirds matching grant assistance to establish metropolitan planning agencies.

Developing and Achieving Areawide Goals

The basic purpose of this study is to develop technical and political guidelines for answering the question: What is the optimum size area for providing a given urban service? Yet, until basic questions concerning the long-term development and goals for a metropolitan area are dealt with--such as patterns of growth, overall size, and the industrial and residential character of the community and area--it is difficult to determine the most effective means of providing any given function. However, today few cities or counties and even fewer metropolitan areas have succeeded in working out any comprehensive plan for future general development.

Every metropolitan area--with its own unique economic and social interests--needs a sense of purpose and some objectives or "goals" to guide it in its future growth and development. For lack of such comprehensive community thinking, leadership in most urban areas "muddles along." Federal, State, local and private expenditures for urban services are, to some extent, wasted in trying to solve one problem at a time. In so doing, they frequently make solving the next problem more difficult. The present picture of uncoordinated development and urban sprawl in our metropolitan areas comes at a time when the nation has, perhaps uniquely in history, the opportunity--by proper use of its human and natural resources, of private and public capital and organizational tools--to achieve almost any kind of urban community that is desired.

Agreement on areawide goals is the basic requirement for coordinated areawide action, regardless of how many local governments or administering agencies may exist. Still greater coordination would be achieved in the metropolitan area if localities then would adapt their policies and programs so as to work toward actual achievement of the areawide goals.

Achievement of an effective system of areawide goal formulation and coordinated governmental action is likely to be a long process. Metropolitan communities need to exert more effort in moving toward that objective, and need to at least begin exploring the problems involved. Moreover, the State and Federal governments, with their vital interests in securing a greater degree of program coordination, should be prepared and willing to lend their assistance in this exploratory process.

Local governments might well, therefore, begin to explore jointly with State representatives and key Federal agencies, the development of agreed-upon goals for each metropolitan area and a program of governmental and intergovernmental action needed to achieve these desired objectives.

II

DETERMINING THE OPTIMUM JURISDICTION
FOR HANDLING URBAN SERVICES

Chapter 1

INTRODUCTION

Part **II** demonstrates a method by which citizens and public officials in large urban centers might analyze urban functions and reach conclusions as to whether they should be provided on a local, areawide, or intermediate area basis. **It** contains the detailed analysis of 15 urban functions from which the findings summarized in Part **I** are drawn.

Chapter 2 develops seven economic and political criteria to serve as guidelines in deciding the most desirable jurisdiction for handling each of the 15 urban services. Each urban function is evaluated in the light of these criteria to answer the question: Is the function most adequately and effectively provided on a local, areawide, or intermediate area basis? For example, will performance of the transportation function on a local, county, or areawide basis be most likely to introduce economies of scale, or permit equating of costs and benefits, or provide greater citizen accessibility?

Chapter 3 describes, for each of the 15 functions, (a) the nature and scope of the function as generally viewed and carried on in metropolitan areas throughout the country, (b) current practice with respect to jurisdiction of performance, (c) the roles of the State and National governments, (d) technical standards of service, and (e) the desirable jurisdiction suggested by specialists. Selected criteria are then applied. These concern mainly benefit area, economy of scale, and geographic adequacy--criteria to which individual functions may respond differently. Concluding the treatment of each function is a description of recent experience with larger area performance of the function.

Chapter 4 applies the remaining criteria to all the functions taken together, instead of function-by-function, because only **in** that way can these criteria be applied significantly, or because **a**ll the functions respond in the same way to the individual criteria. For example, **it** is believed that a more inclusive unit of government will consistently possess greater ability to attract skilled administrative personnel, as well as political and civic leadership for every function. These criteria applied to the functions as a group concern legal

and administrative ability, comprehensiveness of government, accessibility and controllability, and citizen participation.

In applying the Commission's findings to any given community, it must be kept in mind that these findings are largely illustrative. Individual variations in population size and density, laws, traditions and geography make it necessary for those concerned with the particular urban area to decide the best manner of planning and administering these urban functions.

Definitions

For purposes of this study, "local" urban functions are those performed by units of government whose jurisdiction extends to only a portion of a metropolitan area. Generally, such units are municipalities, townships, school districts, small special districts, and counties encompassing less than a substantial amount of the entire metropolitan area. "Areawide" urban functions are those performed throughout a metropolitan area by a single unit or by a number of local units acting jointly or cooperatively. "Intermediate" urban functions are those performed by a single unit or by a number of local units acting jointly or cooperatively, having jurisdiction over a substantial part of the metropolitan area. Such units usually will be large special districts or counties occupying less than an entire metropolitan area.

Specialists' Suggestions

In the functional description and analysis in Chapter 3, the suggestions of specialists with regard to desirable scale of jurisdiction are given special attention. Specialists--health officers, water engineers, planners, educators, police administrators, for example--daily deal with technical problems of providing service, and are in intimate contact with the public affected. In evaluating the viewpoints of the professionals, it was recognized that these groups tend to recommend "desirable" standards that may exceed minimum requirements, and their concern for meeting standards of service may cause them to give too much weight to administrative efficiency and adequacy while neglecting other considerations.

State Responsibility for Local Governments

A fundamental fact in State-local relations in the United States is that local units of government depend upon their State legislatures for their organization, powers, and boundaries, except as otherwise provided by State constitutions and judicial interpretation. Local dependence upon State legislatures is especially important in dealing with metropolitan problems, since such constitutional protection as localities have against legislative control usually applies only to "local" matters. Metropolitan problems, on the other hand, are by definition more than purely "local"; they concern more than a single locality. ^{1/}

The fundamental superior-subordinate relationship of State and local governments is significant in regard to all the functions of government analyzed here, although there may be some constitutional variations among the different functions and among the States. Since it is universally applicable, specific reference to this relationship is not made in the analysis of "The Role of State Government" for each function in Chapter 3, except where special circumstances indicate such references to be desirable. Comments on the role of State governments are therefore generally limited to description of the extent State governments provide technical and financial assistance, establish standards, provide direction or supervision, or impose other requirements which might encourage or discourage performance of a particular urban function at either the local or regional level.

Proportion of Urban Expenditures Allocated to 15 Functions

Direct expenditures for the 15 functions studied represented over 85 percent of the total direct general expenditures by local governments in 1961. Table I indicates the general distribution of expenditures by function, according to the U. S. Census Bureau classification. Some of the functional categories in the Census Bureau classification differ from those used in this study. Thus,

^{1/} Advisory Commission on Intergovernmental Relations, State Constitutional and Statutory Restrictions Upon the Structural, Functional, and Personnel Powers of Local Government (Washington: Government Printing Office, 1962), and John W. Winters, State Constitutional Limitations on Solutions of Metropolitan Area Problems (Ann Arbor: The University of Michigan, 1961), Chapter II.

in the table, air pollution control is included under health; planning is included under general control; and housing inspection and building inspection (both discussed under the housing function in this study) are covered in the category "other and unallocable"

Expenditures for water supply, which are excluded from Table 1 because the Census Bureau does not define them as general expenditures, amounted to \$2,106 million in 1961. 2/

Statistics on Intergovernmental Relations and Current Performance Level

To provide an overall view, and also to avoid repetitive citation in the report, financial statistics on intergovernmental expenditures by function, and on units of local government currently performing urban functions are presented in Tables 2 and 3, respectively.

Table 2 supplements Table 1, showing intergovernmental expenditures in addition to direct expenditures. The functional breakdown is not as detailed as in Table 1, but the functions shown are the major ones involving significant amounts of intergovernmental expenditures. Figures on intergovernmental expenditures do not, of course, reveal the extent direction and control from a higher level accompany expenditures. Analysis of each function provides the detail on these and other intergovernmental aspects of the function.

Table 3 indicates the extent responsibility for locally-administered functions was shared among different types of local governments in 1957. Comparable figures for water supply systems not shown in the table are (in millions of dollars): counties--26; municipalities--1,305; townships--58; and special districts--196. 3/ An obvious limitation of this table, and also of the function-by-function description of current practice in Chapter 3,

2/ U. S. Bureau of the Census, Governmental Finances in 1961 (Washington: Government Printing Office, 1962), Table 9, p.25.

3/ U. S. Bureau of the Census, "Compendium of Government Finances", U. S. Census of Governments: 1957, Vol. III, No. 5 (Washington: Government Printing Office, 1959), Table 12, p. 23.

is lack of information on the degree local units provide services jointly or cooperatively under formal or informal agreements. Such performance has many of the attributes of an areawide approach, so that lack of data on the frequency of joint cooperation results in an understatement of areawide provision of services under current practice.

Table 1 - DIRECT GENERAL EXPENDITURE, BY FUNCTION, BY LEVEL OF GOVERNMENT: 1961

Function	Amount (millions of dollars)				
	: All : govern- : ments	: Federal : Govern- : ment	: State and local governments		
			: Total	: State	: Local
	139.161	82.960	56.201	19,004	37,197
National defense and inter- national relations	49.387	49.387	---	---	---
All other functions	89.774	33,573	56.201	19,004	37.197
Postal service	4.025	4.025	---	---	---
Education	21.214	640	20.574	3.792	16.782
Institutions of higher educa- tion	3.570	---	3.570	3.170	400
Local schools	16.608	---	16,608	226	16.382
Other	1.036	640	396	396	---
Highways	9.995	151	9.844	6.230	3.614
Public Welfare	4.779	59	4.720	2.311	2.409
Categorical public assistance ..	3.088	13	3.075	1.767	1,308
Other public assistance	515	---	515	258	257
Other public welfare	1.178	46	1.132	287	845
Health and hospitals	5.682	1,595	4,087	2.059	2,028
Public hospitals	4.310	957	3.353	1.750	1.603
Other hospitals	239	96	143	49	94
Health	1.132	542	590	260	330
Police protection	2.210	193	2.017	261	1.756
Local fire protection	1.087	---	1.087	---	1.087
Sewerage	1.103	---	1.103	---	1.103
Sanitation other than sewerage ..	672	---	672	---	672
Local parks and recreation	857	---	857	---	857
Natural resources	11.409	10.082	1,327	906	421
Housing and urban renewal	1.320	377	943	7	936
Air transportation	1.800	1.378	422	36	386
Water transport & terminals	1.273	980	293	78	215
Correction	810	47	763	479	284
Libraries	368	---	368	19	349
Social insurance administration ..	636	285	351	351	---
Financial administration	1,608	591	1,017	472	545
General control	1.417	197	1.220	253	967
General public buildings (State- local)	590	---	590	120	470
Interest on general debt	9.309	7.485	1.824	584	1.240
Other and unallocable	7,607	5.485	2.122	1,046	1.076

Source: U. S. Bureau of Census, Governmental Finances in 1961 (Washington: Government Printing Office, 1962). Table 6, p. 23.

Table 2 • SUMMARY OF GENERAL EXPENDITURE (DIRECT AND INTERGOVERNMENTAL),
BY FUNCTION, BY LEVEL OF GOVERNMENT: 1961

Item	Amount (millions of dollars)			
	All governmentments	Federal Government	States	Local governmentments
All functions.....	11139,161	89,971	29,118	37,393
Direct.....	139,161	82,960	19,004	37,197
Intergovernmental..	1/	21 7,011	10,114	196
National defense and international relations ^{3/}	49,387	49,387	---	---
Postal service ^{3/}	4,025	4,025	---	---
Education.....	1/ 21,214	1,669	9,755	16,782
Direct.....	21,214	640	3,792	16,782
Intergovernmental.....	1/	1,030	5,963	4/
Highways.....	1/ 9,995	2,738	7,496	3,645
Direct.....	9,995	151	6,230	3,614
Intergovernmental.....	1/	2,586	1,266	31
Public Welfare.....	1/ 4,779	2,238	3,913	2,442
Direct.....	4,779	59	2,311	2,409
Intergovernmental.....	1/	2,178	1,602	33
Health and hospitals.....	1/ 5,682	1,750	2,243	2,092
Direct.....	5,682	1,595	2,059	2,028
Intergovernmental	1/	154	184	64
Natural resources.....	1/ 11,409	10,214	924	421
Direct.....	11,409	10,032	906	421
Intergovernmental.....	1/	132	18	4/
Housing and urban renewal.....	1/ 1,320	655	37	936
Direct.....	1,320	377	7	936
Intergovernmental	1/	278	30	4/
Air transportation.....	1/ 1,800	1,442	55	386
Direct.....	1,800	1,378	36	386
Intergovernmental.....	1/	64	20	---
Social insurance administration..	1/ 636	655	351	4/
Direct.....	636	285	351	4/
Intergovernmental.....	1/	370	---	---
Interest on general debt ^{3/}	9,309	7,485	584	1,240
Other and combined.....	1/ 19,604	7,714	3,760	9,448
Direct... ..	19,604	7,494	2,729	9,381
Intergovernmental.....	1/	219	1,031	67

Note: Because of rounding, detail may not add to totals. Local government amounts are estimates subject to sampling variation.

Source: U. S. Bureau of the Census, Governmental Finances in 1961 (Washington: Government Printing Office, 1962), Table 5, p. 22.

1/ Duplicative transactions between levels of government are excluded in arriving at aggregates.

2/ Entirely to States except for \$745 million paid direct to local governments, including \$276 million for education, \$278 million for housing and urban renewal, \$44 million for airports, \$44 million for waste treatment facilities, and about \$28 million, Federal lump-sum contribution to the District of Columbia.

3/ Entirely direct expenditure.

4/ Minor amounts included under "Other and combined", below.

Table 3 - DIRECT GENERAL EXPENDITURE BY FUNCTION, BY TYPE
OF LOCAL GOVERNMENT: 1957 (IN MILLIONS OF DOLLARS)

Item	Total	Coun- ties	Munici- palities	Town- ships	School districts	Special districts
	26,604	5,359	9,417	1,132	9,581	1,115
Education	11,668	557	1,423	341	9,347	---
Local schools..	11,635	530	1,417	341	9,347	---
Other.....	33	27	6	---	---	---
Highways	2,941	1,205	1,313	325	---	99
Public welfare	1,659	1,104	489	66	---	---
Categorical public assistance.....	1,043	736	278	29	---	---
Other public assistance	146	73	65	8	---	---
Other	470	296	145	29	---	---
Hospitals	1,246	582	529	7	---	129
Health	303	126	159	9	---	9
Police	1,290	193	1,041	55	---	---
Local fire protection....	810	26	709	43	---	31
Natural resources.....	244	124	---	---	---	120
Sewers and sewage disposal.....	906	103	642	46	---	114
Other sanitation.....	537	10	504	21	---	2
Local parks and recrea- tion.....	608	67	459	22	---	60
Housing and community redevelopment	503	---	247	1	---	255
Nonhighway transportation	447	32	240	3	---	172
Air transportation.....	226	31	105	2	---	89
Water transportation & terminal facilities..	133	2	47	---	---	84
Other	89	---	88	1	---	---
Correction.....	136	136	---	---	---	---
Local libraries	199	31	145	10	---	13
General control.....	1,195	594	512	89	---	---
General public buildings (State-local)	351	174	157	20	---	---
Interest on general debt.	755	90	309	20	234	102
Other and unallocable....	806	203	540	55	---	7

Source: U.S. Bureau of Census, "Compendium of Government Finances", U.S. Census of Governments: 1957, Vol. III, No. 5 (Washington: Government Printing Office, 1959), Table 8, p. 20.

Chapter 2

ECONOMIC AND POLITICAL CRITERIA FOR ALLOCATION OF URBAN FUNCTIONS

A number of economic and political criteria might be applied to urban functions in order to arrive at a judgment on whether the functions should be performed on a local, intermediate, or areawide basis. No single set of criteria would of course receive universal endorsement. The following set is suggested as likely to receive widespread acceptance as tending, if followed, to foster local government in metropolitan areas capable of resolving conflicts, providing a setting for personal development in a democratic atmosphere, and providing public goods and services required by the citizenry. The first two are economic criteria; the last five are political.

1. The governmental jurisdiction responsible for providing any service should be large enough to enable the benefits from that service to be consumed primarily within the jurisdiction.
2. The unit of government should be large enough to permit realization of the economies of scale.
3. The unit of government carrying on a function should have a geographic area of jurisdiction adequate for effective performance.
4. The unit of government performing a function should have the legal and administrative ability to perform the services assigned to it.
5. Every unit of government should be responsible for a sufficient number of functions so that it provides a forum for resolution of conflicting interests, with significant responsibility for balancing governmental needs and resources.
6. The performance of functions by a unit of government should remain controllable by and accessible to its residents.
7. Functions should be assigned to that level of government which maximizes the conditions and opportunities for active citizen participation and still permits adequate performance.

Economic Criteria

1. The governmental jurisdiction responsible for providing any service should be large enough to enable the benefits from that service to be consumed primarily within the jurisdiction.
The benefits from the service and the social cost of failing to provide it should have a minimum of "spillover" into other jurisdictions.

The difficulties in achieving a unit *of* government which satisfies this criterion are immediately apparent. First, spillovers of social benefits and social costs cannot always be identified. Second, even when they can be identified, it is frequently not feasible to enlarge the jurisdiction to eliminate spillovers. Third, many functions involve subfunctions for which the amount of inter-community spillover varies,

Definition of the area within which benefits are consumed involves first a determination of the extent to which consumption of service benefits is narrowly confined to individuals or broadly diffused throughout the community. Three general groupings of functions may be distinguished on this basis. Each group combines partial appropriability of benefits to individuals with partial uniformity of collective consumption, but they vary in the degree the latter characteristic predominates.

(1) Social service 1/ functions are those whose benefits are least susceptible to appropriation by any one individual, and are most likely to be enjoyed only if they are provided on a community-wide basis. These include:

Parks and conservation
Sanitary and health inspection services
Highways and streets
Planning and zoning

1/ The term "social service" is not used here with its usual welfare connotation. Reference is to consumption of public services by society as a whole, rather than by an individual.

Building and housing inspection
Police protection
Fire fighting and prevention
Judicial functions, including probation and custodial services
Civil defense
Nuisance control
Welfare 2/

(2) Utility services are those whose direct benefits can be enjoyed exclusively by the individual consumer, who pays for the number of units of service he uses. The indirect benefits are small compared to the direct benefits. These services are frequently monopolistic or involve substantial economies of scale. Government provides them either because the private market does not find it profitable to do so, especially when rates are regulated, or when the community decides that public administration is the best way to regulate monopoly in the public interest and assure minimum standard of service. These services include:

Refuse collection and disposal
Gas and electricity
Parking facilities
Golf courses, swimming pools, etc.
Curb, gutter and sidewalk improvements and maintenance
Transportation terminals: airports, truck depots, etc.
Legal services, such as recording of deeds, etc.

(3) A third group of services falls between these two, in that their direct benefits can be largely enjoyed by individual consumers, and priced accordingly, but they also have a substantial spillover of indirect benefits to the entire community.

Water supply
Sewage disposal
Public health services
Hospital and medical care facilities
Transportation
Recreation programs
Education
Libraries

2/ Although individuals receive large direct share of welfare benefits, the economic justification for providing the service lies in the broader social benefits created. For further discussion see page 50.

It is apparent from the grouping of services that it is difficult to define an area of benefit consumption for certain services. For the large group of social services (group 1), many of the beneficiaries (especially the indirect beneficiaries) cannot even be identified. When beneficiaries cannot be identified, and thereby located, the entire area to which benefits extend cannot be circumscribed. Thus, only for appropriable benefits (that is, benefits enjoyed exclusively by individuals) from utility services and certain direct benefits from social services can the boundaries of a benefit area be identified with precision.

Spillovers of benefits and costs can never be eliminated entirely. No sooner does a jurisdiction catch up to them than they extend further. Law enforcement in one community, for example, affects the crime rate among its neighbors, but as the jurisdiction of a police force is extended the criminal likewise can extend his activities to the whole State, neighboring States, and ultimately the entire Nation and beyond. No one has seriously suggested a single police force to patrol the entire area to which its benefits might extend; rather a series of overlying law enforcement jurisdictions has been established from municipal to county to State police, through the FBI to Interpol. Moreover, the authority of each has been defined in terms of spillovers from the next lower level. Thus the FBI is concerned with interstate crime, which is beyond the jurisdiction of the individual States and localities.

In practice, there has been no attempt to eliminate spillovers by extending the jurisdiction of the several layers of law enforcement agencies because it would introduce diseconomies of scale. The unit cost of a foot patrol provided by Interpol for Dayton, Ohio, would likely be far greater than for the same quality of patrol provided by the Dayton police force. Conversely, the cost of maintaining facilities for pursuing a criminal in France would be prohibitive for Dayton. Extension of jurisdiction to reduce spillovers is therefore limited in the first instance by potential diseconomies of scale.

Finding the scale at which an urban function can be performed without spillover of benefits is complicated by the fact that functions usually consist of several subfunctions, each of which may have different spillover effects. Thus, within the total service of a parks and recreation department, playlots have a much narrower benefit area than large recreation parks. In the promotion of public health, the benefits of dwelling inspection might be more localized than those of immunization.

2. The unit of government should have large enough area to permit realization of the economies of scale.

Economy of scale is the tendency for unit costs of output to decline with increased output. It is accepted as a principle of economic organization and underlies, in the private sector of the economy, development of large scale industry and commerce. It results from application of assembly line methods, the lower proportion of fixed costs allocated to a single unit of output, greater efficiency of centralized overhead functions, such as purchasing and personnel, and greater flexibility in coping with the problem of discontinuities in capital capacity.

As in determining the benefit area for a function, determining the jurisdictional area of lowest unit cost is complicated by the fact that a function usually consists of several sub-functions. Direction of traffic flow and enforcement of traffic regulations, activities of the police department, might be most efficient at the local level, while investigation of auto theft might be most efficient at the county or State level. In fire administration, fire fighting might be most efficient at the local level, while fire prevention might be conducted at the lowest cost at the areawide level.

References to economies of scale to be realized from performing urban services on a large scale are common in public administration literature. However, with few exceptions, these references are not substantiated with specific objective studies of what has happened when the administration of various urban services has been moved from a smaller to a larger unit of government .

Figures are sometimes cited to show that diseconomies rather than economies of scale prevail in the provision of urban services. For example, it may be noted that the Compendium of City Government Finances in 1961 shows the following per capita current expenditures for cities of varying size groups: 1,000,000 population or more--\$160.65; 500,000 to 999,999--\$120.03; 300,000 to 499,999--\$86.71; 200,000 to 299,999--\$89.31; 100,000 to 199,999--\$89.59; 50,000 to 99,999--\$83.89; 25,000 to 49,999--\$66.75; and less than 25,000--\$46.80. 3/ Closer

3/ U. S. Bureau of the Census, Compendium of City Government Finances in 1961 (Washington: Government Printing Office, 1962), p. 9.

analysis, however, would raise doubt as to whether these figures reflect diseconomies of scale. The per capita expenditure figures do not necessarily represent equal amounts of service, and where expenditures are larger it may be that units of service provided are proportionately even higher. The relationship is at best highly superficial, for the variation between groups of cities is not significantly greater than that within these groups. Studies have been directed to finding explanations of variations in city expenditures (not costs), and evidence points to a relation between increased expenditures on one hand and density of population, the ratio of the city's population to that of the standard metropolitan statistical area in which it is located, and the magnitude of median family income, on the other. ^{4/}

Relation between Economic Criteria

To the extent that a benefit area can be defined, its size (usually in terms of population) is directly related to economies of scale for **many** services. That is, the larger the size of the benefit area for these services, the lower the unit cost of output. Conversely, reducing the size of the service area may increase the unit cost of output. Refuse disposal provides an example. A **small** community finds it uneconomical to build a refuse incineration plant because the large investment required involves a unit cost of output higher than the citizenry is willing to pay. The reduced unit cost from enlarged production would make it worthwhile enlarging the benefit area, that is, taking in more customers, at least up to the point of maximum use of the plant capacity. Thus, for services which enjoy reduced unit cost from increased output, spillovers can be eliminated by enlarging the service jurisdiction to take advantage of those economies.

There say remain elusive indirect benefits and costs for even these services, which **may** or may not continue to spill over the larger jurisdiction. For practical purposes these may be considered a "residue" which accrue to a higher level of government.

^{4/} Harvey E. Brazer, City Expenditures in the United States (New York: National Bureau of Economic Research, Inc., 1959), p. 67.

Problems of Application

Separate jurisdictional allocation of innumerable sub-functions on the basis of the economic criteria could result in a more confused welter of local agencies and service areas than already exists. Thus application of the economic criteria must take account of the desirability of structural simplicity among local governments. For any given service or subfunction, responsibility should be allocated to that jurisdiction which is closest in area to the service area delineated on pure efficiency grounds. Thus, some functions, such as traffic control and parking, might be carried out entirely by one level of local government, while for others, such as health and highways, responsibility would be shared by two or more jurisdictional levels.

Because of the great diversity of economic characteristics among the jurisdictions within a metropolitan area, efficient allocation of responsibilities does not necessarily coincide with distribution of economic resources needed to sustain the appropriate package of public services. Legal restraints imposed upon local governments further inhibit their ability to provide and finance service. The plight of the dormitory city with sufficient population to support a school system at an efficient scale of operations, but insufficient property tax base to finance it at a desirable level of quality, is all too familiar. This condition presupposes raising local finances entirely out of property taxes, to which resource most school districts are limited by State law. If this restraint were removed many such communities undoubtedly could finance education by other revenue means. Moreover, ability to finance a service depends upon the level of quality of service sought. Communities which appear to be unable to finance education, say, have insufficient resources relative to a given standard of school services; they could lower the standards or curtail expenditure on some other service in favor of education. These variations in the ability to finance a given quality of education of course provide the justification for State aid to local school districts and the State standards of quality upon which the aid is based. Both standards and financial aid are established in recognition of the large spillovers of education benefits. In any case, application of the economic criteria for allocation of functional responsibilities must be modified to take account of the large intercommunity variations in tax bases and qualitative and quantitative demands for public services.

Even if the jurisdictional allocation of functions is undertaken on the basis of the economic criteria, the less than average level of service in low tax base-low standard communities and the above average level in high tax base-high standard communities may introduce a "second order" of spillovers. For example, poor quality and quantity of service in the low standard community can create problems, such as crime and delinquency, which affect the high standard community. At this point several alternatives may be taken, depending to a great extent upon the value placed on freedom of consumer choice.

Freedom of consumer choice, or consumer sovereignty, plays an important role in efficient allocation of economic resources. Full expression of choice determines that those goods and services will be produced, either publicly or privately, which are positively valued and to which necessary productive resources will be readily allotted. Conversely, productive resources will be fully utilized if they are applied to goods and services for which there is an effective demand.

In reacting to a "second order" of spillovers, if a metropolitan area places secondary importance on freedom of consumer choice, it may choose to enforce a uniform minimum standard for all public services administered locally through intercommunity transfers of funds by a higher level of government, or it may consolidate all services under an areawide government, thereby also assuring a uniform minimum service standard. On the other hand, if freedom of consumer choice of public services is highly valued, the area will strive to preserve the variation in local community service offerings, since it provides that freedom both to the present consumer-voters and to prospective consumers who may be "shopping" among communities for a place to locate. Under conditions of full mobility of population and resources within a metropolitan area, one might expect this shopping to result in emigration from the low base-low standard communities and an ultimate evening out of revenue resources and service standards throughout the area. In fact, however, restrictive zoning combined with racial discrimination, which prohibits full mobility of persons and resources, results in both reinforcement of public differentiation and restriction of consumer choice.

Freedom of consumer choice is restricted in metropolitan areas on quite different grounds as well. That choice is generally registered through the voting process, but commuters who may spend all their daylight hours in a city other than the one in which they reside do not have a means of expressing their service

preferences there except indirectly and often ineffectively through business-employer pressure. They must accept the services supplied by the resident voters, whose choices may be sharply divergent from the commuter's, given the economic and social differentiation of metropolitan communities.

Residents of central cities frequently claim that they subsidize the commuter and imply that, as a consequence, he is not justified in claiming consumer-voter rights. The existence and amount of this subsidy are frequently overrated, however. Even where the commuter pays no taxes directly to the central city, his place of employment and his business patronage contribute to the economic prosperity and revenue base of the city. If his benefits exceed his contributions, this is but another facet of the general spillover problem, alternately soluble by an appropriate transfer of functions to a wider jurisdictional base according to the criteria under discussion in preference to central city attempts to calculate subsidies and exact financial compensation from the commuter.

Solution to the problems of consumer sovereignty, restriction of population movement and expression of commuter preferences is ultimately a political matter, but the political choice will affect the application of economic criteria for allocation of functions in any given metropolitan area. A decision in favor of maintaining local control and service variations in order to offer alternative service choices for resident consumers, either despite barriers to migration or with removal of such barriers enforced by a higher government, might limit the scope of services undertaken by a larger jurisdiction. On the other hand, a decision to broaden the voting base, and thereby provide the means for non-residents to register their public service preference in communities to which they commute, might result in widening the jurisdiction of certain services beyond the minimum required by strict economic efficiency. Finally, adoption of minimum standards of local service might require enlargement of the jurisdiction in order to enlarge the revenue base, the formation of interlocal contractual enterprises, or intercommunity transfers of funds through shared taxes or grants-in-aid.

The concept of minimum standards of service, as noted earlier, provides the rationale for many of the current Federal and State aids to local governments. Conceivably, if functional jurisdictions were drawn on the basis of economic efficiency criteria, which permitted financing of many services from a greatly broadened revenue base, many of these aid programs could

be reduced or consolidated. Whether financed by a single local community or a broad regional jurisdiction, the provision of social services inevitably involves transfer of economic resources from some segments of the population to others. Education provides a striking example. The direct beneficiaries are the children attending school, but indirect benefits are diffused throughout the population with varying degrees of intensity. Furthermore, the children of low-income families, who in the absence of public education would likely receive none, derive a proportionately greater benefit than the children of high-income families, who might alternatively attend private school. These effective transfers often create conflicts in the process of budgetary decisionmaking, both within a single community and among communities of a larger jurisdiction. The latter is well illustrated by the complaint of central cities that they effectively subsidize the suburbs by providing the high level of health and welfare services required for underprivileged groups, who are excluded from the suburbs by restrictive zoning and other forms of discrimination. These conflicts are difficult to resolve on economic grounds because the indirect benefits accruing to the jurisdiction as a whole from such transfers are often long-run and difficult to evaluate. Transfers for the purpose of providing social services of the welfare type are economically justifiable as a means of conserving human resources and thereby contributing to economic efficiency, but justification is more commonly predicated upon political considerations of equity. The application of the efficiency criteria to jurisdictional allocation of services involving transfers will thus be further modified by political evaluation of the transfer effect.

Political Criteria

3. The unit of government carrying on a function should have a geographic area of jurisdiction adequate for effective performance.

Some functions by their very nature dictate the area that is adequate for effective performance. Boundaries of municipal jurisdictions often bisect watersheds and drainage basins that water supply and sewage disposal systems depend upon. Mass transit lines and highways need to cross jurisdictional boundaries at will so that bridges will not be halted in mid-stream and six-lane super highways will not feed into country lanes. Air pollution is no respecter of legal boundaries and its effects

can only be mitigated by large area action. In order to coordinate and perform this type of service, administering governments, singly or jointly, should have political control of the total causal area and total area affected. Economic factors pertinent to areal adequacy and central-city suburban subsidization have been discussed.

Accumulations of large populations in urban areas require larger and larger blocks of land for purposes such as recreation, parks and "open space". Since land and other natural attributes are fixed, any public use by nonresidents of the governmental unit in which they are located must be arranged through inter-governmental cooperation. For example, it may be necessary for several jurisdictions in an area to work together to set aside sufficient land for purposes such as open space or rights-of-way.

A difficulty often cited in connection with urban renewal projects, highway development, and other major municipal capital undertakings is insufficient area for proper relocation of those dispossessed by the development. When only part of a metropolitan area, due to municipal boundaries, is available as a relocation area, the charge made against urban renewal and redevelopment--that slums are moved from one location to another--may in some instances be true. If relocation agencies have authority over sufficient area to shift groups about to greatest advantage, many of the disruptions and injustices associated with the process of uprooting families and dislocating patterns of living might well be dissipated. However, the political, economic, and social barriers to granting and exercise of such authority are enormous.

Some functions are intimate by nature, such as the relationship between client and welfare case worker, or pupil and teacher. For effective immediate performance only a small area may be necessary, but adequate planning and financing may determine that a much larger area is necessary. In other words, while it is always pleasant, often desirable, and sometimes possible to preserve neighborhood and small community areas for the boundaries of governmental functions, it may be necessary to follow natural boundaries or to expand geographic coverage to insure areal adequacy to perform particular functions.

4. The unit of government performing the function should have the legal and administrative ability to perform services assigned to it.

Government needs sufficient legal authority to undertake a service or an aspect of a service. For example, districts created for enumerated purposes cannot legally undertake additional functions. Functions such as law enforcement have changed in impact altering a small jurisdiction's ability to cope with them. The automobile enables criminals to flee far and wide in short order making it difficult to capture them because of lack of legal authority by one jurisdiction in many of the other jurisdictions in a metropolitan area.

Also important is the structure of government in the parts of the area or in the area as a whole. It is possible that the central, or largest city, in a metropolitan area has a structure of government, i.e., mayor, with or without a manager, and a council, adequate to undertaking any number of new functions or expansion of existing functions. In some instances a county government is in a position to furnish services that **may** be assigned to it with little or no restructuring of its government. On the other hand, many jurisdictions in metropolitan areas have governmental structures which reflect their rural origins and are not legally permitted or organizationally capable of undertaking or administering a new service. This latter problem has led to the growth in metropolitan areas of a multiplicity of special districts, or failure to provide a needed service altogether.

Related to legal and organizational structure is the necessity for a total administrative establishment that is capable and adequate to undertake new responsibility. Frequently, **small** municipalities find it impossible to afford or even recruit manpower necessary to carry out new and highly technical functions. Consequently, recruitment and retention of technical personnel may sometimes be possible only on a larger area basis.

Another consideration before assigning or undertaking new services is existence of able leadership. Some writers 5/ have stated that small cities frequently do not have on tap the necessary imagination, **skills**, and time to negotiate for civic programs and the necessary money. On the other hand, larger cities are often handicapped in civic leadership because of separation of cities and suburbs. The problem of lack of central city leadership has been termed "social absenteeism". Not only does the potential leadership not assume its responsibilities toward the city but those living in the suburbs while still working in the city often identify with interests opposed to it. In one metropolitan area where a successful consolidation between two municipalities, Newport News and Warwick, Virginia, was effected, the driving force was the realization by the businessmen of the area that they had no voice in the municipality that controlled the major governmental forces affecting their businesses. 6/

The government needs to have an adequate financial base to perform assigned services. In many instances a municipality does not have financial resources because of the original basis of its incorporation. The incorporators desirous of maintaining the residential character of an area may purposely draw boundaries to exclude an industrial area and potential tax source; or an area may make certain tax promises in order to attract a business. Older municipalities may have a decreasing financial base because of fleeing industry and residents due to deterioration. The problems raised by tax and debt limitations which have been placed on local governments by State governments have been previously discussed by this Commission.

5/ These concepts are discussed at some length in Edward C. Banfield and Morton Grodzins, Government and Housing in Metropolitan Areas (New York: McGraw-Hill Book Co., Inc., 1958), pp. 127-132; and Morris Janowitz, The Community Press in an Urban Setting (New York: The Free Press of Glencoe, 1962), p. 214.

6/ Advisory Commission on Intergovernmental Relations, Factors Affecting Voter Reactions to Governmental Reorganization in Metropolitan Areas (Washington: May 1962).

Resources such as sufficient legal authority, adequate structure and administrative personnel, civic leadership, and a proper financial base, then, become important determinants for the assignment of any service to units or levels of local government in large urban areas.

5. Every unit of government should be responsible for a sufficient number of functions so that it provides a forum for resolution of conflicting interests, with significant responsibility for balancing governmental needs and resources.

This' criterion tends to exclude creation of districts to perform just single functions and "governments" that are devised as contracting agents for a particular area. It implies that special governments should be brought within and made part of regular county or municipal governments. 7/

Broad scope for every government is important because services depend upon one another. Street and highway patterns bear upon developing mass transit patterns, whether public or private. The street pattern as part of subdivision control has a relationship to placement of utility lines, sewage disposal, water securement, and school buildings. Schools are entwined with aspects of police protection, fire prevention, welfare agencies, and public health programs.

If one authority controls sewage and water, and another streets, and a third transit, they may operate at cross-purposes and thus defeat even the best general development plan. School boards that build schools on secondary streets without regard to overall planning of traffic patterns are defeating their own goals as well as those of the traffic engineer.

When a government controls sufficient services, it can not only balance present needs and assign priorities, but it can also plan for the future. Municipalities with adequate planning,

7/ In its report, Governmental Structure, Organization, and Planning in Metropolitan Areas, (Washington: July 1961), the Advisory Commission on Intergovernmental Relations has discussed this issue and has proposed appropriate legislative remedies. See particularly pp. 26-31 and Appendix E.

and ability to insure implementation of their plans, can coordinate development of new land with access roads, street patterns, public utilities, sewer and water lines, and other community facilities to provide adequate services for expanding population in coming years, as well as adapt to unforeseen changes.

Different services and levels of service are considered essential by various social groupings that have developed. If government is able to weigh interests of the less fortunate in one area with the successful of another, the white collar with the blue collar, the over-pragmatic politician with the head-in-the-clouds planner, and others concerned, its decisions may more nearly represent a sensible and acceptable compromise.

Core cities house many of the poorly educated, less secure economically, social outcasts, minority groups with problems of assimilation, those less familiar with long-range goals of "good government". Their most immediate needs are assistance from health and welfare departments with only the barest interest in newer concepts of education. Another enclave in the metropolitan area may be able to afford the best private medical care available and by the same token want government to furnish public schools of a caliber that can only be matched by high tuition-charging private institutions. Downtown businessmen are more concerned with up-to-date fire equipment complete with tallest ladders and high pressure hoses than are ranch house owners on quarter-acre lots. The magnet that the city offers to some is museums, art galleries, symphony orchestras, and theaters, while these same cultural activities may serve to drive others to the environs of "rural" suburbia.

Since no single need or desire should dominate an entire metropolitan area, nor even a part of an area, government should have under its aegis responsibility for enough of the services to consider them as a total package to balance one with another, to assign priorities, always taking into consideration values of sub-areas and groups. Thus, any allocation of functions must relate to viable governments capable of serving their residents, while always being careful that distorted political jurisdictions are not created or left as a residue which will be unable to serve residents or to grow and change with changing forces.

6. The performance of functions by a unit of government should remain controllable by and accessible to its residents.

An earlier Commission report stated 8/ accessibility and controllability of local government are determined to a significant degree by factors having little relationship to size of government. These factors, which concern structural and procedural features of government, include number and nature of elective officials, manner of their election (by district or at-large), their terms, distribution of powers among them and appointive personnel, provisions for notice and hearings on proposed policy changes, administrative provisions for receiving and action on complaints, provisions for initiative and referendum, and recourse to the courts.

Citizens do not always use these tools, creating reason for concern with citizen apathy and failure to utilize opportunities to make their desires felt. The Commission study, Factors Affecting Voter Reaction to Governmental Reorganization in Metropolitan Areas, which reviewed voter reaction to governmental reorganization proposals in 18 metropolitan areas, found that in only two instances was voting participation as much as one-third of the adult population. Comparing voting on the 18 proposals with balloting in Presidential elections: turnout on reorganization proposals was typically less than one-half the vote cast for President at the national election of a nearby date. In only **two** of the 18 areas was the referendum vote **more** than two-thirds of the local vote for President, and in three instances it was less than one-third. A result of voter apathy, or inertia, is to allow vested political and other interests to defeat plans and proposals for any reorganization of structure or reallocation of functions. In this way, the status quo is continued which may defeat the very raison d'etre for maintaining smallness and closeness.

The other side of the coin of voter apathy could be that there is no reason for great outpouring of voters at every election, or citizens continually streaming to city hall. The "silent assent or denial" is always a potent force that will

8/ Advisory Commission on Intergovernmental Relations, Alternative Approaches to Governmental Reorganization in Metropolitan Areas (Washington: June 1962).

make itself felt when current conditions violate tolerance or a stunning new proposal is set forth. At other times, citizens may be satisfied to permit government operations to remain in the hands of the political activists.

When citizen control, or its lack, results in government that **does not** respond to needs then citizen self-determination will tend to be destroyed. Unsolved local problems will find themselves becoming solved by agencies of the State government stepping in to fill the vacuum, or by citizen appeal to the Federal Government. A resulting solution may be an independent agency, such as a sanitary district, which is governed by a board whose members have been appointed by the Governor and are not responsive or accessible to local citizens. State supervision of a water program because of inability to agree on a water program at a local-regional level, removes the program one step further from citizens. Local government that cannot secure itself firmly on its own financial base, causing it to seek aid from the Federal Government, loses some control of programs so financed.

There is one final facet to controllability by citizens. It was argued by James Madison in the famous Federalist Paper Number 10, "Extend the sphere (of government area) and you take in a greater variety of parties and interests; you make it less probable that a majority of the whole will have a common motive to invade the rights of other citizens." 9/ The Commission report cited earlier concluded that in terms of effective control "...the unit of government should be large enough to make it unlikely that any single interest can dominate it." 10/

Local control and accessibility, then, may be more practicable for the citizen of a single areawide government with effective overview of all functions as well as a degree of remoteness from vested interests, than for the citizen of a small community which is overlaid by many units of government, subject to pressures, over which he has no control.

9/ The Federalist (New York: The Modern Library), p. 61.

10/ Alternative Approaches to Governmental Reorganization in Metropolitan Areas, op. cit., p. 14.

7. Functions should be assigned to that level of government which maximizes the conditions and opportunities for active citizen participation and still permits adequate performance.

This principle, while possibly inconsistent in varying degrees with the other criteria set forth earlier is nevertheless a necessary and desirable balancing influence in assigning responsibilities for urban functions. While traditional concepts of **small and intimate** local governments are impossible to quantify, they are very real and constitute one of the essentials in our scale of values as to what we want our governments to be and how we want them to function. Obviously, increasing population and complexity of governmental services create inexorable pressure for modification (but not elimination) of these values. The problem is one of balancing traditional values with present-day and future realities. This balancing process is inherent in the analyses and conclusions contained in this report.

Widespread popular sentiment seems to favor smaller units of government as being "closer to the people." Lennox Moak in discussing this has said, "This phenomenon of our emotional attachment to a wholly artificial area on a map, usually laid out before our time, is difficult to explain in purely logical concepts. Yet it is a real force... ¹¹/ It is more than purely an irrational force, **as** people do seem to concern themselves more and participate more actively in local affairs of the **smaller communities**. Officials are friends and neighbors and **more** responsive to local sentiment. Citizens can also express more accurately the level of service they feel best represents their needs and is within the tax levy they want to impose.

Participation may also be more likely to be stimulated by small governments than large ones, **if** for no other reason than that smallness makes for greater numbers. **As** one observer noted:

¹¹/ Lennox L. Moak, "Some Practical Obstacles in Modifying Governmental Structure to Meet Metropolitan Problems," A Symposium on Metropolitan Regionalism: Developing Governmental Concepts, University of Pennsylvania Law Review, Vol. 105, No. 4 (February 1957), p. 612.

There is a critical political function for local government to fulfill. That function is not the training of players before they move to the big leagues. It is, rather, the sponsorship of sandlot politics in order that community interest in the game be maximized, and that the fans be enabled to exercise real discrimination when they have a chance from time to time to watch and to support the professionals. 12/

Banfield and Grodzins in their study for ACTION have made one of the most persuasive cases for maintaining communities **small** enough to permit citizen participation. They would permit "residence in a town which has a name and an identity apart from the central city, if the citizens are willing to pay the added cost this entails." 13/ In another place, "Provided minimum standards are everywhere met, there is much to be said for encouraging differentials in service levels. Many people do not wish to buy **more** of the services supplied by local government than absolutely necessary." 14/ Finally, in any analysis of what is desirable for government, consideration of "intangibles--for example, the suburbanite's satisfaction in remaining apart from the central city--should be accorded some value." 15/

Their precepts have not gone unchallenged. Webb Fiser in his comments on the Banfield and Grodzins theory states, "A community can maintain a type of control which makes it impossible for any poor people to live in the community, but if it does so it must bear its share of the burden by allocating

12/ Gilbert Y. Steiner, "The Local Government Concept;" Illinois Local Government, Final Report and Background Papers, Assembly on Illinois Local Government, Vol. 58, No. 67 (University of Illinois Bulletin, May 1961), p. 19.

13/ Edward C. Banfield and Morton Grodzins, Government and Housing in Metropolitan Areas (New York: McGraw-Hill Book Company, Inc., 1958), p. 33.

14/ Ibid., p. 37.

15/ Ibid., p. 155.

these functions to a government with power to tax the rich and poor community alike for the support of the necessary services." 16/ Fiser also cautions that when one is looking at all the considerations for allocating urban functions, one should not get lost in the intangibles and forget about the technical. 17/

Other writers have also modified their view of the value and results of the homogenous town. While it is the result of democratic choice, it does not result in democracy. The philosophy of the town or city reflects in its institutions, and "one-classness" will pervade such things as the educational system, as Norton Long stated, "to indoctrinate youth in the spirit of polity...to separate the men of gold from the men of silver and the men of brass." 18/

Intimateness of government must also be considered in light of increases in citizen demand for services with accompanying increases in cost of performance, changes in methods of administering functions, agglomerations of population in metropolitan areas, and other recent developments. Some argue that with proper social and political engineering it may be just as possible to make a metropolis democratic as it is to make a city or a Nation democratic. Jefferson Fordham states:

A major problem of our complex contemporary society is how to preserve the values associated with the small community unit at the same time that we organize effectively in the larger community orientation. We like to keep government close to the people--to give the common man a sense of participation. How do we do this when even local communities have become so large that big government seems inescapable? 19/

16/ Webb S. Fiser, Mastery of the Metropolis (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1962), p. 123-124. See also, Robert C. Wood, Suburbia: Its People and Their Politics (Boston: Houghton Mifflin Company, 1959), especially pp. 287-288.

17/ Fiser, op. cit., p. 123.

18/ Norton Long, "Aristotle and the Study of Local Governments," Social Research, Vol. 24, No. 3 (Autumn 1957), p. 295.

19/ Jefferson Fordham, A Larger Concept of Community (Baton Rouge, Louisiana: State University Press, 1956), p. 4.

Chapter 3

DESCRIPTION OF FUNCTIONS AND APPLICATION OF SELECTED CRITERIA

A. PUBLIC EDUCATION

The function of the public schools is to provide universal education from kindergarten through the twelfth grade, and in some communities through junior college level. Until relatively recently, the public schools limited themselves basically to development of the skills of the mind--the teaching of reading, writing, and arithmetic. Today their goals have been broadened, and they are asked to help children to acquire any skill or characteristic which a majority of the community deems worthwhile. Thus, in addition to intellectual achievement, the schools frequently are expected to foster "morality, happiness, and any useful ability." 1/

Current Practice

The organization for operation of public schools varies among the States because of differences in State legal provisions. The 1962 Census of Governments found that in 23 States local responsibility for public schools was vested solely in school districts which were independent units of government but, in addition, each of these States had at least one institution of higher education operated by a city or county government. In 17 States, a "mixed" situation prevailed, with public schools operated in some areas by independent school districts and elsewhere by some other type of local government. In the District of Columbia and four States, all public schools were administered by systems that were agencies of county, city, or town governments, or of the State. 2/

1/ The Committee for the White House Conference on Education, A Report to the President (Washington: Government Printing Office, 1956), p. 9.

2/ U. S. Bureau of the Census, Public School Systems in the United States, 1961-62, Preliminary Report Number 3 (Washington: 1962), p. 1.

The 212 standard metropolitan statistical areas (SMSAs) contained 6,605 public school systems in 1962. Of these, 601 were administered by State, county, municipal, or township governments, and 6,004 by independent school districts. The distribution of the number of school systems and pupil enrollment by size of student body enrolled in the 212 SMSAs was as follows:

Table 4--Distribution of School Systems and Pupils in SMSAs by Size of Student Body: 1961-1962

Size of student body	:Number of operating : : school systems <u>1/</u> :		Number of pupils enrolled October 1961	
	:Amount :	Percent : : of total :	Amount :	Percent : : of total
25,000 or more pupils	129	2.3	9,845,157	43.9
12,000 to 24,999 pupils	206	3.6	3,371,728	15.0
6,000 to 11,999 pupils	344	6.0	2,909,083	13.0
3,000 to 5,999 pupils	677	11.9	2,845,083	12.7
1,800 to 2,999 pupils	660	11.6	1,531,191	6.8
1,200 to 1,799 pupils	541	9.5	799,726	3.6
600 to 1,199 pupils	797	14.0	693,811	3.1
300 to 599 pupils	613	10.8	274,133	1.2
150 to 299 pupils	481	8.5	105,402	0.5
50 to 149 pupils	585	10.3	54,021	0.2
15 to 49 pupils	540	9.5	15,035	0.1
1 to 14 pupils	<u>120</u>	<u>2.1</u>	<u>1,246</u>	<u>2/</u>
Total	5,693	100.0	22,445,616	100.0

Source: U. S. Bureau of the Census, "Governmental Organization," Census of Governments: 1962, Vol. I (Washington, 1963), Table 10, p. 37

Note: Due to rounding detail will not necessarily add to totals.

1/ Excludes 912 nonoperating school systems,

2/ Less than 0.05 percent.

The 1962 Census of Governments provides other data on school systems which bear on the problems of local government structure in metropolitan areas. Of the 6,005 independent school districts in the SMSAs, 1,476 were coterminous with other local

government areas, and 4,528 were noncoterminous. Of the 600 dependent school systems, 378 were coterminous with other local government areas and 223 were noncoterminous.

Seventy-four of the coterminous districts were countywide. The Census report does not indicate, however, how many of these were in SMSAs consisting of a single county, and thus how many could be presumed to cover an entire metropolitan area. All school systems are countywide in three States--Florida, Nevada, and West Virginia. Maryland and Virginia have substantially similar systems since their "citywide" systems serve cities which are geographically separate from the county.

Nonoperating school districts constituted 912 of the 6,605 total districts in the SMSAs. These are districts which carry out their legal responsibilities by "providing transportation and paying tuition or reimbursement to other school systems for any public school pupils who reside in their respective areas." 3/

The Movement for School District Consolidation

An important trend in the local administration of the public schools has been the marked reduction in the number of school districts. As recently as 1932 there were 127,000 local school districts in the United States. The number dropped to 110,000 in 1942, to 53,000 in 1957 and 37,025 in 1962. The number of school systems in the 310 counties (or parts of counties) constituting the 212 SMSAs of the 1960 Census dropped from about 15,400 in 1942, to about 7,900 in 1957, 7,163 in 1960, and 6,605 in 1962.

In early America public schools were, of course, attuned to a rural society, based largely on a farm economy, in which children went to school for only a few years and only in the months when they could be spared from farm work, and the curriculum was limited. As the number of years of schooling increased and the curriculum was broadened, the original **small** districts became incapable of conducting an effective educational program, and found it increasingly difficult to finance one. Migration from the farm to the city left some districts with few children. Emergence of mass transportation and use of school buses made it unnecessary for school children to be within walking distance of their schools, and thus further undermined the continuance of numerous small school districts.

3/ Public School Systems in the United States, 1961-62, op. cit., p. 2.

The States showed great variations in the methods by which the number of districts were reduced, but the greatest reductions came where the State governments took constitutional, legislative, or administrative action. Ten States simply wiped out existing districts by State action and substituted new districts based entirely or mainly on county boundaries. They were Maryland (1868), Louisiana (1912), West Virginia (1933), Florida (1947), Nevada (1956), Alabama (1903), Tennessee (1907), Kentucky (1908), Utah (1915), Virginia (1923) and Georgia (1945). In Georgia, school reorganization was effected by constitutional amendment, in the other nine States by legislative action.

Four States delegated authority to reorganize districts to a State agency and a county agency jointly and without requiring them to refer the issue to a vote of the people--North Carolina (1923), New Mexico (1941), South Carolina (1951), and Mississippi (1953). In each case the county was compelled to act within a specified time, and the State agencies were given dominant authority.

Delaware created large special districts in 1921, at the same time taking over major financial responsibility for schools. Between 1882 and 1909 all the New England States passed legislation abolishing existing districts and substituting new ones based chiefly on townships and cities. Because the latter in turn have proved to be too small, several of these States have taken further steps to reduce the number of districts.

By legislative act approved by a statewide referendum, Arkansas created in each county a new school district made up of existing districts of less than 350 population.

In all, 23 States have replaced their existing school districts by a new administrative structure solely by State constitution or law, or through compulsory joint State and county action under strong State authority, without referring the change to popular vote in the abolished districts. Nineteen of these States rank among 20 in the Nation with the smallest total number of districts. The others rank within the first 27. 4/

4/ Committee for Economic Development, "Appendix A," Paying for Better Public Schools (New York: 1959), pp. 59-79.

Role of State Government

State constitutions usually require legislatures to establish and maintain a general, uniform and efficient system of free public schools. The legislatures are required to assure a degree of uniformity of schooling opportunity throughout their jurisdiction. As a consequence, although day-to-day operation of schools from the earliest days **has** been in the hands of the local communities, State governments have retained their basic responsibility for public education. In recent decades, State supervision and control have been expanded and tightened. School district consolidation described above is one path this expansion has taken. Another is that of financial grants-in-aid. As indicated in Table 5, in 1902 these aids amounted to \$45,000,000, or 18.9 percent of total expenditures of the school districts. In 1961 they were \$5,963,000,000, or 36 percent of total expenditures of local **school** systems. The aids usually are distributed pursuant to legislative formula, and are administered by the State department of education.

Other major State activities affecting local school districts include conduct of research and compilation of statistical data on the schools of the State; certification of teachers; making and supervising curriculum; and conduct of programs for school health, vocational education, the deaf, blind and other handicapped groups, adult education, rural schools and visual education. 5/ They also are administered by the State department of education.

Role of National Government

The National Government plays mainly an advisory, research, and information role in relation to elementary and secondary education. Its financial aids to public schools are specific rather than general purpose grants.

The Office of Education, Department of Health, Education, and Welfare, works through and assists State departments of education in collecting and disseminating statistics, in research and experimental programs, as a clearance point on educational information, in giving broad guidance, and in the administration of grants-in-aid. Its research, advisory, and experimental programs

5/ Council of State Governments, The Forty-eight State School Systems, (Chicago: 1949).

Table 5--State Aids to Local School Systems
in the United States--Selected Years: 1902-1961

(In millions)

Year	: Local government :direct expenditures : for education	:State payments : to local :school systems	: State payments as : percent of local :school expenditures
1961	\$16,782	\$5,963	35.5
1957	11,668	4,087	35.0
1950	5,819	2,054	35.3
1940	2,263	700	30.9
1932	2,033	398	19.6
1922	1,541	202	13.0
1913	522	82	15.7
1902	238	45	18.9

Source: For years 1902-1957--U. S. Bureau of the Census, U. S. Census of Governments: 1957, Vol. IV, No. 3, Historical Summary of Governmental Finances in the United States (Washington: Government Printing Office, 1959), Tables 5 and 6. For year 1961--U. S. Bureau of the Census, Governmental Finances in 1961 (Washington: Government Printing Office, 1962), Table 5.

cover the organization and management of school systems and methods of teaching in such fields of elementary and secondary education as finance and business administration, administration of local school systems, and special education. The grants-in-aid it administers include the program of vocational education under the Smith-Hughes, George-Barden and supplementary acts, special financial assistance to areas affected by activities of the National Government, grants to the States for guidance, counseling and testing programs, and grants to States and loans to nonprofit private schools for purchasing equipment and improving State supervision to strengthen elementary and secondary school instruction in science, mathematics, and modern foreign languages. 6/

The Agricultural Marketing Service of the Department of Agriculture administers the National Government's grants to the States for school lunch programs. The funds go to public and private schools, of high school grade or under, operating nonprofit school lunch programs. The States must match the National funds. 7/

Specialists' Suggestions on Area

The problem of the "proper" size of the public school system has been described by one observer as that of "how to secure a school district large enough to be educationally adequate and economically efficient, yet small enough to retain popular interest and control and to effectuate lay participation and lay leadership." 8/ Another writer has said a school district should be large enough to maintain a comprehensive school program, from kindergarten to 12th or 14th grade, with classes large enough to avoid increased per capita costs and an overall size sufficient to justify adequate administrative and supervisory services without disproportionate costs for overhead; and yet small enough to retain a feeling of oneness among the people of the district. 9/

6/ U. S. Government Organization Manual (Washington: Government Printing Office, 1962), pp. 338-40.

7/ Ibid, pp. 257-58.

8/ M. L. Cushman, "The Ideal School District," Phi Delta Kappan, Vol. XXXII, No. 7 (March 1951), pp. 313-16.

9/ John R. Shannon, "Criteria for Determining Local Units of School Administration," American School Board Journal, Vol. 119, No. 4 (October 1949), pp. 28-29.

To meet educational objectives, it seems generally agreed that a school district should have a unified system, that is, one which operates grades one through twelve, and also kindergarten, where it is offered. The district may also operate a junior or community college. 10/

The reasons for having a unified system have been described as follows:

A unified system, as differentiated from one in which separate governments operate different levels of schools (usually elementary schools or high schools, but sometimes only the first few grades) has great advantages. It makes possible an educational program that is coordinated through all grades and can adapt consistently to changing conditions and needs. It simplifies educational control, since a single board of education is responsible for the total educational program. It permits all people in the community to have a voice in the entire educational program, which is not the case where a grade-school district sends its student on to a high school operated by a different district. It fosters the use of school funds at the levels where they are most needed. It avoids unnecessary duplication in school business management, which is characteristic of dual systems. It permits the utilization of special service personnel throughout the system. 11/

The National Commission on School District Reorganization of the National Education Association suggested standards for the minimum size of school districts in 1948, and these standards

10/ Committee for Economic Development, op. cit., p. 60. The 1962 Census of Governments reports that 126 of the 5,693 operating school systems in standard metropolitan statistical areas had college grade enrollment. Op. cit., p. 104, Table 14.

11/ Committee for Economic Development, op. cit., p. 60.

have been cited frequently by writers on the subject. 12/ The Commission said the district should have at least 1,200 pupils between the ages of six and 18, with at least 40 classroom teachers. Based on the average ratio of public school enrollment to total population, a 1,200 pupil enrollment would mean a total district population of approximately 6,000. 13/

Several recent comments on the minimum effective size for a school district have tended to regard 1,200 pupils as too few. The Committee for Economic Development reasoned as follows:

..A grade school needs at least one teacher for each level. For kindergarten to 6th grade this implies over 200 pupils, if the present national average elementary school class size of 30 pupils per classroom teacher is used as a standard. Important educational advantages and operating economies appear to accrue until a school is three times this size.

A senior high school with a graduating class of less than 100 is too small to offer a sufficiently diversified curriculum to meet the needs of its students. It is almost impossible, for example, to offer advanced science and math courses and the fourth year in foreign languages, under teachers qualified in these subjects, along with vocational courses appropriate for other students, without at least this enrollment; and it is expensive unless the enrollment is larger. In a 10-12 grade senior high school this would imply a total enrollment of more than 300 (permitting at least 15 classroom teachers, on the basis of average pupil-teacher ratios), in a four-year senior high school considerably more than 600. Again

12/ National Commission on School District Reorganization, Your School District (Washington: Department of Rural Education, National Education Association, 1948). Cited, for example, by the Committee for the White House Conference on Education, op. cit., p. 14; and M. L. Cushman, op. cit.

13/ Based on population-pupil ratio in U. S. Bureau of the Census, Statistical Abstract of the U. S.: 1962, 83rd edition (Washington: Government Printing Office, 1962), Table 151.

important advantages accrue from a larger enrollment: But simple arithmetic shows that a 13-grade unified school system channeling into a graduating class of 100 would require 1,300 students if there were no attrition of students and no population growth. When these factors are allowed for, the figure approaches 2,000, even in periods when population is growing normally so that the present distorted age distribution **does** not exist.. ..

The figure of 1,200 that is frequently cited as the minimum enrollment for a school district to provide an effective school program appears to be definitely on the low side.. .. 14/

The desirable minimum of 100 pupils in the high school graduating class was cited by James Bryant Conant in his study of the Nation's high schools for the Carnegie Foundation. 15/ Based on the average ratios, a graduating class of this size probably would require an average school enrollment of about 2,000 and an average school district population of about 10,000.

A recent textbook on educational administration also indicates doubts about the adequacy of the 1,200 pupil minimum:

Studies of the services needed for a satisfactory program of education through the high school grades show that these cannot be provided most economically and effectively by a district having fewer than about 10,800 students. Where districts of this size are not practicable, a district with at least 5,000 students can be reasonably effective if certain staff members assume responsibility for more than one type of service. The minimum should be about 1,200 to 1,500 students with 40 to 50

14/ Committee for Economic Development, op. cit., p. 61.

15/ "How Good is Your High School?" U. S. News and World Report, Vol. 46: 51-53, January 9, 1959.

teachers, a principal, a superintendent, and perhaps one or two particularly competent assistants. Such a district, however, probably would not be as economical as one with a larger enrollment. 16/

Though there is some difference of opinion with respect to the minimum effective size of a school district, it seems fairly clear that at least a floor has been established. The differences seem to revolve around whether the floor is too low. With respect to the maximum effective size, on the other hand, there seems to be little consensus, mainly because little attention has been given to the question. Thus, Morphet, Johns and Reller state:

...Research has reasonably well established the minimum size for an effective school district, but there has been comparatively little attention to the maximum size. ...There is considerable evidence that a district having 5,000 to 10,000 pupils can provide better educational opportunities at a more economical cost than a district with 1,200 to 1,500 people. But what about larger districts, especially those having more than 40,000 to 50,000 children? 17/

The relatively greater attention given to minimum size no doubt results from the large number of uneconomic small school districts, and the long continuing efforts to reduce the number.

The National Committee on School District Reorganization said gains in efficiency and economy supposedly *can* be expected until about 10,000 pupils are included in one district. 18/

16/ Edgar L. Morphet, R. L. Johns, and Theodore L. Reller, Educational Administration: Concepts, Practices, and Issues (Englewood Cliffs, N. J.: Prentice-Hall, 1959), p. 221.

17/ Ibid., p. 221.

18/ National Committee on School District Reorganization, op. cit., p. 87.

However, it ventured no estimate of the point, if any, at which a further increase in size becomes disadvantageous in terms of diminishing citizen interest in school policy and management.

The Committee for Economic Development report concluded that important educational and financial advantages accrue in school districts operating on a large scale, with a number of high schools and many elementary schools.

These advantages include the ability to employ highly qualified school administrators and specialized personnel; to plan construction, and to acquire appropriate school sites; to locate schools advantageously, and to adjust school attendance area boundaries, and school use by grades, in accordance with changing population distributions and age patterns; important economies in school design, in maintenance of buildings, grounds, and equipment, in purchasing, in the layout of school bus routes, in insurance, and in many other aspects of administration and financial management. There are further advantages in a broadened tax base, and in a school construction program large and continuous enough to permit real choice and flexibility in decisions concerning the extent **to** which construction shall be financed on a pay-as-you-go basis, by advance accumulation of funds, and the type of debt instrument utilized. 19/

The CED suggested that the educational advantages of larger size may be largely attained when the enrollment reaches as little as 25,000, although it pointed out that financial advantages might continue to accrue to larger systems. But it noted that:

Really huge size may bring some administrative disadvantages, including the **loss** of contact of top school management with the school principal and teacher, and its greater inaccessibility to parents of pupils, as well as the difficulty of adjusting to the varying needs of children with different backgrounds in various sections of the district....Outside the largest cities...the

19/ Committee for Economic Development, op. cit., p. 62.

limiting factor on the desirable size of a school system usually is not the enrollment that can be efficiently administered, but the size of the area that can retain the advantages of local control. 20/

The issue of maximum optimum size, as might be expected, arises mainly in the case of large city school districts. The American Association of School Administrators said "the best size for a district within a large city is not yet resolved." 21/ The Committee for the White House Conference on Education said:

..many big city school systems... are too large for either educational or financial efficiency. In recent years, the need to consolidate rural school districts has received considerable attention, but the parallel problem of how to decentralize large urban school districts in order to make them more responsive to the needs of the pupils and the will of the people has had much less notice, in spite of the fact that more children now live in big cities than in rural areas. 22/

The White House Conference report gave the following disadvantages of school districts which are too large:

...Citizens of a large city generally have less pride in their schools than those of a smaller school district, and are seldom willing to work as hard for better schools. **As** a result, it is easier for big city schools to lose all contact with the people, and to be administered almost exclusively by a **small** group of professionals.

20/ Committee for Economic Development, op. cit., p. 64.

21/ American Association of School Administrators, School District Organization (Washington: 1958), p. 390.

22/ The Committee for the White House Conference on Education, op. cit., p. 14.

Children or parents who have complaints against big city school systems generally find it harder to be heard. In many small school districts there is one school board member for each 1,000 people. In many large cities, there is only one board member for each 100,000 residents....Citizens of large school districts sometimes lose sight of the fact they are all in the same district, and work against each other rather than cooperate for overall school improvement. 23/

Morphet, Johns and Reller concur in the difficulty of retaining public interest and control in the large city districts, and also note the effect on administration and teaching:

...What can be done to prevent the staff from becoming enmeshed in a web of impersonal relationships, red tape requirements, and prescribed procedures that tend to discourage initiative and responsibility and place a premium on conformity? 24/

The uncertainty as to what to do with the problems of the large city school district is summarized by Morphet, Johns and Reller's closing statement on the subject:

Various proposals have been made for solving these problems, but little has been done. Some have suggested that the most populous districts should be broken into small districts; that in each of the large cities there should be several separate districts. However, the fact remains that, in a sense, each city is a community. Moreover, breaking such an area into several smaller districts would often mean that some of the districts would be quite wealthy and others would be relatively poor. The problem of equalization of educational opportunity would undoubtedly become more complicated.

23/ The Committee for the White House Conference on Education, op. cit., p. 16.

24/ Morphet, Johns and Reller, op. cit., p. 221.

Others have proposed that the city districts should be retained as a basic taxing and bonding unit, but subdistricts should be organized for operation and administration of schools. The central district would continue to have a policy board and an administrator or coordinator with a staff that would include competent consultants. Each subdistrict should also have a board elected by the residents of the area, a superintendent who might be nominated by the administrator of the central district and appointed by the subdistrict board, and of course a staff for its schools. As an additional means of providing more opportunity for citizens to help make decisions about their schools, especially those involving financial support, the subdistrict might have some taxing leeway. The large district would thus become a kind of intermediate unit that would provide basic support and coordination and the subdistricts would become basic units for the operation of the educational program in their respective areas.

What should be done to solve the unique problem confronting some of the largest and most populous school districts? What steps can be taken to encourage desirable initiative and responsibility on the part of individual staff members? How can the people be kept in close touch with their schools? 25/

Finally, it may be noted that at least one large city, Chicago, has attempted to meet the problems of size in its school system by administrative decentralization. In 1955, the city was divided into 16 districts, each serving about 250,000 people, with 20,000 pupils and 1,000 teachers. It has been claimed that "the recent district reorganization of the Chicago public schools puts mammoth-scale education on a local level--so local in fact, that students and teachers alike are not without the democratic and personal benefits of the smaller school system." 26/

25/ Morphet, Johns and Reller, op. cit., p. 221.

26/ John W. Bell and Arthur S. Green, "Why Not Vertical Administration?" American School Board Journal, Vol. 135 (December 1957), pp. 25-26.

Application of Selected Economic and Political Criteria

Benefit Area

The direct beneficiaries of education are readily located among the students and graduates of a public school system. Aside from the personal satisfaction derived, the quality and extent of an individual's education will determine to a considerable degree the level of his earning capacity and his command of material goods and leisure enjoyments. As a result, direct benefits of education to an individual become indirect benefits or costs to a community according to whether he contributes to the general economy through his productive skills, demand for goods and services and creation of property values, or whether he burdens community health, welfare and police services because of his inability to provide for himself.

These kinds of spillovers extend far beyond the confines of a single school district, for the type and quality of education provided by each one will determine the quality of the labor force available to employers throughout the metropolitan area. If there is an inadequate supply of needed skills within the metropolitan area, or within any single municipality, labor will be imported or industry will move out, imposing economic hardship and social cost on the residents. On the other hand, a large pool of well-trained personnel will attract commerce and industry, and may supply employers in neighboring or distant communities through exports of labor. Because a metropolitan area is essentially a single labor market, each school district within that area has a strong economic and social interest in supplying the kind of educational training required by employers.

In order to meet requirements of metropolitan area employers and provide individual opportunity for economic and social advancement, a school system must be able to offer various kinds of specialized training at the high school and even post-high school level. Furthermore, as implied in the discussion of spillovers in Chapter 2, the quality of educational service is crucial to the degree of benefit it confers upon individuals and society as a whole. Quality of education is often directly commensurate

with specialization of teaching and associated personnel. Specialization of both personnel and curriculum are, in turn, directly related to the economies of scale attainable by the school system. A system or district serving a small population will not have a sufficient number of pupils enrolled in any one vocational training or college preparatory program to justify the cost of providing specialized teachers or separate classes for them. When the unit costs of specialized education are prohibitive the **small** district can offer only a general common-denominator training that properly prepares none of its graduates for employment or college; the physically and mentally handicapped are virtually abandoned.

Quality of education is highly correlated as well with teacher salaries and expenditures upon buildings and equipment. Some small districts with high per capita property values, and a desire on the part of the residents to devote a large portion of tax revenues to education, may be able to attract highly qualified teachers and provide a modern school plant. Many small districts, however, are not so fortunate. Yet the economic rationale for the provision of free public education in the United States involves the principle of equal (in quality) education for all children regardless of their ability to pay for it. In the absence of this principle, which recognizes the extensive social benefits of education, the function can be financed readily by user charges, as is done in private schools.

As the principle of equality is pursued, economic resources are transferred, through taxes, from the wealthier residents of a school district to the children of those at the opposite end of the income scale. On the basis of this rationale, it is hard to justify depriving a child of adequate educational opportunity because the school district in which he lives is of insufficient size with insufficient tax base to provide the quality of education offered by at least the average school district in the area.

Economy of Scale

Common acceptance of a minimum desirable size of school district is based on consideration of economic operation as well as educational adequacy and local interest and control. Increasing the size of school district above the minimum point

produces lower unit cost. On the instructional side, there is reduced cost of employing special service personnel, such as consultants and teachers of exceptional children. Administrative and supervisory personnel can be carried at a lower unit cost. On the business and financial side, the economies of employing skilled personnel are also realized. In addition, there are important economies in planning and design of school building construction, choice and acquisition of sites, use of buildings, maintenance of buildings, grounds, and equipment, purchase of equipment and supplies, layout of school bus routes, use of automatic data processing, and application of organization and management techniques.

The point at which diseconomies of scale set in is, uncertain and probably varies among districts. Estimates cited earlier range from 10,000 to 25,000 pupils. There seems to be general agreement that large city school systems are too large, for economic efficiency as well as other reasons.

Controllability and Accessibility

Four related factors distinguish local education from other local functions with respect to accessibility to and controllability by the public: (1) Of all local functions, education most concerns the general public. Few matters, if any, are as important to parents as development of their children, and few functions of local government have as direct and important an effect on child development as education. (2) No other local function has as well-organized, interested, and militant a following as public education has in the form of parent-teacher and other citizen groups. (3) No other function is as extensively performed by an independent unit of government, governed by its own board (usually directly elected by the people), and possessing its own financing power. (4) Mainly because of the first three factors, which produce a strong upward push on local government expenditures, probably no other local function receives as much attention from taxpayer associations and others primarily concerned with reducing expenditures.

The deep concern of parents for their children, and the value to educational development of parents being kept closely informed about their children's progress, produces the close school-parent ties in the form of parent-teacher conferences, report cards, parent-teacher meetings, etc. The structural independence of school boards and the fact that they are preponderantly elected rather than appointed provide a unique focusing of public interest on the educational function by both

the "spenders" and the "economizers." Independent power to tax and borrow for school purposes sharpens the focus, particularly when the public retains the right, as it usually does, to pass on school board requests for expanded taxing and borrowing authority. This right to grant or withhold additional financial power also gives the public opportunity to direct fiscal support or economy to a particular function, which is unique among all the local functions examined in this study.

Provided as it inherently is with unusual opportunities for a high degree of public accessibility and controllability, the question still arises as to whether the size of the school district of itself affects the degree of accessibility and controllability. The formal and structural characteristics affecting accessibility and controllability, that is, the independence of the school organization, the election of school board members, and fiscal separation, have little relation to size of school district. The degree of interest shown by parents in the work of the school system, particularly as it affects their own children, seems to be affected by factors both inside and outside the school system. Factors inside the system are the administration's awareness of the need for keeping parents informed and the lengths to which they go to encourage the parents' interest, as through the system of reporting, public hearings, school tours, involvement of the public in building planning, teachers conferences, and special meetings. Factors outside the system are mainly the economic and cultural backgrounds of the parents which affect their standards of value. Thus, parents placing a high value upon education take a great interest in schools and perforce are likely to exert themselves to control and maintain access to the school system. Typically, such parents are the higher-income, white collar, professional groups.

It does not appear that size of the school district has any direct relation to the factors affecting the parents' interest: economic and cultural background. The larger, older central core cities are mainly the cities of the lower-income, unskilled labor, minority groups of the population, and to this extent it may be contended that size produces, by and large, a parent body which is not interested in the welfare of public education. However, it is not size as such which creates the conditions under which these population groups gravitate to and remain in the big cities. It is rather the attraction of other factors, such as available housing, the presence of congenial economic and racial groups, and tradition. The school system of Montgomery County, Maryland, illustrates that size alone does not produce the economic and

cultural conditions which lead to parent disinterest and apathy. It had a 1960 population of 340,928 and public school enrollment of 80,680, yet is considered by many as one of the outstanding systems of the country. A high proportion of its people have college or higher education (26.5%), and are engaged in a profession (27.3%), and the district has a high annual per capita income (\$3,023 in 1961).

Size may have some effect on the overall vigor of the PTA and its effectiveness in representing the entire district before the school board. In the statement quoted earlier, for example, it was noted that "citizens of large school districts sometimes lose sight of the fact that they are all in the same district, and work against each other rather than cooperate for overall school improvement." This is a danger which grows with the size of the school district, since PTAs are basically school-oriented rather than school system-oriented.

The size of the school district probably does have an effect on factors inside the school system affecting the awareness, accessibility, and control of citizens over the school system. The Committee for Economic Development suggests that when the system is of "really huge size" there will be greater inaccessibility to parents of pupils, and greater difficulty in adjusting to the varying needs of children with different backgrounds in various sections of the district. Increased remoteness of the school administration from the people can lead to over-influence of a **small** group of professionals on school policy.

Acknowledging the deadening effect of largeness on parent interest and the tendency it has to place more actual control in the hands of professional educators, it is not certain that these effects necessarily must follow from the very large districts. For example, a large district may be composed of moderate size or small schools. Moreover, as suggested in the discussion above, large cities are familiar with the problem and are using their ingenuity in experimenting with organizational devices which may tend to offset the dulling effects of over-centralization. It **may** be possible that decentralization within a large system can provide the answer.

Citizen Participation

Features of public education which distinguish it from other local functions, referred to under accessibility and

controllability, affect citizen interest as well as citizen accessibility and controllability. Parents' concern for their children's development and the structural and financial independence of the school function provide a great stimulus to citizen participation in school affairs. Conversely, the thrust that these two factors give to public expenditures heightens the participation of taxpayer associations and others concerned with governmental economy in school policy and management.

Evidence indicates that the largest school districts, which are mainly in the big cities, suffer a diminution of citizen interest. Some of this effect may stem from the fact that the large city tends to contain a higher proportion of groups who place less value on education than the population as a whole. To some extent the lower districtwide interest is offset by the fact that citizen interest in public education is basically school-oriented rather than school district-oriented. Nevertheless, it seems generally agreed that at some point citizen participation diminishes with increasing size of a school district. Therefore, despite the inherent pull of the education function on citizen interest, this criterion favors the smaller school district.

Experience with Larger-Area Performance

The voters of Dade County (Miami), Fla., approved consolidation of ten school districts into a single countywide system in 1945. More recently, a single countywide district was formed in Mecklenburg County (Charlotte), N. C.

Many metropolitan areas are functioning entirely with school districts having at least 2,000 pupils enrolled in kindergarten through 12th grade--regarded by many as a minimum size needed to warrant and support an adequate elementary-secondary educational program. Most of these are found in the 23 States that have taken positive action to effect school consolidation. Examples are the metropolitan areas of Baltimore, Jacksonville, Ogden, Shreveport, Albuquerque, Memphis, Richmond, Honolulu, and Washington, D. C.

In some metropolitan areas in which all school districts have more than 2,000 enrolled pupils, a community college is also provided by one or more of the districts for their own students. Examples are districts in the SMSA's of Washington, D. C.; Baltimore, Md.; Ft. Lauderdale-Hollywood, Dade, Pensacola, Tampa-St. Petersburg, and West Palm Beach, Fla.; Honolulu; Pueblo, Col.; Asheville and Charlotte, N. C.; and Charleston, S. C.

B. LIBRARIES

The role of the public library as defined by Gerald W. Johnson is "the function of an open door. The public library is a way of escape from the narrow area of our individual lives into the field, finite, no doubt, but unbounded, of the wisdom and experience of all mankind." ^{1/} The official publication of the American Library Association when defining standards stated:

The modern public library collects the printed and audio-visual materials needed to conduct the individual and group life of its constituency. Further, it organizes and makes available these resources so that they are convenient and easy to use. Still further, it interprets and guides the use of materials to enable as many people as possible to apply in their daily lives the record of what is known.

Provision of library materials means a sufficient supply to make the library a dependable source for most people most of the time. In addition to books, the public library selects and provides pamphlets, documents and other nonbook sources in printed form, as well as films, tapes, discs and other nonprint recording of knowledge and opinion. All activities of the library are designed to facilitate use of resources, to remove barriers, to invite use, to guide reading toward the goals of each individual.

Current Practice

Of the 8,190 public libraries operating in 1960, 4,567, or 56.9 percent, served populations of less than 5,000 people, and 3,279, or 40.1 percent, served populations between 5,000

^{1/} "Role of the Public Library," Public Library Service: A Guide to Evaluation with Minimum Standards (Chicago: American Library Association, 1956), p. IX; see also, How About Your Public Library? (Chicago: American Library Association, n.d.).

and 100,000. At the top end of the scale, 255 library systems (3 percent) served more than 100,000 people each, or a total population of 80.4 million (44.8 percent of the total U. S. population). 2/

A 1962 survey of cities over 10,000 population found that of 1,190 cities responding, 756 operated a library; 161 were served by county libraries; 86 by joint city-county libraries; 69 by private library associations making their services available to the public; 57 by school libraries; 14 by special library districts; 28 by regional libraries (serving two or more counties); and 19 by various other agencies such as the State, a private organization under contract with the city government, and county-school libraries. 3/

According to the 1962 Census of Governments, there were 349 single-function special library districts. Of these, 214 were in Indiana. 4/

Role of National and State Governments

Congress passed the Library Services Act in 1956 to stimulate development of public library service in rural areas for a five-year period. By the end of the period, expenditure of some \$28 million of Federal funds, matched by State and local funds, produced library service for the first time to four million citizens, and greatly improved service for 32 million others. More than 200 bookmobiles were being used in rural areas, and the number of field consultants in State library extension agencies had doubled. In 1960 Congress extended the Library Services Act until July 1966. 5/

2/ Frank L. Schick and Doris C. Holladay, "Statistics of Public Library Systems Serving Populations of 100,000 or More: Fiscal Year 1960," Library Statistics (Washington: Library Services Branch, Office of Education, U. S. Department of Health, Education, and Welfare, November 1961).

3/ International City Managers' Association, Municipal Year Book 1963 (Chicago, 1963), p. 466.

4/ U. S. Bureau of the Census, "Governmental Organization," Census of Governments: 1962, Vol. I (Washington, 1963), Table 12, p. 66.

5/ Eleanor A. Ferguson, "Library Services and Legislation," The Book of the States 1962-63, Vol. XIV (Chicago: Council of State Governments, 1962), p. 331.

Federal legislation has also served to strengthen State library agencies generally, as well as giving them resources to exert some pressure toward developing library systems in nonrural as well as rural areas. 61 In 1961, 26 States made appropriations for grants-in-aid to local public libraries, amounting to as much as \$6,480,000 in New York State. 7/ A number of States provide incentives for provision of local library service by "systems" or on a larger area basis. Among elements of the New Ysrk State aid law, for example, are (1) an annual grant of \$5,000 for a system serving less than one county, and \$10,000 per county for a system serving one or more than one county; (2) \$6.00 per square mile of area served in systems serving one county or less, increasing \$3.00 per square mile for each additional entire county served, with a maximum of \$18 per square mile, and (3) a grant of \$10,000 to establish a system if it serves one county or part thereof, or \$20,000 for each entire county served. Systems, to be fully approved, must serve at least 200,000 people or 4,000 square miles. 8/

Specialists' Suggestions on Area

A standards committee of the American Library Association stated that its most important recommendation was for a "cooperative approach on the part of libraries." Libraries were urged to band together formally or informally into groups called "systems." In such systems, already well established and successful in large cities and populous counties, large and small libraries in an area work together to make a wide range of library materials and services available to all residents. Development of systems of libraries does not weaken or eliminate the small community library. Instead, it offers that library and its users greatly expanded resources and services.

61 Library Services to the Nation (Washington: Library Services Branch, Office of Education, U. S. Department of Health, Education, and Welfare, 1962) brochure; John G. Lorenz, "Library Services Act - first three years," ALA Bulletin (January 1960).

7/ Eleanor A. Ferguson, op. cit., p. 333.

81 Eleanor A. Ferguson, "Library Services and Legislation," The Book of the States 1960-61, Vol. XIII (Chicago: The Council of State Governments, 1960), p. 309.

Library systems come into existence and are financed in a variety of ways. In larger cities and in counties with a single library serving an entire area, the central agency, its branches, and other means of extension naturally form a legally unified structure of service. Almost the same degree of unity is achieved where unserved districts, or districts with small libraries, decide to affiliate with a nearby center. Local library boards of trustees may be created or retained in such places, with certain defined powers remaining in the locality, or the local boards may contract with the center for the service. Joint action without any legal change or contract is another possibility, if careful agreements are entered into by the several legally separate libraries in a region, to achieve the service characteristics of a single system.

A single system is also better able to work cooperatively and take fuller advantage of cooperative financial and other arrangements with State and Federal governments. 9/

Although systems have never been precisely defined in terms of population served, and any size community can meet standards of service if it so chooses, there appears to be some professional agreement that the minimum population base for a comprehensive library system might be about 100,000. In more sparsely settled areas, populations of about 50,000 might conceivably provide a workable standard, while in metropolitan areas, systems serving 200,000 or over might be more practical. 10/

Other studies indicate that a small library costs more per capita than a large library, and a library operating outside a system costs more than a library which benefits from the economies of joint purchasing, processing, sharing of resources and specialization of responsibility. Some estimated 1959 per capita costs for library systems meeting ALA standards are:

9/ Public Library Service: A Guide to Evaluation with Minimum Standards, op. cit., p. 7.

10/ Rose Vainstein, "Public Library Standards--Their Development and Use," Mountain Plains Library Quarterly (Fall 1960).

A countywide library system serving 50,000.....	\$3.96
A city library system in a compact area serving 100,000.....	3.44
A city-county library system spread over a wide area serving 100,000.....	3.49
A metropolitan area library system serving 200,000.. ..	3.05

The committee making these estimates did not feel it could recommend budgets for library systems serving fewer than 50,000 persons without violating the basic premise of its recommendation that **small** libraries work together to achieve standards by means of systems, affiliations, or other cooperating and coordinated groupings of libraries. 11/

A 1950 study, The Public Library in the United States, made two observations: (1) adequacy of public library service must be measured, not by per capita support, but rather in terms of the numbers and kind of staff, and the types and quantities of new materials and resources needed to provide modern library service; (2) \$100,000 was the dividing line between an adequate and inadequate annual budget for a single library system regardless of its size. In 1963 dollars this figure probably would be well over \$125,000.

Standards of Service

Large collections are needed to meet the wide range of interests in modern communities. For example, a library system serving up to 100,000 people should have: 12/

1. 100,000 volumes of currently useful printed materials.
2. 4,000-5,000 titles added annually, including 400-500 children's titles, and 250 for young adults.

11/ "Costs of Public Library Service in 1959," A Supplement to Public Library Service: A Guide to Evaluation with Minimum Standards (Chicago: American Library Association, 1960).

12/ Public Library Service: A Guide to Evaluation with Minimum Standards, op. cit.

3. 1 volume of duplicate copies added annually per 5 persons served.
4. 300-400 periodical titles currently received with approximately 50 percent retained in back file.
5. 250 films, with 25 added annually.
6. 1,500 long-playing records, with 300 added annually.
7. In addition: pamphlets, maps, filmstrips, and slides.

The number of staff members should be sufficient to perform the duties involved in assembling, organizing, and interpreting materials, and to provide consistently efficient service at all hours when the central agency and community outlets are open to the public. Many variables affect the size of adequate staff, for example: population served, volume of work, geographic spread of the district served, number of departments, number of specialists required to meet special community needs, physical arrangement of buildings, number of branches, and hours of service.

Only rough measures can be suggested for judging numbers of employees. The ALA recommends that one staff member (full-time or equivalent) should be minimum provision for each 2,500 people in the service area. All libraries serving populations of 5,000 or more should have full-time professional personnel. Community libraries should be under the charge of a professional librarian or regular guidance of professional staff elsewhere in the system who are readily and frequently accessible.

In each library system there should be at least one Professional staff member for each of the following aspects of library service: administration; organization and control of materials; information and advisory service for adults, Young adults, and children; extension services. A library system may need more than one specialist in several of these fields, including subject specialists as needed. In a system serving 100,000 people, for example, at least 15 professional librarians would be needed, distributed over these several categories.

Application of Selected Economic and Political Criteria

Benefit Area

Characteristics of library benefits are very similar to those of education in that direct beneficiaries are readily located among borrowers of books and people attending library programs. Indirect economic benefits of library service are not so readily calculable, however. To the extent library use contributes to skill, knowledge and earning power it confers indirect benefits upon individuals and the community, but the relationship is more remote than in the case of education. Some library services, particularly circulation of books, are amenable to financing by user charges because their benefits can be enjoyed exclusively by the individual, at least temporarily. Other services are not so readily prorated: reference services of many types; use of materials on the premises; supplementary materials for public and private schools and colleges; and all types of auxiliary services such as book reviews, forums, use of meeting rooms, etc. These are available in fixed amounts irrespective of how many people use them, so that their unit cost is not readily calculable. Yet the social purpose of providing free public libraries in order to equalize opportunities for knowledge through a transfer of economic resources within the community is precisely the same as for education.

To the extent that a library's service is "free" to the users, even its direct benefits spill over community boundaries to any nonresidents who care to enter its doors. (Some libraries restrict service to residents of the unit of government under which the library operates.) In this way external costs may be imposed upon a community offering high quality library service by the residents of a neighboring community whose library is inadequate. It is to be noted that the libraries of many suburban communities limit their book collections because of proximity to the central city's extensive collections. The benefits of the large city library spill over into the suburbs, while use of these facilities by suburban residents may impose additional costs upon the central system. If the external demand is for books of general interest, costs will be imposed because of the necessity for a greater number of duplicate books, increased use of staff time, and additional building space. If the external demand is for specialized research facilities, increased cost will result from greater use of staff, need for space, and wear and tear on irreplaceable materials.

The amount of spillover, therefore, varies with the nature of the service: users of juvenile collections will be geographically concentrated; research collections and special exhibits may attract people from longer distances; and vast research collections, such as the Library of Congress, and specialized collections will attract users from far and wide.

Economy of Scale

As is true for education, the quality of libraries is often directly related to the degree of specialization they can offer. Probably the largest and geographically most extensive social benefit arising from public libraries is the research they generate and facilitate. Ability to provide specialized research facilities is directly related to economies of scale, and requires a large service area in terms of population. For this reason, some public research libraries are operated at the State level, or by very large systems such as that in New York City.

The variation in benefit area associated with type of service and the inherent economies of scale, particularly in research facilities, suggest the desirability of establishing areawide library systems, consisting of individual libraries formally or informally banded together. In such systems, small community libraries operating independently or neighborhood branch libraries can meet the needs of nearby residents for books of juvenile, school and general interest, while larger generalized or specialized research libraries can serve a progressively larger geographic area associated with a greater concentration of population.

Administrative Ability

In order for library service to be useful, trained Personnel are essential. While every library needs a professional librarian or access to professional staff guidance, a small number of more specialized personnel can serve an entire metropolitan area as easily as a community library. If libraries are organized on an areawide "system" basis, they can have an adequate number of specialized personnel without wasting resources

It is true that a library can be established under the most minimal circumstances of a room, a desk and table with a few chairs, some cast-off volumes, and volunteer help. However, the desired goal is library service that at least moderately

approaches the standards set by the profession for every person in the metropolitan area, not just for the few wealthier communities. Since library service does not have top priority claims on the limited financial resources available to many communities, adequate service can only be realized by tapping directly or through cooperative arrangements the tax base of the larger area.

Citizen Participation

The community library often has its origins in the hard work of a group of public spirited citizens, which is then commonly reflected in establishing a board of trustees in charge of the library function. Library boards set policies, initiate new services, and review the work of the staff. In many instances, too, the library is the center of much of the community's or neighborhood's activities. This traditional citizen participation and interest is another significant factor to be considered in any plan to enlarge the jurisdictional area of a library system.

Experience with Larger-Area Performance

Various types of library "system" arrangements are found in metropolitan areas. For example, under a cooperative, contractual relationship the Rochester, N. Y., public library provides centralized book processing services for Monroe County and the adjoining counties of Livingston and Wayne. Residents of the three-county area have the right to use the facilities of any library in the area. The Portland, Ore., library system serves all of Multnomah County, Hamilton County, Ohio, is served by the joint library of the county and the City of Cincinnati. The Wayne County, Mich., public library contracts with the Detroit library for specific services. Services of the Seattle library are available to King County residents. The Buffalo and Erie County Public Library provides various programs and overhead administrative and book processing services to the county library and its branches and to the 26 contracting libraries in the municipalities of Erie County.

C. PARKS AND RECREATION

Recreation has been defined as "any form of experience or activity in which an individual engages from choice because of the personal enjoyment and satisfaction it brings directly to him." 1/ The municipality's responsibility for recreation, it has been said, is "to provide, maintain, and operate a system of major areas and facilities, such as parks, water and winter sports facilities, neighborhood playgrounds, recreation buildings, athletic fields, indoor recreation centers, playfields, golf courses, and reservations. It should also provide leadership for a balanced program of athletics, music, drama, social recreation, crafts, and other activities primarily centered at the public facilities. These two basic functions have been widely recognized by public recreation agencies and have been accepted by many local welfare federations or councils of social agencies." 2/ The acquisition and preservation of "open space" is getting increasing attention in metropolitan areas, as an aspect of the parks and recreation function, and also as a tool for control of urban sprawl and prevention of flood damage.

Municipal recreation systems consist of many different types of properties developed for a variety of uses. Several types are commonly found, although few municipalities may have all of them. The playlot or block playground is found in large-scale housing projects and in underprivileged areas where backyards are lacking. It is for preschoolers and is usually in the center (interior) of a city block. The neighborhood playground is the outdoor recreation center for the people of the neighborhood, fundamentally the children of six to 15 years of age. Usually, it covers an area of four to eight acres, and often is close to, if not in conjunction with, an elementary school.

1/ Municipal Recreation Administration (Chicago: International City Managers' Association, 1960), pp. 2-3.

2/ Ibid., p. 25.

The playfield provides diversified recreation activities for young people and adults. Generally it services four neighborhoods, each with a playground. The neighborhood park is primarily a landscape park, chiefly a restful breathing spot for mothers with small children, and older people, and therefore considered especially necessary for congested areas.

The large "recreation" park is for all ages. It offers the opportunity to get away from the noise and rush of city traffic and into contact with nature. The tendency, however, is for most of such parks to be devoted to active recreation uses, such as athletics, games, picnicking, water sports, and day camping. The reservation is a large tract of land, sometimes of several thousand acres. It is kept primarily in its natural state, but also is usable for hiking, camping, picnicking, nature study, and winter sports. It is for use by all age groups.

Special recreation areas include golf courses, camps, bathing beaches, swimming pools, athletic fields, and stadiums.

The parkway is an elongated park with a road running through it, widening at spots to permit the conduct of recreational activities. Other types of recreational areas include museums, zoological gardens, botanical gardens, nurseries, bird sanctuaries, community gardens, scenic outlooks, and nature trails.

Current Practice

As noted in Table 3 in Chapter 1, showing total direct expenditures by function of units of government below the State level in 1957, 75 percent of direct expenditures for "local parks and recreation" were made by municipalities, 11 percent by counties, and 10 percent by special districts. Also of the 106 single county SMAs analyzed for 1957, 70 had no county government participation in the parks and recreation function, in 36 counties the county and municipal governments shared the function, but in no counties was it exclusively a county function.

The Recreation and Park Yearbook 1961 reported that of 2,769 local public park and recreation agencies responding to its survey, 2,479 were cities, towns, boroughs, villages and park and school districts, and 290 were county agencies. Of

the county agencies, 16 were forest preserve districts or miscellaneous public authorities. 3/ The 1962 Census of Governments reported 488 parks and recreation special districts in 24 States. 4/

Role of State Government

There has been a steady increase in State authorization of local parks and recreation service. One of the latest developments is adoption of legislation by Connecticut, Massachusetts and Rhode Island, enabling localities to create conservation commissions with the functions of planning and coordinating local activities relating to conservation of open space--involving soil, land use, water, recreation, forestry, fish, wildlife, and coastal resources. These commissions give impetus to localities' recognition of open space activities as an important part of the local parks and recreation function, and not just a tag-end activity. 5/

A related development in recent years has been the provision by some State governments of financial assistance to local units, particularly for acquisition of recreation lands. In November 1960, for example, New York State voters authorized \$40 million of bonds for grants to counties and municipalities on a 75 percent State and 25 percent local matching basis. In November 1961 New Jersey voters authorized \$60 million of bonds, partly to be used for assistance to municipalities, counties, and other local units in acquiring recreation lands on a 50 percent matching basis. In 1960 Massachusetts adopted a program authorizing cities and towns to purchase land for conservation purposes on a 50 percent

3/ Recreation and Park Yearbook 1961 (New York: The National Recreation Association, 1961), pp. 28-31.

4/ U. S. Bureau of the Census, "Governmental Organization," Census of Governments: 1962, Vol. 1, (Washington, 1963), Table 12, p. 67.

5/ Council of State Governments, State Responsibility in Urban Regional Development (Chicago, 1962), pp. 169-170.

matching basis. Wisconsin in 1961 voted \$50 million for acquisition of State and local open spaces for various uses including local parks. 6/

The State grant programs require localities to meet certain performance standards. Under the New Jersey Green Acres program, for example, the local unit must state the facts that give rise to the need for open land, submit evidence that there is a comprehensive development plan in effect in the area, and have regulations governing the administration, use, and development of the lands. 7/

The States also provide localities with a variety of technical assistance services in parks and recreation, such as general consultant service, area planning service, general recreation surveys, surveys of areas and facilities, and consultant services on pool and beach design. State agencies involved include agricultural extension service, conservation, education, natural resources, recreation, and park departments. 8/

Role of National Government

Title VII of the Housing Act of 1961 authorizes grants to States and localities to assist them in acting promptly to preserve open-space land which is essential to proper long-range development of urban areas. The program is administered by the Urban Renewal Administration, a constituent of the Housing and Home Finance Agency. Under the law, grants may be made to State and local bodies not to exceed 20 percent of the total cost of acquiring land, or permanent interests in land. Significantly, however, the grant may be as much as 30 percent if it is made to a public body which (1) exercises responsibilities consistent with the purposes of the act for an urban area as a

6/ The Book of the States 1962-63 (Chicago: Council of State Governments, 1962), pp. 486-487; Municipal Year Book 1962 (Chicago: International City Managers' Association, 1962), p. 468.

7/ Council of State Governments, State Responsibility in Urban Regional Development (Chicago, 1962), p. 156.

8/ For tabulation of such services by State, see Recreation and Park Yearbook 1961, op. cit., pp. 18-21.

whole; (2) or exercises or participates in the exercise of such responsibilities for all or a substantial portion of an urban area pursuant to an interstate or other intergovernmental compact or agreement. The 1961 law authorized appropriations of up to \$50,000,000.

The Administrator can make grants only if he finds the proposed use of the land for open space fits in with the execution of a comprehensive plan for the urban area, and a comprehensive planning procedure is being carried on. The Administrator is authorized to provide technical assistance to State and local governments in carrying out the purpose of the act.

The National Government has other control and service relationships to local recreation departments. The Public Housing Administration of the HFA requires provision of outdoor recreation space on housing developments unless adequate and convenient off-site facilities are safely available. The National Park Service of the Department of the Interior provides, on request, advisory and consultative assistance in planning for park and recreation programs and areas. It advises the General Services Administration as to the advisability of transferring surplus property to local agencies for park, recreation, and historic monument purposes, and makes recommendations to the Bureau of Land Management on local government applications to purchase or lease public domain lands for park and recreation or historic monument purposes. The Federal Extension Service of the Department of Agriculture emphasizes community recreation planning and outdoor recreation resource development, but this is mostly in nonurban areas.

By Executive Order in 1962 a Bureau of Outdoor Recreation was established in the Department of the Interior to formulate a nationwide outdoor recreation plan, encourage regional and inter-governmental cooperation, sponsor and engage in research and promote public use of outdoor recreation facilities. Legislation is pending in Congress to give statutory authority to the bureau.

Standards of Service

Recreation Areas and-Facilities

The National Recreation Association has established standards for municipal recreation areas and facilities that have been used for some time. In recent years the adequacy of the standards has been questioned by some because of the expanding concepts of public recreation.

More study is needed on the basic objectives of recreation and particularly public recreation. Study is needed to determine whether the recreation programs and facilities that cities are providing and advocating do in fact fit the needs and wants of people in cities. Research is also needed to develop relative standards that will take account of variable recreation needs, interest and desires of people in different parts of the country, different cities, and particularly different areas of any one city. 9/

To meet the need for up-to-date standards, the National Recreation Association in 1959 appointed a Special Recreation Standards Committee of park and recreation executives, with an advisory committee of representatives of 18 national agencies concerned with planning and other problems of local government. The committee has not made its report, so the standards given below are based on existing National Recreation Association standards. They are taken from Municipal Recreation Administration. 10/

Playlots or block playgrounds should contain 2,500 to 5,000 square feet and serve 300 to 700 persons.

The neighborhood playground should cover four to eight acres and preferably be close to, if not in conjunction with, an elementary school. Where it is combined with the school, a minimum 10 acre site is needed. The recommended standard is one acre of neighborhood playground per 800 persons. Related to the area of the municipality, this means a playground within one-half mile of every resident, and within one-quarter mile in high-density neighborhoods.

The playfield covers 15 to 20 acres, although larger areas may be used, and preferably adjoins a high school. It is within one-half to one mile of every home. A reasonable standard is one acre of playfield for each 800 population.

9/ Local Planning Administration, 3rd edition (Chicago: International City Managers' Association, 1959), p. 259.

10/ Municipal Recreation Administration, op. cit.

The neighborhood park should be within easy walking distance, and not more than one-half mile. The American Public Health Association suggests that there be two acres of neighborhood parks per 1,000 persons in multiple dwelling neighborhoods, and 7/10 of acre per 1,000 persons in other neighborhoods.

A desirable size of the large "recreation" park is 100 acres or more, but it is rare that suitable properties of this size are available within the city limits. Maximum travel distance is 30 to 60 minutes. It should be accessible by public transportation.

Because of its size and natural state, the reservation is usually at the boundaries or outside the city limits, and serves an entire urban area.

A nine-hole golf course is expected to serve about 27,000 people, and an 18-hole course is for 54,000 people.

A well-balanced municipal recreation system does not depend on acreage alone. The distribution of the acreage and the recreational use made of it are important. Differing local conditions determine the best combinations of number, type, and location of the several types of recreational areas. The size and location of landscape parks, for example, are influenced by the availability of properties of uneven topography or unusual scenic value, which have little economic value but potential recreational value. Playgrounds and playfields, on the other hand, are needed in all residential neighborhoods and their space requirements can be determined with some accuracy. The Suggested standard is that at least one-half of a city's total park and recreation acreage be developed for active uses in playgrounds and playfields.

Certain general standards apply to all recreation areas and facilities: (1) Different age groups have different interests and abilities, and therefore require different types of facilities. Active recreation areas should be separated according to the age group that will use them. (2) The recreation site should be accessible to the people who use it. The radius of the service area usually will be determined by the age of the users. (3) Recreation facilities should be combined with school facilities to serve as educational and recreational centers for neighborhoods or groups of neighborhoods. 11/

11/ Local Planning Administration, op. cit., PP. 259-260.

In general, the main factors that affect application of standards in any particular community are the existing recreation facilities and resources, both man-made and natural, topography, climate, existing land-use patterns, types and densities of housing, population characteristics, financial resources, and changing recreation concepts. 12/

Recreational specialists generally believe that a well-balanced city recreation program needs at least ten acres of permanent, publicly owned open space for each 1,000 inhabitants. These are the areas inside or immediately adjoining the city. They further suggest that ten, 20 or more acres per each 1,000 persons of scenic and natural parks be available outside the city, but under the control of county, State, or other non-municipal authority. 13/

Planner John T. Howard, considering recreational needs in the broader context of the metropolitan area, states:

A generation ago, the total of all kinds of recreation space for a metropolitan area was proposed at a rate of 10 acres per 1,000 persons. Of this, three to four acres were of the small-scale or urban kind, leaving six to seven acres for the big-space projects. Currently a standard of 20 total acres per 1,000 persons is being urged, of which perhaps 15 would be in the latter category. This doubling of the recommended rate has occurred during a period when leisure time has been greatly increased and when the use of these facilities has increased correspondingly.

The age of automation almost certainly will place a far greater number of leisure hours at the disposal of our urban population....

There seems to be every likelihood, then, that if the current standard of acres per 1,000 persons is valid for the present situation, the future will justify a still higher standard. It

12/ Local Planning Administration, op. cit., pp. 271-275.

13/ Municipal Recreation Administration, op. cit., pp. 66-67.

would surely be prudently conservative to forecast that our metropolitan areas will need at least 20 acres of natural park and reservation land for each 1,000 inhabitants. 14/

Conrad L. Wirth, Director of the National Park Service, in 1957 stated his belief that present recreation standards are too low, and noted that a report of the California Committee on Planning recommended 15 acres per 1,000 population for in-city parks and recreation facilities in addition to parkways and waterfront developments. 15/

Organized Recreation Activities

Standards for the organized recreation program carried on by the governmental unit do not appear to be as well-defined as the standards for park area and facilities. The yardstick suggested by the National Recreation Association some years ago is related to the municipal park and recreation budget. The Association estimated that a city needs to spend at least \$6 per capita per year to operate and maintain a system of recreation areas and facilities and to provide a well-balanced program of recreation activities and services that meets generally accepted standards. "It is not feasible to recommend the specific percentage of the total amount (of the recreation budget) that should be spent for organized recreation as compared with traditional park services, but in many cities approximately one-half, or \$3 per capita, might be allocated to each type of service." 16/

Specialists' Suggestions on Area

George D. Butler, research director of the National Recreation Association, considered the need for reallocating recreational activities among the levels of government in metropolitan areas and concluded the need exists: (1) if a particular service requires the use of a scarce resource which

14/ John T. Howard, "Future Metropolitan Growth and Planning," The Annals, Vol. 313 (September 1957), pp. 32-37.

15/ Cited in Local Planning Administration, op. cit., p. 271.

16/ Municipal Recreation Administration, op. cit., p. 320.

is not now being provided in an optimum manner, perhaps due to "lack of intergovernmental cooperation in the acquisition and planning of recreation sites"; (2) if the present arrangement results in tax inequities, for example, subsidization of unincorporated areas by incorporated areas, or provision of regional facilities by a central city.

When reallocation of responsibility is indicated, says Butler, it may be based on these guidelines: (1) Responsibility for the service should be vested in a unit which can establish an equitable relationship between cost allocation and receipt of benefit. (2) Fiscal capacity of the unit must be taken into account. (3) The reallocation should produce a "degree of economy." (4) The various governmental units must be willing to accept and carry out the responsibility for the function. He says that the ability of the unit to perform the function is of primary importance, and that the procedures for acquisition, design, construction and operation of recreation areas are "so closely interrelated that for any type of area, they can normally be administered most effectively at the same level of government." 17/

Butler rejects the extremes of maintaining the status quo and centralizing all park and recreation services in a single metropolitan authority as answers to the problem of proper allocation of responsibilities, the first on the ground that it makes no change, and the second on the ground that it is not feasible and moreover some activities need to be close to the people. He says informal and formal cooperation among public and private recreation agencies would add to the effective administration of recreation services, but would only be a complement to more needed changes in responsibility. He concludes that responsibility for recreation may have to be divided among two levels of government in most areas.

He proposes that all areas, facilities, and services that benefit only local residents be handled by municipalities. An example is the acquisition, planning, development, operation, and maintenance of parks and other recreation areas serving residential neighborhoods and communities within a local unit of government. Larger properties serving the entire city would

17/ George D. Butler, "Recreation Administration in Metropolitan Areas," Recreation, Vol. LV, No. 7 (September 1962), pp. 349-351

also be under local control, unless they served a large proportion of nonresidents. Other functions he would allocate to municipalities include diversified activities carried on at local indoor and outdoor centers; organization of clubs, teams, leagues, and groups engaging in music, drama, arts and crafts, sports, hobbies and other activities on a neighborhood or citywide basis; and furnishing of leadership service, advice, and equipment to local groups and individuals. He says the extent to which some of these services might be allocated to the municipality might depend on its size, since limitations of finances and population might indicate need for administration by a larger unit.

In many metropolitan areas, Butler says, the county would be the logical agency to provide the nonlocal recreation activities. These are services for the entire area, such as large recreation parks, reservations, and properties, such as golf courses, camps, zoological parks, nature preserves, cultural centers and parkways. The county would **also** have responsibility for areawide recreation activities, such as athletic leagues, music, drama, nature, and dance groups and conduct of tournaments and special events in which groups from all localities participate. Butler says this arrangement should raise little opposition "since the tax burden entailed in furnishing these services would be spread equitably over the entire population benefited."

Butler sees the danger of unfairly burdening the central city if it already provides such services from its own funds and is then asked to share in the financing of county-wide services. Solutions to this problem would be for the county to contract with the city to provide the services countywide, for the city to transfer the functions to the county, or for joint city-county administration.

The use of the county for providing areawide services would not be feasible in metropolitan areas comprising more than one county or extending across State lines, Butler says. In such areas within one State, he suggests a special park district coterminous with the boundary of the area. Municipalities would continue to operate playgrounds and other local

facilities and conduct neighborhood and citywide activities, and properties and services benefiting the entire area would be transferred to the special district. 18/

Planner John T. Howard states his conclusions on the question of what recreational services are best suited to areawide handling:

There are three main kinds of recreational facilities that fall into this large-area category: the large park, the natural reservation, and certain special purpose areas like golf courses and beaches. These three facilities require major acreages to perform their functions. They have another characteristic: all require natural land--they cannot be practically developed out of sites that have been urbanized.. .. 19/

The Outdoor Recreation Resources Review Commission (ORRRC), created by Act of Congress in 1958, reached similar conclusions on metropolitan park services:

Large-scale outdoor recreation areas and facilities must be provided on a metropolitan or regional basis.

In addition to the need for recreation within the urban environment--local parks, parkways, developed riverbanks, stream valleys, and marshes--there is need to use overall, regional resources in metropolitan areas. The regional or metropolitan day-use area... is quite different from the local site. Local areas cannot be expected to meet all the demands of the masses of people who live in the urban core of metropolitan areas. Urban dwellers and suburbanites are increasingly seeking recreation opportunities beyond community boundaries.

18/ George D. Butler, "Recreation Administration in Metropolitan Areas, Part 2: Authorization and Function," Recreation, Vol. LV, No. 8 (October 1962), pp. 411-413.

19/ John T. Howard, op. cit., p. 32.

The metropolitan or regional outdoor recreation area is larger and can have a wider variety of natural features and man-made facilities than local areas. 20/

Finally, a special study for the Council of State Governments prepared under the direction of a professional planner gave special attention to the problem of coordinating open space activities in metropolitan areas: "...as communities become more aware that the open space problem transcends corporate boundaries, there is a growing concern for providing effective governmental machinery at the metropolitan and regional level." 21/

Application of Selected Economic and Political Criteria

Benefit Area

Unlike libraries or education, the indirect social benefits of parks far exceed the direct benefits to individual users. In addition to their contribution to the physical and mental health of the citizenry, parks play a significant role in planning and zoning by providing buffers between land uses. Urban parks, well placed, help to reduce population density and offer pleasing vistas to passers-by and occupants of neighboring buildings, who may never actually enter the grounds. Parks of all kinds perform an important conservation function in maintaining the balance of nature. Furthermore, many of the direct benefits of parks cannot be enjoyed exclusively by any one individual. The facilities are there, whether they are used or not, and one person's enjoyment of them does not detract from that of another. The venerable

20/ A Report to the President and to the Congress by the Outdoor Recreation Resources Review Commission, Outdoor Recreation for America (Washington: Government Printing Office, 1962), p. 153.

21/ Council of State Governments, State Responsibility in Urban Regional Development (Chicago, 1962), p. 169.

tradition of the "free park bench" is precious to all urban dwellers; grass and pathways are even more widely shared. In short, parks of all kinds provide what we have defined as a social service and are, therefore, financed by the community as a whole.

The spillover of benefits from parks, both direct and indirect, depends upon the purpose for which they are created. The playlots of one neighborhood or community are not likely to benefit children from another because the distance involved in gaining access provides a strong deterrent. On the other hand, the costs of failure to provide them, especially in densely populated cities, may be high, both to the community and the surrounding area, in terms of lowered health standards, high automobile accident rates and delinquency. At the other extreme, the benefits of a large natural park with hiking trails and camping facilities may extend to a wide geographic area by attracting whole families for an outing of one to several days.

It is this variety of benefit areas which has provided the framework for the opinions of the recreation specialists. They have, in fact, defined the boundaries for each type of park service in terms of benefit area. Stating these standards in jurisdictional terms, playlot, playground, playfield and neighborhood park should all be provided at the municipal level, while the large "recreation" park, reservation, and parkway are provided at the county or metropolitan level. The reservation might be provided by the State or the Federal Government. This jurisdictional allocation is also supported by considerations of economies of scale. Generally speaking, acquisition costs constitute the lion's share of park expenditures, and acquisition costs, except in the heart of very large cities, vary in proportion to the size of the proposed park. Provision of larger parks by the larger jurisdiction enables them to be financed by a broader revenue base.

Recreation programs differ from parks in the nature of their benefits. Their direct benefits are more exclusively confined to the participating individuals, while their indirect social benefits are expressed chiefly in terms of general health and welfare. As with parks, failure to provide organized recreation services, especially to children, may impose costs upon the community in health, safety, and delinquency. Although recreation programs lend themselves to financing by user charges, they are not usually financed

this way because one of the important purposes for establishing them is to equalize recreational opportunities among income groups. Moreover, many of these services, such as art and drama classes and even sports, have an educational quality.

Because the benefits of organized recreation programs are largely limited to participating individuals, the spillover of these benefits among communities is not great. They are, therefore, properly provided by the local municipality. Economy of scale is not an important consideration here because the expense of these programs usually varies in close relation to the number of people served. For activities such as special dramatic productions, which attract audiences from beyond the local community, a small admission charge can readily defray whatever additional financial cost can be attributed to servicing nonresidents.

A third type of parks and recreation service falls into the group we have characterized as utility services. The benefits of swimming pools, golf courses, tennis courts, marinas and so on are largely confined to the users, although there is some spillover of social benefit in terms of general health and welfare. If they are entirely financed by user charges, the spillover of benefits among communities becomes irrelevant. On the other hand, the large expenditure necessary to build these facilities requires a scale of operation sufficiently large to keep unit costs and per capita charges at a reasonably low level. Golf courses and marinas can be most satisfactorily provided at the county or metropolitan level, while swimming pools and tennis courts might be provided at the municipal level in larger cities, and by two or more cooperating municipalities where population is small.

Economy of Scale

The administration of parks requires acquisition, construction, operation and maintenance of buildings, and the acquisition and development of park lands. These activities lend themselves to centralized planning and control and thus reduce unit cost of overhead. Quantity purchasing and the use of specialized personnel, moreover, contribute to lowered unit cost with increased scale of operation.

The extent of reduced cost of operation from expanding the scale of a local parks and recreation department depends to some degree on how well the department is integrated in the

municipal government with other departments requiring similar equipment and operating through similar processes, such as public works departments. If the municipal parks department already shares centralized equipment, centralized labor, and skilled trades pools, and an engineering and design section with a public works department, for example, economy of scale from putting the department on a larger area basis is less than if the department currently is operating without such integration with other city departments. Moreover, pulling the parks operation out of an integrated city organization may well cause an increase in the proportionate cost of operating the remaining city functions. Taxpayers of affected jurisdictions thus would need to consider the total effect of transferring a parks department to a larger jurisdiction.

Geographic Adequacy

Playlots, neighborhood playgrounds, playfields, and neighborhood parks are created essentially to service their immediate neighborhoods. Developing localities have no difficulty in finding space for these facilities, sometimes providing it through subdivision regulation. Built-up localities may have no vacant space available, in which case they probably have to acquire it by purchase or condemnation. Thus urban units must find space within their boundaries if they are to enjoy the specialized benefits of these park and recreation facilities.

Large packages of land and natural park facilities, such as lakes, ocean shore, and bird sanctuaries, must be used where they are. Often this is away from the jurisdiction of large population concentration. Creation of these facilities within the boundaries of a municipality through assembly or clearance of land is likely to be unfeasible because of the relatively high cost compared with acquiring and maintaining a similar plot of ground away from the congested area.

Acquiring and preserving open space for control of land use development often requires extension beyond the boundaries of single communities. To the extent that a municipality's exercise of the parks and recreation function includes the development control aspect of open space policy, therefore, it finds itself frustrated by the limitations of its boundaries, except as it may possess and choose to exercise extraterritorial powers, either of land acquisition and reservation or of subdivision regulation.

Citizen Participation

A unique aspect of the parks and recreation function affected by the governmental unit's rapport with the public is the enlistment of volunteer help in carrying on recreation programs. The fresh point of view and enthusiasm of volunteers, as well as their specialized skills, are regarded as distinct assets in the effective functioning of the recreation program. The ability of a recreation department to enlist volunteer help depends on many factors, including the leadership ability of the department head and the challenge of the program. The extent to which the size of the performing government affects the ability to enlist volunteer help is problematical. The feeling of neighborhood loyalty, which sometimes is focused around a small local park and recreation facility, can be very important in stimulating volunteer interest. To the extent that size of governmental jurisdiction adversely affects this feeling of community, it would adversely affect the capacity for attracting volunteer support.

Experience with Larger-Area Performance

Several agencies acquire, develop, and operate systems of regional parks serving residents of one or more metropolitan areas. These do not provide the types of neighborhood and community service normally provided by municipal recreation agencies, but rather supplement municipal recreation areas, facilities, and programs. Examples are the Huron-Clinton Metropolitan Authority in Michigan, the East Bay Regional Park District in California, the Metropolitan District Commission in Massachusetts, the Hennepin County Park Reserve District in Minnesota, and the park systems of Erie, Onandaga, and Monroe Counties, New York.

D. FIRE PROTECTION

The objectives of the urban fire protection function are: (1) to prevent fires from starting; (2) to prevent loss of life and property in case a fire does start; (3) to confine a fire to the place of origin; and (4) to extinguish the fire. From the early days of the Republic local government has been involved in fire prevention and fire fighting. 1/

Some specialists state the objectives of an urban fire protection program somewhat differently: (1) personal safety-- saving of life and elimination of injury; (2) economic protection-- saving of means of livelihood of citizens and of the tax base of the community; (3) property protection--saving of individual property from loss by fire. These objectives are achieved primarily by: (1) fire extinguishing, (2) fire protection activities, (3) adoption of regulatory provisions to restrict extent of possible loss. 2/

Current Practice

Fire fighting and fire prevention are traditional functions of municipalities. Other units of government have undertaken the function to a limited extent. The 1962 Municipal Yearbook reported that of 221 urban counties out of a possible total of 263, 54 provided county fire service to unincorporated urban areas, and 12 urban counties provided fire service throughout the entire county. 3/ The 1962 Census of Governments reported 3,229 special fire protection districts in 29 States. 4/

-
- 1/ Municipal Fire Administration, Sixth Edition, 1956 .(Chicago: International City Managers' Association, 1959).
 - 2/ Municipal Fire Defense Institute materials available as a service of the American Municipal Association, Washington, D. C.
 - 3/ Victor Jones, "Urban and Metropolitan Counties ," The Municipal Yearbook 1962 (Chicago: International City Managers' Association, 1962).
 - 4/ U.S. Bureau of the Census, "Governmental Organization," Census of Governments: 1962, Vol. I (Washington: Government Printing Office, 1963), Table 12, p. 66.

Role of State and National Governments

About three-fourths of the States have established the office of State fire marshal as a central State agency to coordinate and to encourage local fire-prevention activities. State fire marshals **also** conduct fire investigations and prosecutions in case of suspicious fires.

Most States have a program for firemen's training. In several States, the examination of firemen for promotion is handled by State civil service agencies, while other States have established various types of statewide retirement and pension schedules. In a number of States, fire hose and other equipment may be purchased through a State purchasing agency.

The local fire department is also an integral part of any State plan for combating natural or nuclear disasters and their effects. In a number of instances, State governments have negotiated for funds and equipment from the Federal Government under the Federal Civil Defense Act of 1950 and subsequent amendments, to provide for necessary additional resources of local fire departments in case of atomic attack.

Standards of Service

Objective standards for measuring efficiency of fire protection programs are incomplete. The National Fire Protection Association has recently undertaken new studies in this area. The following discussion of standards has been adapted from Municipal Fire Administration. 5/

Fire Fighting

For many years the National Board of Fire Underwriters has used a grading schedule to measure the ability of a community's fire defenses to cope with a conflagration. The grading schedule is administered by trained engineers who evaluate the following items: water supply, structural conditions, fire alarm system, fire prevention, building laws, police, fire department, and climatic conditions. Rating of cities with respect to these items is done in terms of weighted deficiency points; the fewer the deficiencies, the higher the classification of a city for insurance purposes. 5/

5/ Municipal Fire Administration, Sixth Edition, 1956 (Chicago: The International City Managers' Association, 1959).

Some portions of the grading schedule can be adapted to the problems of constructing guidelines for fire department administration, such as the following: (1) minimum pumping engine capacity, based on an estimate of the rate at which it will be necessary to pump water to deal effectively with the kinds of fires that may be expected; (2) minimum number of companies, based on population; (3) minimum number of firemen needed to man properly the available equipment; and (4) distribution of companies, based on accessibility of various parts of the city.

The basic unit of the fire department is the "fire company." Under systems in common use, a fire company may range in size from two to six men in a paid department, and as many as 15 in a volunteer department. A company is normally assigned one major piece of apparatus, and is commanded by a captain assisted by one or more junior captains or lieutenants.

The number of companies should be determined by the conditions of the city, particularly the following: (1) the number of hose streams likely to be required to handle such fires as may be expected, (2) the manpower and capacity of fire department pumping apparatus and the ladder service, (3) accessibility of various parts of the city to fire companies, and (4) size of the city.

Two effective hose streams is the minimum requirement for fighting fires in areas of scattered residences, and a dozen or more streams may be required for large fires in unsprinkled industrial, mercantile, and institutional properties. Fire companies should be manned so as to be able to operate two lines of 1-1/2 inch hose, or a single line of 2-1/2 inch hose manually operated, or a heavy, fixed stream supplied by two or more lines of large hose.

Initial response to a building fire should not be less than two pumper companies plus necessary ladder facilities. This provides for an attack upon a fire from two directions and also meets the possibility that one company may be delayed by traffic or an accident. In high-hazard districts, a minimum of three pumper companies and one or more ladder companies should be the initial response.

The National Board of Fire Underwriters has devised a formula, based on population, to determine the number of fire companies required by a city under average conditions: P is

the population of the city in thousands. For cities under 50,000 the number of engine and/or hose companies is 0.85 plus 0.12 P. For cities 50,000 to 200,000 the number of engine and/or hose companies is 3.4 plus 0.07 P. One ladder company is required in cities having five buildings three stories or higher. In cities 20,000 to 200,000 the number of ladder companies is 1 plus 0.03 P.

Cities with bad structural conditions, severe life hazards, and peculiarities of topography and general layout may require a larger number of fire companies. Cities almost solely residential in character, such as suburbs in metropolitan districts or where the city has no large high-value centers, may need less protection than the average. Cities over 200,000 population are not subject to treatment by the general formula for number of companies. In larger cities there should be sufficient companies to handle two simultaneous large fires without leaving other sections of the city unprotected.

There must be sufficient manpower to put fire apparatus into effective use. To place a single line of 2-1/2 inch hose in service, three men are needed. One additional man is needed to operate a pump so that engine companies require a minimum of four men plus an officer to operate effectively.

Ladder companies are governed by similar manpower considerations. One man can carry and place short ladders but long ladders require three to six men. In addition to raising these ladders, laddermen are responsible for ventilation to remove smoke, for rescue work, and for forcible entry including opening of floors, roofs, walls and ceilings which may conceal fire. The National Board guidelines for manning fire departments using motor apparatus under average conditions are:

<u>Companies</u>	<u>Required Strength</u>
High-value Companies (first alarm response to high-value districts):	
Engine Company	7
Hose Company	6
Aerial Ladder Company	7
Service Ladder Company	8
Engine-Ladder Company	10
Other Companies (in other districts):	
Engine Company	5
Hose Company	4

<u>Companies</u>	<u>Required Strength</u>
Aerial Ladder Company	6
Service Ladder Company	6
Engine-Ladder Company	8
Engine Company with extra ladder equipment	7

In actual operation, current manning practice works out to about 1.5 firemen per 1,000 population where the work week is **64** or more hours and 2.0 men per 1,000 population where the hours worked are in the **48** to 56-hour range.

Fire companies should be distributed so that they can get to most fires in two or three minutes. It takes a company about one-half minute to get out of the station after an alarm is received and the remaining time is available to make the run to the fire. The National Board of Fire Underwriters' standards for distance distribution of fire companies was revised in January 1963. The revised distances of engine and ladder companies continue to be related to type of district (high-value or residential) to be protected, and in addition are now dependent on the amount of water required to fight fire.

Fire Prevention

While the entire personnel of the fire department should be trained in the basic techniques of fire prevention, according to the National Board of Fire Underwriters, there should be a fire prevention bureau or division to coordinate the fire prevention program and to provide specialists in this field. The city should be zoned for the use of buildings and land, and there should be careful inspection of buildings and rigid investigation of fires by firemen. Authority for fire prevention is based upon police power inherent in the State to regulate persons and properties for the safety of the public, and this power is delegated by the State to municipalities.

Perhaps 75 percent or more fire **loss** is preventable by means of a public relations-education program combined with carefully drafted, adopted, and enforced fire prevention regulations and ordinances. Building and electrical codes are the most important types of fire-prevention legislation. Other fire-prevention legislation is aimed at: restricting smoking in public places, the arsonist, and the incendiary.

Effectiveness of fire-prevention legislation depends on its enforcement. The principal methods and agencies used for this purpose include permits and licenses, routine and technical inspections, education and public relations, and investigations.

While police departments have taken advantage of the radio and have put men on patrol duty, many fire departments continue to use only about two percent of their manpower on fire prevention work and hold 98 percent in the stationhouse waiting for fire alarms that could have been prevented through fire inspection patrols. It has been demonstrated that many fire departments could reduce the number of calls 50 percent or more by utilizing fire company personnel for an aggressive year-round fire prevention program. At least one-half of the fire fighters should be doing constructive fire prevention work each day, according to fire professionals.

Specialists' Suggestions

Traditionally, every municipality has a fire department. In some metropolitan areas, however, one fire department or some form of mutual agreement has proven preferable to numerous departments, one in each municipality of the metropolitan area. Many of the smaller places in an urban area may lack water supply systems and fire protection facilities, and even where these services are available the fire defense problem has certain characteristics peculiar to small communities. For example, there may be a **small** aggregate amount of combustible property to be protected, thus making it undesirable or unnecessary to establish a department sufficient to take care of larger fires. A low density of population may prohibit the establishment of an adequate water supply because of the cost. ^{6/}

The small municipality in an urban or suburban area is **often** an uneconomical unit of fire defense administration. The cost per capita of providing adequate fire defense in such a community may be two to three times as great as that community's share of the cost of a metropolitan fire department. For example, a study comparing costs of fire protection in a metropolitan area in New Jersey with 13 separate fire departments and similar costs in Cleveland, St. Louis, or Baltimore, using the under-writers' standards for the number of companies and men, showed that a saving of 31 percent could be made as a direct result of unification of fire departments in the area. ^{7/}

^{6/} Municipal Fire Administration, op. cit., p. 39.

^{7/} Ibid., p. 6.

A larger fire department is also able to support various staff services. There can be a better maintenance bureau, a better training division and training facilities, a fire prevention bureau, and an arson squad. Greater management and control is possible than in small departments where the chief **must** handle all departmental business as well as conduct training and fire fighting operations. Large departments offer more opportunity for advancement and promotion, and greater incentive to study and work for promotion than do small departments. Larger departments offer economy in communication facilities, often with less confusion.

Application of Selected Economic and Political Criteria

Benefit Area

The function of fire fighting and prevention was designated in the discussion of the economic criteria as a social service, i.e., spillover of benefits among persons is so large that service can be enjoyed only by the community as a whole. The reason for this is obvious, in terms of spread of fires and danger to every property from insufficient precaution against fire on one property.

Frequently, **less** developed communities on the fringes of the metropolitan area are not convinced of the value of full-time fire protection and fail to provide adequately for it. Should a fire start in one of these smaller communities where **it** abuts the larger well-equipped community, the latter must decide, if **it** is legally permitted, whether **it** should protect **its** own property by furnishing service to the second community. The more numerous this type of smaller community, and the greater the variation in fire protection standards, the more frequently these decisions must be made. Many communities are no longer able or willing to make expenditures from which they derive little benefit, and have ceased to extend fire protection or "outside aid" on a purely neighborly or good-will basis.

Nevertheless, spillover among communities of benefits from adequate fire service is not geographically extensive, so that from this standpoint, the fire function is well suited to administration at the local municipal level. Furthermore, technical strategic requirements for the number and placement of fire stations minimizes the significance of economies of scale compared, for example, with the economies available from centralized provision of major water supply and pumping facilities.

Legal and Administrative Ability

When the problem of adequate fire protection for all parts of the metropolitan area, particularly new fringe areas not yet ready to assume local government responsibilities, is solved by depending upon "outside aid" from older communities a number of legal questions arise: (1) Does the "donor" community have extra-territorial rights applicable to fire fighting? (2) What is its liability for damage done by apparatus, or injuries sustained by firemen when used beyond municipal boundaries? (3) Are insurance and pension provisions of firemen applicable for duty performed outside corporate limits? (4) Will the community's fire insurance rating be affected or will collection for city fire damage be affected when equipment is used for "outside aid"? Ramifications of the answers to these questions make reliance on "outside aid" agreements an undesirable method of assuring uniform fire protection for a metropolitan area.

Certain economies can be realized by coordinated provision for fire protection within a metropolitan area. Dividing the entire metropolitan area into fire districts, regardless of legal boundaries, will prevent duplication that sometimes exists when adjoining communities have fire stations across the street from one another. There are economies in centralized purchasing and servicing of equipment, particularly the types of equipment so vital to fire departments. In a number of cases, purchasing has been centralized at the State level.

While the very nature of fire fighting requires fire companies and equipment to be decentralized, planning of total fire fighting administration benefits from coordination on an interjurisdictional basis. Recruiting and training of all personnel, as well as securing specially trained personnel is facilitated by ability to use resources of a large area. More efficient assignment of personnel to decentralized fire stations is **also** possible. Administration of the other aspect of fire protection--fire prevention including uniform code enforcement--benefits from **areawide** coordination. Funds and personnel from an **areawide** fire department are more readily available for this purpose than from the more limited means of a local community fire department.

Citizen Participation

In the many places where there is a tradition of volunteer fire departments, people are loath to accept a paid department, let alone an areawide administered department. To some extent this community attachment is due to the social function the volunteer department fills in conducting or participating in such affairs as drills and parades. While the kind of fire fighting and prevention activities volunteer departments are capable of undertaking may be adequate for less developed areas, however, they become less adequate as urbanism increases. Fire service requirements in metropolitan areas thus increasingly modify the possibility of active citizen participation in the fire protection function.

Experience with Larger-Area Performance

In Erie County, New York, all 25 towns, the villages and the three cities participate in the countywide mutual aid fire protection system. They are all linked by a radio network. Fire prevention in Nassau County, New York, is administered by the county fire marshal, who is charged with the duty of enforcing the Nassau County fire prevention ordinance through his immediate staff and members of local volunteer fire departments designated as assistant fire inspectors. A contractual agreement exists between the city of Rochester, N. Y., and Monroe County, which enables the local volunteer fire departments in the mutual aid system to use the training facilities, personnel, and training program of the fire academy of the Rochester bureau of fire. In the New York counties of Broome, Erie, Nassau, and Onandaga, county training programs are conducted for fire personnel of towns and villages.

Since 1955 Boston has provided training for firemen from 20 cities and towns in the area. Dade County, Fla., is authorized to provide fire stations, records, training, and communications to the entire county. It may provide direct fire service if a municipality fails to meet minimum standards of service set by the county. Los Angeles County performs a number of fire protection services under contract with its cities, including central communications and dispatching services and post-fire investigations.

E. POLICE

A police department has broad responsibilities and activities which involve (1) prevention of criminality, (2) repression of crime, (3) apprehension of offenders, (4) recovery of property, (5) regulation of noncriminal conduct. ^{1/} Prevention of criminality is a newer aspect of the police function which delves into factors of community life that create criminal tendencies and lead the criminal to indulge in antisocial behavior.

A leading commentator on police administration has placed major police activities into the following categories: ^{2/}

<u>Major Grouping</u>	<u>Related Activities Within Each Group</u>
1. Patrol force	All protective patrols Recording and checking patrol-box calls Patrol wagon service Booking prisoners at district stations Custody of prisoners at district lockups Operation of patrol and district station records
2. Traffic regulation	All traffic regulation posts and patrols Traffic engineering and planning Accident prevention squads and records Accident records and reports Junior traffic patrols

^{1/} For amplification see Municipal Police Administration, 5th Ed. (Chicago: International City Managers' Association, 1961).

^{2/} Bruce Smith, Police Systems in the United States, 2nd Rev. (New York: Harper & Brothers, 1960), p. 219.

- | | |
|--------------------------------------|--|
| 3. Criminal investigation | All organized crime detection activities conducted by agencies other than the patrol force
Criminal correspondence
Crime laboratory
Photography of crimes and criminals |
| 4. Crime prevention | Protective work with women and juveniles
Supervision of delinquent boys' activities
Juvenile aid programs |
| 5. Morals regulation | Headquarter squads for controlling prostitution, narcotics, intoxicants, and gambling |
| 6. Communication and records control | Files of crimes and investigation reports
Arrest records
Identification files
Central complaint room |
| 7. Property management | Accounting and payrolls
Purchasing
Maintenance of police buildings and equipment |
| 8. Personnel management | Examination and investigation of recruits
Qualification and efficiency records
Promotion standards
Training
Disciplinary trials
Police surgeons |

Another writer has defined a self-sufficient police department as one that has the ability to support adequately the following phases of the police function: 3/

3/ Gordon E. Misner, "Recent Developments in the Metropolitan Law Enforcement," The Journal of Criminal Law, Criminology, and Police Service, Vol. 50, No. 5 (January-February 1960), p. 500.

A. Field operations:

1. basic and specialized patrol, to include traffic enforcement;
2. specialized field services, to include the investigation of major crimes, juvenile delinquency, and vice conditions;

B. Auxiliary services:

1. communications, to include agreements to monitor radio and teletype transmissions on a regional basis;
2. identification and records;
3. laboratory services, to include at least criminalistics examinations of blood; latent, visible and plastic fingerprint and other impressions; and basic chemical analysis of alcohol, narcotics and poisons;
4. detention facilities for misdemeanants awaiting court disposition and for felons awaiting preliminary hearings;

C. Administrative functions:

1. personnel services to include at least advisory participation in the recruitment and selection process and participation in the disciplinary process;
2. training, to include arrangements for basic recruit and in-service programs for all levels of personnel;
3. police planning: continuous critical self-analysis and evaluation of police procedures and methods;
4. internal and external public relations;
5. administrative "housekeeping" duties of budgeting, payroll, reporting, purchasing, and maintenance to the extent that these duties are not performed by a central agency of the jurisdiction.

Current Practice

The United States has a traditional pattern of local autonomy in law enforcement which is followed by no other civilized nation in the world. Regardless of size, location in relation to other units of general local government, or financial resources, practically every unit of local government is thought capable of administering basic law enforcement within the confines of its own jurisdiction.

In metropolitan areas, municipalities are the principal providers of police service. Counties usually have the office of sheriff, but the sheriff's duties are mainly of a civil nature in most cases and are not related to the business of preventing crime or apprehending criminals. ^{4/} Nevertheless, a 1962 survey by the Municipal Year Book found that of 221 urban counties of 100,000 population reporting, 152 provided police services to unincorporated urban areas, and 73 provided police services throughout the county, including incorporated territory. ^{5/}

One consequence of the extreme degree of local autonomy in policing has been cooperation among police departments in metropolitan areas to improve service, increase efficiency, and reduce costs. This has been particularly true in the special technical fields, such as communications, identification, criminal statistics, and laboratories.

Role of National and State Governments

The Federal Bureau of Investigation, the investigative arm of the United States Department of Justice, is of major importance in the relationship of municipal police to Federal agencies because of such activities as the publication of crime statistics, the National Academy for training in police methods, the collection of fingerprints, and clearing of other criminal records on a national basis. These facilities of the FBI are an important tool to municipal police forces and implement inadequate facilities.

^{4/} Lane W. Lancaster, Government in Rural America (Princeton, N. J.: D. Van Nostrand, Inc., 1957), p. 165.

^{5/} Municipal Year Book 1962 (Chicago: International City Managers' Association, 1962), pp. 62-63.

As far as investigative activities alone are concerned, municipal police have equally important relationships with such Federal agencies as the Alcohol Tax Unit of the Internal Revenue Service, the Bureau of Narcotics of the Treasury, the Secret Service, and the Post Office Department. Municipal police departments have less frequent contacts with another group of Federal agencies which include the Coast Guard, the Immigration and Naturalization Service of the Department of Justice, the Intelligence Unit of the Customs Patrol, and various agencies of the military establishments.

At least 33 States have some sort of bureau for filing identification data and criminal histories, conducting investigations, carrying on research, coordinating communications, and collecting and compiling statistics. Many State police agencies integrate local officers into their recruit and in-service training schools, conduct regional training programs and assist in local civil defense planning and planning for other natural and man-made disasters. 6/

Standards of Service

One method that has been used to judge adequate police protection is the use of a ratio of police per numbers of local population. When comparisons are made on this basis, not only does size of the city bear a direct relationship to that of police force, but also the larger the city the larger the ratio of police to population. For cities over 250,000 population, an average of about 2.5 police department employees per thousand of population is maintained; in cities between 50,000 and 250,000, the ratio drops to 1.67/1,000. The figures do not include independent park police forces maintained by some of our largest cities. In particular instances these may increase municipal police strength by 10 to 15 percent. In the largest population group (over 250,000 inhabitants), some cities have a ratio four times greater than others. 7/

6/ Municipal Police Administration, op. cit., pp. 28-32; The Council of State Governments, The Book of the States 1962-63 (Chicago, 1962), pp. 439-440.

7/ Bruce Smith, op. cit., p. 106.

On the other hand, the writers of the International City Managers' Association training manual state that while there is some relationship between number of police employed by a city and the amount of crime in that city, it is not a simple, direct relationship. There are many criteria on which to base an estimate of required numerical strength: area, population, topography, and geographical peculiarities of the municipality. More specifically, such things as presence of a large or small city on the border; location of schools, churches, hospitals, etc.; natural phenomena such as lakes, ocean, rivers, docks and warehouses; number and direction of streets, all need to be considered. 8/

Another frequently used statistical device is cost of police service per capita. This is extremely flexible and may be employed to condemn a police department or to extol its efficiency. If per capita expenditure for police service is high, the conclusion may seem to be that cost of police protection was excessive; however, the important factor is what is being received for the money spent. Under a policy of "the least regulation possible," dictated by the interests concerned, direct police costs may actually go down. 9/

Unduly large police costs for amount and quality of public service rendered may result from the fact that city police forces waste a part, and sometimes a considerable part, of their available manpower on: (1) Performance of unnecessary or so-called "public relations" assignments. (2) Distribution of uniformed patrols and of investigating and traffic units, without regard to established need. (3) Lax supervision of day-to-day operations, and failure to control malingering by men on disability or light duty rolls. (4) An inability or unwillingness, or both, to retire aged police officers to the pension rolls by executive order, and without regard to inclinations of the incumbent. 10/

8/ Municipal Police Administration, op. cit., p. 49.

9/ V. A. Leonard, Police Organization and Management (Brooklyn: The Foundation Press, Inc., 1951), p. 349.

10/ Smith, op. cit., p. 120.

Finally, an additional burden on police department costs are those that police "donate" to other line departments for total service to the community.

Specialists' Suggestions

At the conclusion of a description of a self-sufficient police department, cited above, Misner stated: "It seems unlikely, except under the most fortuitous circumstances, that a jurisdiction with less than 50,000 population can support a police department which is self-sufficient and sustaining." 11/ Specialists point out, furthermore, that if every local government, regardless of size or strength, maintains its own police facilities, the latter become so numerous that their interrelationships are unduly complex and burdensome. When to sheer complexity is added the confusion and destructive rivalries arising out of overlapping enforcement powers, the discouragement that so often overtakes police administrators is readily understood. As stated by Misner, "The total police resources of our metropolitan areas are dissipated by the very nature of their organization." 12/

As noted previously, intermunicipal cooperation has been urged as a partial solution to the problem of many police departments in a single metropolitan area. Bruce Smith, however, does not feel that individual centralized services are an "offset to the process of minute particularization." He states:

While they make it possible for the clumsy and ill-articulated police organism to perform its tasks, that is not their proper function....They perform a role wholly distinct from binding together into an appearance of unity the tens of thousands of unrelated police agencies...As matters stand the central services sometimes actually operate to revive and to stimulate into new activity various police instrumentalities which are so ill-adapted to modern conditions that they might better be allowed to decline and disintegrate.

11/ Misner, op. cit., p. 500.

12/ Ibid., p. 497; see also, Smith, op. cit., p. 219; and Municipal Police Administration, op. cit., p. 514.

Other results of fragmented police control within a metropolitan area include: (1) expenses of administration and staff services are disproportionately high in such departments; (2) duty rosters in smaller departments may be so limited as to be inflexible and incapable of meeting emergency conditions, often making it necessary to rely excessively upon "reserve" and untrained personnel; (3) limited administrative areas also deny police officials in metropolitan areas adequate planning tools they would have if the area were treated as a socially and economically integrated and interdependent unit. 13/

Reflecting the existence of several aspects or subfunctions of police administration, the specialists consider the question of optimum size jurisdiction from the standpoint of the individual aspects: patrol, detective, traffic, laboratories, communications, records, training, and jails.

The foundation of any police department is the patrol force. It is usually the largest unit of the department with the task of acting as a deterrent to potential crime, as well as gathering and reporting information. The plans and tactics devised by the administrator and the need for specialized operating forces are dependent upon the effectiveness of the patrol force. The patrol function has been traditionally assigned to local government for a number of reasons: citizen support is more easily secured; citizens can make known the level of service desired within their means; community goals in law enforcement are better reflected and achieved. 14/

Another basic aspect of the police function is the detective force, used for intensive criminal investigation. As with patrol, the detective force is not a staff service but a part of the field operations of any police agency, i. e., the arm of the service in a large part responsible for accomplishing an important share of the objectives of the agency. Because of the pattern of local autonomy, many jurisdictions do

13/ Misner, op. cit., p. 501; Smith, op. cit., p. 315.

14/ Richard D. Yerby, "The Police Function," Metropolitan Services (Los Angeles: University of California, Bureau of Governmental Research, June 1961), p. 86.

not have resources necessary to provide competent specialists in the area of criminal investigation, nor is the scope of all investigations confined to a small area. Many of the controversies, jealousies, and competitions which now exist between jurisdictions were generated originally by conflicts between investigators. Solution to this aspect of metropolitan police problems would appear to reside almost exclusively in the realm of reducing the total number of police jurisdictions. 15/

A newer aspect of the police function is traffic law enforcement. Few cities today can successfully deal with traffic law enforcement without establishment of a full-fledged specialized traffic division, including accident investigation, recording and analysis of data, centralized traffic enforcement patrols, motorized parking and movement supervision, and intersection control functions. There is no formula to determine how large a police department should be before it specializes in traffic activities, or what degree of specialization is appropriate. Cities of 50,000 population and over generally can improve effectiveness by line specialization, but many cities of 25,000 or smaller have full-fledged traffic divisions working successfully. 16/

In recent years there has been some movement toward centralization of certain police functions, such as laboratories, communications, records files, and personnel activities. Centralization of these aspects has resulted generally in economies due to less duplication of equipment, space and buildings, and personnel, as well as ability to make better use of scarce technically trained persons necessary to each of the aspects.

A small police laboratory can rarely afford all the necessary equipment for complete testing; also, often the small department police scientist is more restricted in experience and training than his counterpart in the larger laboratory. For these reasons, there has been a marked tendency toward the establishment of central laboratories not only on a county or metropolitan basis, but by States and various agencies of the Federal Government.

15/ Misner, op. cit., p. 504.

16/ Franklin M. Kreml, "The Specialized Traffic Division," The Annals, Vol. 291 (January 1954), p. 66; Municipal Police Administration, op. cit., pp. 338-339.

The central laboratory can serve best as a cooperating agency that carries out examinations which the local police scientist realizes are desirable, but which he cannot make. He, in turn, is in an excellent position to serve as liaison man with the central laboratory on the one hand and the police investigator on the other. 17/

Communications require centralized development more than any other area of auxiliary police activity. Physical limitations, particularly due to the limited number of radio frequencies, as well as the availability and cost of specialized equipment; demonstrate this need. **Also**, the breakdown in rapid communication in a metropolitan area is intensified by the availability of modern vehicles and better highways for criminals. These advantages for the criminal can be overcome by increasing the mobility of the police force. Coordination of forces is the single most important aspect of mobility, and it can only be achieved by a rapid communications system able to bring dispersed forces into immediate action. 18/

Central records serve the vital purpose of reducing the time lapse in gaining and disseminating information. A central records bureau is able to identify patterns of occurrence indicating organized criminal operations in such areas as stolen property, check forgery, automotive theft. A central metropolitan records file, if organized properly, can also make the best use of all services performed by the national files of the Federal Bureau of Investigation, and services available at the State level. Central records are closely related to central laboratories since the value of the latter depends upon the amount of comparative evidence available. Fingerprints, for example, are of greater importance as a method of identification when the file of samples is as nearly complete as possible. 19/

Most experts generally agree that the training aspect of personnel activities should be provided on a centralized or metropolitan basis. Central training facilities, for both

17/ Paul H. Kirk, "Progress in Criminal Investigation," The Annals, Vol. 291 (January 1954), p. 59.

18/ Yerby, op. cit., pp. 79-80.

19/ Ibid., pp. 77-78.

initial orientation and training, tend to eliminate wasteful duplication, provide more adequate programs, and introduce a higher quality of instruction. A training program conducted by a small agency faces limited contact with outside thinking thus promoting a tendency to become ingrown." Lack of adequate local training programs has prompted organization of regional programs by the State, private agencies, and the Federal Government. 20/ Recruitment should also be conducted on a regional basis. In this way a wider choice of candidates is available to the entire area. It may be possible that a regional personnel officer can undertake job descriptions, classification, testing, and recruiting for the entire metropolitan area. Then each municipality within the area has available a roster of candidates from which to choose those best suited to its needs and resources.

Finally, the operation of two traditional police facilities, the jail and the district station, is currently being reexamined by police specialists. There is some doubt among them whether jail operation is properly a police function at all. William Parker states that jail operation consumes as much as 20 percent of the police budget and seven percent of personnel strength. Further, it encumbers police training with studies of institutional problems not remotely connected with law enforcement, while it adds a completely "unnecessary and unjustifiable element to the chief administrators' hearily impossible span of attention." 21/ Misner in his analysis of the problem states, "experts seem agreed that local jails are a black spot on the panorama of American penological practices." The existence of so many local jails in our metropolitan areas means that many of them are small units, definitely a secondary consideration to the police. Strict adherence to the "philosophy that every local police jurisdiction is entitled to perform basic jail functions has taken its toll in American corrections." 22/

20/ Leonard, op. cit., p. 146; Smith, op. cit., p. 283; Municipal Police Administration, op. cit., p. 181.

21/ William H. Parker, "The Police Challenge in Our Great Cities," The Annals, Vol. 291 (January 1954), pp. 7-8.

22/ Misner, op. cit., p. 503.

The district police station is expensive in terms of site, buildings, furnishings and equipment, operating personnel, services, and maintenance. Centralized operations would not only be more economical than services provided through district stations, but they would also eliminate administrative and organization problems and thus simplify the administrative tasks, tighten control, and assure more effective operations. On the other hand, district stations have traditionally met two needs that in very large areas may be sufficiently pressing to justify their continuation in spite of their disadvantages: (1) they are a convenience to citizens who may wish to call at a police station for some service; and, (2) they save police time by reducing the distance between the location of their duties and their station. Studies have shown, however, that there are also disadvantages in district stations. Citizens much more often telephone to police stations rather than call in person; and time saved by police is not equal in money value to the cost of building and operating a district station. 23/

Application of Selected Economic and Political Criteria

Benefit Area

Police protection is another of the services whose benefits cannot be enjoyed exclusively by an individual but accrue to the community as a whole. Ironically, spillover of benefits of police service from one community to another is not as great as the spillover of social costs from inadequate police protection. Rigorous law enforcement in one town, in fact, forces violators to establish themselves among more hospitable neighbors. Many metropolitan areas contain at least one "wide open town" with some claim to fame. Although the accepted doctrine of "hot pursuit" allows police officials to follow the trail of a law breaker through the maze of local governments, the less efficient efforts at crime prevention in one community impose heavy costs upon others. Even less dramatic police services involve extensive intercommunity spillovers. Dogs do not observe boundary markers, and although four out of five communities may have effective dog ordinances, canine visitors from the fifth will roam them all.

23/ For additional discussion, see Municipal Police Administration, op. cit., p. 52.

Economy of Scale

In addition to large spillovers many police services are amenable to substantial economies of scale. Specialized services of all kinds, including laboratories, communications, systems, record systems, homicide, vice and other specialized detective squads, impose prohibitive unit costs unless they serve a population large enough fully to utilize their capacity. Jails and penal institutions, as well, can usually be operated more efficiently on a larger scale.

Traffic control appears to fall into two categories. Control of intercity expressways, in fact mobile traffic control units generally, can be administered more efficiently on an areawide basis, while traffic direction and parking enforcement on city streets may be more effectively administered by the local unit,

On the basis of the economic criteria, a large measure of the administration of police service should be assigned to the county or metropolitan level of jurisdiction: criminal law enforcement and its related special services, penal institutions, mobile investigation and traffic control. The local municipality can administer more effectively foot patrol and local traffic and parking regulations.

Legal and Administrative Ability

From the point of view of administrative ability and effectiveness, areawide operation of many aspects of the police function is preferable. Police specialists have pointed out that laboratories, communications, records, and personnel activities are already areawide in many places because of greater ease of recruiting and keeping specially trained people. These Same activities on an areawide basis are more useful to the police function since they tend to be more comprehensive and better equipped and staffed. Other aspects of the police function, district jails and stations, not now centralized, would benefit from areawide administration. Better trained personnel specializing in penology managing the jails would remove the stigma attributed to jails by specialists. Centralizing housekeeping functions of district stations would be more administratively efficient as well as economical. Finally, there is a general group of benefits to be derived from areawide administrative control: ability to plan on a total overall basis; flexibility in assigning operations from immediate pressures of vested interest groups.

Citizen Participation

It is the patrolman on the beat, the policeman directing traffic, the school crossing guard with whom citizens identify police protection. Inherent in the duties of these jobs is an identification with and intimate knowledge of the groups and places of the beat location. There is value in maintaining this relationship both for the security of the citizen and the efficiency of the police department.

As the aspects of policing become increasingly removed from the day-to-day observation of the citizen, i.e., the more technically trained patrolmen used for detective and traffic work, and the four completely technical activities, the need for accessibility and participation diminishes accordingly. The two institutions of police, jails and district stations, which have been traditionally the security symbol to the populace, according to the specialists have become less necessary administratively on a decentralized basis.

Experience with Larger-Area Performance

In Los Angeles County the sheriff's office makes available a number of law enforcement services to cities by contract or agreement. These include conduct of crime detection and prevention programs, furnishing of auxiliary services such as records and statistics, two-way radio system, interlocking teletype with other California police agencies, photography and fingerprinting, and recruitment and training.

The City of Philadelphia and 163 localities in 11 surrounding counties in Pennsylvania and New Jersey cooperate in the Delaware Valley Fugitive Search Plan. It establishes and sets up roadblocks and checkpoints during the search for fugitives who commit felonies within a 35-mile radius of Philadelphia.

Among the 164 police departments in five counties surrounding Philadelphia in 1962, 128 had radio systems, and of these 107 had cooperative radio agreements with other departments of other local governments. In early 1962, Dade County, Fla., was providing police communication services to its own public safety department and on a contract basis to police departments of nine municipalities in the County. Localities in the Washington, D. C., metropolitan area have developed an agreement to maintain and operate a regional police teletype system.

A mobile crime laboratory in the Erie County, N. Y., sheriff's department is available on request to other polic'e agencies of the county. In Onandaga County, N. Y., law enforcement agencies can contract with the Syracuse police department for similar services for criminal investigation and crime detection.

In Erie County, the communications division of the sheriff's department provides areawide means of communication through four functional units--radio, teletype, auto bureau, and switchboard. The Erie County law enforcement training academy of the sheriff's department is open to trainees from city, town, and village police departments. Monroe County, N. Y., and the City of Rochester jointly participate in the police and fire radio systems throughout the county.

F. PUBLIC WELFARE

The public welfare function has been defined as government's furnishing of such benefits and/or social services as are needed to maintain the minimum level of economic and social protection for particular individuals that society is willing and able to guarantee, within the economic and ideological limits fixed by its productive capacity, knowledge, and social philosophy. 1/ Welfare has also been defined as part of a larger field of activity involving promotion of economic security, and alleviation and prevention of economic insecurity, of individuals and families. Welfare includes an increasing variety of rehabilitative, protective, and preventive services to children and adults. 2/

A limitation on descriptive definition arises from differences that exist from place to place in the specifics of public welfare operation. Only the grant-in-aid provisions of the Social Security Act, originally passed in 1935 and subsequently expanded by repeated amendments, have brought a measure of geographical unity into the field. Virtually universal, therefore, are five Federally aided categories of assistance to needy persons in particular circumstances, often called "categorical assistance": Old Age Assistance (OAA), Aid to Families with Dependent Children (AFDC), Aid to the Blind (AB), Aid to the Permanently and Totally Disabled (APTD), and Medical Assistance to the Aged (MAA). "General Assistance" is the term used to describe the financial aid to individuals and families who are not eligible under the five Federally aided categories. The availability of this assistance in any area depends upon State and local action, and patterns for such assistance vary widely.

-
- 1/ Elizabeth Wickenden, "Section One: Toward a More Effective Welfare Policy," Public Welfare, Time for a Change, Project on Public Services for Families and Children, Sponsored by the New York School of Social Work (New York: Columbia University, 1961), p. 17.
 - 2/ Commission on Intergovernmental Relations, Federal Aid to Welfare, A Study Committee Report (Washington, 1955), p. 5.

Public welfare programs have many important aspects in addition to provision of financial assistance to needy persons and families. Among other programs administered through public welfare agencies are: 3/

Operation of specialized institutions to meet particular needs, including children's institutions, homes for the aged, and training schools.

Licensing and standard setting for voluntary or commercial institutions in the same fields and for certain other kinds of voluntary social welfare activity.

Provision of social services for older persons, not necessarily limited to those receiving assistance.

Planning and organizing the emergency welfare aspects of the civil defense program.

Assisting people in certain kinds of disaster situations.

Making investigations necessary for interstate and intercounty adoptions and certain other movements of people.

Assisting with the repatriation of persons stranded overseas.

Operating or financing certain specialized types of welfare service, such as homemaker service, day care, medical home care programs for the needy, etc.

Public welfare as a function or service of local government has undergone considerable change in the past 30 years. Only a fraction of the services normally associated with the broad aspects of "social public welfare" or "public assistance" remain as the sole responsibility of local government. The Federal and State governments have assumed major responsibility.

Role of Federal Government

The economic dislocation of the 1930's was the propelling force for major Federal involvement in the public welfare field. Prior to the Social Security Act, there were variations in public

3/ Wickenden, op. cit., pp. 14-15.

welfare among States and local jurisdictions both in fiscal capacity and administrative organization. In part, these variations reflected differing customs and social attitudes of local communities toward relief and its recipients. These disparate State and local systems were unable to cope with the costs of relief on the massive scale required during the early 1930's. This traumatic effect of the Depression created a political climate which made possible both the national program for Federal assistance to the States in providing money/income to certain categories of needy persons, and the national systems of social insurance. Both the Old-Age Insurance and Unemployment Insurance programs were based on a presumptive need for income maintenance in cases of income **loss** from retirement or unemployment after attachment to the labor force. Under the Old-Age and Survivors Insurance and Unemployment Insurance titles of the Social Security Act, the Federal Government provided certain social insurance benefits, financed through payroll taxes and available in cases where a **loss** of earnings could be assumed to indicate a need for public income maintenance payments.

Entrance of the Federal Government directly into the public assistance field was accomplished through other provisions of the Social Security Act of 1935 which established the categorical assistance programs--the five Federally aided categories previously listed. The Social Security Act of 1935 constituted a major landmark in the evolution of American public welfare structure and policy. The pattern of using State machinery as the instrument of Federal policy through incentives offered by the grant-in-aid device has been followed by more recent programs with similar purposes. ^{4/}

Role of State Government

The Social Security Act placed State government in the pivotal role for administration of the Federally supported programs. However, to qualify for their share of grant-in-aid funds, States must meet certain Federally established requirements. Among these are: (1) the State plan must be in effect in all political subdivisions of the State, and if administered

^{4/} Odin W. Anderson, "Private and Public Action in Meeting Health Needs," Annals, Vol. 337 (September 1961), pp. 59-60; Wickend n, op. cit., pp. 40-41.

by the subdivisions it must be mandatory upon them; (2) the State plan must provide for establishment or designation of a single State agency to administer the plan; (3) it must provide for financial participation by the State; (4) it must provide for methods of administration necessary for proper and efficient operation of the plan, including establishment and maintenance of personnel standards on a merit basis; (5) the State plan must require restriction of information about applicants for and recipients of assistance to purposes directly connected with the administration of the program (a provision enacted as a part of the Revenue Act of 1951 permits exceptions to this prohibition under appropriate State legislation); (6) it must provide opportunity for anyone *so* desiring to apply for categorical assistance and to have his application acted upon with reasonable promptness; (7) it must provide an opportunity for fair hearing before the State agency for any claimant for assistance whose claim is denied or is not acted upon with reasonable promptness; and (8) the State plan must provide for the submittal of **such** reports as the Welfare Administration may require.

The emphasis on State program and leadership, backed up by Federal financing, has strengthened the role of State government in the public welfare field but, in doing *so*, it inevitably removed or limited authority which had formerly been passed on to local units of government. In those States, where local communities keep welfare functions not covered by Federal aid requirements, while county government has become the agent of State-supervised Federal programs, a dual system is created within an overlapping geographical area. In a few States, jurisdictional duality has been reflected in two State welfare departments, one typically limited to the Federally aided assistance programs with their more stringent requirements. Over the years, there has been a steady trend toward integration of public welfare organizations at both State and county level. This trend is in line with the aim of welfare agencies generally to coordinate various programs that may affect several client members of a single family.

Current Practice

In about one-half of the States the Federally aided Public assistance programs (categorical aids) are directly administered by **the** State government, and in the other States, **they** are administered by local units under State supervision. Under both types of administration the county is the main unit

upon which the welfare offices are based. Only where public assistance is administered by the State agency have offices been established on a regional or area plan rather than on a more numerous county, city, or township basis. 5/

General assistance is wholly financed by State and local governments throughout the country. The pattern of administration and financing between State and local governments, and among types of local units, varies widely.

In 15 States, general assistance is administered by the State public assistance agency through its local offices. In 9 States it is supervised by the State public assistance agency through local offices which are branches of county or municipal government, usually also serving Federally aided programs.

In 26 States general assistance is administered by local political jurisdictions. In 9 of these States specifically limited responsibility is exercised by the State public assistance agency which may finance specified costs, receive statistical reports or settle intercounty disputes. In the remaining 17 States, no responsibility is exercised by a State agency.

The county is the most common political-geographic unit for administration of general assistance in 39 States. In 10 States, townships, towns, municipalities, or combinations of these local units are the most common. Alaska uses a "defined area unit" for administration of general assistance. Some cities have separate programs or make up separate administrative units, sometimes with municipal funds and policies which differ from nearby county programs. 6/

The extent to which Federal, State, and local governments have shared in financing public assistance programs is reflected in Table 4.

5/ Tax Foundation, Inc., Public Assistance, A Survey of Selected Aspects of State Programs (New York: 1960), p. 18.

6/ Department of Health, Education, and Welfare, Characteristics of General Assistance in the United States, Public Assistance Report No. 39 (Washington: Government Printing Office, 1959), pp. 7, 9.

Table 4--State-local general assistance and all public assistance payments, by source of funds, 1951 - 1961 (millions of dollars)

Year ^{1/}	Total assistance payments	General assistance ^{2/}		All public assistance ^{3/}			
		Amount	Percent of total	Total	Federal	State	Local
1951	2,691	282	10.5	2,409	1,122	1,024	263
1952	2,617	224	8.6	2,393	1,134	997	262
1953	2,736	212	7.7	2,524	1,277	986	261
1954	2,783	220	7.9	2,563	1,320	961	283
1955	2,998	286	9.5	2,712	1,350	1,031	332
1956	3,052	270	8.8	2,782	1,366	1,077	338
1957	3,245	276	8.5	2,969	1,505	1,117	347
1958	3,588	338	9.4	3,250	1,642	1,210	398
1959	4,000	426	10.6	3,574	1,848	1,281	445
1960	4,131	426	10.3	3,705	1,922	1,344	440
1961	4,404	466	10.6	3,938	2,049	1,412	477

^{1/} Fiscal year. Alaska and Hawaii included throughout the period.

^{2/} Supported entirely by State and local funds.

^{3/} Includes payments directly to suppliers of medical and remedial Care for, as well as direct assistance to, recipients in federally aided programs.

Source: Department of Health, Education, and Welfare.

Standards of Service

Minimal or optimal service standards for welfare activities are not definable in terms of gallons of clear water per consumer, or hose and ladder trucks **so** many minutes from a burning building. "Basic living requirements" translated into food, clothing, shelter, medical care, and incidentals to the extent citizen-determined financing permits, are extended by welfare departments to needy recipients.

Social welfare specialists believe that, in addition to persons in need, public welfare should focus strongly upon welfare services which are aimed at "strengthening family life" and maximizing "self-support." This positive emphasis upon help to troubled families in addition to determining their eligibility for payments has been reflected in the Public Welfare Amendments of 1962.

Specialists' Suggestions

Of the government-financed welfare activities, Federally supported categorical public assistance programs have taken over a substantial share of the total assistance load, and as financing has shifted from local and/or private welfare to Federal government supported programs, so has their management and direction. Even solely State and locally operated general assistance programs have been influenced by standards of administration established by the Federal programs. In terms of area size for the welfare function, the political unit has perforce become the county or some other regional subdivision of the State with policy dictated by the State agencies as delimited by Federal program standards.

This dominance of the Federal categorical aid programs in the total public assistance picture, and in turn the common use of the county as the administrative unit, becomes significant in relation to the specialists' suggestion with respect to the desirable administrative unit. In "A Statement of Principles," the American Public Welfare Association stated:

Public welfare functions can be more efficiently and more satisfactorily administered by a single agency at each level of government. This arrangement contributes to a consistent philosophy of public welfare and an adequately comprehensive program. The person with a problem knows where to turn. The citizen, together with his elected

representatives, knows whom to hold responsible for the carrying out of the program. All services, including those requiring special knowledge and special skill, should be centralized within this single agency. 7/

This recommendation suggests that where the categorical aid programs are provided at the county level, which is the customary pattern, general assistance should also be provided by the county, indeed, by the same administrative agency.

Private Welfare and Area of Jurisdiction

Ten to 25 percent of welfare services are still privately financed and controlled. The private agencies minister to the many persons whose needs cannot be met by public welfare alone, such as families about to break up under their many burdens; troubled adolescents headed for delinquency; the handicapped, the aged or the emotionally disturbed. "Theirs is a need for understanding, compassion and guidance often over long periods of time. It is in meeting such needs that the private welfare agencies with their skilled counselors and teachers, their rehabilitation facilities and their long experience in repairing the human spirit share major responsibility." 8/

The complex problem of coordinating local community planning for public welfare programs with private agencies has been undertaken in many communities by the local community social welfare councils. These are local voluntary associations of people and organizations whose objective is to guide the community in making sound policy and budget decisions with respect to health, welfare, and recreation programs. Since they have no direct administrative authority over any community agencies,

7/ American Public Welfare Association, Essentials of Public Welfare, A Statement of Principles prepared by the Committee on Welfare Policy, approved by Board of Directors, November 21, 1952 (Chicago: American Public Welfare Association, 1953), pp. 5-6.

8/ Commissioners of the Public Welfare Services of New York State and New York City, "The Indispensable **Role** of Private Welfare," A Statement, New York Times, December 9, 1962.

they achieve their influence through knowledge of facts, good workmanship, and sound procedures involving the decision-making groups in the community. 9/

Community welfare council specialists have discussed local private social service agencies in terms of scale of operation. One author developed a list of "musts" for such agencies in metropolitan communities which include: 10/

1. We must give a new interpretation to "eligibility" and discard many of our present restrictions--"first is elimination of political community of residence.
2. Agencies must be of optimum size for effective operation. Ways must be found to eliminate the small, separate, independent, unrelated, and inefficient agency....When limits are set to serve only the residents of a political jurisdiction in a suburban area, an agency is almost inevitably sacrificing the advantages of optimum size. We have far too many one-man agencies operating on a total \$10,000 a year....Our social service agencies need the flexibility which only size can afford....The caliber of personnel who can be attracted to an agency of optimum size is almost certain to be higher than that of those willing to engage in solo service. Agency size is surely a significant factor in the quality of service.

9/ Howard F. Gustafson, "Community Welfare Councils," and Harry L. Lurie, "The Development of Social Welfare Programs," both from Social Work Year Book 1960 (New York: National Association of Social Workers, 1960).

10/ Isadore Seeman, "The Organization of Social Services for a Metropolitan Area," Planning Social Services for Urban Needs, Papers presented at the 84th Annual Forum of the National Conference on Social Work (New York: Columbia University Press, 1957), p. 24.

3. We must find ways for services to cross boundary lines and bridges. Especially we must find or invent new devices by which our governmental agencies can deal with each other, or as has been done in a few instances, where there are regional authorities, actually be one with each other.

4. Agencies must be organized with such a balance **as** to avoid both the dangers of excessive size which can lead to remoteness and the dangers of restrictive eligibility, and a lower quality of service. Agencies serving a limited political community should band together or expand to serve the larger need. Agencies serving an entire metropolitan area must reach down to local contacts with the people they are serving. The slums of our central cities cannot be neglected in order to reach out to the new suburbs.

Private welfare agencies which are not restricted by jurisdictional boundaries, as are public agencies, tend to use the metropolitan area as the total entity, rather than city or suburb, or even county. In many instances, they have reorganized to serve their larger geographical areas through field service or branch offices.

Application of Selected Economic and Political Criteria

Benefit Area

The welfare function, to a significant extent, epitomizes Spillover. The social cost imposed upon a community by the Presence of a substantial number of needy persons provided justification for the earliest public welfare programs. Recognition of large intercommunity spillovers resulting from indigence, which extends ultimately to the borders of the Nation, motivated the Federal Government to assume a major financial responsibility for welfare services within the States and communities during the 1930's. The Federal share in the costs of certain assistance related the proportion of Federal help to the States' general financial ability. Similarly, States have tended to equalize cost burdens of assistance within the State by financing a large part of the State share of assistance costs from State funds. As a result, all but a small proportion of public welfare

expenditures are financed out of State and Federal revenues. Furthermore, that **small** proportion of the total spent by local government is accounted for mainly by large cities.

Spillover of benefits from "public assistance" welfare services at the local level occurs chiefly in those counties and large cities which raise their benefit payments above the minimum required by State or Federal programs. These communities attract migrants from other areas whose economic position is precarious and who seek the "backstop" security of a generous welfare program. In the same way above-average benefits of many State programs spill over to other States. Probably the most effective way these externalities can be minimized or eliminated is through improvement of other public services, such as health, education and housing, which attack the welfare problem at its source.

Administrative Ability

The county has been accepted in general as the local administrative unit for carrying out Federally aided categorical assistance programs, although legal responsibility for these programs is lodged in a single State agency. This administrative framework has also been adopted by many States for the general assistance program. The advantages of providing one county welfare department for both categorical and public assistance are several. It provides a single point of contact for persons who are in need. Such a combination also reaps the benefits of size, since professional personnel can be used more economically and efficiently. Similarly, opportunities are increased for making large segments of recordkeeping and record processing an automatic data operation, thereby freeing personnel time.

Controllability and Accessibility

Control over Federally aided assistance categories is exercised by the States within Federal limits established in the Social Security Act and regulations pursuant to that Act. For general assistance, in those States where the State government has not exercised control, there is great reluctance on the part of some communities to surrender control over setting standards for general assistance financed from local funds. There is fear that should control move to a larger and less accessible level of government, administration of welfare money would involve assistance on a larger scale than the

local community would be willing to finance. Whether this reluctance would continue if the State assumed an increased share of the cost at the same time it set standards is uncertain.

An agency with a single office serving a large area may be relatively inaccessible to needy persons who are geographically distant from that office. On the other hand, an agency may be so small that personnel cannot be used efficiently in meeting the needs of clients and determining eligibility for assistance.

Experience with Larger-Area Performance

In 16 States containing standard metropolitan statistical areas both categorical assistance and general assistance are administered by the county welfare unit (Alabama, Arkansas, Colorado, Iowa, Kansas, Louisiana, Montana, Nebraska, North Carolina, North Dakota, Oklahoma, Oregon, Pennsylvania, South Carolina, Utah, and West Virginia). In a number of other States, the county is usually the unit for administration of both types of assistance.

G. PUBLIC HEALTH

The classic definition of public health has been stated as: "Public health is the art and science of preventing disease, prolonging life, and promoting physical and mental efficiency, through organized community effort." 1/ The ultimate benefits of a health program can be measured in three ways: (1) prevention of disease; (2) prolongation of life; (3) improvement in health and attainment of optimal health. 2/

The six basic services of a local health department are: (1) environmental sanitation; (2) control of communicable disease; (3) vital statistics; (4) maternal and child health services; (5) public health laboratory service; (6) health education for the general public. 3/

1. Environmental sanitation is one of the oldest and most firmly established aspects of health administration. It includes supervision of water supply and sewage disposal systems; supervision of food handling establishments; regulation of provisions dealing with milk and food sanitation; oversight of recreational and overnight camps and housing standards; smoke abatement; control of noisome trades; industrial sanitation prevention of pollution of streams, ponds and tidal flats; and rodent and fly control. Inclusion of refuse collection and disposal no longer is considered a desirable part of this health activity.

-
- 1/ C. E. A. Winslow, "The Untilled Fields of Public Health," Science, quoted in James E. Pate, Local Government and Administration (New York: American Book Company, 1954), p. 407.
- 2/ Vlado A. Getting, "Indispensable Functions from Viewpoint of State Health Commissioner," Supplement to American Journal of Public Health, Vol. 37, No. 1 (January 1947), p. 46.
- 3/ Getting, op. cit., pp. 49-52; Beatrice Dinerman, "The Public Health Function," Metropolitan Services (Los Angeles: University of California, Bureau of Governmental Research, June 1961) pp. 32-46.

2. Control of communicable diseases includes isolation and quarantine regulations; consultation and laboratory services for diagnosis of questionable cases; diagnostic centers for such diseases as tuberculosis, and venereal diseases with follow-up of cases and their contacts; hospitalization and medical treatment for the more common communicable and infectious diseases; epidemiological studies of major infectious diseases; immunization programs; treatment, control, and prevention programs for cancer and other chronic diseases.

3. Records and vital statistics includes collection and reporting of births, deaths, and specified diseases with some statistical analysis.

4. Maternal and child care constitutes one of the most comprehensive services of public health. The objectives of this activity, seeking to promote the health of the child from the time of conception through his adolescent period, are both service and educational in nature.

5. Public health laboratories are auxiliary aids for other public health activities and perform some of the following basic services: (1) diagnostic facilities for physicians, hospitals, and public health officials; (2) consultative service for private physicians, hospitals, and public health workers; (3) chemical and bacteriological examination of food, milk, and water; (4) preparation and distribution of biologicals and other materials for diagnosis, prevention, and therapy to local health departments, and through them to hospitals and private physicians.

6. A health education program seeks to promote better understanding of the principles of preventive medicine and the individual's responsibility in the area of personal hygiene through such activities as: (1) participation in informational campaigns in answer to citizens' inquiries; (2) preparation and distribution of health educational materials; (3) initiation of speakers bureaus, conferences, exhibits, visual aids, etc.; (4) establishment of cooperative relationships among all related official and nonofficial agencies; (5) publicizing activities of the local health department through use of all available communication media; (6) participation in in-service training of public health personnel; (7) constructive appraisal of community programs for the advancement of public health education.

Until the turn of the present century, public health service still retained some of its earliest philosophy of being available principally for those not quite able to care for themselves. It had been largely influenced by the severe epidemics generally attributed to unsanitary living conditions in the community. Health measures related primarily to promotion of municipal cleanliness as a means of protecting citizens from infection, making environmental sanitation the basic weapon against communicable disease. This, together with development of immunization techniques in the late 19th century, led to a general decrease in mortality from infectious disease.

Changing disease patterns, social changes, and continuing advances in medical knowledge then shifted attention to emphasis on health for the individual, and problems connected with chronic diseases. Control for diabetes, arthritis, and rheumatism were added to existing responsibilities of public health departments. One observer lists the following as common new activities undertaken by many local health agencies in recent years: \$/

1. Planning, particularly for measuring the need for community health programs, evaluating causal factors, and organizing available resources to meet a health problem.

2. Medical care--auxiliary help to the practicing physician, such as laboratory and home nursing service, and in a few areas, administration of health care plans for the indigent.

3. Environmental health activities, such as controlling sources of ionizing radiation and air pollution, beyond the traditional scope of "sanitation."

4. Mental health.

5. Accident prevention in the home, on the highway and in recreational settings.

6. Research.

4/ Berwyn F. Maccison, "Organization for New Responsibilities in Public Health," American Journal of Public Health, Vol. 52, No. 5 (May 1962), p. 793.

Current Practice

In 1962 there were something over 1,500 governmental health organizations serving local areas. They were made up of 914 single-county departments, 324 city departments, 233 local health districts, and 120 State health districts. The four types of unit follow a general geographic pattern of location. In general the Northeast has more independent city health departments; single-county and local health districts are more often found in the southeast and south central States; and State health districts providing or supplementing local services are found predominantly in the north central and northeastern States. Total population coverage for organized public health services is highest in the South and lowest in the Rocky Mountain States, the Southwest and the Great Plains States. 5/

Role of the State Government

While the local health department is the focus of health services and is in most direct contact with the citizen, the State government is the backstop for activities the local health departments do not or cannot undertake, as well as the channel between the programs of aid financed by the Federal Government and the local recipient.

State public health departments often began as agencies for collection of statistics of births, deaths, and disease. They also initially provided public information about early identification and development of treatment for tuberculosis, the then-leading cause of death in the United States. With a decrease in importance of TB, attention turned to other major illnesses, such as heart disease, cancer, and mental illness. To some extent, States are aided by Federal grants which are used to assist local government programs.

Other activities of the State Health Department which serve to supplement those of local health departments are:

1. Enacting of essential laws and regulations dealing with certain health problems of general interest in the State, such as stream pollution,

5/ Municipal Year Book 1963, (Chicago: International City Managers' Association, 1963), p. 344.

disposition of sewage and other wastes, sanitation on highways, movements of persons with communicable diseases, and milk inspection.

2. Prescription and enforcement of minimum standards with respect to certain public health personnel, facilities and equipment, and organization and administration.

3. Maintenance of a state central health laboratory, with such branches as may be essential, for general state research and regulatory purposes, and performance of direct laboratory services for local units unable to support their own facilities.

4. Provision of direct health services and institutional care where costs prohibit local communities from doing so, and conduct of rehabilitation programs, directly in some instances and in cooperation with local communities in others. 6/

The State also undertakes responsibility for health oriented activities, such as accident prevention and abatement of air pollution; occupational health; radiological health with assistance of Atomic Energy Commission and Public Health Service; and school health programs. There is an increasing interest by the States in the problems of the chronically ill and aged. 7/ In addition, the State has responsibility for public programs of vocational rehabilitation services for the physically and mentally disabled to restore them to employment. Each State has a program in operation, providing a range of services to disabled individuals of working age, as needed, including diagnosis, physical restoration, prosthetic appliances, counseling and guidance, training and adjustment, and job placement and follow-up.

6/ Additional material in William Anderson, Clara Penniman, and Edward W. Weidner, Government in the Fifty States (New York: Holt, Rinehart and Winston, 1962), pp. 450-455; and Jewel Cass Phillips, Municipal Government and Administration in America (New York: The Macmillan Company, 1960), pp. 527-529.

7/ "State Health Programs," The Book of the States, 1962-1963 (Chicago: Council of State Governments, 1962), pp. 358 ff.

Role of the Federal Government

The Public Health Service of the Department of Health, Education, and Welfare is the Federal agency specifically charged with responsibility for protecting and improving the health of the people. Major functions of the Service are:

(1) to conduct and support research and training in medical and related sciences, and in public health methods and administration; (2) to provide medical and hospital services to persons authorized to receive care from the Service, to aid in the development of the nation's hospitals and related facilities, to prevent the introduction of communicable diseases into the United States and its possessions; and (3) to assist States and other governments in the application of new knowledge for the prevention and control of disease, the maintenance of a healthful environment and the development of community health services.

Direct medical care is provided for eligible beneficiaries through a system of Public Health Service Hospitals, outpatient clinics, and offices located throughout the country where seamen employed on vessels of U. S. registry, Coast Guard and other uniformed services personnel, and their dependents receive hospitalization and medical care, and preventive health services. There is also a program of therapeutic and preventive health services for Indians and Alaska natives, and the District of Columbia through the administrative supervision of Freedman's Hospital.

The Bureau of State Services is concerned with Federal-State and interstate programs. Its activities include: research; training, consultation, and technical assistance to States and localities; field surveys, investigations, and demonstrations; emergency disaster and epidemic aid to States; enforcement of corrective measures under certain statutes; public education and information programs; and administration of grant-in-aid programs to the States. 8/

Continuing Federal grants for public health activities were inaugurated under the Social Security Act of 1935. In 1938, the Chamberlain-Kahn Act for venereal disease control was revised and amended. The Public Health Service Act of 1944 which

8/ United States Government Organization Manual, 1962-63 (Washington: Government Printing Office, 1962), pp. 334-338.

consolidated and expanded previous public health legislation has become the basic public health statute. Grants are made to assist States and their political subdivisions maintain adequate programs for general health in five specific categories: cancer control, heart disease control, mental health, tuberculosis control, and venereal disease control. Funds are allotted to the States on a matching basis for each category, except venereal disease, on the basis of formulas which generally take into account population, extent of the particular health problem, and the State per capita income. Funds for venereal disease control are granted on a project basis at the discretion of the Surgeon General and do not require matching. Closely related to these categorical grants are grants for Crippled Children's Services and for Maternal and Child Health Services. Allotment of funds takes into account the incidence of the respective problem and the financial need of the State. Part of the grants are unmatched, and part must be matched dollar for dollar. 9/

The area in which the Federal Government takes a leading role is medical research. Of the approximately \$890 million total funds spent on medical research in 1961 the public share was \$526 million (Federal--\$496 million; State and local--\$30 million), with industry paying \$250 million; and private foundations, \$114 million. Federal expenditures for medical and health related research are distributed among several agencies. 10/

9/ Advisory Commission on Intergovernmental Relations, Modification of Federal Grants-in-Aid for Public Health Services (January 1961), pp. 2-3.

10/ Boisfeuillet Jones, "Organizing Medical Research Programs to Meet the Health Needs of Americans," Annals, vol. 337 (September 1961), pp. 21-22.

Table 5--Federal Expenditures for Medical Research for 1961 (Thousands of Dollars)

<u>Agency</u>	<u>(estimated)</u>
Atomic Energy Commission	\$ 495,701
Department of Defense	19,800
Department of Health, Education, and Welfare (National Institutes of Health)	424,972 (385,300)
Veterans Administration	16,665
Other	3,417
State Department (ICA)	711
Department of Interior	21
National Science Foundation	1,700
Federal Aviation Agency	981
TVA	4

Standards of Service and Specialists' Suggestions

In 1945, a committee led by Dr. Haven Emerson undertook a study which produced a report, Local Health Units for the Nation, setting standards of minimum size and staff for local health departments. ^{11/} The report stated that only under circumstances of space and sparsity of population should less than 50,000 population be served by a single local health department. This local health organization for 50,000 people was to include 16 persons: a full-time professionally trained and experienced physician for health officer; a professionally trained sanitary or public engineer, and a nonprofessional assistant; 10 public health nurses of whom one should be of supervisory grade; and three persons in secretarial or clerical positions. Clinical medical services would be needed on a part-time basis. Instead of the 18,000 local health jurisdictions existing in 1946, the committee recommended 1,197. Also recommended was tax support of at least \$1.00 per capita for local health services, and preferably \$2.00. At least 50 percent of the tax support should be from local sources, grants of State funds to supplement local tax monies if necessary,

^{11/} Haven Emerson, "Local Health Units for the Nation," Supplement to American Journal of Public Health, Vol. 37, No. 1 (January 1947), pp. 5-6.

and Federal aid of not more than 25 percent of total cost to be devoted to additional or exceptional services rather than basic health activities.

The standards from the 1947 report can be stated in another way. A health unit to be successful in fulfilling its obligations to the people, the report stated, should meet certain community conditions in terms of government, wealth, and legal authority: (1) The area should be a political entity. (2) It should possess legal authority to levy taxes and disburse funds for organized, full-time health service. (3) It must be able to invest personnel appointed with necessary legal status. (4) It should possess wealth, which, when moderately taxed, will provide sufficient funds to pay for reasonably adequate full-time health service.

In many respects the county is the unit of government which countrywide best meets these minimum requirements of fiscal ability, population, legal authority, and "localness". Perhaps this accounts for the fact that the county is the most common unit now providing local health service. Some very practical factors have contributed to the county's popularity as local health unit. One of these is the chronic shortage of trained public health personnel. 12/ Thus, when a local jurisdiction loses its public health officer, the difficulties of finding a replacement may force the locality to ask the county health officer to act "pro tem." This arrangement can fairly easily become permanent.

Another factor aiding the "upward" movement of public health services was noted in a study of six typical cities. While almost no political subdivision and its local politicians are willing to give up their present rights and powers, they are more likely to combine, coordinate, and reorganize for health than for anything else. This is an international as well as local political experience. The health organization of the League of Nations outlasted the League itself. 13/

12/ Kurt W. Deuschle, "Organizing Preventive Health Programs to Meet Health Needs," Annals, Vol. 337 (September 1961), pp. 42-43

13/ "Lessons from Six Cities," Chapter 15, Urban Sprawl and Health, Report of the 1958 National Health Forum (New York: National Health Council, January 1959), p. 103.

Rapid changes in medicine, social conditions and public demands since the 1947 Emerson report have added new factors forcing a reappraisal of the standards established in that report. One observer, the executive director of the American Public Health Association, points out an important aspect of the change that has occurred:

...if there be any question that today's health agency is different from that envisaged by Haven Emerson, let me remind you that 7,312 (17 percent) of the 44,000 full-time personnel listed by the Department of Health, Education, and Welfare as employed in organized local health services during 1960 were other than physicians, nurses, engineers, professional sanitarians, health educators, laboratory personnel, statisticians, clerks and maintenance personnel. These newer categories included social workers (medical and psychiatric), physical therapists, psychologists, dental hygienists, administrative management personnel, nutritionists, veterinarians, and so on. 14/

The same commentator in mentioning "only a few of the organizational problem areas crying for attention and urgently needing systematic study to develop approaches for satisfactory solution" includes regional planning and action:

...Health problems arising from environmental, physiological, or cultural situations are not delineated by state or local lines; and regional aggregates of similar problems should be viewed and perhaps treated on an area basis. Are interstate compacts part of the answer? And, if so, for what part--planning, study, or joint action? 15/

In September 1962 the American Public Health Association and the National Health Council established the National Commission on Community Health Services, which plans a four-year study of

14/ Mattison, op. cit., p. 793.

15/ Ibid., p. 794.

community health services in depth and breadth "to estimate how far we have come, how far we can see ahead, and in which direction we should be going." 16/ Indications are that the Commission is likely to emphasize variety rather than unity, and flexibility rather than rigidity in patterns and methods for health organization and service.

Application of Selected Economic and Political Criteria

Benefit Area

The various aspects of public health service all fall into the category designated as social service. Their benefits are enjoyed largely by the community as a whole, although for some of them, such as maternal and child health, direct benefits to individuals are also large. Where benefits to individuals are amenable to financing by user charges, they are usually arranged on a sliding scale according to individual ability to pay. Like education and libraries, an important social objective of public health service is equalization of benefits among income groups.

Spillover among communities of environmental health services and communicable disease control are obvious. Indeed, the wide area over which they extend has provided justification for the active role played by State and Federal governments in public health. The intercommunity spillovers of maternal and child care services are considerably less obvious, and probably less extensive, because direct individual benefits of these programs constitute a larger proportion of total benefits. They are, therefore, amenable to local municipal administration, although economies of scale require a minimum service area in terms of population size in order to provide a given quality of service.

Economy of Scale

The appropriate jurisdiction for public health laboratories is almost entirely predicated upon economies of scale. As in the case of police laboratories, they involve intensive specializatio

16/ Berwyn F. Mattison and T. Leroy Richman, Community Health Services Public Affairs Pamphlet No. 180-S (New York: Public Affairs Committee, Inc., May 1962)

in many fields of activity. They must service a sufficiently large population to utilize capacity while minimizing unit costs. Frequently these laboratories are provided by the State, although in densely populated areas a county or metropolitan unit can capture these economies.

The same criterion applies to vital statistics records, although for these services economies of scale will be determined largely by the extent to which automatic data processing is utilized. For small communities there may be no cost advantage in utilizing electronic equipment, while for larger and more densely populated ones financial cost may be cut substantially. Vital statistics are currently quite decentralized with hospitals, physicians, courts, as well as governmental bodies all sending data to a State agency. While the State vital statistics center is the place for assembling vital statistic material for both the Federal Government and State government, when data are centralized on a metropolitanwide basis, statistical use and inferences of value to the particular area can be made,

Geographic Adequacy

Some activities or aspects of the health function by their very nature require an adequate geographic area for effective planning and operation. These include: control of air pollution; supervision of water supply and sewage systems; insect and animal control; milk and food sanitation; and control of communicable diseases.

Legal and Administrative Ability

Current figures show a tremendous shortage of trained physicians, nurses, and other personnel trained for public health activities. Since these persons are in great demand and are often personally mobile, only those communities which are organized on a large area basis with command of financial and other resources can offer sufficient challenge, administrative attractiveness, and financial return to attract this Personnel. On the other hand, areawide organization spreads the existing personnel more effectively for more population than will small area departments, and thus uses available manpower more efficiently.

An areawide department well staffed and adequately financed, is in a better position to administer certain other aspects of the health function than are small communities.

One of these is health education. An adequate program for education, including personnel and equipment, can be developed and used throughout an entire area at about the same cost as for partial coverage. Areawide administration is also more likely to create the type of department and staff that is able to negotiate with the State and Federal governments for assistance, and then make better use of assistance received.

Controllability and Accessibility

There are aspects of the health function, particularly activities connected with maternal and child health services, that are based on an intimate patient-doctor/nurse relationship. Clients are normally fearful that surrendering administrative control of clinics, visiting nurses, or other facilities to a larger area will mean a greater impersonalness in this relationship. From this standpoint, therefore, health activities which involve a patient-nurse/doctor relationship probably are best administered by local units of government.

Experience with Larger-Area Performance

As indicated under "Current Practice," single-county departments constitute the majority of local government health units in the United States, providing all the public health services to the residents of the county. There appears to be a steady trend toward transfer of the health function from cities to counties, or consolidation of city and county health departments. In 1961, for example, health departments of Salt Lake City and County, Utah, Omaha and Douglas County, Neb., and Rochester and Monroe County, N. Y., were consolidated. In 1962, Las Vegas' public health services were assumed by Clark County and countywide health units were formed in Decatur, Illinois and South Bend, Indiana.

H. HOSPITALS AND MEDICAL CARE FACILITIES

A wide variety of hospital and medical care facilities provide care and treatment for persons with illnesses, injuries, or other conditions requiring medical attention. These facilities include general hospitals, which are primarily for the short-term care of acute illnesses and injuries, and for obstetrics; mental hospitals; tuberculosis hospitals; chronic disease hospitals; nursing homes; diagnostic and treatment centers; public health centers; and rehabilitation facilities. 1/

Hospitals and medical care facilities are owned and controlled by a variety of governmental and nongovernmental entities. Table 6 is a distribution of hospitals, beds, and admissions in the United States in 1961 by type of hospital ownership and control. In 1956, local government accounted for 18.1 percent of all hospitals, 12.6 percent of all hospital beds, and 15.8 percent of all hospital admissions. 2/ Of the 1,263 local government institutions, the distribution among types of facility was estimated as follows: short-term general acute--1,013; tuberculosis--130; long-term chronic, convalescent--62; psychiatric--31; and children's--1. 3/

Local governments build and operate hospitals and related medical facilities mainly to provide institutional medical care for the medically indigent (part of the welfare function) and to provide "emergency care" for everybody, regardless of economic status. Largely because of their substantial indigent patient load, moreover, local government hospitals are important institutions for education and clinical training of medical students, interns, and residents. 4/

1/ "Health Facility Construction," Indicators (September 1962), p.v.

2/ James A. Hamilton, Patterns of Hospital Ownership and Control (Minneapolis: University of Minnesota Press, 1961), p. 23.

3/ Ibid., pp. 73, 76, 79, 83.

4/ Ibid., pp. 74, 77, 80, 84.

Table 6--Hospital Facilities and Use, by Type
of Hospital and Control: 1961

Type of hospital and control	Number of--					
	Hospitals	:Percent :of total:	Beds (Thousands)	:Percent :of total:	Admissions (Thousands)	Percent :of total
Non-Federal :						
Psychiatric						
Voluntary	72	1.0	11.0	0.7	40.8	0.2
Proprietary	98	1.4	6.9	0.4	41.4	0.2
State & Local Government	313	4.5	696.7	41.7	294.2	1.2
Tuberculosis						
Voluntary	24	0.3	3.7	0.2	5.2	--
Proprietary	3	--	0.2	--	0.2	--
State & Local Government	195	2.8	44.7	2.7	59.4	0.2
Long-Term General and Other Special						
Voluntary	187	2.7	21.3	1.3	53.4	0.7
Proprietary	24	0.3	1.6	--	4.8	--
State & Local Government	110	1.6	47.6	2.9	97.2	0.4
Short-Term General and Other Special						
Voluntary	3,305	47.7	458.1	27.4	16,974.4	66.7
Proprietary	848	12.2	38.3	2.3	1,566.0	6.2
State & Local Government	1,307	18.9	162.2	9.7	4,834.7	19.0
Federal:	437	6.3	177.6	10.6	1,502.8	5.8
United States--						
Total	6,923	100.0	1,699.8	100.0	25,474.4	100.0

Source: American Hospital Association, Hospitals: Part II, Guide Issue,
Vol. 36, p. 416, August 1, 1962.

Note: **Due to** rounding, detail will not necessarily add to totals.

As seen in discussion of the welfare function, responsibility for providing welfare services varies greatly among the States. The variation accounts for much of the variation in local governments' provision of hospital care. It helps explain, for example, why counties own and operate hospitals in some States, and cities in others. Local governments' hospital responsibilities differ also because some undertake to provide service directly in their own facilities, whereas others pay for care of the indigent in private hospitals. Unfortunately there is a lack of exact data on variations in these policies throughout the country. 5/

Current Practice

A 1956 summary showed the following distribution of hospitals and beds among types of local government:

	<u>Hospitals</u>	<u>Beds</u>
County	722	114,760
City-county	85	13,944
City	365	65,940
Special district	<u>91</u>	<u>7,724</u>
	1,263	202,368

That county and city-county hospitals together represent a substantially larger portion of the total number of local government hospital beds than city hospitals indicates a tendency to establish local government hospitals on a larger-than-city basis. Some special hospital districts also cover the area of several municipalities. 6/

Role of National and State Governments

Prior to 1946, hospitals and other medical facilities developed independently with little attempt at coordinated Planning by political jurisdictions. During the period of

5/ U.S. Department of Health, Education, and Welfare, Medical Resources Available to Meet the Needs of Public Assistance Recipients, A report submitted to the Committee on Ways and Means (Washington: Government Printing Office, 1961), p. 63.

6/ Hamilton, op. cit., pp. 72-83.

hospital expansion from 1910 to 1930, rising income levels made local funds available from philanthropic and public sources to meet broadened demands for hospital care. This expansion era proceeded with little conscious planning for facilities in relation to overall need. In many instances, distribution was uneven, with overbuilding in some communities and lack of facilities in others. During the depression years new hospital construction practically stopped. By the mid-1930's the amount spent for such construction by private sources dropped to about one-tenth of that spent during the peak period of the 1920's with public expenditures falling to about one-third. During the war years hospital construction, exclusive of Federal military installations, was at a minimum.

After the close of World War II, growing demands for hospital care focused national concern on the need for increasing the supply of hospital facilities. In August 1946, following an intensive study by the American Hospital Association, the Commission on Hospital Care, and the U.S. Public Health Service, Congress passed the Hospital Survey and Construction Act, establishing what is generally known as the Hill-Burton program. It had two major purposes: (1) to assist the States in taking an inventory of existing facilities, in surveying their needs for additional facilities, and in developing comprehensive plans for construction of additional facilities; and (2) to provide the necessary incentive, through financial assistance to the States, for the construction of long-needed public and other nonprofit hospitals, public health centers, and related hospital facilities. In 1949, amendments to the Act authorized the Public Health Service to conduct and make grants for research, experiments, and demonstrations relating to effective utilization of hospital services, facilities, and resources.

In 1954 the Act was amended to provide additional funds for constructing nursing homes, diagnostic and treatment centers, rehabilitation facilities, and chronic disease hospitals. In the same year funds were appropriated to the Public Health Service for the first time to conduct and make grants for hospital research. The Community Health Services and Facilities Act raised the annual research appropriation authorization and authorized experimental and demonstration construction and equipment projects.

To participate, each State is required to designate a single State administering agency and to develop an annual State plan for construction, including an inventory of all civilian inpatient and outpatient facilities available, and

a long-range program for meeting additional facility needs. From the financial point of view, Federal funds under the Hill-Burton program have accounted for 35 percent of the cost of federally aided construction and 12 percent of total hospital construction (other than direct Federal construction). 7/

Specialists' Suggestions

Hospital specialists apparently have made no direct suggestions with respect to the most appropriate jurisdiction for the ownership and operation of governmental hospitals. It might appear possible to infer standards from their suggestions as to optimum size hospital facility, since the size of an institution would presume a certain population to warrant its existence. Suggestions on optimum size of institution, however, do not seem widely cited by the specialists in the field.

In its regulations on grants for Hill-Burton hospital construction funds, the U.S. Public Health Service sets forth no specific guidelines for optimum size of different facilities. It prescribes minimum standards of construction and equipment which are "considered necessary to insure properly planned and well-constructed hospitals and public health centers which can be maintained and efficiently operated to furnish adequate services." 8/ The regulations establish no minimum or optimum size for general hospitals, although they make particular note that "the small hospital of 50 beds or under presents a special problem", mainly because the size of the various departments will be generally smaller. Construction and equipment requirements for general hospitals are generally divided between those for facilities up to and including 100 beds and those for facilities over 100 beds.

7/ "Health Facility Construction," Indicators- (September 1962), pp. vi-vii; U.S. Public Health Service, Areawide Planning for Hospitals and Related Health Facilities, Report of the Joint Committee of the American Hospital Association and Public Health Service, Publication No. 855 (Washington: Government Printing Office, July 1961), pp. 11-12.

8/ U.S. Department of Health, Education, and Welfare, Public Health Service Regulations, Part 53, Pertaining to Hospital and Medical Facilities Survey and Construction Legislation (Washington: Government Printing Office, 1962), p. 15.

The regulations state that no application for construction of a psychiatric hospital with a capacity of more than 500 beds or of a mental hospital with a capacity of more than 3,000 beds shall be approved, and no application for construction of a tuberculosis hospital with a capacity of less than 100 beds shall be approved, with certain exceptions. Nursing homes to be eligible must have at least 10 beds.

One hospital authority notes that we are essentially a nation of small hospitals, since almost 80 percent of the hospitals have less than 200 beds and more than one-third have under 50 beds. He goes on to say that this is "true despite the fact that **small** hospitals usually cannot operate as efficiently as their larger counterparts and is the result of both local pride and the natural desire on the part of the public to have adequate hospital care close at hand." 9/

In a pamphlet suggesting guides for new urban development, a governmental planning body stated that the ideal size for a district or outlying hospital in an urban area is 200 beds, and for a large hospital is 500 beds. A 200 bed minimum, according to the same source, would serve a population of 50,000 to 75,000 people. 10/

Specialists' concern for the proper area of jurisdiction for hospital services apparently has centered mostly on planning and coordination of total community efforts, both governmental and nongovernmental, rather than construction and operation of hospitals. Linking governmental and nongovernmental facilities reflects the essential interrelationship of the two kinds of facility in a community. Thus if a local government provides institutions to care for medical indigents, emergency cases, and contagious cases, nongovernmental hospitals will need to provide care for the rest of the community if total need is to be met. What the government decides to do will affect what the rest of the community must do, and vice versa. Moreover, as the government hospital's patient **load** is heavily affected by economic conditions--increasing or decreasing the load of

9/ Hamilton, op. cit., p. 13.

10/ Inter-County Regional Planning Commission, Standards for New Urban Development, Master Plan Report No. 13 (Denver, 1960).

indigent patients--the nongovernmental hospitals are affected in the opposite direction. **Also**, to the extent that the government cares for indigents in its own institutions, instead of paying for medical indigent care in voluntary or proprietary hospitals, **it** is likely that the government hospitals will be the main institutions for training interns and residents. This will have important implications for staffing voluntary hospitals in the community.

Specialists seem to agree that coordinating planning and policies of all hospital facilities in a community, governmental and nongovernmental, provides great possibilities of overall economy and efficiency in construction and operation. This has become increasingly true in recent years as medical practice has become more specialized, complicated, and expensive. Most economical and effective hospital service now requires that medical facilities be planned in terms of interrelated hospital systems, since only a few hospitals can or are even needed to furnish many of the complicated services, such as diagnostic services.

The Federal Government's Hill-Burton program for increasing the supply of hospital facilities has given great impetus to the concept of coordinated community planning of hospital and related medical services. Providing the incentive of Federal grant funds, the program requires development of systematic statewide planning of hospital facilities on a continuous basis. **It** has stimulated effective coordinated and cooperative effort among agencies of the National, State, and local governments, as well as nonprofit groups. **Also** under the Hill-Burton program, the Federal Government has given special demonstration grants to help finance over 20 areawide health facility planning agencies in major metropolitan areas.

Many of those who have studied the problem of adequate, economical hospital service have endorsed the necessity of coordinated communitywide planning. For example:

The need for establishing meaningful relationships between hospitals and nursing homes is only one instance of a larger problem that we now face, namely bringing together in some rational system of organization the large number of separate medical care institutions and services in the community. The regional organization of hospitals is one device advocated to help accomplish this objective. In its

pure form, this concept envisages the unified planning of a functionally differentiated and carefully coordinated system of hospitals serving an entire geographic region demarcated, not by narrow political boundaries, but according to established patterns of seeking and providing medical care in a manner analogous to trading areas. Under such a plan, standards of medical care could be considerably improved throughout the region without costly duplication or inefficient deployment of scarce resources and skills....

A major characteristic of the organization of medical care in this country is its lack of organization. In spite of the multiplicity of governmental and privately sponsored programs, important areas of need remain virtually untouched. Everywhere one is confronted with shortages, maldistribution, haphazard growth, and inefficient use of scarce and valuable resources. What is required is a broad, flexible, and carefully coordinated system in which appropriate services are readily available and continuously adapted to the patients' needs. 11/

A 1948 Report to the President recommended a "coordinated hospital system":

A coordinated hospital system, through a free-flowing exchange of medical services and patients, would offer the highest quality medical care to all communities, even the most remote. The medical center would combine training, extensive research, and expert diagnosis and treatment of complicated cases. Several district hospitals would provide such general and special services for most hospitalized patients as major surgery, pediatrics, obstetrics, psychiatry. Community hospitals

11/ Avedis Donabedian and S. J. Axelrod, "Organizing Medical Care Programs to Meet Health Needs," Annals, Vol. 337 (September 1961), pp. 55-56.

would offer more limited services, referring more complicated cases upward. Rural clinics would serve chiefly as out-patient clinics and diagnostic centers for referral to the larger hospitals. 12/

A special commission studying financing of hospital care advised that one way to control hospital cost to the patient is through integration of services among community hospitals.

Economical planning for effective hospital care requires consideration of the health needs of the entire community and the extent to which those needs are met by all community hospitals and related organizations. If comprehensive service is to be provided at a minimal cost to the public, it is necessary that there be cooperation among hospitals to avoid duplication as well as gaps in facilities and services. . . . Every hospital in the community offered a comprehensive service, without regard to community needs for such services, the total costs of hospital care to the public would be higher than necessary. 13/

A joint committee of the American Hospital Association and the Public Health Service sponsored research on the need for planning on a communitywide basis for hospitals and related facilities. 14/ The committee suggested that the vehicle for

12/ Oscar R. Ewing, The Nation's Health, A Ten Year Program, A Report to the President by the Federal Security Administrator (Washington: 1948).

13/ Commission on Financing of Hospital Care, Gordon Gray, Chairman of Executive Committee, Financing Hospital Care in the United States, Recommendations, (New York: The Blakeston Company, Inc., 1954), pp. 41-42.

14/ Areawide Planning for Hospitals and Related Health Facilities, op. cit.; see also, U.S. PHS, Areawide Planning of Facilities for Long-Term Treatment and Care, Report of the Joint Committee of the American Hospital Association and PHS Publication No. 930-B-1 (Washington: Government Printing Office, February 1963).

coordinated community action be the Local Planning Agency (for hospital and related health facilities), formed either by voluntary community initiative or by official action of the State or local governments. It should meet organizational standards set by the State Hill-Burton agency and should be recognized by that agency as the authorized planning agency for the locality. The governing board of this permanent planning agency should be comprised of members drawn from the top echelon of lay and professional community leadership. While the majority of members should not be engaged full time in health or hospital work, it is to the health field that the agency must turn, not only for representation on the governing body but for membership on advisory committees to provide technical assistance. Funds for operating a planning agency should come from a variety of sources, including contributors to health service institutions as well as the institutions themselves, but should not come exclusively from hospitals. This regional planning group for medical facilities would be coordinating agencies and institutions that are a mix of private and public since government and voluntary organizations share control and operation of hospitals.

The joint study group said that the local planning agency should (1) establish goals and principles; (2) obtain data necessary for sound planning judgments; (3) encourage construction of needed hospital and related health facilities as well as adequate and sufficient facilities to be used for educating and training medical and paramedical personnel; (4) stimulate individual hospitals and related health facilities to define their objectives as they relate to their responsibility to the community, to appraise their own standards of care, to correct deficiencies, and to set forth specific programs to meet such objectives; (5) establish priorities for allocating funds for construction and modernization; (6) encourage endorsement of the local plan by administrators of hospitals and related health facilities, donors, and the community at large; (7) approve fund-raising drives only for those hospitals with construction programs which conform to community needs.

The area of jurisdiction or planning region, said the joint study report, should be as large as is believed practical for successful execution of planning. Specifically, in a footnote the report states:

The planning region is that particular geographic unit for which comprehensive coordinated hospital and related health facilities

and services are planned. The region will usually be centered in a city. In heavily urbanized regions, the most populated central city will serve as the focal point of operation. An urban region should include the central city, suburbs and that portion of the surrounding territory which may be expected to assume urban characteristics in the foreseeable future....15/

A planning region which includes a standard metropolitan statistical area should include both core cities and suburban cities to the greatest extent possible. It may even be desirable to include more than one such area in a planning region. Socio-economic and political cohesiveness are among the prime elements to be considered in deciding the geographic boundary for a local planning area. Other factors to be examined include projected land use, community development, hospital location, transportation facilities, traditional hospital usage patterns, and availability of medical and other professional personnel. Final determinations should be based on recommendations by the State Hill-Burton agency and local judgment. It was also stated in the study that in large metropolitan areas, delineation of service areas within the total planning region may be necessary for effective planning.

Typical of similar comments by specialists on the desirable jurisdiction of the community planning agency is the following:

Unless there is joint planning carried out simultaneously and cooperatively by a city and its outlying suburban and exurban areas, institutional and related patterns for hospital and medical service may occur which are not in the best interest of good patient care, and which may result in the uneconomical use of funds for construction of these facilities. Further, the lack of proper planning may result in higher costs for operation and maintenance. 16/

15/ Areawide Planning for Hospitals and Related Facilities, op. cit., p. 2, footnote 3.

16/ John J. Bourke, Chapter 16, "Don't Weaken the Medical Centers," Urban Sprawl and Health, Report of the 1958 National Health Forum (New York: National Health Council, January 1959), p. 112.

Application of Selected Economic and Political Criteria

Benefit Area

Hospital and medical care facilities belong to the group of functions which combines aspects of utility services and social services. Direct benefits to individuals are large and can be financed by user charges, but spillover of social benefits to the community or region is also large and justifies financing from general revenues. Therefore, as in the case of general public health services, whatever user charges are imposed are scaled according to ability to pay in order to equalize individual benefit opportunities throughout service areas and thereby maximize social benefit.

To the extent that prevention of disease and promotion and maintenance of the general health level are desirable for all members of an area, including those unable to pay, all communities within a metropolitan area will derive benefits from a coordinated hospital program. Insofar as each community "goes it alone", spillover of the social cost of lowered health standards from communities which fail to provide adequate service is likely to exceed the external benefits created by communities adequately supplied with medical facilities.

Economy of Scale

The vast improvements in medical and hospital practice in recent decades are related chiefly to specialization. As in other public services, specialization and related higher standards of service are attainable chiefly through the advantages of economies of scale. In addition, in the case of hospitals even the minimum facility requires a large capital investment. As a result of these factors, the full benefits of technical progress in medical and hospital facilities can be made available only to communities with a large enough demand to utilize capacity and sufficient economic resources to finance large-scale operation. In many metropolitan areas this implies county or areawide responsibility for hospital construction and operation. Planning of hospital facilities on an areawide basis would also yield economies in planning personnel and equipment compared to planning by individual locality.

Geographic Adequacy

Nongovernmental hospitals, accounting for about two-thirds of the country's hospitals and about one-third of its hospital beds, derive their leadership and financing without regard to local government boundary lines, and serve patients without respect to jurisdiction of residence. In metropolitan areas, this means that nongovernmental institutions are essentially areawide institutions, from the standpoint of their support, direction and patients. Since the ways in which local governments discharge their responsibilities for hospital care are closely intertwined with the policies and programs of nongovernmental hospitals, and since economical and effective hospital service make it imperative that nongovernmental hospitals plan their construction and service programs cooperatively through a metropolitan area, it follows that governmental hospital services should be planned in relation to nongovernmental hospital services, and that nothing less than the metropolitan area is adequate for such planning and coordination.

Legal and Administrative Ability

Areawide coordinated planning would make best use of scarce personnel necessary to staff hospitals and other facilities. Up-to-date facilities with progressive attitudes would, in turn, be an attraction to this personnel.

Because of variations in ownership of the cooperating institutions, goals being sought, and the nature of the liaison process, it is necessary to have aid and support of the best civic leadership, possible only on an areawide basis.

Areawide planning for allocation of capital funds has been found to be a desirable solution to an emerging problem of hospital financing, i.e., decreasing willingness of private philanthropy to contribute to building programs. A coordinated plan, eliminating duplications and providing for a balanced pattern of health facilities in an area, would not only satisfy public agency requirements, but be more easily saleable to private sources.

Controllability and Accessibility

Hospitals tend to develop loyal groups, either their auxiliary, the community group that helped raise the funds, their boards, their staff, or even in some cases, their patients. These groups and the communities where the hospitals are located do not want to surrender to some supergroup their prerogative of expansion or contraction. However, areawide planning does not interfere with the operation of the facilities or dictate internal policy.

Experience with Larger-Area Performance

There are about 20 established metropolitan and areawide health facility planning organizations currently in operation. Examples are the Columbus, Ohio Hospital Federation, the Greater Detroit Area Hospital Council, Inc., the Hospital Review and Planning Council of Southern New **York**, and the Kansas City, Mo. Area Hospital Association.

I. AIR POLLUTION CONTROL

Air pollution is defined as the presence in the outdoor atmosphere of one or more contaminants, such as dusts, fumes, gas, mist, odor, smoke or vapor, in quantities, of characteristics, and of duration such as to be injurious to human, plant, or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life and property. 1/

Recognition of air pollution as a problem once was largely limited to smoke or other pollutants that could be seen or smelled. Advances in technology--the wider use of improved fuels, better combustion, improved dust collectors--coupled with local smoke abatement programs, have reduced the level of visible pollutants. Concurrently, however, advancing technology has also produced new sources of pollutants and research has brought about a recognition that the air pollution problem is not merely limited to visible smoke.

Today's pollutants are such waste products as the dusts, smoke, fumes, and liquid droplets that hide the sun, delay aircraft operations, and **soil** our buildings and our clothing. They are gaseous discharges like sulfur dioxide, carbon monoxide, oxides of nitrogen, and hydrogen sulfide. They are metallic fumes and dusts from lead, vanadium, iron and their compounds. They are fluorine and phosphorous compounds which have proved harmful to plants and livestock. Finally, they are contaminants created in the air, under the influence of sunlight, by the interaction of some of these substances. For example, invisible clouds of hydrocarbons and oxides of nitrogen are "triggered" by sunlight to form photochemical smog of the typical Los Angeles variety. 2/

1/ Engineers Joint Council Policy Statement on Air Pollution and Its Control, Report No. 107 (New York: Engineers Joint Council, 1957).

2/ "Air Pollution," Health, Education, and Welfare Indicators (May 1962), p. v.

The sources of air pollutants are almost as varied as the pollutants. The pollutants come from automobile and truck exhaust pipes and crankcases, from chimneys and trash and leaf fires. They come from municipal power plants and smouldering municipal dumps, apartment house and municipal incinerators, and commercial enterprises, oil refineries, storage tanks, trains, airplanes, ships, and factories.

The severity of air pollution depends on atmospheric conditions as well as sources of pollution. Normally, air currents disperse and dilute the pollutants. Air near the ground is warm and tends to rise through the cooler upper layers of the atmosphere. If there is an inversion in temperature, however, the air near the ground is cooler than the upper layers of the atmosphere, and the abnormal layer of warm air acts as a lid, sealing in the air below. Atmosphere inversion is most commonly associated with the air pollution difficulties of Los Angeles. Other atmospheric conditions--wind speed, precipitation, sunshine--which may be "normal" for an area may create problems if the rates of emission of contaminants are high enough. Further, abnormal stagnation conditions, not necessarily associated with inversions, may cause a buildup of concentrations in an area.

Governmental units try to control air pollution by various methods: requiring that a permit be obtained before construction or alteration of combustion or processing equipment; surveillance of possible pollution sources in the field; establishing and enforcing emissions standards on existing pollution sources; land use planning and zoning activities to arrive at an optimum spatial distribution of air pollution sources; public and industry education; and technical assistance and consultative services to owners of existing or potential air pollution sources. Major efforts of local control agencies are in the area of abatement of existing sources, through inspections and complaint follow-up.

The regulatory unit measures potential emission against an air pollution emission table of standards prescribed by law or ordinance. Such standards limit, for example, the permissible density of smoke and quantity of fly ash emissions. The standards table will depend on the severity and types of air pollution present in a community.

The content of a control program depends ultimately on determination of the standards of "safe" community air, just as a water pollution control program is keyed to the community's desired standards of "safe" water. Considerable research is

being done to establish an index or indexes of community air contamination, mainly directed toward the effects of health and agriculture. 3/ Few areas, notably in California, have adopted air quality standards to date, and these govern only a few contaminants. 4/ More commonly, many governments have adopted various types of emission standards (governing the amount of a pollutant emitted from a source).

Significant interest is being shown in the possibility of preventing or reducing air pollution concentrations through broad regional land use and facilities planning. Thus, depending upon topography, wind currents, and other meteorological factors, air pollution control may dictate the need for controlling the location of stationary sources in an air basin so as to achieve an optimum spatial distribution which will minimize air pollution concentrations within the area. The location and design of highways, ~~mass~~ transit and other elements of an area's transportation system may also affect the severity of an area's air pollution problem. Disposal of solid wastes so as to minimize air pollution may require the reservation of strategically located open areas for sanitary landfill or may suggest the need for municipal incinerators serving a population large enough to make large-scale, efficient operations economically feasible. 5/

3/ S. M. Rogers, A Brief Review of the Public Health Service Air Pollution Program, a paper presented to East Central Section, Air Pollution Control Association (Louisville, Ky.: September 21, 1961), Mimeo. p 17. "Much less and in some cases almost no, attention **has** been paid to appraisal of other effects of air pollution--nuisances, sensory effects, soiling, corrosion, effects upon visibility, interference with transportation, etc."

4/ Arthur C. Stern, "Air Pollution Standards," Air Pollution, ed. Arthur C. Stern (New York: Academic Press, 1962), Vol. II, Chapter 37.

5/ Letter from Chief, Division of Air Pollution, U. S. Public Health Service, June 7, 1963.

Current Practice

More than 2,000 communities have some legal basis for regulating air pollution, 6/ but a survey early in 1961 revealed that there were only 85 local air pollution control agencies which spent \$5,000 or more per year. 7/ Of the 34 spending more than \$25,000 per year, three covered more than a single county, ten were county agencies, and 21 were under a city government. Of the 51 spending between \$5,000 and \$25,000, one covered more than a single county, two were county agencies, 48 were administered by a city, and one by a township. Thus, such air pollution control activities as were being carried on below the State level were being conducted mostly by municipal governments.

Role of State Government

Most States have adopted legislation for State air pollution activities but in 1961 there were only 17 States with programs involving expenditures of \$5,000 per year or more. The State of California alone accounted for 57 percent of the total of \$2,000,000 spent by the States for air pollution control in 1961.

From four to six States were engaged in "enforcement" activities, the exact number depending on the definition of "enforcement." However, most States confined their activities to technical assistance and encouragement of local programs. Six or seven States conducted Statewide air quality monitoring and five reviewed and approved plans for certain types of installation which might cause air pollution. California and New York have a program for regulating emissions from motor vehicles. Thirteen of the States have conducted Statewide surveys to develop bases for air pollution control programs. State agencies also provide training, disseminate information, conduct nuisance abatement work, provide laboratory services to local agencies,

6/ Council of State Governments, Air Pollution: Summary Report to the Governors' Conference (Chicago: 1958), p. 22.

7/ Jean J. Schueneman, Air Pollution Problems and Control Programs in the United States, a paper presented to 55th Annual Meeting of the Air Pollution Control Association. (Chicago: May 20-24, 1962), Table 6.

study pollutant emissions, and carry on research on the effects of pollution on health. Only a few States engage in more than a few of these activities, however. 8/

Role of National Government

By Public Law 159 of the 84th Congress, enacted July 14, 1955, Congress declared its policy of preserving and protecting the "primary responsibilities and rights of States and local governments in controlling air pollution," supporting and aiding technical research on the methods of abating such pollution, and providing Federal technical services and financial aid to State and local government air pollution control agencies and other public and private institutions in the formulation and execution of their air pollution abatement research programs.

The Public Health Service of the Department of Health, Education, and Welfare is authorized by the act to prepare or recommend research programs for controlling air pollution, encourage cooperative activities by State and local governments for pollution abatement, collect and disseminate pertinent information, conduct technical research to develop pollution control methods, render financial aid and support to State and local government and private agencies in research on air pollution. Fiscal year 1963 appropriations to the Public Health Service for air pollution research, training, and technical assistance activities, carried out under the PHS Act (P. L. 78-410, as amended) and P. L. 84-159, as amended, were about \$11 million.

The "local government air pollution control agency" to which grants are authorized to be made means a city, county, or other local government health authority or single agency other than the health authority which is responsible for enforcing air pollution control laws or ordinances.

In a special health message to Congress on February 7, 1963, President Kennedy, citing the health hazards and economic damages due to air pollution and the relatively limited local, State and Federal programs in air pollution control, recommended legislation enlarging the Federal role in air pollution prevention and control. It would authorize the Public Health Service (1) to engage in a more intensive research program, (2) provide financial

8/ Jean J. Schueneman, op. cit., PP. 6-7.

stimulation to States and local air pollution agencies through project grants for initiation or improvement of control programs, (3) conduct studies on air pollution problems of interstate or nationwide significance, and (4) take action to abate interstate air pollution, along the general lines of the existing water pollution control enforcement measures.

Approximately 18 separate bills related to air pollution were introduced during the first five months of the first session of the 88th Congress. These were either (1) comprehensive bills dealing broadly with the Federal air pollution program, and generally consistent with the President's recommendations, or (2) bills dealing with special aspects of air pollution control. 9/

Specialists' Suggestions

The characteristics of the air pollution problem and the measures needed to control pollution have a direct bearing on the assignment of governmental responsibility for control. The first of these characteristics is air pollution's disregard for political boundaries. Pollutants in the air are as free to move from place to place as the air which carries them.

A survey of 1959 air pollution control agencies in 37 States showed that "over 60 percent reported air pollution problems caused by sources outside their jurisdiction. When the population served exceeded 200,000, external pollution problems were reported by 70 to 100 percent of the agencies in the various population groups. A survey of Pennsylvania communities reveals that of the nearly 100 communities with major air pollution problems, over half receive their air pollution from sources outside the jurisdiction of the affected area." **S/**

9/ Memorandum prepared by Division of Air Pollution, U. S. Public Health Service, June 1963.

10/ Sidney Edelman, Legal Problems of Interjurisdictional Air Pollution Control, a paper presented to 55th Annual Meeting of the Air Pollution Control Assn. (Chicago: May 24, 1962), Mimeo., p. 3.

The mobility of the automobile, a major source of air pollution, is a second factor affecting the assignment of governmental responsibility for air pollution control. "Because vehicles are by definition mobile, local control is likely to be difficult and ineffectual." 11/

A third factor is the possible mobility of other sources of air pollution, particularly industry. Although the extent of such mobility and the role of air pollution regulation in the locational decisions of industry are debatable, many areas are reluctant to impose stringent air pollution controls because of the fear that they will drive affected industries out of the area or discourage new industries from coming in.

A final factor is the nature and status of air pollution control technology. Considerable research has been done but much more is needed on the causes, tolerance levels, and methods of control of air pollution on meteorology, and on the health, economic and other effects of air pollution. The prescription and enforcement of effective standards depend on the results of such research. With continuing technological development in manufacturing processes and other potential pollution sources, moreover, it can be expected that the need for research activity will continue.

The interjurisdictional aspect of the incidence and control of air pollution and the need for extensive research and education in the problem suggest increased interlocal cooperation and involvement of the Federal and State governments in effective air pollution control efforts. This is the direction of the recommendations made by the various individuals and groups who have given expert attention to air pollution problems.

The Air Hygiene Committee, Engineering and Sanitation Section of the American Public Health Association has issued a comprehensive statement on the question of governmental responsibility for air pollution control. 12/ The committee "suscribes

11/ Harold W. Kennedy, Legal Aspects of State versus Local Control, a paper presented to 53rd Annual Meeting of the Air Pollution Control Assn. (Cincinnati, Ohio: May 22-26, 1960), Mimeo., p. 26.

12/ "Role of Public Health Agencies in Air Pollution Control," American Journal of Public Health, vol. 50, No. 10 (Oct. 1960), pp. 1591-1903.

to the thesis that enforcement of laws designed to control polluting emissions from specific sources can best be accomplished at the lowest level of government capable of effective action. In practice this means that the area for operations must be of sufficient size and of such characteristics that the control of sources of emission within the area will substantially eliminate air pollution from the area. Also, the coverage must rest on a population and economic base capable of financially supporting a competent staff and required services."

Applying its principles, the APHA group outlines what it considers the desired role for the Federal, State, and local governments. The Federal Government should primarily do the things that are more effectively done by a central agency than by 50 States and several thousand cities. The need for centralized efforts is most apparent in research and training. The Federal Government should therefore undertake research in areas where the implications are nationwide in scope or which local agencies are unable to support because of the magnitude of the problem and the limits on budget and staff. It should also provide the means for training air pollution personnel for States and localities.

A second function of the Federal Government, says the APHA committee, should be to provide centralized services to States and localities by disseminating air pollution information and providing consultative and laboratory services to State and local agencies. The Federal Government should also provide periodic nationwide review and appraisal by conducting special surveys and studies and sponsoring national meetings.

Finally, the Federal Government should have certain operational responsibilities: studies of international air pollution problems, control of air pollution from Federal installations, coordination of weather prediction activity, and assistance in the establishment of interstate air pollution compacts.

The APHA Committee suggests that the State health department should be responsible for all aspects of the air pollution program except those relating directly to enforcement of control regulations. Among these responsibilities, the State should (1) carry out general overall investigation, analysis and interpretation of the air pollution problem in the State; (2) secure long-range planning of the State and localities in air pollution studies and activities; (3) establish and participate in Statewide systematic surveillance of air quality; (4) develop plans for coping with

emergencies and disasters; (5) advise local control agencies and foster development of their programs; (6) give technical assistance to localities, and in-service training to their staffs; (7) demonstrate principles, procedures and equipment used in local programs; (8) study special problems of air pollution .

In some unusual cases, says the **APHA** Committee, **it may** be necessary for a State to carry out functions usually performed by the Federal Government, and cites California's medical research program as an example. The State **may** also have to involve itself in direct enforcement, ordinarily left to the localities, as in the case of vehicle exhaust emissions in California .

With respect to the role of local agencies, the **APHA** Committee says, in view of the cost of adequate air pollution control programs this "lowest level of government **may** be a region or district composed of several jurisdictions or **it may** be individual counties, cities, towns, or boroughs. Care must be taken, however, to insure a sufficiently broad population, economic, and area base to provide **for** effective action." With respect to financing of the program, the committee says that 10 to 20 cents per capita, "or more, where unusual problems exist," **may** be necessary.

Typical responsibilities and activities that should be given to the local pollution control agency, according to the **APHA** Committee, are: (1) air monitoring to determine present quality of the community's air supply and potential changes; (2) planning to cope with air pollution disasters; (3) investigation of existing problems; (4) obtaining abatement, through persuasion or legal action; (5) prevention of pollution by review of plans, establishment of equipment standards, and preventive maintenance inspections of potential sources; (6) prevention of pollution through cooperation with local planning and zoning agencies.

The **APHA** Committee emphasized that "the area for operations must be of sufficient size and of such characteristics that the control of sources of emission within the area will substantially eliminate air pollution from the area."

Hearings before a subcommittee of the U. S. House of Representatives in early 1963 on bills to improve air pollution control programs brought out different opinions with respect to

the roles of the various levels of government. The principal bills on which the hearings were held emphasized a stronger Federal role in abatement proceedings than recommended by the APHA group in the summary above. They would authorize the Federal Government to abate interstate pollution along the general lines of existing water pollution control measures. Ultimate action to enforce compliance in such cases would be institution of a suit by the Attorney General. A number of specialists testified in favor of a stronger Federal role. 13/

The strong consensus of the air pollution control experts seems to be that since the area of pollution sources and effects frequently overlaps the boundaries of local government units, pollution control activities should be performed by an agency with areal jurisdiction encompassing that of a number of municipalities and perhaps even counties. A report of a survey by two representatives of the Air Pollution Control Division of the National Coal Association, for example, states:

There is a need for numbers of adjacent communities to join together in a district operation, Enabling legislation at the state level making the joining together of several communities to fight air pollution permissive would be most helpful in overcoming financial and personnel problems. This would be most helpful where a **major** community is surrounded by a series of satellite communities. Air pollution control legislation should not be limited to city, county, or, in some instances, state lines. In the evaluation of the problem, it is most important to establish the area of pollution sources and effects, and every means should be used to consolidate efforts over this total area regardless of political subdivision. 14/

13/ U. S. Cong. House. Committee on Interstate and Foreign Commerce; Air Pollution; Hearings before a subcommittee of the 88th Cong. 1st sess. March 18 and 19, 1963 (Washington: Government Printing Office, 1963).

14/ Harry C. Ballman, Thomas J. Fitzmorris, Local Air Pollution Control Programs--A Survey and Analysis, a paper presented to 55th Annual Meeting of the Air Pollution Control Assn. (Chicago: May 20-24, 1962), pp. 24-25.

Another air pollution control specialist says:

Most people agree that air pollution should be regulated by the lowest level of government capable of dealing with a particular problem in its entirety. Sometimes this is a city government but more often the "air basin" involves a much broader area encompassing a great many cities and perhaps several counties and states. 15/

Similar comments emphasizing the need for areawide control of air pollution activities have been made by other experts. 16/

Application of Selected Economic and Political Criteria

Benefit Area

The spillover of air pollution among communities hardly requires documentation. Indeed, in the case of atomic testing it is worldwide. Jurisdictional boundaries and urban-rural classifications of land are irrelevant to the problem of atmospheric pollution. The nature of the problem and the appropriate solution to it are dictated almost entirely by technical factors, and must be defined primarily in terms of geological and meteorological characteristics of the area. In one area, for example, surrounding mountain ranges and the prevailing air current may serve to confine the effects of air pollution rather narrowly, while in other areas the natural environment may cause the pollutants to be carried great distances. Therefore, governmental efforts to minimize and control air pollution can be successful **only** if they are applied over the entire area circumscribed by technical requirements. This is usually a major area of a State or several contiguous States.

15/ Jean J. Schueneman, op. cit., p. 6.

16/ Health Officials Guide to Air Pollution Control, prepared by Subcommittee on Health Aspects of Air Pollution (New York: 1962), p. 26; Edelman, op. cit., p. 1; and U. S. Public Health Service Air Pollution Control Field Operations Manual, P.H.S. Publication No. 937 (Washington: U. S. Government Printing Office, 1962), p. 15.

Economy of Scale

Economies of scale are available from centralized use of specialized equipment for monitoring the air, investigating complaints and suspected pollution sources, and conducting preventive maintenance inspections; and from use of technical personnel and procedures in these and additional duties involved in plan review and investigations.

Geographic Adequacy

The nature of the source of air pollution and the means by which it is transported dictate that controls be set up on an "air basin" basis. In metropolitan areas this is likely to be larger than any single municipality, and may be larger than the whole metropolitan area. Even if not larger than the area, moreover, the "air basin" may not be coextensive with it, depending on topographic, atmospheric, climatic and other conditions. In certain sections of the country where metropolitan areas abut one another, the air basin may extend over several States. Thus the effective area for control of air pollution may be the State or even a group of States.

Experience with Larger-Area Performance

The Bay Area Pollution Control District, a State-established special district, controls air pollution in the nine county area around San Francisco. The Lehigh Valley Air Pollution Control Association serves 21 municipalities in the Lehigh Valley, Penn., region. Each municipality has its own ordinance and control board and is responsible for controlling pollution within its own borders. The municipalities pool information and develop joint plans through the association.

The Metropolitan Air Pollution Control District of the Boston area was set up by the Massachusetts legislature. Originally including 30 cities and towns, it can be enlarged by the acceptance of other contiguous municipalities that apply. One interstate agency has been set up by compact, approved by Congress. It is the Interstate Sanitation Commission of New York, New Jersey, and Connecticut. It has authority to make studies of smoke and air pollution within its territory, but has no enforcement power.

J. REFUSE COLLECTION AND DISPOSAL

Reduced to its simplest terms, refuse collection and disposal consists of the acceptance at each household, business property, or institution, of the solid waste that results from processes of urban life, the transportation of such material to disposal sites, and the processing and disposal of the collected refuse so that nuisances are not created. The entire process must be carried out in such a manner that the public health of the community is protected, that the extent and character of the service is in accord with the desires of the people, and that the operation is conducted effectively and economically....For a collection and disposal service to be entirely free from nuisances and menace to public health, the material must be stored so that odors cannot escape, so that insects and animals cannot have access to the material; it must be transported so as to cause no unsightly appearance or disagreeable odor; and the disposal must be carried out so that flies and insects cannot feed on the refuse, odors are not disseminated, and dust and papers are not thrown around. 1/

There is a variety of methods of refuse disposal. 2/

(1) Sanitary landfill operations are usually performed by depositing refuse in a natural or man-made depression or trench, or dumping it at ground level, compacting it to the smallest practical volume, and covering it with compacted earth or other material in a systematic and sanitary manner. (2) Central incineration--municipally or privately owned--reduces refuse to ash by high temperature burning. (3) On-site incineration of refuse produced on the premises is done in and outside of

1/ Municipal Public Works Administration, 5th edition (Chicago: International City Managers' Association, 1957), p. 329.

2/ American Public Works Association, Committee on Refuse Disposal, Municipal Refuse Disposal (Chicago: Public Administration Service, 1961), chap. 3.

houses, in apartment buildings, stores, small industries, hospitals, and other institutions. (4) Food wastes may be disposed of by grinding them and flushing them into sewers, at the home, food-handling locations, or centrally located stations operated by a municipality. (5) Food wastes may be fed to swine. (6) Composting may be used to dispose of moist, solid, organic matter. Under controlled conditions aerobic microorganisms cause a rapid but partial decomposition of the refuse. (7) Refuse ~~may~~ be salvaged and reclaimed. (8) Open dumps may be used.

Of the eight methods listed, only sanitary landfill and open dumping are capable of handling all types of refuse. Central incineration handles only combustibles and also produces an ash which must be disposed of by dumping or sanitary landfill.

In 1956, 834 cities over 5,000 population replied to a Municipal Year Book questionnaire on their refuse collection and disposal practices. Sanitary landfill was used by 58 percent, open dump--38 percent, hog feeding--18 percent, incinerator--13 percent, and salvage--4 percent. Of the 27 cities over 250,000 reporting, 24 used landfill, 14--incinerator, 9--hog feeding, 8--salvage, and 4--open dump. 3/

Just as there is a variety of methods of refuse disposal, so is there a variety of ways in which government discharges its responsibility for disposal.

The municipality may (1) have its own crews dispose of refuse at municipally owned facilities; (2) contract with or license private collectors to dispose of refuse in municipally owned or private facilities, but with municipal control over practices; (3) pass ordinances specifying the ways in which refuse must be disposed of by householders, businesses, and industry. (household or commercial garbage grinders, for instance, are required by law in some places, and the municipality collects and disposes of only nonputrescible refuse); and (4) use any combination of direct municipal and private disposal. 4/

3/ Municipal Year Book 1957 (Chicago: International City Managers' Association, 1957), pp. 326-327.

4/ American Public Works Association, Municipal Refuse Disposal, op. cit., p. 1.

The above-cited questionnaire survey in 1956 found that 54 percent of 862 cities reporting had municipal refuse collection, 13 percent had contract collection, 11 percent had private collectors, and 22 percent had a combination. ^{5/} Collection by contract and by private collectors was most frequent among the smaller cities.

Current Practice

To the extent that government provides refuse collection and disposal service, it is almost exclusively a municipal, rather than a county or special district function. A 1962 survey of 221 counties over 100,000 population revealed that only five counties provided garbage collection service county-wide, and only 28 provided such service just to unincorporated areas within their jurisdiction. ^{6/} The 1962 Census of Governments reported that 13 States had statutory authorization for special districts to perform the refuse collection and disposal function. In three of these States (Kentucky, Minnesota, and New Jersey), no such districts were operating in 1962, and in several of the other States it did not appear that much use had been made of the special district device for the refuse handling function. ^{7/}

As noted in Table 3 of Chapter 1, showing total direct expenditures by function of units of government below the State level in 1957, 94 percent of direct expenditures for "other sanitation" were made by municipalities and 4 percent by townships. Also, of the 106 single-county standard metropolitan areas analyzed for 1957, 98 had no county participation in the "other sanitation" function, in eight counties the county and municipal governments shared it, but in no counties was it exclusively a county function.

^{5/} Municipal Year Book 1957, op. cit., p. 327.

^{6/} Municipal Year Book 1962 (Chicago: International City Managers' Association, 1962), pp. 63-64.

^{7/} U. S. Bureau of the Census, "Governmental Organization," U. S. Census of Governments: 1962, Vol. I (Washington: Government Printing Office, 1962).

Role of State Government

State governments exercise little control and supervision over local governments' provision of refuse collection and disposal services. The Book of the States 1962-63 notes that State health departments are increasing their promotion of the use of sanitary landfills, and that all 50 States have passed laws requiring heat treatment of garbage prior to feeding it to swine. ^{8/} About one-third of the State governments have some agency which makes available on request, training, consultation and technical assistance to localities. Usually it is the health department. Frequently the department is asked to help pick landfill sites, choose equipment, and advise on operations. Some States, such as New York and New Jersey, prescribe minimum standards for operation of disposal facilities.

Role of National Government

The National Government conducts research and disseminates information on solid waste collection and disposal problems and methods through the Solid Wastes Disposal Section, Division of Environmental Engineering and Food Protection, Public Health Service of the Department of Health, Education, and Welfare. The National Government has no directive power over the States and local governments on solid waste matters, and dispenses no grants-in-aid. Most PHS research on solid waste storage, collection, and disposal is conducted by investigators who have been awarded research grants by the Public Health Service.

Standards of Service

Published materials on refuse collection and disposal deal for the most part with existing practices rather than standards of desirable practice. To some extent, this reflects the lack of uniformity in the manner in which municipalities are exercising their responsibility for the function.

The American Public Works Association suggests a number of factors that must be considered in selecting the best disposal method for a community:

^{8/} The Book of the States 1962-63 (Chicago: Council of State Governments, 1962), p. 364.

1. What methods are technically feasible; what are the limitations of each? 2. Do local conditions make some methods particularly suitable or unsuitable? 3. What factors, such as good public health features or fewer potential nuisances, favor one method over another? 4. Will weather, mechanical failure, or other circumstances interrupt disposal procedures and with what results for the city? 5. What are the costs of the various methods; how do they vary and with what factors? 6. What effect do collection procedures have on costs of disposal? 7. What methods can be adapted economically to changing conditions in the city? 8. Will salvage or reclamation pay part of disposal costs? 9. What elements in each method are likely to gain public support or meet with antagonism? 9/

Of all the methods of refuse disposal, open dumps are not recommended because they are the source of a number of public health and safety problems--disease, air and water pollution, fires, mosquitoes, rodents, and insects. 10/ An ~~ad hoc~~ Study Group on Community Solid Waste Disposal, called together by the U.S. Surgeon General, singled out no particular disposal method for special endorsement. 11/

With respect to standards of service for refuse collection, the APWA Refuse Collection Committee stated:

There is no agreement among cities or municipal officials as to the character or amount of collection service that should be

9/ American Public Works Association, Municipal Refuse Disposal, op. cit., p. 53.

10/ Ibid., p. 58; U. S. Public Health Service, Environmental Health Planning Guide, P.H.S. Publication No. 823 (Washington: Government Printing Office, 1962), p. 30.

11/ Public Health Service, Community Solid Waste Disposal, Proceedings of March 14-15, 1957 meeting of Ad Hoc Study Group.

provided. Communities have different standards of sanitation and appearance and varying attitudes as to the division of the work between the householders and the collection forces. The residents of some cities insist on healthful and attractive conditions and demand prompt and complete refuse removal. They do not want refuse containers on the streets at any time, will not permit waste materials to accumulate on public or private lands, and will not tolerate conditions that menace public health. In other communities, the citizens apparently place a much lower value on sanitation and orderliness. The people in some communities are unwilling to do any of the work of preparing refuse or setting it out on collection days for removal; in others, the citizens will do part of the work or accept part of the responsibility in order to keep the cost as low as possible.

Such varying attitudes and opinions make the problem somewhat different in each place and make it extremely difficult to get any agreement as to standards of service. There is no general measure yet available that can be used to judge the effectiveness of a particular collection system. 12/

The U. S. Public Health Service has established a "rule-of-thumb" guide to determine the economic justification of governmentally regulated or provided collection and disposal service under average conditions. With population density over 2,500 persons per square mile, approximating average residential lot size of less than one acre, PHS considers service would be economically justified. At population

12/ American Public Works Association, Committee on Refuse Collection, Refuse Collection Practice, 2nd edition (Chicago: Public Administration Service, 1958), p. 3. (underlining in original)

density of 1,000-2,500 persons per square mile, approximating average residential lot size of one to two acres, service is normally" justified. 13/

Regardless of whether the city takes direct responsibility for disposal, licenses or contracts with private collectors, or requires the producer to dispose of at least some of the refuse, it is agreed that the city must coordinate its disposal program with the collection program. "The collection methods used may have a great deal of influence on the type of disposal service provided. Separate or combined collections of various kinds of refuse, frequency of collections, and other factors must all be considered in relation to the city's responsibility for disposal." 14/

The Public Health Service says that collection should include both rubbish and garbage, since where only one type of refuse is collected routinely, experience indicates that the other type is often neglected. 15/ Where garbage is collected, it should be done at least twice weekly during the warmer summer months. Weekly collection may suffice during winter months in many parts of the country. 16/

The most restrictive limitations put on refuse disposal methods are those imposed in the interest of public health. Public health considerations include direct transmission of disease to men and animals and the reservoirs from which the disease may emerge, and such **environment-depreciating** factors as odor, visible smoke, gases, dust, noise, fly ash, drifting paper, heavy traffic, and unsightly appearance.

Among the major economic considerations in selection of the disposal method is the fact that incineration costs two or three times per ton more than the commonly used sanitary landfill. On the other hand, cities find it necessary to go ever farther

13/ U. S. Public Health Service, Environmental Health Planning Guide, op. cit., p. 31.

14/ American Public Works Association, Municipal Refuse Disposal, op. cit., p. 1.

15/ U. S. Public Health Service, Environmental-Health Planning Guide, op. cit., p. 30.

16/ Ibid.

out to find land for sanitary landfill. Thus, the higher operating cost of an incinerator may be offset by the shorter hauling distance. The U. S. Public Health Service says the disposal site should be as near as possible to the area it services, preferably not more than 10 miles away. 17/

Application of Selected Economic and Political Criteria

Benefit Area

Refuse collection has been classified earlier as a utility function. The benefits of this governmental service accrue primarily to the individual **who**, in its absence, must take the trouble to burn the combustible portion of his refuse and find a place to put the rest. In rural or thinly populated areas this presents no serious problems, but as urbanized areas become more congested the social costs of failure to provide a public refuse service increase. The dangerous fire and smog conditions resulting from individual refuse disposal in Los Angeles several years ago are well known.

Although social benefits of safe and efficient public refuse disposal are large, benefits of refuse collection service are primarily a matter of convenience to the individual. As a result of this dual nature of the function, both user charges and general revenue financing are commonly practiced. In many communities the two types of financing may be combined in that properties are assessed for refuse collection but this assessment does not cover full costs of combined collection and disposal services; the remainder is financed from general revenues.

There is little spillover of social benefit from refuse collection and disposal services among communities. There is some spillover of social costs from inadequate refuse service in terms of health and safety, most commonly when cities have disposal facilities outside their boundaries, and are inclined to provide only marginal operations because surrounding property owners are not city residents.

17/ U. S. Public Health Service, Environmental Health Planning Guide, op. cit., p. 31.

Economy of Scale

The availability of economies of scale in refuse disposal depends primarily on the method used. There is little unit land cost advantage in combining dump site requirements of many communities together. Communities need the same amount of dump space in any case. Operating economy would be possible, however, from operating a large dump instead of two or more smaller ones. When communities come to the point where dump sites are pushed farther and farther out and increased hauling costs make it desirable to turn to incineration, there is some economy in building and operating one large incinerator rather than a number of small ones. Thus an enlarged area offers economy of scale for incineration. The economics of constructing and operating incinerators of various sizes, and the economic hauling distance from pickup points determine the most economic size of the incineration area.

So far as actual collection is concerned, there can be economies from larger area by more effective layout of truck routes. The most economical size is limited by the increasing distance trucks must travel for collection and transportation to the disposal site. This distance can be increased, however, by use of stations for transferring refuse from pickup trucks to larger carriers which then proceed to the disposal site.

Geographic Adequacy

A sanitary landfill site within reasonable haul distance is the most economical of the accepted governmental methods of disposing of refuse. Although many communities, particularly the older ones, cannot find such sites within their boundaries, they usually can find them outside. Frequently this requires truck transfer stations. As the metropolitan area becomes built up and available dump or landfill sites are pushed farther and farther out, however, it becomes necessary to convert increasingly to disposal by incineration. Localities can turn to incineration as long as they have neighborhoods in which the location of incinerators is not objectionable. Communities without such neighborhoods, such as high income residential suburbs, will have to contract to use an incinerator in another community. Generally speaking, however, each community desires to exclude refuse disposal facilities, particularly those of other political jurisdictions, regardless of the type of facility. A county or other large jurisdiction is more likely to have a greater number of locational alternatives available so that it can minimize the problems of disposal site location.

Experience with Larger-Area Performance

Orange and Los Angeles Counties, Calif., provide and maintain sanitary landfill sites for their municipalities. In addition, they provide transfer stations and trucks to receive and transport refuse collected in the municipalities. The government of Bergen County, N. J., provides garbage disposal sites for private collectors serving 56 of the 70 towns in the county. Allegheny County, Penn., and Hartford, Conn., are now making plans to provide refuse disposal service for intermunicipal territory in their areas.

In Bucks, Chester, Delaware and Montgomery Counties, Penn., surrounding Philadelphia, 41 municipalities participate in 15 agreements for refuse disposal. Ten of the agreements are for sanitary landfills which serve **33** of the municipalities. The other agreements provide incineration facilities for eight municipalities.

Rochester, N. Y., makes its three municipal incinerators available to surrounding towns on a contract basis. Binghamton, N. Y., with incinerator capacity in excess of its present needs, also offers its use to neighboring communities.

K. WATER SUPPLY AND SEWAGE DISPOSAL

Water supply and sewage disposal developed as separate functions of local government and still are administered separately in most communities. It has become increasingly apparent, however, particularly in metropolitan areas, that water supply and sewage disposal are two phases of the single function of "water resource management." 1/ This development stems from a number of causes, including: (1) the contiguity of many units of government in urban centers, so that one community's sewage disposal seriously affects another community's water supply; (2) the increasing reliance on the re-use of water because of expanding demand for water; and (3) the greater variety of uses of water, particularly for recreational purposes in metropolitan areas. Water supply and sewage disposal in this analysis therefore are considered parts of a single function, rather than as two separate functions.

Water supply. Water service in urban areas has three principal requisites: providing a water supply that is safe, clear, potable, and preferably soft; providing adequate pressure and supply for fire fighting needs; and maintenance of reasonable charges and services. 2/ In fringe parts of metropolitan areas the requirements of purity, pressure and economy may be met by individual residential wells. These are the rare exceptions, however, and are limited to country home developments on large lots; metropolitan communities usually need a public water system. 3/

1/ Clean Water: A Challenge to the Nation, Public Health Service Publication No. 816, Highlights and Recommendations of the National Conference on Water Pollution (Washington, D. C. , 1960).

2/ Municipal Public Works Administration (Chicago: International City Managers' Association, 1957), p. 263.

3/ U.S. Public Health Service states that public water supply generally is economically justified where population density is at least 1,000 persons per square mile or the lot size is no more than two acres per residence. U.S. Public Health Service, Environmental Health Planning Guide, P.H.S. Publication No. 823 (Washington: Government Printing Office, 1962), p. 44.

A public system ordinarily consists of the water source, which may be river water, lake water, springs, or subsurface sources; reservoirs to hold the water until used, and to create pressure; treatment plants and pumping stations; and a network of mains and lateral pipes to carry the water to the consumer.

Under favorable conditions, public wells may prove adequate as a source of supply for even a fairly dense pattern of development. However, more intensive urban use of land for streets and buildings decreases the amount of precipitation returned to the soil, thus contributing to the lowering of the water table and jeopardizing reliability of well supplies. Larger urban concentrations thus tend to rely more on surface than subsurface water sources.

Sewage collection and disposal. The function of sewage collection in urban centers is to collect contaminated, putrescible liquid from the plumbing systems of buildings, carry it to a sewage plant or another suitable place of disposal, and there reduce the objectionable characteristics of the liquid before it is discharged. The principal purpose of the sewage function is to avoid contaminating the water supply of the community and its neighbors for whatever purpose they want to use it: domestic, industrial, or recreational.

The sewage collection system consists of a network of drains and sewers, preferably built to follow topography so that the sewage will reach the treatment plant by gravity flow. Pumping stations and force mains can be used to carry sewage over hills, but such facilities are expensive to construct and operate and make service less reliable because of the possibility of mechanical breakdown. The sewers, called sanitary sewers, are also sometimes used to collect and carry rain or surface water to natural water courses or bodies of water where a separate storm sewer system is not provided. Use of the same sewers for both sanitary and storm drain purposes complicates and increases the expense of handling and treating sanitary sewage. Increasing attention is being given to constructing separate storm drain facilities.

The sewage treatment facility varies with the type and intensity of treatment given. It treats the sewage by separating the solids from the liquids and disposing of the two individually.

The solids are either buried or burned, and the liquids usually are further treated before being discharged into a body of water. 4/

The sewage collection and disposal function as described applies to the central city section of metropolitan areas and to most of the area of the bordering municipalities. At the fringes of the metropolitan centers, however, where urban development is still sparse or where lot sizes tend to be larger, sewage is frequently handled by private, on-site systems. In the on-site system, the entire disposal process takes place on the same site as the building being served. The most commonly used on-site system is the septic tank-soil absorption system, in which the larger solids are separated from the liquids in the septic tank, and the partially treated effluent is then discharged into the subsoil by a seepage pit or system of perforated pipes. 5/

Public health technicians generally believe that the isolated homesite, such as a rural farm, is the only safe place for reliance on the on-site system on a permanent basis, and that in suburban areas the septic tank should be used only as an interim system. 6/ As a rule of thumb, they suggest that a public sewerage system is justified economically where population density is at least 2,500 persons per square mile, approximating a building density of no more than one-half acre per residence. This yardstick does not necessarily reflect the justification of public sewerage service from a health standpoint, since a number of variables unrelated to density of settlement have to be taken into account, such as local soil characteristics. 7/

4/ Municipal Public Works Administration, op. cit., pp. 289-328; Twin Cities Metropolitan Planning Commission, Metropolitan Sewerage Study (St. Paul, Minnesota: 1960), p. 7.

5/ U.S. Public Health Service, Manual of Septic Tank Practice, Public Health Service Publication No. 526 (Washington: Government Printing-Office, 1958).

6/ Ibid., p. v.

7/ U.S. Public Health Service, Environmental Health Planning Guide, op. cit., p. 38.

Aside from the primary human needs that water supply and sewage disposal satisfy, they are important in metropolitan areas for their effect on the pattern of urban development. The post-World War II housing boom, which took place mostly outside the cities, radically changed the existing pattern of development. Lacking connection to city water and sewer mains, new settlements had to find other water supply and sanitation facilities. Individual wells and septic tanks, essentially rural facilities, were most commonly used. They were suited to the needs of isolated areas and allowed housing and industrial development to continue, unfettered by pipes.

It soon became apparent that these methods were not an adequate permanent means for providing large suburban areas with essential services. "Without the unifying effect of facilities such as sewer and water pipes, development began to spread out and occur in scattered clusters. Consequently, subdivisions both large and **small** have been built miles from the previously existing urban development and in the process, large acreages of vacant land have been left between the new developments. This pattern of urban growth has been defined as urban sprawl.

"Urban sprawl is a highly inefficient pattern of development from the standpoint of providing both services and the full utilization of land resources. Also, in the opinion of many people, it does not produce a desirable environment." 8/

Water and sanitary sewerage facilities thus can be important tools for guiding urban expansion into desirable patterns of development.

Current Practice

A recent report summarizes the present allocation of responsibility for water and sewage disposal service in metropolitan areas as follows:

8/ Twin Cities Metropolitan Planning Commission, Metropolitan Sewerage Study, op. cit., p. 11. Also see "From Plan to Reality," Regional Plan News, No. 70 (New York: Regional Plan Association, September 1962), pp. 1-2.

The water supply and distribution systems and sewage collection and treatment facilities of the central cities remain the dominant element in the provision of water utilities in urban areas. But metropolitan development, the pollution problems caused by the overlap of metropolitan complexes, and the increased water resource activities role of the Federal and State governments during the past quarter century have tended to reduce the relative importance of the central city.

Suburban development has complicated enormously the task of supplying the urban dweller with water and removing and treating his wastes. The initial reliance in most suburban areas is on individual systems-- involving the use of wells and septic tanks-- or small community water and waste treatment systems. When community systems are employed, service is often provided by a private company or utility district, sometimes serving only part of the suburban unit.

Where individual or small community systems prove unsuitable or uneconomical, other arrangements have been developed. These include contracting with the central city for water supply or sewage disposal, or both; the creation of special districts to serve two or more communities; and the development of metropolitan agencies to serve both central city and suburbs.

These various methods devised by local governments to meet their water supply and sewage disposal responsibilities exist in an infinite number of combinations. Generally a number of approaches are used simultaneously in different parts of a single metropolitan area. Relatively few areas have only one agency providing water and sewer service. Central cities rarely extend service through contract to every community in the area. Metropolitan devices often fail to include some of the suburbs and unincorporated areas, in part because of the

expansion of urban development beyond the service boundaries of metropolitan agencies. Outside the central city, municipal systems, contract arrangements, utility districts with a service area ranging in size from a sub-development to perhaps an entire suburban county, private companies, and individual systems coexist. Often there are enclaves within central cities and the service areas of metropolitan agencies.....

Furthermore, the arrangements for water supply and sewage disposal in a particular metropolitan area are often quite different. In part, this is explained by physical and technological considerations--availability of surface and ground water, suitability of soil for septic tank use, and the configuration of watershed and drainage basins. The differences are also explained by certain general trends. Contracting with the central city is more prevalent for water supply than sewage disposal and treatment. Metropolitan agencies have been created for the sewage function more often than for water supply. Private companies are almost never active in sewage treatment; and individual systems are employed more frequently for waste disposal than for water supply. 9/

A 1961 survey found that about two-thirds of the 3,052 cities over 5,000 population reporting indicated that they had water supply and distribution facilities and sewage treatment plants. 10/ Many of the municipalities provided their services to other governmental units. 11/

9/ Advisory Commission on Intergovernmental Relations, Intergovernmental Responsibilities for Water Supply and Sewage Disposal in Metropolitan Areas (Washington: 1962), pp. 15-16.

10/ Municipal Year Book 1962 (Chicago: International City Managers' Association, 1962), pp. 106-107.

11/ U.S. Public Health Service, Municipal Water Facilities Communities of 25,000 Population and Over, P.H.S. Publication No. 661 (1962 edition); U.S. Public Health Service, Statistical Summary of Sewage Works in the United States, P.H.S. Publication No. 609 (Washington: Government Printing Office, 1958), p. 29.

A 1961 survey of 221 counties in standard metropolitan statistical areas reported that 35 counties had sewerage systems, 26 had sewage treatment plants, 18 had water supply and distribution systems, and six had systems for distributing water. 12/ The 1962 Census of Governments reported 937 sewerage special—districts in 38 States, 1,502 water supply special districts in 36 States, and 138 multi-function sewerage and water supply districts in 18 States. 13/

A 1956 tabulation showed that there were 22 metropolitan special districts providing water or sewer service, or a combination of the two. Eleven provided sewage disposal service, seven provided water supply, and four provided both services. 14/

Role of State Government

While local governments exercise paramount responsibility for water supply and sewage disposal in urban areas, they do so within the framework of policies and controls established by the State government. The States' chief role has been to allocate water supply, regulate use of waters including pollution control, and regulate the planning and construction of local water and sewage facilities. In addition, some States have undertaken comprehensive water resource planning and development, engaged in research activities, provided technical assistance and training programs for local water and sewage agencies, made loans and grants for constructing water and sewer utilities, and developed urban water supplies.

Role of National Government

The National Government also influences urban water and sewage service, both directly and indirectly. Its chief effort is in control of water quality. Under the Water Pollution Control Act of 1948, as amended in 1956 and 1961, the U.S. Public Health Service provides grants to localities to construct municipal

12/ Municipal Year Book 1962, op. cit., p. 64.

13/ U.S. Bureau of Census, "Governmental Organization," Census of Governments: 1962, Vol. I, (Washington: Government Printing Office, 1963), Table 12, p. 67.

14/ Municipal Year Book 1956 (Chicago: International City Managers' Association, 1956), p.

waste treatment facilities, makes grants to improve and strengthen State and interstate pollution control programs, enforces national water pollution regulations, conducts research, extends technical assistance to State and local governments, and establishes water quality control as a criterion in planning and building national reservoirs. 15/ In regard to the quantity of water, the development of urban water storage facilities is authorized in conjunction with national multipurpose river basin projects.

Economies of Scale

The costs of construction, operation, and maintenance of water supply and sewage collection and treatment systems reflect economies of scale. A comprehensive study of water-treatment costs in 1956 found that unit construction costs for the treatment plants decreased as capacity increased from one to 300 acre-feet daily capacity. Operation and maintenance costs per unit processed decreased with increasing flow capacity as follows: 16/

<u>Daily plant capacity in acre-feet</u>	<u>Cost per acre- foot treated</u>
15	\$26.00
30	21.50
150	11.00
300	10.00

15/ "Water Resources and Pollution Control," Indicators (October 1962), p. xiii.

16/ Gerald T. Orlob and Marvin R. Lindorf, "Cost of Water Treatment in California," Journal American Water Works Association, Vol. L (January 1958), pp. 45-55, quoted in Jack Hirshleifer, James C. DeHaven, Jerome W. Milliman, Water Supply: Economics, Technology, and Policy (Chicago: The University of Chicago Press, 1960), pp. 176-177.

Similarly, the cost per unit of capacity of maintaining and operating the water conveyance system from the source of supply to the treatment plant declines with increased carrying capacity, as indicated in the following tabulation: 17/

Water-conveyance Cost

	Capacity (acre-feet per year)				
	: 22.4	: 224	: 1,120	: 2,240	: 112,000
Dollars per acre-foot per mile:					
with pumping	\$13.00	\$5.88	\$2.90	\$2.10	\$0.36
gravity flow	10.40	3.50	1.30	0.95	---

A similar relationship exists between scale of sewage treatment and disposal works and unit costs. The following data are taken from exhibits prepared by engineer consultants for a report on sewage works by the Office for Local Government of New York State: 18/

17/ Louis Koenig, "Disposal of Saline Water Conversion Brines: An Orientation Study," Department of the Interior, Office of Saline Water, Research and Development **Progress** Report No. 20 (Washington: April 1957), quoted in Hirshleifer, DeHaven, Milliman, op. cit., p. 179.

18/ State of New York, Office for Local Government, Study of Needs for Sewage Works, Report No. 1 (Albany: 1962), Appendix D.

Estimated Units Costs of Construction, Operation, and Maintenance
Sewage Works Facilities
January 1962

	<u>Primary treatment only</u>	<u>Primary and secondary treatment</u>
Sewage treatment plant:		
Average cost of construction, per million gallons daily (m.g.d.) capacity :		
Plant with 100 m g d capacity	\$135,000	\$230,000
Plant with 10 m g d capacity	230,000	400,000
Plant with 1 m g d capacity	415,000	720,000
Operation and maintenance cost , per million gallons (m.g.):		
Plant with 100 m g d capacity	\$23.00	\$35.00
Plant with 10 m g d capacity	27.00	39.00
Plant with 1 m g d capacity	44.00	62.00
Sewage pumping stations:		
Average cost of construction, per million gallons daily (m.g.d.) capacity :		
Plant with 50 m g d capacity	\$ 11,000	
Plant with 10 m g d capacity	22 ,000	
Plant with 1 m g d capacity	68,000	

The effects of economies of scale are shown directly in relation to size of community rather than plant capacity in the following tabulation, based on an analysis of contract award date for sewage plant construction reported to the U.S. Public Health Service: 19/

19/ Municipal Public Works Administration, op. cit., p. 326.

Per Capita Construction Costs of Sewage Treatment Plants

Population served	Primary Treatment Plants		Secondary Treatment Plants	
	No. of plants	Avg/capita cost*	No. of plants	Avg/capita cost*
1,000 - 2,500	36	\$34.90	57	\$66.70
2,500 - 5,000	12	31.80	37	44.80
5,000 - 10,000	16	29.70	37	35.40
10,000 - 25,000	12	19.30	22	32.30
25,000 - 50,000	3	14.10	8	35.40
50,000 and over	1	11.50	4	40.60

*These figures do not include the cost of land, interceptor sewers or engineering fees, and cannot be used as a reliable basis for determining what the cost of a plant would be in any specific instance. Such information could only be obtained from a detailed study of local conditions by a competent engineer who has had experience in the design and construction of sewage treatment plants.

Standards of Service

Water Supply. The quantity of water needed is related directly to population. It represents not only domestic consumption needs, but also all commercial and industrial uses, fire fighting and street cleaning requirements, and other public uses. Account must be taken of the probable peak hour demand, which usually is determined by peak domestic demand plus the volume used in fighting a major fire.

Cities' needed capacities vary from 100 gallons per capita per day to as much as 250 gallons per capita per day. 20/ A suggested figure for design for a municipal water supply system is 150 gallons per capita per day. 21/ Requirements for fire fighting needs are usually based on standards set by the National

20/ Local Planning Administration (Chicago: International City Managers' Association, 1959), p. 235.

21/ Advisory Commission on Intergovernmental Relations, op. cit., p. 7.

Board of Fire Underwriters, and vary from a flow of 1,000 gallons per minute for a duration of four hours in a city of 1,000 population to a flow of 12,000 gallons per minute for a duration of 10 hours, with 2,000 to 8,000 gallons per minute for a second fire in the largest cities. 22/

The quality of water should meet State and U.S. Public Health Service standards. 23/ In general, this means that water for domestic use should be free from bacteriological or other contamination; clear, colorless, odorless, and pleasant to the taste; and contain only a moderate amount of soluble mineral substances. The most acceptable water for general use contains not less than 10 nor more than 50 parts per million of hardness, although in communities where the only available water has high mineral content, 80 parts per million may be tolerated.

The source and quality of the water will determine the type and amount of treatment needed. State health agencies usually require treatment and periodic bacteriological analyses of the water.

Sewage Collection and Disposal. The sewage collection system should be capable of collecting all sanitary sewage from the community and delivering it to the treatment plant. The treatment facility should be capable of treating all sewage to the desired standard of cleanliness before being discharged into a body of water.

Various standards of sewage treatment are in current use among the States for determining tolerable pollution levels for water supply, fish and aquatic life, agricultural use, recreational use, and general nuisance prevention. At least 20 States have legislation authorizing stream classification, and seven others require consideration of stream use in determining treatment requirements. 24/

22/ Municipal Public Works Administration, op. cit., p. 265.

23/ Public Health Service, Environmental Health Planning Guide, op. cit., p. 43.

24/ Municipal Public Works Administration, op. cit., pp. 310-311.

The variation of standards of desirable water cleanliness was acknowledged in the report of the 1960 National Conference on Water Pollution. ^{25/} One of the panels at the Conference, consisting of representatives of industry, conservation interests, water and sewage works manufacturers, and health officials, recommended that the "Conference express its conviction that the goal of pollution abatement is to protect and enhance the capacity of the water resource to serve the widest possible range of human needs, and that this goal can be approached only by accepting the positive policy of keeping waters as clean as possible, as opposed to the negative policy of attempting to use the full capacity of water for waste assimilation." ^{26/}

"As clean as possible" refers to costs as well as the technical problems of purification. Sewage treatment can remove 90 percent of organic impurities, but some municipalities might not consider this a "possible" policy in view of the cost relative to the marginal benefit of reaching that degree of purity.

Specialists' Suggestions on Area

From a consideration of the nature of the problem of providing water and sewage disposal service in metropolitan areas, and the technology required, various groups of specialists have come to conclusions as to the desirable jurisdictional basis for handling the functions. The President's Water Resources Policy Commission stated:

Municipal water supply should continue to be primarily a local responsibility, including intercommunity cooperation through the formation of metropolitan water districts to make possible areawide coordination of water supply sources to meet the needs of an increasing population. The growing needs of communities for water supply should, however, be considered in connection with the planning of all comprehensive basin programs. ^{27/}

^{25/} Clean Water: A Challenge to the Nation, op. cit., p. 5.

^{26/} Ibid., p. 20.

^{27/} President's Water Resources Policy Commission, A Water Policy for the American People, Summary of Recommendations (Washington: Government Printing Office, 1960), p. 15.

A research document prepared for use of the Water Resources Policy Commission stated as follows:

Metropolitan areas are presenting serious water pollution problems. As the number and size of these residential, industrial complexes grow, their problems can be expected to become exceedingly difficult. Legislation is needed which will permit the various communities comprising the metropolitan region to work together effectively and equitably toward an integrated regional approach to common water and waste problems. 28/

The U.S. Public Health Service's Environmental Health Planning Guide, prepared with the assistance of "many State and local health, planning, public works and other officials," 29/ makes the following statements about water and sewerage service and jurisdictional areas:

Water

A **small** number of community water utilities is preferable to a multiplicity of uncoordinated systems. Where practical, interconnection between distribution lines is recommended. A large number of relatively **small** water companies or municipal departments is often the result of a lack of a coordinated policy for community water resources. Widely different rate systems, insufficient capacity in some areas, and deficient fire protection service can often be traced to these conditions and illustrate the need for areawide coordinated plan for water service. 30/

28/ U.S. Congress, Senate, Select Committee on National Water Resources, Water Resources Activities in the United States, Water Quality Management, 86th Congress, 2nd Sess., 1960.

29/ Public Health Service, Environmental Health Planning Guide, op. cit., p. iv.

30/ Ibid., p. 43.

Sewage

Service areas should be based on population density and topography. A multiplicity of small sewage treatment plants indicates a lack of coordinated area planning. The practice of constructing many small plants, each designed to serve only its immediate area, is less desirable and often more expensive than a few large plants designed to serve entire drainage areas....Jurisdictional areas should be related to drainage areas and should reflect anticipated growth patterns. 31/

Water-sewage coordination

A master plan which shows future needs and facilities in relation to the area's growth and water resources is necessary for effective planning. Such a plan should be developed in connection with the sewerage master plan, and should encompass the long-range watershed needs, storage facilities, and, if appropriate, flood-control plans. 32/

The International City Managers' Association manual on Local Planning Administration comments on water service as follows :

Streams do not respect municipal boundaries, and in most instances the communities through which a stream flows will have to make cooperative arrangements on the amounts to be withdrawn. Where possible, a responsibility should be unified--through a water district, for example. 33/

In regard to sewage disposal, the same publication states:

Since sewers should be designed to take advantage of gravity, the area to be served by a

31/ Environmental Health Planning Guide, op. cit., p. 37.

32/ Ibid., p. 43.

33/ Local Planning Administration, op. cit., p. 235.

sewer is determined by the topography. In effect, each sewer serves a drainage area. Such areas will not always lie within the boundaries of a single governmental jurisdiction. Therefore problems of coordinating the planning, jurisdiction, financing, and maintenance stages are likely to develop. Where each jurisdiction affected has a master plan of sewerage and treatment facilities, developed jointly, it should be possible to cooperate in the physical implementation of such plans.

In general, a coordinated sewer system can be developed only with unified governmental responsibility. In some cities the problem of sewage collection and disposal **may** lead to annexation of surrounding areas. In some cases the solution lies in the formation of a special district....Other solutions to this problem include varying forms of metropolitan government and intermunicipal contracts for the treatment of sewage by one political subdivision for others in the tributary area....

The construction of new subdivisions in urban fringe areas presents serious problems of long-range planning for sewage collection and treatment. If the new area is not served by any sewer system it will probably rely either on individual septic tanks or on a **small** treatment plant designed to serve the particular subdivision of the small community. Neither of these methods may be the final answer; it is necessary therefore to develop a policy regarding the long-range solution and the ways in which it will be achieved. 34/

These statements clearly reflect a preference for areawide coordination of planning and policies on water supply and sewage disposal, in the interests of health, economy, recreation, and overall development planning. They do not mean, however, that operation of the utility facilities needs to be the responsibility

34/ Local Planning Administration, op. cit., pp. 239-240.

of an areawide government, or that planning and policies of both water supply and sewage disposal need to be handled by the same areawide agency. One reason is that watersheds and drainage areas may not be coterminous. Under coordinated areawide planning and policies individual municipalities might well retain responsibility for constructing and maintaining water mains, laterals, pumps and reservoirs as well as sewage system facilities within their boundaries. They might also retain the powers of determining policies for extending service within their jurisdictions and the responsibility for billing their consumers. As dne writer points out, coordinated areawide handling of water and sewage service...

merely means that all of the alternatives for supplying water or disposing of it have been studied, and that combination adopted which is best suited to the topography and geography of the region, and will most efficiently and economically provide the required service with the least interruption or damage to people, property and resources. The selected combinations might very well include several sources of water, several points of waste disposal and several separate systems and operating agencies. The point is, however, that whatever the combination selected, it represents what appears to be the most efficient and economical arrangement for achieving the regional goals, whatever these have been determined to be. 35/

Application of Selected Economic and Political Criteria

Benefit Area

In Chapter 2 water supply and sewage disposal were classified as hybrid functions combining both utility and social service characteristics. The benefits of water pumping and distribution

35/ Melvin E. Scheidt, Water Management Problems in Urban Areas, Paper presented at the Residence Course on Urban Planning for Environmental Health at Sanitary Engineering Center, Public Health Service (Cincinnati, Ohio: April 3, 1962), pp. 7-8.

and sewage collection accrue almost entirely to the individual or business. These aspects of the two functions are readily financed by user charges, involve little spillover of benefits beyond the jurisdiction, and are appropriate responsibilities for the local municipal government.

On the other hand, the tapping and management of sources for an urban water supply, and the disposal of collected sewage involve complex problems of conservation. The benefits and costs resulting from these aspects of the functions are almost entirely social. If two neighboring communities use deep wells and draw from the same subsurface stratum, one may deplete the other's supply, depending on subsurface hydrologic conditions. If both use a surface source, a similar effect may be produced. Moreover, more than water supply may be affected. Chicago's drawing of water from Lake Michigan affects the port economies of other cities on the Great Lakes. Heavy drawing of water from a river for urban use may affect the resort economy of lakes which feed the river. Inadequate treatment of sewage imposes costs upon communities downstream of the discharging community, which vary according to the purposes for which the water is to be used, and the degree to which it must be purified. Inadequate treatment **also** destroys marine life, endangers agricultural products and inhibits recreational development. Indeed, water use and management policies, including control of sewage effluent, exert a profound influence on the entire balance of nature throughout a vast watershed or river basin.

Since water and sewage disposal service are essential to economic development, the layout of the two systems, particularly the sewage system, has an important effect on how land is used. Foresighted layout can create long-range benefit for the whole area by its salutary effect on areawide development.

Because the benefits of wise management accrue to the population throughout the region, urban consumers are not usually willing to pay in user charges the higher financial cost of conservational management over minimum-cost exploitation. The management of resources for both water supply and sewage control must, therefore, be financed from general revenues and administered over the river basin or watershed as a whole. Where many communities draw upon the same distant source of water supply the large conduits and facilities required to bring it to the metropolitan area should be supplied and financed at the metropolitan level. Similarly the sewage

treatment facilities of metropolitan communities must be coordinated and administered on an areawide basis. The ultimate distribution of water to the consumer and initial collection of wastes remain municipal functions.

Economy of Scale

Engineering studies cited in the preceding analysis demonstrate that unit cost of water supply and sewage declines with increased size because of economies in construction and operation of water and sewage disposal facilities. Economies of scale in water supply and sewage disposal also result when duplication of mains can be avoided through multicommunity use of a single conduit for water from a common source or sewage disposal to a common discharge point. Furthermore, these economies can be maximized when water and sewage systems are designed to follow the contours of natural basins, which can take advantage of gravity and avoid costly pumping. Finally, the advantages of economies of scale frequently determine whether a community will be served at all by public water or sewer facilities. For small communities discontinuities in the levels of capacity at which such facilities can be built render the financial cost of providing them prohibitive. The benefit argument for areawide provision of initial water supply and ultimate sewage disposal is thus strongly supported by consideration of economies of scale.

Areal Adequacy

Municipalities sometimes must go outside their boundaries to obtain water supply and discharge their sewage into lakes or streams. Individual localities in such cases do not have adequate resources within their own geographical limits to meet their residents' water and sewage disposal needs.

Experience with Larger-Area Performance

A well-known agency providing water supply over a large area is the Metropolitan Water District of Southern California, embracing territory in three metropolitan areas. It acts as a wholesaler, obtaining and transmitting water to its member cities and counties, who either distribute it retail to the consumer or make arrangements for public or private systems to do so. Another example of a special district supplying water over a large area is the Washington Suburban Sanitary Commission, Which owns and operates public water facilities supplying suburban Washington, D. D. communities in Maryland.

As indicated in the summary of "Current Practice," most cases of water supply being provided on an areawide basis involve contractual arrangements between central cities and many of their suburbs. The Chicago and Minneapolis areas are examples.

The Metropolitan Sanitary District of Chicago, the Municipality of Metropolitan Seattle, and the St. Louis Metropolitan Sewer District all provide sanitary sewer service over an area covering a number of localities. The City of Salem and Marion and Polk Counties, Oregon, recently adopted an agreement for a regional sewer program, and a metropolitan sewerage district was established in metropolitan Denver.

In four suburban counties of the Penjerdel region in Pennsylvania, the water supply is distributed to consumers by private enterprise. However, there are 18 municipal water authorities and eight interjurisdictional agreements under which 16 communities are served.

L. PLANNING

As a governmental function, "planning is a continuing process carried on in intimate relation with policymaking. It provides the coordinating link between long-range goals, intermediate programs to attain such goals, and detailed operating plans to implement these intermediate programs. Furthermore, from this planning process come the means to harness into effective team effort the work of many different operating agencies responsible for carrying out segments of the total program. Finally, planning works in cyclical fashion, constantly evaluating progress towards goal achievement and furnishing the basis for reexamination and refinement of goals and programs through replanning." ^{1/}

The earliest emphasis of governmental planning at the local level of government was on guiding the physical development of the community. Guiding community development continues to be the more heavily emphasized aspect of local planning, with increasing attention being given to social and economic factors in this development. The other aspect of governmental planning is its role as an aid to executive management.

...these two lines of development have criss-crossed, intertwined, and in some ways merged....This intertwining reflects the fact that city planning in the United States, in its public form, has been developing as a rather unique governmental function which joins together general staff activities (concerned with "integration" and balancing of municipal government operations, for example, through capital-improvement programming) and substantive activities concerned with guiding urban physical development (for

^{1/} Local Planning Administration (Chicago: International City Managers' Association, 1959), p. 46.

example, through the preparation of master plans and the application of zoning and other controls to carry them out). 2/

Urban planning is thus a mixed "line-staff" activity. The "line" activity is designed to guide urban development. The "staff" activity consists of assisting in forming policy and helping to develop and maintain the system of inter-relationships among parts of municipal government essential in achieving a unified approach to urban development. 3/

Thus the line dimension of city planning grows from the substantive roots in land-use planning and the concern for physical arrangements of housing, streets, industrial and commercial activity, governmental facilities, services, and the like. The staff dimension, in contrast, stems from the generalized nature of planning as an indispensable element in administration. 4/

In carrying on its line function of guiding the community's development, the urban planning agency (1) develops and continually revises a land-use plan; (2) prepares and refines similar plans for transportation, public buildings, public utilities, park and recreation areas, urban renewal, capital improvements; and (3) implements these plans by influencing the many public and private actions which produce growth and development in the urban area. Some of the more effective tools of planning implementation are the capital budget, and zoning, subdivision, and platting ordinances.

A typical city planning agency has the following divisions: (1) comprehensive plan; (2) land use; (3) streets and highways; (4) mapping and zoning; (5) research and statistics; (6) capital program and budget; and (7) platting and subdivision. 5/

2/ Harvey S. Perloff, Education for Planning: City, State and Regional (Baltimore: The John Hopkins Press, 1957), pp. 6-8.

3/ Local Planning Administration, op. cit., pp. 51-52.

4/ Ibid., p. 52.

5/ Ibid., p. 64.

The task of guiding urban development in metropolitan areas has grown beyond the ability of municipal planning agencies as the economic, social, and physical factors affecting development have extended beyond the municipality's boundaries, and as special districts have been created to provide urban services among a number of municipalities. ^{6/} As a consequence there has been increasing realization of the need to conduct comprehensive planning on an areawide basis, with the result that many metropolitan planning bodies have come into existence. The National Government, through its "701" grant program under the 1954 Housing Act, has had much to do with stimulating the creation and growth of metropolitan planning bodies. Thus, urban planning in metropolitan areas increasingly is a function which is performed on two levels: the local or municipal level, and the areawide or metropolitan level.

Experience with metropolitan planning is relatively new and varied, making it difficult to generalize on the activities embraced in the function as currently performed. Moreover, as distinguished from other urban functions, which commonly are handled by a general purpose government, metropolitan planning most often is performed by a single purpose special district. This is because there are few metropolitan general purpose governments, and it has not seemed feasible or desirable to attach the comprehensive planning function to any of the metropolitan single purpose districts performing line functions of government, such as sewer or water districts or port authorities.

A common activity of the metropolitan planning agency is to prepare a comprehensive plan for the area and to coordinate plans of local units within its geographical boundaries. Many existing planning agencies are still in the process of preparing their plans. Usually coordination of local plans consists only of the metropolitan agency's effort to keep itself informed of local plans and projects and to inform localities of instances where local plans do not conform with the metropolitan agency's comprehensive plan. Few have the authority of mandatory review of local plans. Other responsibilities of metropolitan planning agencies are, for example, development of cooperative techniques among local governments for solution of metropolitan problems ;

^{6/} Local Planning Administration, op. cit., p. 8.

preparation for local governments of standards for zoning, building, and subdivision control ordinances and other planning regulation; and contracting with other governments to provide specialized planning services. 7/

Current Practice

Local planning is done by municipalities and counties. Areawide planning is usually done by special district agencies and, where all or most of an area is within a single county, by the county government.

A survey by the Municipal Year Book 1962 revealed that 1,226 of 1,311 cities over 10,000 population which reported had an official planning agency. 8/ Another survey by the same publication covered the extent of planning by county governments. It found that of 221 urban counties reporting (out of a possible total of 263), 66 percent said they had some kind of planning agency, and another ten percent participated in a regional planning agency. 9/

A survey reported in the National Civic Review in July 1962 that there were 63 metropolitan planning agencies in the Nation's 212 standard metropolitan statistical areas. The agencies were defined as those which were "consciously created on a multi-jurisdictional basis, i.e., agencies serving several counties, several municipalities, a combination of counties and municipalities, or a city and county jointly." 10/

Role of State Government

State governments influence local planning activities through the assistance which they provide to local and areawide planning agencies, and through their performance of Statewide planning. State provision of direct aid to localities has been stimulated considerably by the National Government's grant

7/ Paul Oppermann, The Conditions of Metropolitan Planning, Paper presented to National Conference, American Institute of Planners (Los Angeles, California: October 15, 1962).

8/ Municipal Year Book 1962 (Chicago: International City Managers' Association, 1962), p. 305.

9/ Ibid., pp. 65-66.

10/ National Civic Review, Vol. LI, No. 7 (July 1962), p. 384 ff.

program under the 1954 Housing Act as amended. Section 701 of the Act as revised authorizes national grants to the States for direct planning and assistance to **small** cities and counties under 50,000 population, to metropolitan, regional and State planning agencies, to municipalities and counties in catastrophe and economically depressed areas, and to official government planning agencies in federally impacted areas. The National Government finances two-thirds of the cost of approved local planning projects (three-fourths in depressed, impacted or catastrophe areas) with one-third coming from the State and local governments.

The States vary widely in administering the National planning grant programs with respect to the State agency which handles the channeling of grants, the requirements it establishes for local units to qualify, and the financial and technical aid it provides. Planning boards, universities, housing boards, and departments of commerce are among the types of State agencies which administer the grants. Some States approve a Section 701 program only if the program includes a complete master plan according to a prescribed outline. Other States permit more variation during the planning, but impose tighter restrictions in approving planners to undertake the work in the first place. Usually the localities provide the local-matching share of the funds, but sometimes the States cover part or all of the non-Federal cost. Some States provide State planning staff to do the planning work for the localities under the 701 grants, others use consultants, and others employ a combination of State staff, local staff, and consultants. 11/

Technical assistance to localities provided by the State planning agency--financed by State as well as National funds--may include such services as standby technical aid in the form of attendance at planning commission meetings and limited interim field work, usually in communities where comprehensive planning is well advanced; program technical assistance through specific studies and reports; and preparation of parts of comprehensive plans .

11/ The Council of State Governments, State Responsibility in Urban Regional Development (Chicago : 1962), pp . 35-38.

State financial aid to localities for planning frequently comes in the sharing of the non-Federal cost of a 701 program planning activity. Sometimes the States pay the entire non-Federal part. New Jersey provides direct aid to support continuing local planning programs not covered under the Federal grant program, feeling such aid is necessary to sustain new local programs once the Federal grant has ended. Some States provide financial grants for local urban renewal projects. These projects ordinarily involve considerable planning activity.

State aid to localities' planning efforts by creating and supporting county, regional and metropolitan planning agencies is based on the theory that a network of such agencies is better able than a State planning agency to provide continuing technical assistance geared to the varying needs of the different segments of the State. These agencies are also able to provide better coordination of the planning efforts of localities within their jurisdictions.

The preparation and maintenance of State comprehensive development plans relating regional and local needs to State policies, has been recommended by a number of groups, including the Council of State Governments, but has been largely unrealized. One State, Connecticut, involves the State plan noticeably in local and areawide planning, by requiring local and regional comprehensive plans to be checked by the Connecticut Development Commission against the State development plans.

Role of National Government

The previous section described how the National Government, through the 701 program, is involved in the stimulation and support of local and metropolitan planning programs. The act places emphasis on the encouragement of planning on a unified metropolitan basis:

Planning assisted under this section shall, to the maximum extent feasible, cover entire urban areas having common or related urban development problems. The Administrator shall encourage cooperation in preparing and

carrying out plans among all interested municipalities, political subdivisions, public agencies, and other parties in order to achieve coordinated development of entire areas.. .. 12/

(c) The Administrator is authorized, in areas embracing several municipalities or other political subdivisions , to encourage planning on a unified metropolitan basis and to provide technical assistance for such planning and the solution of problems relating thereto. 13/

Under an HHA administrative ruling, assistance grants to local planning agencies may now be continuing, rather than only on an individual project basis. This change is expected to strengthen planning at the local and metropolitan levels.

Through September 30, 1962, 91 metropolitan and regional planning agencies in 40 States had received 168 grants under the 701 grant program, for a total amount of \$12,364,000. 14/ As of February 28, 1962, 2,109 localities under 50,000 population in 40 States and Puerto Rico had received planning assistance amounting to \$13,256,663. 15/ It is apparent that a considerable share of the National grant money is being directed toward stimulation of planning on a metropolitan or regional basis.

The "open space" program of the National Government also contains provisions which encourage areawide planning. The \$50 million program of matching grants for the acquisition and reservation of open spaces provides that the HHA Administrator may make grants only if he finds that (1) the proposed use of

12/ 40 U.S.C. 461 (a) (5).

13/ 40 U.S.C. 461 (c).

14/ U. S. Congress, Senate, Committee on Government Operations, Subcommittee on Intergovernmental Relations , Robert C. Weaver, "Statement," Hearings, 87th Cong., 2nd sess., 1962, p. 7, Appendix.

15/ Council of State Governments, State Responsibility in Urban Regional Development, op. cit., p. 29.

the land for permanent open space **is** important to execution of a comprehensive plan for the urban area meeting criteria he has established for such plans, and **(2)** a program for comprehensive planning is being actively carried on for the urban area. 16/ (For other Federal grant and loan programs with local or areawide planning requirements, see Appendix B.)

Specialists' Suggestions

The planning profession sees a need for urban planning to be performed at two levels of government: local and metropolitan. This is clear from the development of metropolitan planning bodies, which the planners have strongly supported, and from numerous writings, statements and speeches of leading planners.

A major concern of professional planners now is definition of the metropolitan planning function, and delineation of the relationship between metropolitan planning and local planning in urban areas. For the existence of two governmental agencies with the function of providing planning service in the same geographical area causes conflict of jurisdiction unless their separate roles can be clearly defined. A step toward defining metropolitan planning was taken by the American Institute of Planners in a "working statement" on The Role of Metropolitan Planning prepared in 1962 by the Metropolitan Conference Committee of the **AIP**, "distilled from actual metropolitan planning experience." The **AIP** committee statement suggests that long-term policies for metropolitan planning agencies be as follows:

The metropolitan planning agency should seek the development of a unified plan for land use, density and design, the provision and correlation of public facilities, services and utilities, and the preservation of open space and wise use of natural resources. It should strive to coordinate local planning, both public and private, with planning at the metropolitan level; similarly, the metropolitan plan should be coordinated with state and national plans-- particularly those affecting transportation,

16/ 42 U.S.C. 1500 (b).

public facilities and natural resource programs and functions that are metropolitan in scope. To this purpose, there should be a legal requirement that the agency review the content, conformity or compatibility of all proposals affecting the metropolitan area. 17/

The Committee emphasizes that the power of review is not the power of veto, but rather the necessity of comment on proposals affecting the metropolitan area.

To carry out metropolitan planning policies, the AIP committee suggests four basic functions to be performed by the metropolitan planning agency: research--to provide the data needed for preparing the comprehensive plan; planning--to prepare the comprehensive area plan; cooperation and coordination--in regard to the objectives, proposals and plans at various levels of governmental units affected; and advice and assistance--to other planning agencies and local governmental and nongovernmental organizations, including establishing standards for planning regulations and encouraging local units to adopt and properly administer them.

Recognizing the existence of governmental agencies providing services on an areawide basis, and the need for involving planning closely in their operations (the "staff" activity noted earlier), the AIP group says:

The metropolitan planning agency should seek to establish especially close relationships with other institutions concerned with metropolitanwide development such as water supply and development authorities, mass transportation agencies, special districts, highway departments, park and recreation agencies and air pollution control bodies. Efforts should be made to

17/ American Institute of Planners, The Role of Metropolitan Planning, Metropolitan Planning Conference, Findings and Recommendations (Chicago: 1962), Mimeo., p. 1.

participate in the decision-making processes of such agencies as a major means of accomplishing areawide development goals. 18/

The metropolitan planning agency, according to the AIP, is to develop a comprehensive plan for the entire population area, yet within that area numerous municipalities will continue to develop their own comprehensive plans. The AIP recognizes the possible conflict by saying that the metropolitan agency must "coordinate local planning, both public and private, with planning at the metropolitan level." For this purpose, the AIP says, the metropolitan planning law should require that the metropolitan planning body review "the content, conformity or compatibility of all proposals affecting the metropolitan area." It seems likely that these proposals would include such measures of municipal planning as the local comprehensive plan and zoning and subdivision controls. The AIP makes clear that the metropolitan body's review power is only the power to be heard, not the power to approve or reject. On these vital matters, therefore, the AIP suggests that ultimate power to heed or ignore the recommendations of the metropolitan planning agency would be in the hands of the locality, and thus in matters of conflict, local planning would take precedence over metropolitan planning.

Powers given to the metropolitan planning body in the AIP statement might, as a practical matter, enable the agency to act so as to keep conflicts with local planning bodies to a minimum and still influence areawide development. First, the metropolitan planning body is urged to seek to establish close liaison with governmental agencies performing areawide line functions and to try to participate in their decision-making processes. Presumably, the propriety and value of such close ties would be recognized by local agencies. Second, the agency's extensive powers to prepare plans, conduct research and educational activities, and advise and assist local planning bodies, including the suggestion of standards, would be expected to have a persuasive educational effect on local governmental units and their planning bodies.

18/ American Institute of Planners, The Role of Metropolitan Planning, op. cit., p. 5.

In the final analysis, however, if it came to an issue of one planning jurisdiction's recommendation taking precedence over the other, the recommendation of the local planning body would prevail under the terms of the working statement of the AIP. The AIP statement thus leaves the function of guiding areawide development to the localities and whatever influence can be brought to bear on them through the educational and other indirect means of the metropolitan planning body.

Under the prevailing practice of giving metropolitan planning agencies authority only to advise and make suggestions to localities, problems of conflict are resolved in favor of local plans and policies. Exceptions are the Federal Government's requirement that certain functional grants be contingent upon a project's being in conformity with an areawide comprehensive plan (see Appendix B).

Application of Selected Economic and Political Criteria

Benefit Area

The planning function is by this report's definition a social service, for its stated purpose is to promote development of that physical setting for all urban activities which is most beneficial to the community as a whole. Thus planning creates the link between public and private urban affairs. Further, it helps to coordinate all of the public functions of the community with one another.

The intercommunity spillover of benefits from sound planning, and social costs resulting from lack of it, are widely recognized by layman and specialists alike. Indeed, the economic foundation of an entire metropolitan area depends upon the way in which land is zoned and used in each of its component communities. For example, insufficient land for industry and commerce will discourage development of these enterprises, while over-zoning for commercial or industrial land may cause an unhealthy rivalry among individual communities, which results in poor allocation of economic resources among them. Because local government relies so heavily upon the property tax, the chief obstacle to sound areawide planning is the competition among municipalities for land use developments which are productive of large tax revenues. The rationale of many zoning ordinances lies in fiscal competition rather than desirable spatial arrangement of uses. This kind of policy is self-defeating, however, and may result in a reduction of total economic resources for the area as a whole.

In helping to coordinate public functions, the planning agency affects the efficiency with which most of the other public services will be provided. This type of planning benefits accrues to local and areawide services alike: fire protection and recreation programs as well as water supply, sewage disposal, and transportation.

Within the planning framework provided for the area by plans for generalized land use, transportation networks, major utility lines, public capital facilities, open space and urban renewal, planning by individual communities creates benefits which are largely confined within their boundaries. Local land use limitations, as long as they conform to areawide requirements, create basically local benefits. Similarly, since there **is** little spillover among communities of benefit from local playgrounds and parks, fire stations, police precinct stations, distributional water and sewer lines, etc., planning of capital facilities for these functions creates essentially local benefits. The placement of shopping areas, industrial neighborhoods and residences of varying density, as well as public facilities, near the borders of a municipality does affect its neighbors, however. **It** is therefore necessary for local and areawide planning to be closely coordinated.

Geographica 1 Adequacy

Major forces determining the direction and intensity of urban physical development in metropolitan areas are areawide in nature. They are not contained within the boundaries of individual municipalities. This conclusion is clear from the analysis of other functions in this study, such as transportation, air pollution control, water supply and sewage disposal, and housing, all of which are influenced by, and have an influence on, **area-**wide economic, political and social forces. The areawide nature of these forces is just as evident in the private sector of the metropolitan economy.

Underlying the physical and economic development of a metropolitan area are the various governmental decisions which determine what specific pieces of land may and may not be used for. Orderly development requires coordinated planning of these governmental decisions. Recommendations on this planning, based on comprehensive research, is a most important function of a governmental planning agency.

Thus, from the standpoint of most effective provision of urban services of many kinds, for the general planning of which the governmental planning agency should be responsible, as well as from the standpoint of the orderly use of land by both public and private users, an areawide planning approach is essential.

At the same time, however, localized planning is also needed: (1) for coordination of urban functions provided on a municipality-by-municipality basis so as to produce the most effective overall local program, and (2) for guidance of local development within areawide guidelines proposed by the metropolitan planning body.

Experience with Larger-Area Performance

As noted in "Current Practice," there are many metropolitan planning agencies in operation. Among them are the Inter-County Regional Planning Commission (Denver), Regional Planning Agency of South Central Connecticut (New Haven), National Capital Regional Planning Council (Washington, D. C.), Atlanta Region Metropolitan Planning Commission, Northeastern Illinois Metropolitan Area Planning Commission (Chicago), and Metropolitan Planning Commission (Portland, Ore.). In 1962 the Association of Bay Area Governments (ABAG), an organization of local officials covering nine counties in the San Francisco area, indicated its intention to undertake general planning for the area.

M. HOUSING

The housing function of urban government comprises the activities conducted to assure the provision of safe, decent, and sanitary housing for residents of the urban area. The task of providing housing is primarily the responsibility of the private housing industry. The industry is affected by the whole range of urban government activities, in the same sense that these activities affect the private economy generally by the "governmental climate" they create. Of most direct importance for the private housing industry, however, are the governmental activities of planning, subdivision regulation, zoning, and building and housing code regulations, since they restrict the location and costs of building, using, and maintaining private housing.

To the extent that the private housing industry is not meeting the needs of low-income groups, moreover, urban government takes direct action to provide housing. Such action usually consists of local government's construction, maintenance, and operation of housing units (public housing), sometimes as an integral part of urban renewal projects. It may also include supplementing the income of low-income persons and families, by rental payments or subsidies paid to private industry to construct and operate housing for low-income tenants. Low income groups in this context include families who are above the income level of the indigent receiving public assistance for dwelling and other basic maintenance needs, as well as many who are on public assistance, but all are below the income level needed to obtain standard housing.

Current Practice

Subdivision regulation, zoning, and building and housing code regulations are largely the functions of municipalities. Of 1,180 cities over 10,000 population responding to a 1961 survey, 906 (78 percent) had regulations covering the subdivision of land, and over 84 percent had zoning controls. ^{1/} A survey

^{1/} Municipal Year Book 1961 (Chicago: International City Managers' Association, 1961), p. 272.

in 1960 revealed that 229 cities over 10,000 population had housing maintenance standards. 2/ In 1951, 2,233 municipalities had building codes. 3/ In-December 1962, of 1,130 municipalities having an approved "workable program" with the Urban Renewal Administration, 900 or 80 percent had building codes. 4/

A 1962 survey reported that of 221 urban counties responding, 104 (47 percent) had zoning ordinances in effect. In most cases, however, these ordinances were effective only in the unincorporated areas. The survey revealed that 135 counties (61 percent) had subdivision regulations, again with most of them effective only in unincorporated areas. 5/

At the end of 1960, 1,496 separate localities were participating in public housing programs involving National funds. 6/ A 1962 survey revealed that only 15 of 221 urban county governments were providing public housing, indicating that the great bulk of local housing agencies were municipal. 7/ However, although the agencies were municipal, their area of operation usually included an area 5 to 10 miles surrounding the municipality. Also, most of the State housing authorities laws provided for cooperation between housing authorities and for the establishment of regional (comprising groups of counties) and consolidated (comprising groups of cities) housing authorities. (For discussion of current practice with respect to planning and urban renewal, two other urban functions affecting the housing function, see pages 213-225 and 241-251, respectively.)

2/ Municipal Year Book 1960 (Chicago: International City Managers' Association, 1960), p. 318.

3/ Housing and Home Finance Agency, Building; Regulation Systems in the United States (Washington: 1951).

4/ Information received from Urban Renewal Administration, Washington, D. C., .January 29, 1963.

5/ Municipal Year Book 1962 (Chicago: International City Managers' Association, 1962), pp. 62-63.

6/ Municipal Year Book 1961, op. cit., p. 313.

7/ Municipal Year Book 1962, op. cit., pp. 62-63.

Role of National Government

Until the economic depression of the 1930's, housing was invariably regarded in the United States as an exclusive responsibility of private enterprise rather than of government, although municipal governments sought to maintain housing standards through zoning and building and housing code enforcement, as they continue to do today. Early in the 1930's the National Government entered the housing field in order to stimulate building, as well as clear **slums** and provide housing for low-income groups. The National Government in 1932 authorized loans to corporations formed to put up housing for families of low income, or to reconstruct slum areas. In 1933 the law was revised to permit loans to State and local governments as well. Few loans were sought by either private corporations or State and local governments. The National Government then entered the public housing field directly, building housing projects under the Public Works Administration and acting as landlord and operator of the projects.

The National Housing Act of 1934 created the Federal Housing Administration, which has become a major Federal tool for stimulating private building. Its aim is to encourage and stabilize the home-mortgage market, and improve home financing practices and housing standards and conditions. These purposes are accomplished through insurance of loans and mortgages to finance purchase, production, repair and improvement of residential properties, including the building or rehabilitation of housing in urban renewal areas and housing for low-and moderate-income families and families displaced by urban renewal projects or other governmental actions. Insurance is granted subject to FHA-prescribed minimum property standards. As of June 30, 1962, \$77 billion of insurance had been written with \$39 billion outstanding.

The Servicemen's Readjustment Act of 1944 provided a similar mortgage insurance program for veterans. By 1960, the Veterans Administration had insured 3,530,000 first mortgages for a total of \$29,872 million.

In **1937**, as the result of a court decision denying the National Government the use of the power of eminent domain for purchasing land to construct public housing, **8/** Congress revised

8/ United States v. Certain Lands in Louisville, 78 Fed. 2d 684 (1935).

the national policy from one of national construction and operation to national assistance for local communities prepared to provide public housing under State authorization. It authorized national financial assistance to any State, county, city or other governmental entity or public body empowered to develop or administer low-rent housing or slum clearance. Except for Oklahoma, Utah, and Wyoming, the States now have authorized establishment of local housing authorities to receive the national aid, and to build and manage housing facilities for low-income families. ^{9/} National assistance is in the form of capital grants or annual contributions to reduce rents, but the capital grant authorization has never been used.

The relationship of the National Government's low-rent public housing program and local government today is described as follows in a recent publication of the Housing and Home Finance Agency, the parent agency of the Public Housing Administration:

The federally assisted public housing program furnishes financial and technical assistance to local housing authorities in providing low rent public housing, the occupancy of which is limited to low income families unable to afford decent, safe, and sanitary private housing in the locality. The adoption of a Workable Program for Community Improvement, approved by the Housing Administrator, is required before this aid can be given.

A local authority, created under State law, determines the need for **low** rent housing, plans and constructs the housing, and manages it. The local governing body grants its exemption from Local taxes. The Federal Government, through loans or guarantees of loans, makes possible the financing of the housing, and makes an annual contribution to enable rents to be set within the reach of **low** income families.

^{9/} John D. Lange, "Housing and Urban Renewal," Municipal Year Book 1962 (Chicago: International City Managers' Association, 1962), p. 350.

Local authorities establish policies for admission of tenants that give consideration to the special needs of elderly persons and to families displaced by urban renewal projects and other public improvements.

Rents of public housing tenants are set in relation to their incomes. When a family's income rises above limits established for continued occupancy, it must move as soon as it can obtain other housing that meets its needs. From the rents collected, the local authority pays all operating expenses, including a payment, in lieu of taxes, to offset the cost of municipal services furnished. 10/

The National housing law describes the public housing agency to which loans and grants are made as "any State, county, municipality, or other governmental entity or public body . . . which is authorized to engage in the development or administration of low-rent-housing or slum-clearance." 11/ Unlike the urban renewal law, 12/ the low-rent-housing law does not encourage administration of the housing program by a metropolitan agency. This is permitted, however, under the low-rent law and has been utilized in at least two States (Delaware and Ohio) where the State Board of Housing establishes a housing authority for a metropolitan area (any county or part of a county). In Ohio, the area must comprise two or more political subdivisions or portions thereof but less than all the territory within a county. In Delaware, the area is any county or part of a county. Moreover, many State housing laws, as noted above, also provide for the creation of regional and consolidated housing authorities.

In summary, the FHA and VA mortgage-insurance program of the National Government provided great stimulants to construction of private housing, and the PHA program spurred urban government's entry into the direct provision of housing. Urban

10/ Urban Affairs and Housing, the Coordinated Programs of the Housing and Home Finance Agency (Washington: Government Printing Office, 1962), p. 20.

11/ 42 U.S.C. 1402 (11).

12/ 42 U.S.C. 1451 (b).

renewal programs, also substantially encouraged and guided by the National Government, frequently include some public housing projects because of the requirement that decent, safe, and sanitary dwellings be made available to families displaced by urban renewal projects, at rents or prices within their means. Furthermore, whether or not urban renewal projects include public housing, they encourage cities' housing activity by requiring local adoption of a "workable program," which includes minimum standards of planning, zoning, and code enforcement.

Role of State Government

In general, State governments do relatively little directly to affect local governments' exercise of building regulation, zoning, subdivision regulation and housing code powers. About 20 States have promulgated building codes, but with few exceptions, these have few specific standards, are only advisory to municipalities, and are limited to regulation of buildings other than private residences and farm structures. ^{13/} One notable exception is New York State, which has adopted a State building code. Localities have the choice of adopting the State code or an acceptable alternative.

Some State planning bodies provide technical assistance to localities on problems of subdivision regulation and zoning ordinances. The technical assistance consists of consultation, studies and surveys, model laws and regulations, and conferences. ^{14/}

California has a State housing code, which municipalities must adopt if they do not have their own. Michigan has a similar arrangement. New York and New Jersey have prepared model housing codes which localities may adopt by reference. Some of the States, such as New York and Tennessee, provide technical assistance to local units for preparation of a housing code. These States are the exception, however, and by and large the States have done little to move their local governments toward housing code adoption or to help them.

^{13/} Information received from Urban Renewal Administration, Washington, D. C., January 1963.

^{14/} See page 217 and William L. Frederick and Marilyn Gettell, State Technical Assistance to Local Governments (Chicago: Council of State Governments, 1962), pp. 29-32.

With respect to local housing aids, in 1962 **14** States were providing direct financial aid to their localities for housing to be rented or sold. 15/

Standards of Service

Specialists in planning, zoning, health, safety, building construction and related fields have set forth desirable minimum standards of subdivision regulation, zoning, and building and housing code regulation to assure a housing supply which is constructed and maintained in a safe, decent, and sanitary manner. 16/ Higher income communities maintain and in many cases exceed these standards. In communities containing lower economic groups, however, if the minimum housing standards were followed, the only housing available would be too expensive for some people. Such communities have the choice of (a) lowering the standard of regulation and code enforcement to a point where the private housing market will meet the needs of even the poorest; (b) retaining the desirable minimum standards but subsidizing those who cannot afford the housing built and maintained according to the standards; (c) a position somewhere in between: regulation and code enforcement below the minimum desirable standard and subsidizing fewer than the number subsidized under (b). Each community makes its own choice among these alternatives, and the choice determines its standards of regulation and code enforcement and its needs for subsidizing the housing of the low-income groups .

One writer, R. M. Fisher, says the community's decision is an economic one:

...the problem of substandard housing becomes first a matter of determining how much the public and private owners are willing and can afford to devote toward eliminating unsafe and insanitary housing in view of all other claims on their resources. Once

15/ Book of the States, 1962-63 (Chicago: Council of State Governments , 1962), p . 460.

16/ "Selected and Model Ordinances," Municipal Year Book 1962 (Chicago: International City Managers' Association, 1962), pp. 493-514, for references to ordinances and regulations containing such standards.

these limits are set, criteria of housing standards can then be adopted with a reasonable assurance of being attained through effective public action. 17/

The National Housing Act is not specific as to standards of sanitary, decent, and safe housing. Fisher concludes that this is deliberate policy in tacit recognition of the great variation in minimum requirements of local housing codes. 18/ But he notes that certain criteria are now fairly widely used by various housing experts and agencies, including the Public Housing Administration, as an index for purposes of broad and unrefined nationwide analysis. Thus, a dwelling unit is considered to be "standard" if it is not dilapidated and has a flush toilet and bath inside the structure for the unit's exclusive use, as well as hot and cold running water. The definition of dilapidation is that of the Bureau of Census used in the U.S. Census of Housing:

Dilapidated housing does not provide safe and adequate shelter. It has one or more critical defects; or has a combination of intermediate defects in sufficient number to require extensive repair or rebuilding; or is of inadequate original construction. Critical defects result from continued neglect or indicate serious damage to the structure. 19/

Recognizing the great variations that exist in communities throughout the Nation, the PHA specifies further criteria which may be used by local authorities in analyzing local housing. PHA's Low-Rent Housing Manual states that PHA considers the existence of any of eleven conditions an adequate basis for determining that a dwelling is unsafe, unsanitary, or overcrowded. The eleven conditions refer to location, condition of structure, water supply, sewage system, toilet, bath,

17/ Robert Moore Fisher, 20 Years of Public Housing (New York: Harper and Brothers, 1959), p. 30.

18/ Ibid., p. 61.

19/ U.S. Bureau of the Census, U.S. Census of Housing: 1960, Series HC(3)-68, p. x.

kitchen, lighting or heating facilities, light and ventilation, and overcrowding. HHA leaves it up to local authorities to modify or add to these criteria to meet local conditions. 20/

If in applying the standards set forth in the HHA Housing Manual a community finds it has substandard housing, and then wishes to obtain Federal financial assistance, it must be able to show that the people to whom it seeks to provide the housing fall below certain income standards. It must demonstrate "to the satisfaction of the Authority (Public Housing Administration) that a gap of at least 20 per centum (except in the case of a family displaced by urban renewal or other governmental action or an elderly family) has been left between the upper rental limits for admission to the proposed low rent housing and the lowest rents at which private enterprise unaided by public subsidy is providing (through new construction and available existing structures) a substantial supply of decent, safe, and sanitary housing toward meeting the need of an adequate volume thereof." 21/

The law also imposes limits on the costs of the dwelling units since costs affect the allowable rental. The cost of construction and equipment (excluding land, demolition and non-dwelling facilities) shall not exceed \$2,000 per room (\$3,000 per room in the case of Alaska, or in the case of accommodations designed specifically for elderly families \$3,000 per room and \$3,500 per room in the case of Alaska). Under exceptional local conditions the limit may be raised by up to \$750. 22/

Specialists' Suggestions

Minimum building and housing requirements inevitably raise the cost of providing and maintaining housing, and thereby reduce the likelihood of the private housing industry's meeting the needs of low-income groups. It is important, therefore, that standards should not be excessive, or otherwise contribute unnecessarily to increased costs.

20/ R. M. Fisher, op. cit., p. 31.

21/ 42 U.S.C. 1415 (7)(b).

22/ 42 U.S.C. 1415 (5).

Some actions of local governments do unnecessarily raise the cost of housing. They stem from the numerous jurisdictions in the metropolitan areas. As stated by a trio of housing experts:

There is almost no uniformity among the zoning, subdivision, and building controls that are operative throughout a metropolitan area. As a result there is frequently a mixture of land uses that is unsightly and costly; there are severe diseconomies to the builder, who cannot easily assemble land in quantity or build to consistent specifications; and finally, there is an inequitable allocation of housing and community facilities. 23/

Thus it appears that better coordination of planning, zoning, and building controls in the metropolitan area would reduce the cost of housing.

James E. Lash, executive director of ACTION, the organization for stimulating citizen participation in urban renewal activities, says:

Various policies and actions of numerous jurisdictions affect the housing market. The potential we have glimpsed for urban renewal will evade us until we develop a better understanding of the market, plan for it and accomplish the means of cooperating to increase the market's effectiveness....

A basic fact not yet given cognizance by either our public programs of housing and urban renewal or by private enterprise is that the housing market is metropolitan in scope, operating across the conglomeration of municipal and county jurisdictions in all our metropolitan areas. Both public policy and private actions function in confusion

23/ Martin Meyerson, Barbara Terrett, William L. C. Wheaton, Housing, People and Cities (New York: McGraw-Hill Book Company, Inc., 1962), p. 318.

and often contradiction without continuing fact-finding and analysis of what is actually happening in the local metropolitan housing market. 24/

The areawide character of the urban housing market also was pointed out by a committee of the American Institute of Planners: "...sound urban renewal demands that the real estate and housing market of the metropolitan area be treated as an economic unit." 25/

Income and racial discrimination is an important influence in the private housing market. 26/ Builders, lenders, and real estate agencies feel pressures to restrict the neighborhoods in which they will provide housing to particular income or racial groups. Not only does this have a direct effect on the ability of these groups to obtain housing they want; it also tends to keep down the quality of the housing which they are permitted to occupy by creating pressure for easing up on housing code enforcement.

One writer explains the problem as follows:

Political pressure by owners to prevent the adoption or enforcement of such ordinances 27/ has been great. The same is true of occupation density, and "safe-and-sanitary-condition" ordinances. They exist commonly enough, but are difficult to enforce. For one thing, the slum owner can frequently defy the inspector. "Go ahead, board up the place! See what happens!"

24/ James E. Lash, "Renewal: Area Problem," National Civic Review, Vol. LI, No. 4 (April, 1962), pp. 201, 204.

25/ American Institute of Planners, The Role of Metropolitan Planning, Metropolitan Conference Committee, Findings and Recommendations (Chicago: 1962), mimeo., p. 4.

26/ See Edward C. Banfield and Morton Grodzins, Government and Housing in Metropolitan Areas (New York: McGraw-Hill, 1958), p. 29 ff.

27/ Reference is to ordinances authorizing cities to repair housing to a minimum standard and assess the cost against the owner.

What happens, of course, is that the slum dwellers are more concerned about being put out on the street, or forced into more expensive housing, or having to leave a comfortable, well-known neighborhood than they are about unsafe, unsanitary, and illegal conditions which exist. The owner knows this is the case. It is often his most powerful weapon. Owner and renter pressures are both applied against enforcement. S/

Even after removing the barriers to the most effective functioning of the private housing industry, in many metropolitan centers there still are people who cannot afford to purchase or rent safe, decent, and sanitary housing. In order for urban government to assure standard housing for these people, it must provide a subsidy, either through directly owning and operating housing facilities or a rental payment to a private housing owner. State and National governments' low-rent housing programs are directed at this group.

Application of Selected Economic and Political Criteria

Benefit Area

The housing function of local government consists of assuring safe, sanitary, and decent housing for all, regardless of income. While the function as performed is concerned mainly with providing the conditions under which the private housing industry can supply an adequate amount of standard housing, it becomes a welfare function when it consists of direct provision of housing. As such, the housing function has large spillovers of social costs and benefits from local government, all the way to the National Government. This is implicit in State and National government programs of financial assistance to public housing at the local level, paralleling their financial participation in public assistance programs, which include payments for shelter. In consideration of the basic reliance placed on the private housing industry to supply housing for all, however,

281 Charles R. Adrian, Governing Urban America, 2nd edition (New York: McGraw-Hill, 1961), pp. 455-456.

it is essential to analyze the manner in which activities of individual local governments affect the private housing industry's efforts, and to determine how action of individual localities fosters or hinders those efforts, and affects similar action of other localities.

Local government regulates the location and quality of private housing through enactment and enforcement of ordinances. The effects of individual localities' restrictive or permissive residential zoning and building codes on other localities' efforts to stimulate private housing are probably as great as their codes' effects on housing supply within their own boundaries. These spillovers constitute a major point of conflict among metropolitan communities, especially between central cities and their suburbs.

Previous discussion of planning at both municipal and metropolitan levels implies the enactment and enforcement of complementary zoning laws by these two jurisdictions. Insofar as local communities exercise their zoning to restrict lot sizes or land uses within their borders the effects are felt beyond their borders, by restricting the freedom of choice of housing consumers. Therefore, shifting necessary zoning responsibility to a metropolitan planning agency eliminates these zoning spillover effects. The larger jurisdiction does this by insuring, through its generalized zoning, that there are ample provisions for small lots and low-priced homes, suitably located, in the area as a whole to meet varying needs and preferences.

The spillover effects of municipal zoning and building codes are also felt by builders who operate throughout the metropolitan area and who are faced with higher costs because of wide variations in codes. Higher costs tend to reduce the supply of available housing. There is also some spillover of social costs, in terms of health standards and difficulty in maintaining property values, from communities with inadequate codes. These problems are particularly acute in outlying unincorporated areas where, uncontrolled by zoning, building and sanitation requirements, people build housing which may be substandard at the outset, or easily will become so. In time, substandard housing conditions and mixtures of land use tend to create a rural slum which may then blight surrounding areas. It can be upgraded only at a high financial and social cost, especially as land values rise with metropolitan growth.

Thus there are strong reasons for setting minimum standards for building and housing codes on an areawide basis. However, areawide minimum standards need not deny individual localities freedom to impose higher standards if they so desire, as long as such latitude does not interfere with the basic need for providing standard housing for varying needs and incomes.

There is also a spillover of social costs from communities, usually suburbs, erecting an arbitrary barrier against lower income families and nonwhites. Unusually high standard housing and zoning codes may be part of the barrier, abetted by a complex of practices carried on by the private housing industry--builders, lenders, real estate agents--supported and sometimes encouraged by the general public. As a consequence of residential exclusion practices, lower income families and nonwhites are confined to the central cities, where a large supply of older housing is available at substantially lower prices than prevail in the exclusive suburbs. Much of the older central city housing is substandard, however, so that if the city is to raise its housing standards large numbers of families must be displaced. If the suburbs are closed to them they must either overcrowd currently standard city housing, which soon declines, or find new housing within the city. Higher building standards, coupled with much higher land values in the central city, render the cost of new housing prohibitive to lower income groups, except where facilities may be provided under such programs as FHA-insured housing for low-income families.

Because of the sequence of events sketched above, public housing is found primarily in central cities. Its benefits are not so confined, however. While the direct beneficiaries are chiefly the tenants, residents of exclusive suburbs derive indirect benefits through reduction of pressure upon them to admit minority or low-income groups. Conversely, suburban policies impose external costs upon central cities for slum clearance, public housing, loss of property tax base and increased health, welfare and police expenditures. Furthermore, confinement of the majority of families who are eligible for public housing to the central city deprives many suburban low-income families of benefits of public housing. Because they are usually found in relatively small numbers within any single suburban community, the unit cost of supplying low-rent housing to them is higher than the suburb is willing to pay.

Geographic Adequacy

The spillover of costs and benefits in municipalities' discharge of their housing responsibilities indicates the obstacles to trying to control the forces affecting the housing market by separate actions of individual municipalities. The private housing market is basically areawide: housing consumers, within the limits of restrictions imposed by income and discriminatory practices, look for housing wherever it is provided in the area, so long as it is within reasonable distance of their employment, and shopping, recreational, religious, and cultural facilities they need. Similarly, the housing industry, subject to governmental regulations and private or governmental policies of discrimination against minorities, builds and maintains housing to satisfy consumers from the entire area.

Experience with Larger-Area Performance

The housing authority of Allegheny County, Penn., is responsible for public housing in 12 localities. Pittsburgh, which has its own housing authority, is excluded. Fresno, Kern, Marin, and Contra Costa counties in metropolitan areas of California have public housing programs. St. Louis County, Missouri, has jurisdiction for public housing in the suburbs outside the City of St. Louis.

Ohio has established a number of "metropolitan housing authorities" as special districts. Among the 17 tabulated by the 1962 Census of Governments are authorities in Cleveland, Dayton, Cincinnati, and Youngstown. Their jurisdiction covers at least **two** municipalities but less than the entire county in which they are located. Delaware has similar agencies in Dover, Newark, and Wilmington.

Throughout the country local housing authorities generally have authority to provide housing facilities within five or ten miles of the municipal boundaries.

(For examples of experience with larger-area performance of the regulatory aspects of the housing function, such as zoning and subdivision regulation, see urban renewal section.)

N. URBAN RENEWAL

Urban renewal is the "total of all the private and public actions necessary for the continuous sound maintenance and development of the urban area," 1/ "In its broadest sense, urban renewal is a continuous process whereby a local government attempts to put into effect whatever public measures and techniques are needed to restore and maintain a state of economic and social health. This kind of urban renewal exploits the natural cycle of a city's decay and resurgence; though initiated by government, it greatly depends on the approval and responsible actions of private citizens." 2/

Throughout history, and particularly since the industrial revolution, cities have been constantly in the process of renewing themselves, for they inevitably experience deterioration, obsolescence, and the need to readjust their physical resources in response to changing social and economic forces. The renewal process was not consciously planned and executed by many cities, however, until the National Government took an active interest in their physical conditions through the housing acts of 1949 and 1954. Urban renewal now carried on in most cities is a joint national-local activity, shaped largely by the National Government's policies and programs. 3/

Viewed broadly, many of the functions of local government contribute to the renewal of cities: police, fire, housing, code enforcement, health, welfare, water supply, air pollution control, waste collection and disposal, education, parks, street construction and maintenance, and others. In this sense, the functional standard for the determination of the size of jurisdiction best suited to the performance of urban renewal is the composite of the standards established for all these local government functions.

In the restricted and more commonly accepted meaning of neighborhood conservation, rehabilitation, and redevelopment, urban renewal comprises chiefly the functions of planning and zoning, code

1/ James E. Lash, "Renewal: Area Problem," National Civic Review, Vol. LI, No. 4 (April 1962), p. 201.

2/ Local Planning Administration 3rd ed. (Chicago: International City Managers' Association, 1959), pp. 152-153.

3/ Ibid., p. 149.

enforcement, and relocation of displaced persons and businesses, and the acquisition, clearance, and disposal of land. Important to the successful performance of these is citizen support and participation, which is one of the seven specific elements of the "workable program" required by the Federal Government as a condition of urban renewal grants.

Current Practice

The National Housing Act provides that urban renewal loans and grants shall be made to local public agencies, which are defined to include "any State, county, municipality, or other governmental entity or public body, or two or more such entities or bodies, authorized to undertake the project for which assistance is sought." 4/ The Act also directs the administrator to "encourage the operations of such local public agencies as are established on a State, or regional (within a State), or unified metropolitan basis or as are established on such other basis as permits such agencies to contribute effectively toward the solution of community development or redevelopment problems on a State, or regional (within a State), or unified metropolitan basis." 5/

As of December 4, 1962, the Urban Renewal Administration had grant and loan contracts with 593 local public agencies, of which 571 were municipal bodies and 19 were county units. Puerto Rico, Virgin Islands, and Hawaii completed the list of local public agencies. 6/ The 1962 Census of Governments reported 1,099 "housing and urban renewal" special districts in 37 States. 7/

Role of National Government

In the Housing Act of 1949, as amended, as well as in other legislation, Congress has enacted a number of provisions for assistance to urban renewal areas, including loans, grants, technical assistance, and special mortgage insurance. Taken together they

4/ 42 U.S.C. 1460(h).

5/ 42 U.S.C. 1451(b).

6/ Information received from Urban Renewal Administration office, Washington, D. C.

7/ U. S. Bureau of the Census, "Governmental Organization," Census of Governments: 1962, Vol. I, Table 12, p. 66.

represent a "kit of tools" making possible a partnership among local governments, private enterprise, citizens, and the National Government to try to eliminate slums and the causes of urban blight. The Urban Renewal Administration describes the Federal-local relationship in urban renewal as follows:

Urban renewal is a local program--locally conceived, planned, and executed. It is a concerted effort by a community, through its public and private resources, to prevent and correct urban blight and decay and to set in motion long-range, planned redevelopment. It has three main elements :

- (1) Slum prevention through neighborhood conservation and housing code enforcement.
- (2) Rehabilitation of structures and neighborhoods.
- (3) Clearance and redevelopment of structures and neighborhoods.

Urban renewal projects are planned and carried out by a local public agency, which, depending on State law, may be a separate public agency, a local housing authority, or a department of a city government.

Federal assistance is available to help the community carry out its plans when local resources alone are not adequate to do the job. To qualify for Federal assistance to an urban renewal project, a community must adopt, and have certified by the Administrator of the Housing and Home Finance Agency, a Workable Program for Community Improvement, in which it commits itself to the attainment of certain objectives. 8/

8/ Housing and Home Finance Agency, Urban Renewal Administration, The Urban Renewal Program, Fact Sheet (Washington: 1962), p. 1.

The seven elements of the workable program include: (1) adoption and effective enforcement of minimum codes of health, sanitation, and safety, (2) formulation of a comprehensive community plan, (3) identification of blighted neighborhoods and analysis of the extent and causes of deterioration, (4) setting up adequate administrative organization, (5) development of adequate financing, (6) provision of standard housing for all families displaced by urban renewal or other government activities, and (7) development of citizen support and participation.

The National Government's financial aids include grants for the preparation of full-range renewal programs on a community-wide basis, aids in planning and carrying out specific urban renewal projects and in planning general neighborhood areas, grants for demonstrations of urban renewal techniques and for acquisition of land for permanent open-space uses, special FHA financial aids and public housing assistance to provide low-cost private or public housing for families displaced by urban renewal or other public activities.

There are some who maintain that the urban renewal program can and should be carried out by localities without the aid of the National Government, through active code enforcement, tax policies, zoning, improvement of municipal housekeeping, clearing up of land titles, and effective tax collection procedures. ^{9/} Furthermore, in 1957 the Joint Federal-State Action Committee of Governors and national officials appointed at the request of the President, recommended in a preliminary progress report that the States should take on financial responsibility for planning advances on urban renewal property. ^{10/} Despite these counter-movements, however, the National Government continues to be closely involved in stimulating and guiding urban renewal. In fact, the 1961 amendment to the Housing Act actually expanded National participation in urban renewal.

^{9/} See Thomas F. Johnson, James R. Morris, Joseph G. Butts, Renewing America's Cities (Washington: The Institute for Social Science Research, 1962).

^{10/} Joint Federal-State Action Committee, Final Report to the President of the United States and to the Chairman of the Governors Conference (Washington: Government Printing Office, 1960), p. 34.

Role of State Government

State participation in urban renewal is generally limited to legislative authorization for localities to undertake slum prevention and clearance. At the end of 1961, all but five States had given such authorization. The five were Idaho, Louisiana, South Carolina, Utah, and Wyoming. A few States were participating directly in urban renewal activity, however. New York, Pennsylvania, Connecticut, and Massachusetts extended or authorized grants or loans to assist municipalities in paying the local share of federally aided renewal projects. The same four States, plus Louisiana, gave direct financial aid to local housing, which is frequently involved in urban renewal projects. ^{11/}

Specialists' Suggestions

The breadth of the objective of urban renewal affects the determination and application of standards of performance for this governmental function. Thus, since activities involved in planning and zoning, code enforcement, housing, relocation of displaced persons, and the acquisition, clearance, and disposal of land are included in the urban renewal function, standards of performance for each of these would together constitute the standard of performance for urban renewal.

In the analysis of the housing function, it was pointed out that the various specialists concerned see the need for planning for housing on an areawide basis because the housing market is areawide. However, it was also noted that the specialists stop short of recommending the execution of housing plans by an areawide unit of government.

As indicated in the planning function analysis, planners believe that while planning is necessary on a localized basis, in metropolitan areas there are forces of interdependency which make it important to have land use planning and zoning and the planning of certain functions also on an areawide basis. In its volume on Local Planning Administration, the International City Managers' Association states:

^{11/} The Book of the States, 1962-63 (Chicago: Council of State Governments, 1962), pp. 456-458.

The importance of working out the development and redevelopment of urban centers on a metropolitan-planned basis has been recognized.

Planning urban renewal on a metropolitan scale is justified in part because with the rapid spread-out of cities, more and larger investment will be needed in public facilities. Capital budgeting for improvements on a metropolitan basis has many arguments in its favor. Land-use programming and reclamation of dead subdivisions are particularly affected by the metropolitan considerations. Public housing sited on a metropolitan basis, in some cases, would be an advantage. Other advantages are improved distribution of industrial areas, including provision for adequate space for future plant expansion, and overall reduction in the journey-to-work, helping to decrease traffic loads. 12/

Regarding urban renewal, the American Institute of Planners has said in its policy statement on urban renewal:

America's domestic and foreign economies rely upon the efficiency of the great "urban plant" contained within these (metropolitan) areas. Their people and their housing and community facilities are the mainspring of our national efforts in both peace and war. Accordingly, the health of these areas, in terms of urban living conditions, is vital to our national welfare.

The dimensions of a national urban renewal program must be set in terms of metropolitan housing and transportation requirements together with the ancillary public works programs attendant upon proper metropolitan functioning. There is simply no lesser strategy possible if we are interested in survival....13/

121 Local Planning Administration, op. cit., p. 185.

13/ "Urban Renewal--A Policy Statement of the American Institute of Planners," Journal of American Institute of Planners, Vol. XXV, No. 4 (November 1959), p. 219.

The American Institute of Planners made the following recommendation, among others:

2. The concept of the workable program should be retained and strengthened to insure that the total resources of the community are employed in the urban renewal program both to prevent and eliminate blight, and that urban renewal is constructively related to the total urban and metropolitan complex through the instrumentality of a sound and comprehensive general plan.. ■

5. Although urban renewal is by definition an urban program, its scope should be broadened to enable it to accomplish vital conservation in non-urban areas and in the pre-urban fringes of metropolitan areas. 14/

Others have affirmed the need for urban renewal policies and planning to be coordinated on an areawide basis:

The entire community must be considered in planning urban redevelopment projects. There are blighted areas in the suburbs and in the unincorporated fringe as well as in the central cities: there are areas of near blight and of probable deterioration; and in the rapid building up of these suburbs we are certainly sowing the seeds for the next generation's blight.

Furthermore, the pressures that affect the use of land in a metropolitan area cannot be excluded by the boundary lines of a municipal corporation.....

Another reason why the entire community must be considered in the planning of urban redevelopment projects is that the success or failure of a redevelopment scheme depends in large part upon social and economic trends in the community. 15/

14/ "Urban Renewal--A Policy Statement of AIP," op. cit., p. 221.

15/ Victor Jones, "Local Government Organization in Metropolitan Areas: Its Relation to Urban Redevelopment," Part IV, The Future of Cities and Urban Redevelopment, ed. Coleman Woodbury (Chicago: University of Chicago Press, 1953), p. 483.

In a special report on Guiding Metropolitan Growth, the Committee for Economic Development suggests that areawide coordination should affect not only the planning and policies of urban renewal, but also the actual carrying out of the plans and policies:

The Committee feels that planning for urban renewal should be on an area-wide basis in accordance with metropolitan plans. The subdivision of renewal responsibilities among the many municipalities in metropolitan areas undoubtedly results in the misplacement of public and private facilities and a general misallocation of resources. The Committee recommends that the Urban Renewal Administration give special preference in financial and administrative assistance to communities where workable programs and renewal planning are carried out on a metropolitan-wide basis. 16/

The Executive Vice President of ACTION emphasized the metropolitan orientation of the housing aspect of urban renewal in the statement quoted earlier. 17/

Application of Selected Economic and Political Criteria

Benefit Area and Geographic Adequacy

As a program designed to improve the economic and social health of a locality, urban renewal's principal direct benefits accrue to the residents of the locality in terms of stabilized or enhanced property values and reduction in the costs of crime, delinquency, substandard housing, and social dependency. As an outgrowth of the housing problem discussed earlier, urban renewal is necessitated in the first instance by the obsolescence of structures and neighborhoods. When the cleared area is rebuilt, however, the people originally displaced usually do not return. If they are members of minority groups they are severely limited

16/ Committee for Economic Development, Guiding Metropolitan Growth (1960), p. 61.

17/ See page 235 above.

in the places to which they can relocate. Often they create new slums crowding into what are currently borderline areas. Thus, suburban communities practicing residential exclusion impose spillover costs on the city undertaking an ambitious urban renewal program. Elimination of these spillovers requires areawide housing measures.

When an urban renewal program is designed primarily for conservation of a residential neighborhood or business district and does not involve mass displacement of residents, its direct benefits are more narrowly confined to the locality. Redevelopment projects affecting the location and development of major commercial and industrial enterprises clearly create spillovers of benefits and costs beyond the municipality's boundaries.

Economic decisions made in one part of the area affect economic development in other parts. Urban renewal's aim is to retard economic deterioration in individual communities and to revitalize them. Just as original development of those communities had areawide effects, and was affected by economic forces in other parts of the area, similarly with redevelopment. Generalized land use planning and zoning by an areawide planning agency provide basic guidance for such redevelopment.

Economy of Scale

Planning and carrying out urban renewal projects require specialization of personnel, organization, techniques, and procedures. Some lower unit cost of output results from experience gained by repetition in planning, housing, and building code preparation and enforcement, acquisition, assembly, and disposition of land, and relocation of families, businesses, and industries.

Citizen Participation

One of the seven elements of the Federal Government's workable program is the development of citizen support and participation. Even if there were not a requirement under the Federal workable program, municipalities probably would find it necessary to include it as an essential element because it is the only way in which local governing bodies can assure themselves of getting citizen support. While few argue with the long-run general objectives of urban renewal, carrying out the details is another matter. The least drastic types of program--neighborhood conservation and rehabilitation--create out-of-pocket costs for individual property owners.

Unless they are fully informed on the long-run effects, they are likely to resist. Citizen involvement in the planning and carrying out of a conservation and rehabilitation campaign is indispensable for communicating information and thereby obtaining citizen understanding. The same is even more true for the more drastic renewal program--clearance and redevelopment .

So far as the Federally aided urban renewal programs are concerned, the requirement for citizen participation and support is uniform with regard to size of jurisdiction. It seems questionable whether jurisdictional size as such affects a municipality's ability to obtain citizen support and participation. This depends more on such factors as the quality of governmental leaders, their dedication to the renewal program, and the effectiveness of local urban renewal administrative organization and personnel. It would seem, moreover, that any program aiming to obtain citizen support and participation necessarily will provide a good basis for citizen accessibility and control. The latter is indispensable to the former.

Experience with Larger-Area Performance

The urban renewal authority of Allegheny County, Penn., Alexander County (Cairo), Ill., and Jefferson County (Louisville), Ky., are examples of agencies exercising jurisdiction over areas including a number of localities. Generally speaking such county authorities have jurisdiction throughout their territory except in municipalities which have established their own renewal agencies.

Dade County (Miami), Fla., has an urban renewal program. The county adopted an urban renewal ordinance early in 1960, providing for rehabilitation, clearance, and redevelopment of slums and blighted areas in accordance with plans approved by the County Commission. The ordinance may be applied to a given municipality only upon adoption by the Commission of a resolution declaring that one or more blighted areas exist in the municipality and that redevelopment is necessary.

Numerous counties exercise zoning and subdivision regulations, two of the tools needed for control of urban development and renewal. Counties that have subdivision regulations applying both to unincorporated territory and to incorporated places without such regulations of their own, include Allegheny (Pittsburgh), Dallas, Jackson (Kansas City, Mo.), Jefferson (Birmingham), Marion (Indianapolis), Oakland (Detroit area), and Santa Clara (San Jose). Counties that exercise similar zoning authority

include Dade (Miami), Jefferson (Birmingham), Santa Clara (San Jose), Montgomery (Washington, D. C. area), **Polk** (Des Moines), and Bibb (Macon).

In Dade County, the South Florida building code and subdivision regulations were in effect in 1962 for both incorporated and unincorporated areas. Municipalities conducted their own inspections and issued certificates of occupancy for properties within their borders.

O. TRANSPORTATION

The function of metropolitan transportation generally is to move persons and goods into, out of, around, and through cities and their suburbs. There are a number of modes of transportation, i.e., auto, truck, bus, railway transit, railroad, plane, etc. Each mode of transportation has three major parts: (1) a vehicle for carrying people and goods; (2) a facility on, or through, which the vehicle travels; and (3) a terminal which serves as a point of assembly and dis-assembly of people and goods, and provides a transfer function within and between modes.

A comprehensive catalogue of transportation activities would include planning and programming, design and construction, operations, maintenance, as well as administrative activities normally part of any governmental agency or department. 1/

Transportation planning and programming are tools for determining traffic and transit needs and the most practical ways to meet them. It is a staff function that serves to correlate all broad elements of design and construction, maintenance and operations. Minimum basic responsibilities are: (1) Conducting studies of traffic volume, peak loads, origin and destination of trips, parking, speed, and delay, street classification and capacity, and research in related areas. (2) Determining present and future needs for streets, street lighting, parking, transit facilities, and terminal facilities, and establishing priorities for such facilities. (3) Participating in the preparation of a master transportation plan. Such a plan should relate transit and auto transportation to each other and to overall city development. This includes all plans involving transit, street, and terminal improvements. (4) Coordinating transportation improvement programs with other municipal activities. (5) Developing financial plans so that the improvement program can be carried out.

1/ Thomas J. Seburn and Bernard L. Marsh, Urban Transportation Administration (New Haven: Yale University, 1959); National Committee on Urban Transportation, Better Transportation for Your City (Chicago: Public Administration Service, 1958), pp. 83-85.

The design and construction function involves the major duties of: (1) Establishing standards for the design and construction of all transportation facilities. (2) Conducting surveys to determine line, grade and elevations. (3) Preparing detailed engineering drawings and specifications of all new street, transit, and terminal improvements. (4) Construction of facilities. (5) Inspecting the construction of all improvements and review of all contracts for transportation improvements.

The general task of transportation operations is making sure the total available system is used to best advantage, This means efficiency in the movement of people and goods and maximum safety, comfort, and convenience to all users. Principal responsibilities include: (1) Determination of the location, type, and specifications of traffic control devices. (2) Determination of necessary controls on curb parking, standing, and stopping. (3) Installation and timing of traffic signals. (4) Establishment of turning controls, one-way streets, through streets, stop intersections, and any other measures deemed necessary. (5) Development of transit routes, schedules, and service improvements.

The primary purposes of maintenance are to keep the physical plant in good operating condition, and to protect the large public investment in transportation facilities. Principal duties are to: (1) Maintain and repair all transportation facilities and structures. (2) Maintain all transportation equipment, including transit vehicle and street maintenance machinery. (3) Install and maintain uniform signs, pavement markings, parking meters, street lights, and traffic signals. (4) Perform repair and upkeep of streets, bridges, and drainage systems. (5) Care of roadsides and street trees.

Current Practice

As indicated in Table 3 in Chapter 1, counties, townships, municipalities, and special districts share local government responsibility for highway expenditures throughout the country. In the metropolitan areas, the pattern of responsibility is fairly uniform with States primarily administering the main trunk highways, the counties the bulk of the nonurban roads, and municipalities the urban streets. Sidewalks, curbing and street lighting are invariably provided by the municipal government, sometimes financing them by special assessments. Municipalities also usually regulate traffic and parking within their

limits. In 1960, three-fourths of cities over 10,000 population surveyed had publicly owned parking lots. 2/

Bus and trolley lines usually are regulated by State public service commissions as to rates, routes, and service, although in some States localities may have exclusive or supplementary control over one or more of these regulatory aspects. In 1962, 2.1 percent of 2,800 cities over 5,000 population surveyed owned and operated mass transit systems. 3/ Nine of the 21 urbanized areas of more than 600,000 population in the United States and Canada are now served by publicly owned transit systems. 4/

Among special districts, a 1956 tabulation showed eight districts providing one or more types of transportation service on a metropolitan area basis. 5/

Role of State Governmn

Primary responsibility for building and maintaining highways has traditionally centered in the appropriate agencies of State government. Recognizing this, the Federal highway program has worked through State agencies. The State also has played an important role in dealing with the transportation problems of urban centers since over 50,000 miles of the total 709,000 State-administered roads and streets are within cities and towns. Of total State funds expended on capital outlay for State-administered highways in 1960, 29 percent was for municipal extensions of State systems. Ten percent of State disbursements for maintenance of highways

2/ Municipal Year Book 1961 (Chicago: International City Managers' Association, 1961), p. 430.

3/ Municipal Year Book 1963 (Chicago: International City Managers' Association, 1963), p. 167.

4/ W. Norman Kennedy, "Major Problems of Metropolitan Transportation," Metropolitan California (Sacramento, California: The Governor's Commission on Metropolitan Area Problems, 1961), pp. 172-173.

5/ Municipal Year Book 1956 (Chicago: International City Managers' Association, 1956), pp. 47-55.

the same year was on municipal highways. The overall share of total State funds spent on State-administered highways for municipal extensions of State systems was 26 percent. 6/ In addition are the State built and maintained county highways and roads that may also be within a metropolitan area.

State highway departments' role in relation to localities is both a supervisory and operating one. For the most part supervision is exercised over county highway administration. State highway departments provide direction, inspection, advice, and mutual help. 7/

Role of Federal Government

As early as 1916 the National Government was involved in shaping State and local road policy through a system of grants-in-aid, influencing such decisions as highway routing and road numbering. In recent years Federal grants have been for four purposes--trunk highways, farm-to-market or secondary highways, urban extensions of Federal-aid highways, and the interstate highway system. The last--41,000 miles of proposed highway routes as a network linking State capitols and major population centers--was added by Congress in 1956.

In the Housing Act of 1961, Congress provided for the most emergent of the urban transportation problems. This Act authorized three programs of Federal assistance to local communities and regional bodies. First was a restatement of the "701" program of urban planning grants making it clear that transportation planning was an integral and necessary part of comprehensive planning, and that Federal assistance was available for coordinated planning of transportation facilities within metropolitan and regional areas. The second program authorized by the 1961 Act was designed to assist urban planning and research through demonstrations of new ideas and methods for improving mass transportation systems and service.

6/ "Highway Systems," The Book of the States, 1962-1963 (Chicago: The Council of State Governments, 1962), pp. 338, 342-343.

7/ William Anderson, Clara Penniman, Edward W. Weidner, Government in the 50 States (New York: Holt, Reinhart and Winston, 1962), p. 392.

The Federal Government was authorized to make grants to cover up to two-thirds of the cost of such demonstrations. The third program authorized Federal loans for mass transportation facilities in cases where financing was not available in the private market at reasonable terms. This part of the program expired on June 30, 1963.

In 1962 the President submitted to Congress a comprehensive urban mass transportation program. This was a long-range Federal program to assist State and local governments and public and private ~~mass~~ transportation companies to provide the kind of mass transportation facilities necessary for orderly growth and development of urban communities. Basically, the bill provided for a program of Federal loans and grants to supplement local and State funds to finance capital facilities and equipment needed for extension and improvement of comprehensively planned urban mass transportation systems. 8/ Essentially the same program was submitted again in 1963.

Current Problems of Metropolitan Transportation

Urban transportation is today beset by many problems due partly to its large number of component parts and due also to patterns of mid-twentieth century living. The constantly increasing use of the automobile has had a cluster of effects. 9/ Volume of use has made street and highway capacity obsolete almost as soon as a new artery is completed. Building of additional highways faces such problems as increasing costs of construction because of higher material and labor costs; rising prices of rights-of-way without adequate ability or authority to purchase in advance; higher standards of construction to carry increasing volume; and the need for additional lanes, elevations, or tunnels in thickly settled areas. The city with limited tax resources is barely able to pay for maintenance and improvement of existing streets without undertaking or developing new routes. Adding

8/ Robert C. Weaver, "The Federal Interest in Urban Mass Transportation," Traffic Quarterly, Vol. XVII, No. 1 (January 1963), pp. 25-27.

9/ For detailed discussion see: Wilfred Owen, The Metropolitan Transportation Problem (Washington: The Brookings Institution, 1956).

to the burdens of already overcrowded highways is the shift from "rail" to "rubber" of commuting vehicles. But a greater shift is away from **mass** transportation to private automobiles.

Other problems plague **mass** transportation. In many cities, bus and/or street railway companies must operate as profitmaking corporations in the face of rising labor and equipment costs, local and State taxes, falling passenger use, regulated fares, and peak-hour service requirements. Railroad commuter lines are burdened with the additional difficulties of inconvenient terminals both downtown and in suburban sprawl areas, unremunerative fares, and old equipment.

Problems also center about parking facilities for private autos, and truck and bus terminals. Too often the parking and loading problem is partially solved by using valuable street space, making traffic movement more difficult. Loading and shipping is further complicated by the location of older terminals which are often no longer convenient to the business district because of the pattern of city growth.

As a consequence of mass transportation problems passengers also suffer frustrations from transportation deficiencies: slowness of movement, discomfort, inconvenience, undependability, and costliness. 10/

Conclusions of Advisory Commission

In an earlier report, Intergovernmental Responsibilities for Mass Transportation Facilities and Services in Metropolitan Areas, the Advisory Commission commented at some length on the roles of the local, State, and Federal governments. The following are brief excerpts from that report.

Although the belief is not widely held that local government can and should "go it alone" with respect to the provision of mass transportation facilities and services, it is difficult to find responsible opinion, even

10/ Discussed in Advisory Commission on Intergovernmental Relations, Intergovernmental Responsibilities for Mass Transportation Facilities and Services in Metropolitan Areas (Washington: April 1961), pp. 6-7.

among the most vigorous advocates of a strong Federal role in this field, which does not concede at the outset that local government must continue to carry a large share of responsibility for this function.

While the localities must share in this responsibility, the urban transportation problem cannot be met on a piecemeal basis by municipalities and counties acting largely on an independent basis, since transportation within an urban area usually crosses municipal and county boundaries. Local governments have shown only a limited interest in developing regional concepts. Moreover, the fiscal limitations which necessarily exist in dealing with a problem of regional concern on a locality-by-locality basis makes the task of securing essential financing extremely difficult, because a fiscal base is needed which coincides with the service area involved, and, especially as to transportation, this cannot be met under existing systems of multiple and largely independent tax jurisdictions within a single area.

In the light of these considerations, most will agree that the State governments have a highly vital and necessary responsibility in coordinating and assisting local units of government in providing **mass** transportation facilities and services. However, opinion differs markedly on the relative breadth of State responsibilities, aside from regulation, depending on one's position regarding the role of the National Government, some holding to the view that it is hopeless to expect very much **of** the States and that the major burden must fall on a Federal-local partnership.

It is apparent that the main area of controversy with regard to responsibilities for urban **mass** transportation involves the question: "What action should the Federal Government take?"

In answer to this, the Commission recommended enactment of legislation by Congress: (1) to provide grants to assist State and local governments in developing comprehensive plans for mass transportation in urban areas; (2) to underwrite special demonstration projects designed to develop and test innovations in mass transportation facilities and service arrangements; and (3) to initiate a program of long-term low-interest rate loans to State and local governments for the construction and modernization of mass transportation facilities and equipment in urban areas. The Commission further recommended, however, that Federal support for special demonstration projects be restricted to projects undertaken at the initiative of the administering Federal agency.

Specialists' Suggestions

Most of the experts in the transportation field, as well as conferences concerning themselves with transportation problems of metropolitan areas, have concluded that an overall, integrated approach to transportation is a necessary prerequisite for any solution. Henry Fagin states:

The field is crowded with too many virtually independent agencies exercising responsibility. The problem is to find some mechanism for bringing them into better focus and inter-relationship. I have become convinced gradually that we must move in the direction of an overall region wide operating agency in the transportation field.

In the same paper, he quotes from the findings of the Woods Hole Seminar on transportation problems:

Significant progress will be made only when the vast array of elements that constitute urban transportation come to be recognized widely as a single, though complex, interacting system. The big need is to regard vehicles, rights-of-way, tracks and paving, control devices, mechanisms for loading and unloading, cars and containers,

terminal and interchange facilities, and charges, as integral parts of a larger sub-system--the transportation system. 11/

One author discussing the transportation problem at a highway conference said:

Probably no one point in the new highway challenge to the metropolitan area is more important than this -- the metropolitan problem is not highway transportation but total transportation.

No one type of transportation can function without regard to the impact upon other types. Cities are beginning to see the wisdom and necessity of a complete transportation plan. 12/

A recent article highlighted another aspect of a seeming bias toward highway development. 13/

The national bias favoring highway transportation is supported by a durable myth that highway users pay for their facilities. This premise is false, especially in big cities. A Chicago study in the mid-fifties revealed an annual city subsidy of \$84.54 for each motor vehicle using the city streets; a similar study in Milwaukee showed an annual average subsidy of \$90. Bureau of Public Roads statistics indicate that

11/ Henry Fagin, Mass Transportation: Who is Responsible? Paper given at the Sixty-Eighth National Conference on Government, National Municipal League (Washington: November 17, 1962), mimeo.

12/ Boyd T. Barnard, "The Impacts on Land from Metropolitan Growth," The New Highways: Challenge to the Metropolitan Region, Technical Bulletin No. 31 (Washington: Urban Land Institute, 1957), p. 21.

13/ C. W. Griffin, Jr., "Car Snobs, Commuters, and Chaos," Harper's Magazine (July 1962), pp. 54-55.

in 1960 the Nation spent about \$1.5 billion more for building, maintaining, and policing streets and highways than was received by Federal, State, and local governments from highway users.

Wilfred Owen, when analyzing the problem, stated:

Bringing together the various parts of the transportation system for purposes of planning, operation, and finance is not a panacea for the circulatory problems of the urban area. But without having at the outset the administrative machinery necessary to achieve a comprehensive physical plan, the basic tools with which to fashion a unified and effective metropolitan transportation system are missing. Decisions with respect to needed facilities cannot be wisely made unless alternatives can be weighed and the impact of action in one area measured in terms of its effect on another. Transportation solutions are limited when decisions are made separately for each segment of the transportation system. An overall approach, on the other hand, makes possible physical and financial opportunities otherwise absent: the design of expressways to accommodate public transit; the construction of parking facilities in conjunction with expressways; the establishment of joint rates and services; selection of the best methods of movement to accomplish specific transportation requirements; and the pricing of services as an aid to achieving desired transportation objectives. 14/

In another section, the same author wrote specifically to the point of necessity for comprehensiveness:

An effective solution to the urban transportation problem should meet three tests. First, it should be functionally

14/ Owen, op. cit., pp. 196, 259.

comprehensive by including all forms of transportation applicable to the problem. Second, it should be comprehensive geographically by including not only the city but the metropolitan area and all the affected region. Third, it should be comprehensive from a planning standpoint by assuring that transportation is used to promote community goals, and that community plans make satisfactory transportation possible. 15/

Another commentator has written that "of all the metropolitan public services urban transportation is possibly the worst sufferer from the chronic disease of fragmented control." 16/ He also outlined several objectives for a transportation policy: (1) To encourage urban areas to deal with their transportation problems on an overall integrated basis rather than piecemeal and to organize themselves on a metropolitan regionwide basis to attack problems which spill over the boundaries of individual local governmental units. (2) To put private and public urban transportation on a more nearly equal footing as to consumer choice and investment decisions. (3) To foster experimentation with and development of new urban transportation systems, technology equipment, planning techniques and knowledge and administrative expertise. (4) To prevent premature demise and abandonment of existing public transportation facilities which are in financial straits. Many of them may be given a new lease on life with the application of modern, efficient, low operating cost technology and the prospective future development of new transit technology.

Application of Selected Economic and Political Criteria

Benefit Area

Transportation belongs to the group of services which combines both utility and social service characteristics. Direct benefits to individuals are readily financed by user charges. But the great dilemma confronting virtually all urban transit

15/ Owen, op. cit., p. 265.

16/ Lyle C. Fitch, "A Transit Paradox," National Civic Review, Vol. LI, No. 4 (April 1962), p. 154.

systems lies in the spillover of transportation benefits to the community and the entire area. If user charges are set to cover the full costs of a transit system they are considered prohibitive by passengers, who then turn to another mode of transport. On the other hand, the traditional view of transit as a utility service has created strong resistance to financing from general revenues. In actual practice most transit systems are financed by a combination of revenue sources, but that part which comes from taxes is viewed merely as a supplement to cover deficits from the fare box rather than as a bona fide plan of finance.

A way may be found out of the dilemma if two principles are kept clearly in mind: first, urban transportation is physically a single public service which includes several kinds of facilities, automobile and truck, as well as bus and train; second, it is conceptually a hybrid kind of service including large indirect social benefits as well as direct individual benefits. Financing only benefits which the individual can enjoy exclusively from fares or highway user charges, while the much larger social benefits are provided out of general revenues, facilitates planning and construction of a total transportation system which coordinates all modes of transport. Problems of allocation, both with respect to individual and social benefits and among competing forms of transportation, are massive and perplexing. Nevertheless, substitution of fluent, comfortable urban transportation for congestion, delay and discomfort may well depend upon the candor with which these issues are faced.

The intercommunity spillover of both individual and social benefits from transportation are so widely recognized that they do not require extensive description here. They have long provided the rationale for State and Federal participation in local highway construction. The need for a similar broad area approach to bus and rail transit is only beginning to be acted upon. Similarly, need for coordinated areawide provision for alternative kinds of transport facilities is beginning to be recognized.

For some aspects of the total transportation service intercommunity spillovers are not great. The principal services in this group are street maintenance, and provision of curbs, gutters and sidewalks. Benefits of city streets, other than those which constitute arteries of an intercity network of highways, accrue largely to residents of the community.

They are, therefore, proper responsibilities for the local, municipal government. The provision of parking facilities is a difficult function to assign: some may be considered terminals for areawide highways, while others serve primarily residents of the community in which they are located. According to the function they perform in the total transportation network responsibility for providing parking can be shared by the municipality and the region as a whole.

Economy of Scale

The benefit area criterion for metropolitan area provision of transportation services is strongly supported by potential economies of scale. Capital investment in highways, railway lines and rolling stock requires extremely large outlays in most metropolitan areas. Perhaps the largest single component of these expenditures is land acquisition. The cost of land varies greatly according to location of the right-of-way in more or less densely populated portions of the metropolitan area. If benefits of transportation are recognized as areawide in nature, per-mile costs of acquisition and construction can often be reduced substantially by taking advantage of economies of scale accruing from acquiring and building facilities on a large areawide basis.

Localities responsible for local streets, sidewalks, curbs, and parking facilities can also benefit from economy of scale by contracting to have construction and maintenance performed by a larger unit, such as a county or a large central city.

Geographic Adequacy

Major parts of an urban transportation system serve the entire metropolitan area. A large proportion of the trips taken by persons and goods originate in one part of the area and terminate in another, passing over the boundaries of two or more localities. Nothing less than the metropolitan area is an adequate geographic base upon which to coordinate the planning, construction, and maintenance of these facilities in order to facilitate the flow of this interarea traffic.

Experience with Larger-Area Performance

In the Minneapolis-St. Paul five-county SMSA, the Metropolitan Planning Commission, 12 other local agencies, the State highway department, and two Federal agencies are developing a continuing program and working organization for solving metropolitan transportation problems within the framework of a comprehensive areawide plan. Eight counties around the City of Philadelphia (four each from Pennsylvania and New Jersey) are participating with Philadelphia, the State highway departments of Pennsylvania and New Jersey and the U. S. Bureau of Public Roads in the Penn-Jersey Transportation Study of transportation needs in the metropolitan region. The result will be the presentation of alternative comprehensive choices for dealing with the **Camden-Philadelphia-Trenton** transportation problem. Similarly, Salem City, Marion and Polk counties, the Mid-Willamette Valley Planning Council, the State of Oregon, and the Intergovernmental Cooperative Council are joined in a regional transportation study. In addition, the Puget Sound Governmental Conference, representing the counties of King, Pierce, Snohomish and Kitsap and the cities of Seattle, Tacoma, Bremerton and Everett, is developing an areawide transportation plan in cooperation with the Washington State Highway Commission, the Department of Commerce and Economic Development, the U. S. Bureau of Public Roads, and the U. S. Housing and Home Finance Agency.

With respect to operation of transportation facilities, the Chicago Transit Authority and the Metropolitan Transit Authority of Boston have been in existence for some time. A unified mass transit system is expected to begin operating soon in Allegheny County, Pennsylvania. The San Francisco Bay Area Rapid Transit District will operate in three counties--San Francisco, Alameda, and Contra Costa. Since 1921 the Port of New York Authority, a New York-New Jersey agency, has been responsible for planning, coordinating, and operating certain terminal and transportation facilities in, about, and through the Port of New York.

Dade County, Florida, has a countywide traffic and transportation department for transportation planning, standardization of traffic signs and signals, establishment of uniform speed limits and traffic engineering. Four of seven bus systems in the county are operated by the county government.

Chapter 4

APPLICATION OF REMAINING CRITERIA

A number of criteria were withheld from application on a function-by-function basis in Chapter 3, except for selected functions, because (a) they are most meaningful when applied to the composite aflocation of functions, or (b) size of jurisdiction affects achievement in a consistent way for all functions. These are the criteria of (1) legal and administrative ability, (2) comprehensiveness of government, (3) accessibility and controllability, and (4) citizen participation. The last three especially reflect the less tangible and quantifiable values sought for government in metropolitan areas.

Application of these remaining criteria is necessary to round out the considerations which must be borne in mind when allocating the 15 urban functions to a local, areawide, or intermediate scale jurisdiction.

Legal and Administrative Ability

a. Legal ability. Existing legal authority generally is in terms of local, rather than areawide, provision of services. To the extent that services are being provided at all in metropolitan areas, they are predominantly being provided by municipalities, townships, counties, and school districts with less than areawide jurisdiction. Existing legal authority for performance of urban functions on an areawide basis provides for either municipal extraterritoriality, special districts, inter-jurisdictional contract or agreement, or counties or school districts having areawide jurisdiction. Authorization for none of these approaches, however, is nearly as prevalent as legal authorization for municipal performance. Special districts have the additional disadvantage **so** far as legal authority is concerned of usually requiring a special act for each grant of power. Extraterritorial authority is granted to all municipalities or classes of municipalities, but frequently on a function-by-function basis. Provision of some services on an areawide basis is further handicapped by the fact that municipalities do not have adequate authority to perform all the aspects of the function. Transportation is an example.

b. Administrative ability. The Municipal Manpower Commission found that **small** units of government had difficulty attracting and retaining the administrative, professional, and technical layer of manpower for local government. Referring to the **1,333** municipalities of fewer than 50,000 people in the 14 largest metropolitan areas in 1950, the Commission said that "the small-scale problems faced by such units do not offer much attraction to experienced and able personnel. Nor are their staffs large enough to offer careers attractive to young persons of great potential." 1/ Also, "many local units are too small, or their departments too small, to provide an adequate continuing challenge for trained men and women of high caliber and with strong motivation. Nearly four out of ten departments and division heads in cities of less than 250,000 regard their opportunities for advancement as highly unsatisfactory." 2/ While there is no evidence as to the optimum size of government unit from the standpoint of attracting skilled personnel, it is clear that the smallest units have difficulty.

There are indications that quality of political and civic leadership is adversely affected by numerous governments in metropolitan areas, since governmental fractionalization tends to divorce the residence of groups normally looked to for political and civic leadership from their place of political, economic, and social interest, that **is**, the central city.

Small units of government do not have the workload to warrant employment of modern administrative techniques, such as electronic data processing, organization and methods analysis, quantity buying, and centralized equipment and manpower pools. On the other hand, the extent to which such techniques produce a net reduction in unit costs or an improvement in services depends on the degree to which increased size rendered the administrative problems more difficult in the first place.

Comprehensiveness of Governmental Unit

The objective of this criterion is to assure that governmental structure in the metropolitan area will provide an effective

1/ Municipal Manpower Commission, Governmental Manpower for Tomorrow's Cities (New York: McGraw-Hill Publishing Co., Inc., 1962), p. 32.

2/ Ibid., p. 75.

forum for resolution of conflicting political interests affected by governmental policies, will balance needs and resources, and will determine priorities among them. One of the implications for the issue of size of jurisdiction is that whichever level, local or areawide, is considered desirable for performance of functions, performance by single-purpose special districts should be avoided, since they tend to fragment political authority.

An increasingly serious political issue in metropolitan areas arises from residential discrimination practices. The conflict generally has lined up the suburbs against the central city. The level of government which is going to provide the arena for resolving this conflict needs to encompass and balance political forces in both suburbs and central city. Unless such an areawide forum is provided in metropolitan communities, with representation from all sections, power and responsibility for resolution of conflicts may pass to the State and National Governments, to the detriment of vigorous local government.

Another consideration is that if functions are to be transferred to an areawide basis, enough functions must be transferred so that the unit (or the agency created through interlocal contract) becomes the focus of at least a large share of the various political interests in the community and thus creates healthy conditions for the political process. Conversely, if functions are transferred away from the local level, application of this criterion would require that many be transferred away, or that a substantial number of important functions, similarly affecting a wide segment of the important political interests in the community, be left local. In case enough functions are allocated to each level to constitute a bilevel metropolitan system of viable governments, this criterion requires that effective coordination be established between the two levels. Intergovernmental relations would be affected by the basis of representation in the areawide level, allocations of financial power, arrangements for interjurisdictional contracts and agreements, etc., perhaps reflecting, for example, varying intergovernmental relations in existing metropolitan areas in which county government has a strong areawide role.

A problem of coordination affecting the administration of areawide functions would arise from different functions needing different jurisdictional areas. One serious difficulty probably would concern water supply and sewage disposal areas. For one thing, the water basin and the drainage basin probably would not be coextensive. For another, even to the extent their services

overlapped, there might not be uniformity throughout the area as to water and sanitation facilities required. In such cases, the problem of varying costs due to different types of service probably could be fairly easily adjusted because the *two* services lend themselves to service-charge financing. Noncoincidence of jurisdictional area raises the problem of representation, however, and **may** be further complicated as other services are considered.

In considering whether the number of functions left locally is large enough to assure maintenance of a viable government, the possibility of continued local variations in service standards and financing, and implications of these variations for the local decisionmaking process, must also be considered. Thus, although a series of services might be provided on an areawide basis, it would be possible to provide for local self-determination on whether a higher standard of service should be provided within individual localities. These decisions would be made by the local governing body and thus would serve to broaden the scope of its policy responsibilities, to the benefit of keeping government at the local level of significant scope. At the same time, performance of the function on an areawide basis, at the level above standard desired by the local unit, would produce lower unit costs at both the local and areawide levels due to economy of scale. The costs of the increased level of service would, of course, be assessable against the receiving locality.

Strict application of the criterion of comprehensiveness probably would mean that public education would be handled as part of a general-purpose government. This would be contradictory to predominant practice in the Nation, since 6,004 of the 6,605 school districts in standard metropolitan statistical areas, serving 76 percent of the pupils in those areas, were independent of other local governments in 1962. Moreover, 4,751 of the 6,605 districts, serving 57 percent of the pupils, were noncoterminous with other governmental units, further complicating the problem of coordination and balance. 3/ Should application of other criteria weigh more heavily and thus result in continued independent organizational status for public education, the pertinent question

3/ U. S. Bureau of the Census, "Governmental Organization," Census of Governments: 1962, Vol. I (Washington, 1963), Table 10, p. 36.

would be whether the remaining functions retained at the local level would still be significant enough in number and scope to constitute a viable general government by themselves.

Controllability and Accessibility

As indicated in the description of the criterion of controllability and accessibility of urban government in Chapter 2, various factors affect the degree to which a government is controllable by and accessible to its citizens, and these factors have varying relationships to the size of the jurisdiction. Structural and procedural features of the government have an important effect on accessibility and controllability, yet seem to have little relationship to jurisdictional size. Included in these features are the number and nature of elective offices, manner of their election, provisions for notice and hearings on proposed policy changes, arrangements for initiative and referendum, and the vigor of political parties.

Of great importance for effective control of government by the citizenry is the effect of diverse groups on formation of public policy. The smaller the area the more likely that public policy will be dominated by one powerful interest; the larger the area, the more likely that policy will represent the healthy compromise of many conflicting interests. 4/

Yet, all things considered, it is necessary to consider the question of whether the issue of accessibility and controllability is one of effective accessibility and controllability or what the public thinks is effective accessibility and controllability. Surely a large segment of the public thinks **small** government is more accessible and controllable because it is "closer." Whether it is actually **so** is another question, although ideally, effective controllability and accessibility would be identical with what the public thinks it is. The important point is that in democratic society it is for the people to decide what is effective accessibility and controllability, and if they think that smallness of government produces it, their wishes must be respected if democratic responsiveness is to be preserved. In brief, then, despite arguments and considerations in favor of considering accessibility and controllability either unaffected by size of jurisdiction or affected

4/ See page 57 above.

in the direction of increasing the size of jurisdiction, it is a fact that a large body of the citizenry believes that smallness of size enhances accessibility and controllability. So far as the allocation of functions is concerned, this conclusion means that overall application of the criterion of accessibility and controllability favors keeping functions at the local level.

Citizen Participation

A widely held view is that the smaller the unit of government, the greater the feeling of closeness, and thus the greater the likelihood of the citizen's participation in government. The merit of this contention is sometimes questioned by reference to voting statistics which show that small jurisdictions show no greater, if not less, voter turnout in local elections than larger jurisdictions. Contradicting this argument is the belief that voting statistics do not tell the whole story, if indeed a significant part of the story; that people participate in governmental affairs in other ways; and that large voter turnout is perhaps more a reflection of discontent than interest.

With respect to the administration of particular functions of urban government, it has been noted that large jurisdictions have attempted to encourage local participation and reflection of views by various measures of administrative decentralization. Such steps have been taken in large city school systems and in recreation programs. Cities undertaking citywide community renewal appraisals rely on neighborhood citizen advisory groups.

Although these devices indicate that large urban governments are not insensitive to the need for keeping their policies and programs responsive to the citizenry, they have not provided a substitute for citizen participation that comes from having small units of government. As noted in the discussion of this criterion in Chapter 2, participation is likely to be stimulated more by small governments than large ones simply because smallness makes for a greater relative number of active participants. In brief, the value of citizen participation is a force in favor of keeping government local and small, and therefore argues for allocating urban functions to the local level, in contrast to many of the other criteria.

APPENDICES

APPENDIX A

Selected Functions Affecting Physical Development for Which States Made Payments to Local Governments, by State: 1957

State	: Parks & : : Recrea- : : tion :	: Hospi- : : tals :	: Water : : & : : Sewage :	: Housing : : Highways
United States	3	29	3	3 48
Alabama	---	X	---	---
Alaska	---	---	---	---
Arizona	X	X	---	---
Arkansas	---	---	---	---
California	---	X	---	---
Colorado	---	X	---	---
Connecticut	---	X	---	---
Delaware	---	---	---	---
Florida	---	---	---	---
Georgia	---	X	---	---
Hawaii	---	X	---	---
Idaho	---	---	---	---
Illinois	---	X	---	---
Indiana	---	X	---	---
Iowa	---	X	---	---
Kansas	---	X	---	---
Kentucky	X	X	---	---
Louisiana	---	---	X	---
Maine	---	---	---	---
Maryland	---	X	---	---
Massachusetts	---	X	---	X
Michigan	---	X	---	---
Minnesota	---	X	---	---
Mississippi	---	---	---	---
Missouri	---	X	---	---
Montana	---	---	---	---
Nebraska	---	X	---	---
Nevada	---	---	---	---
New Hampshire	---	---	---	---
New Jersey	---	X	---	---
New Mexico	---	---	---	---
New York	---	X	---	X

APPENDIX A (Continued)

State	: Parks & : : Recrea- : : tion :	: Hospi- : : tals :	: Water : : & : : Sewage :	: Housing :	: Highways :
North Carolina	---	X	---	---	X
North Dakota	---	---	X	---	X
Ohio	---	X	---	---	X
Oklahoma	---	X	---	---	X
Oregon	---	---	---	---	X
Pennsylvania	---	---	X	X	X
Rhode Island	---	X	---	---	X
South Carolina	---	X	---	---	X
South Dakota	---	---	---	---	X
Tennessee	---	X	---	---	X
Texas	---	---	---	---	X
Utah	---	---	---	---	X
Vermont	---	---	---	---	X
Virginia	---	X	---	---	X
Washington	---	X	---	---	X
West Virginia	---	---	---	---	---
Wisconsin	X	X	---	---	X
Wyoming	---	---	---	---	X

Source: U. S. Bureau of Census, U. S. Census of Governments: 1957,
 Vol. IV, No. 2, "State Payments to Local Governments"
 (Washington: Government Printing Office, 1959).

APPENDIX B

Federal Grant and Loan Programs Containing
Local or Areawide Planning Requirements

<u>Program</u>	<u>Description</u>	<u>Planning Requirement</u>
Advance planning of public works	Interest-free advances to encourage States and localities to maintain reserve of fully planned public works (excluding housing) so as to permit immediate construction when economic situation makes such action desirable.	Project must conform to an overall State, local, or regional plan. (40 U.S.C. 453)
Area redevelopment	Financial aid to depressed areas: loans to industrial and commercial establishments, and loans and grants for public facilities.	Applications for Federal loans and grants must be approved by redevelopment organization with areawide jurisdiction, and approvals are contingent upon projects' consistency with overall economic development program (OEDP) for area assisted. (42 U.S.C. 2507)
Highways	Grants to States for construction, reconstruction, maintenance of interstate highways.	After June 1, 1965, funds will be granted for projects in urban areas of over 50,000 only if projects are based on continuing comprehensive transportation planning process carried on cooperatively by States and localities. (23 U.S.C. 134)
Hospitals and medical facilities construction (Hill-Burton)	See page 160 above.	Project must be in accord with State plan for hospitals and medical facilities. (42 U.S.C. 291-2). Special demonstration grants given for areawide health facility planning.

APPENDIX B (Continued)

<u>Program</u>	<u>Description</u>	<u>Planning Requirement-</u>
Open space land	See page 94 above.	Grants made only if proposed use of land for permanent open space is important to execution of comprehensive plan for urban area, and program for comprehensive planning is actually being carried on for the urban area. (42 U.S.C. 1500a) Federal participation increased from 20% to 30% if grant is to public body which exercises responsibility for an urban area as a whole or participates in exercise of such responsibility for all or a substantial part of an urban area.
Low-rent public housing	See page 228 above,	Applying communities must have workable program, which includes comprehensive development plan. (42 U.S.C. 1401)
Urban planning assistance	See page 218 above, Includes grants to areawide planning agency. Administrator directed to encourage comprehensive planning for urban development.	Planning activities aided by grant must be related to comprehensive development plan for area being assisted (40 U.S.C. 461)
Urban renewal	See page 242 above. Administrator directed to encourage operations of such local public agencies as are set up on a State, regional, or unified metropolitan basis or on such other basis as permits such agencies to contribute effectively toward solution of development or redevelopment program on State, regional, or unified metropolitan basis.	Must conform to general plan of the governmental unit. (42 U.S.C. 1451)

APPENDIX C

Bibliography

This listing of titles represents sources used primarily for ideas developed in Chapter 2. The source materials for chapters dealing with the fifteen urban functions are cited in footnotes in the appropriate places.

- Banfield, Edward C. (ed.), Urban Government, New Ynrk: The Free Press of Glencoe, Inc., 1961.
- Banfield, Edward C., and Grodzins, Morton, Government and Housing in Metropolitan Areas, New York: McGraw-Hill Book Co., Inc., 1958.
- Birkhead, Guthrie S. (ed.), and Brazer, Harvey E., Greer, Scott, Willbern, York, Metropolitan Issues: Social, Governmental, Fiscal, Background papers for the Third Annual Faculty Seminar on Metropolitan Research, Syracuse University, New York: The Maxwell Graduate School of Citizenship and Public Affairs, February 1962.
- Coke, James G., "The Objectives of Metropolitan Study," Metropolitan Analysis, Steve Sweeney (ed.), Philadelphia: University of Pennsylvania Press, 1958.
- Fiser, Webb S., Mastery of the Metropolis, Englewood Cliffs, New Jersey: A Spectrum Book, Prentice-Hall, Inc., 1962.
- Fordham, Jefferson, A Larger Concept of Community, Baton Rouge: Louisiana State University Press, 1956.
- Greer, Scott, The Emerginp City, New York: The Free Press of Glencoe, 1962.
- Gulick, Luther, Changing Problems and Lines of Attack, Washington, D. C.: Governmental Affairs Institute, 1957.
- Gulick, Luther, "The New Highway Program Requires Metropolitan Cooperation," Urban Land Institute Technical Bulletin 31 (November 1957).

APPENDIX C (Continued)

- Haig, Robert Murray, Regional Survey of New York and Its Environs, Vol. I, Major Economic Factors in Metropolitan Growth and Arrangement, New York: Regional Plan Association, 1927.
- Hauser, Philip M., On the Impact of Population and Community Changes on Local Government, Pittsburgh: University of Pittsburgh, Graduate School of Public and International Affairs, Institute of Local Government, 1961.
- Janowitz, Morris, The Community Press in an Urban Setting, New York: The Free Press of Glencoe, 1952.
- Jones, Victor, "The Organization of a Metropolitan Region," A Symposium on Metropolitan Regionalism: Developing Government Concepts, University of Pennsylvania Law Review, Vol. 105, No. 4 (February 1957).
- Maass, Arthur (ed.), Area and Power, New York: The Free Press of Glencoe, 1959.
- Margolis, Julius, "Municipal Fiscal Structure in a Metropolitan Region," Journal of Political Economy, Vol. 65 (June 1957).
- Margolis, Julius, "On Municipal Land Policy for Fiscal Gains," National Tax Journal, Vol. 9, No. 3 (September 1956).
- Martin, Roscoe, "Federalism and Regionalism," Lectures on Local Government, Texas: The Rice Institute, 1958.
- Meyerson, Martin (ed.), "Metropolis in Ferment," Annals of the American Academy of Political and Social Science, (November 1957).
- Meyerson, Martin, Terrett, Barbara, and Wheaton, William L. C., Housing, People, and Cities, New York: McGraw-Hill Book Co., Inc., 1962.
- Moak, Lennox L., "Some Practical Obstacles in Modifying Structure to Meet Metropolitan Problems," A Symposium on Metropolitan Regionalism: Developing Government Concepts, University of Pennsylvania Law Review, Vol. 105, No. 4 (February 1957).
- Municipal Manpower Commission, Governmental Manpower for Tomorrow's Cities, New York: McGraw-Hill Book Co., Inc., 1962.

APPENDIX C (Continued)

- Musgrave, Richard A. , Theory of Public Finance, New York: McGraw-Hill, 1959.
- Ostrom, Vincent, Tiebout, Charles M., and Warren, Robert, "The Organization of Government in Metropolitan Areas: A Theoretical Inquiry," American Political Science Review, Vol. LV, No. 4 (December 1961).
- Ridley, Clarence E., and Simon, Herbert A., Measuring Municipal Activities, Chicago: The International City Managers' Association, 1943.
- Rodwin, Lloyd and Lynch, Kevin (ed.) , "The Future Metropolis," Daedalus, Middletown, Connecticut: American Academy of Arts and Sciences and Wesleyan University Press, 1960.
- Samuelson, Paul A., "Diagrammatic Exposition of a Theory of Public Expenditure," Review of Economics and Statistics (November 1955).
- Scott, Stanley (ed.), Metropolitan Area Problems, Report of the Pacific Coast Conference on Metropolitan Problems, Berkeley: University of California, Bureau of Public Administration and University Extension, 1960.
- Winters, John M., State Constitutional Limitations on Solutions of Metropolitan Area Problems, Ann Arbor: University of Michigan Law School, 1961.
- Wood, Robert C., Suburbia: Its People and Their Politics, Boston: Houghton Mifflin Company, 1959.
- Wurster, Catherine Bauer, "Framework for an Urban Society," Goals for Americans, The Report of the President's Commission on National Goals, New York: Prentice-Hall, Inc., 1960.

PUBLISHED REPORTS OF THE ADVISORY COMMISSION
ON INTERGOVERNMENTAL RELATIONS 1/
Washington, D. C. 20575

- Coordination of State and Federal Inheritance, Estate and Gift Taxes.
Report A-1. January 1961. 134 p., printed.
- Modification of Federal Grants-in-Aid for Public Health Services.
Report A-2. January 1961. 46 p., offset.
- Investment of Idle Cash Balances by State and Local Governments.
Report A-3. January 1961. 61 p., printed.
- Intergovernmental Responsibilities for Mass Transportation Facilities and Services. Report A-4. April 1961. 54 p., offset (Out of print).
- Governmental Structure, Organization, and Planning in Metropolitan Areas.
Report A-5. July 1961. 83 p., U. S. House of Representatives, Committee on Government Operations, Committee Print, 87th Cong., 1st sess.
- State and Local Taxation of Privately Owned Property Located on Federal Areas: Proposed Amendment to the Buck Act. Report A-6. June 1 61. 34 p., offset.
- Intergovernmental Cooperation in Tax Administration. Report A-7. June 1961. 20 p., offset.
- Periodic Congressional Reassessment of Federal Grants-in-Aid to State and Local Governments. Report A-8. June 1961. 67 p., offset.
- Local Nonproperty Taxes and the Coordinating Role of the State.
Report A-9. September 1961. 68 p., offset.
- State Constitutional and Statutory Restrictions on Local Government Debt. Report A-10. September 1961. 97 p., printed.
- Alternative Approaches to Governmental Reorganization in Metropolitan Areas. Report A-11. June 1962. 88 p., offset.
- State Constitutional and Statutory Restrictions Upon the Structural, Functional, and Personnel Powers of Local Governments. Report A-12. October 1962. 79 p., printed.
- Intergovernmental Responsibilities for Water Supply and Sewage Disposal in Metropolitan Areas. Report A-13. October 1962. 135 p., offset.
- State Constitutional and Statutory Restrictions on Local Taxing Powers.
Report A-14. October 1962. 122 p., offset.
- Apportionment of State Legislatures. Report A-15. December 1962. 78 p., offset.
- Transferability of Public Employee Retirement Credits Among Units of Government. Report A-16. March 1963. 92 p., offset.
- * The Role of the States in Strengthening the Property Tax. Report A-17. June 1963. (2 volumes).
- Industrial Development Bond Financing. Report A-18. June 1963. 96 p., offset.
- * Tax Overlapping in the United States, 1961. Report M-11. September 1961. 136 p., printed (\$1.00).
- Factors Affecting Voter Reactions to Governmental Reorganization in Metropolitan Areas. Report M-15. May 1962. 80 p., offset.
- Measures of State and Local Fiscal Capacity and Tax Effort. Report M-16. October 1962. 150 p., printed.
- * Directory of Federal Statistics for Metropolitan Areas. Report M-18. June 1962. 118 p., printed (\$1.00).
- State Legislative Program of the Advisory Commission on Intergovernmental Relations. Report M-20. October 1963. 214 p., offset.
- * Performance of Urban Functions: Local and Areawide. Report M-21. September 1963. 283 p., offset.

1/ Single copies of reports may be obtained from the Advisory Commission on Intergovernmental Relations, Washington, D. C. 20575, except those marked with an asterisk (*) which may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

