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2101 Constitution Avenue

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The opinions and conclusions expressed in this publication are those of the authors and not necessarily those of the Highway Research Board.
A Framework For Urban Studies

An Analysis of Urban-Metropolitan Development and Research Needs

A Report to the Committee on Urban Research

by Coleman Woodbury
Director of Urban Research
University of Wisconsin

October 1959
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Foreword

This study was sponsored by the Committee on Urban Research because of the growing awareness that urban problems were great and gaps in knowledge frequent, and because little thought had been directed to priority needs and sequence of research tasks. A judicious over-all view is needed to provide the framework within which individual projects and research can best be undertaken and correlated. A primary goal of the study is to furnish perspective and improved understanding of growing urban areas.

Generous grants from the Dodge Division of the Chrysler Corporation; the American Trucking Associations Foundation, in behalf of the American trucking industry, and the U.S. Bureau of Public Roads, made this study possible.

The Committee was fortunate in obtaining the services of Dr. Coleman Woodbury, Director of Urban Research, University of Wisconsin, who has spent a lifetime in urban research. He is one of the most respected scholars in this field and has a unique background in urban land economics, political science, and city and regional planning.

This report reflects, from Professor Woodbury's long experience, the current state of knowledge on research needs and priorities. It was not possible in this undertaking to detail specific projects or to deal with methods of research. The objective here is, first, to point up the severity of the need for urban research and, further, to provide a means for shaping the priorities.

It is hoped that this report will draw new graduates into this challenging field and will induce more researchers to focus effort on these problem areas. It also is hoped that it will help to persuade existing institutions of the gaps in knowledge so that they may more ably review current and planned programs of research.

Research of the kind proposed here will lead to understanding, and from understanding alone can come the judicious decisions so urgently wanted and needed in all aspects of urban life.

Committee on Urban Research
Purpose and Objectives of the Committee on Urban Research

The Committee on Urban Research is a special committee of the Highway Research Board. It was created in April 1954 in response to recommendations from a conference of researchers, engineers and planners called by the National Academy of Sciences - National Research Council to review the problems of burgeoning metropolitan areas.

From the time of its inception the Committee as a group has been cognizant of the interlocking character of the manifold human activities of the whole urban complex. It has been sensitive to the importance and urgency of the totality of the research needs growing out of the urbanization phenomena. A deep concern of this Committee is that the cry of all these research needs of the urban area shall be met. At the same time the Committee underscores the very great need for an intensive research effort in order to better understand the problems created by urban transportation, which is a most vital part of urban life, with a high potential for shaping not only the physical structure of the city but also its social counterpart.

The accelerated expansion of urban areas and the concurrent accelerated highway improvement programs have brought about acute social, economic, and political and administrative problems. These are important and urgent problems affecting the future of the United States. The great opportunity of building well and solving these problems in a creative way is a challenge which is quite properly taken up by a Committee of the Highway Research Board. This prospectus of research with its concentration on the problem areas associated with urban transportation is appropriately sponsored by a Committee operating within the framework of the Highway Research Board.

Therefore, the mission of this Committee is to aid in providing this kind of understanding of the workings of the urban "system" to the end that increasingly dependable predictions can be made of the effects of various decisions and actions, as they concern the interrelation of urbanization and transportation (movement of people and goods).

Specific Committee objectives are:

1. To identify needed research and to recommend priorities.
2. To promote such needed research through conferences, publications and staff activities, and to encourage financial support from public agencies, businesses, foundations and other organizations.
3. To establish and maintain a clearinghouse for urban research to (a) inform researchers on current work and (b) inform interested persons and groups on new research findings and publications.
A Framework For Urban Studies

Summary

This report has been prepared primarily for the consideration and possible guidance of the Committee on Urban Research of the Highway Research Board. It is understood that the Committee may wish to make it available to three classes of persons: (a) others directly concerned with, engaged in, or contemplating urban studies of one kind or another; (b) public and civic officials, community leaders and others now facing urban problems and issues and, therefore, interested in research that sooner or later might help them in the difficult policy decisions they must make or advocate; and (c) responsible officials of universities, research institutes, governmental agencies, and foundations who may have to make up their minds how much, if any, of the resources of their organizations should be devoted to urban studies.

The report, therefore, is not a technical discussion of research design and methods. Neither is it a "popularization" to intrigue the attention of the man in the street. Rather, it attempts (a) to point out the scale, complexity and significance of current urban-metropolitan growth and development; and (b) to outline a number of major areas of urban study that add up to a significant program and that might properly be endorsed and encouraged by a Committee associated with the Highway Research Board.

Almost all (95 percent) of the rapid population growth of the United States is going into the "standard metropolitan areas" recognized by the U.S. Bureau of the Census in 1950, plus non-metropolitan urban centers. Approximately 85 percent is going into the standard metropolitan areas alone.

The rapid growth is producing a new pattern of urban settlement. More than two-thirds of the national population increase is going into standard metropolitan areas outside of their central cities and more than two-fifths is going outside of the central cities and the more densely built suburban areas (that is, into what is becoming known as the rural-urban fringe). Residential dispersal is being accompanied by a somewhat similar decentralization of commercial and industrial land-uses.

These shifts are marked also by a selective or sorting-out process that seems to be producing some problems and seriously aggravating others.

Those who belittle these changes in urban patterns as simply "growth at the peripheries" or "more of the same" are overlooking significant differences between current growth and that of the past—both in character and consequences.

The probable volume of urbanization in the United States in the near future is little understood or appreciated. By one rather conservative estimate, the 1950-75 increase in metropolitan population may be as much as 71 percent, or roughly equivalent to the 1950 populations of the 38 largest metropolitan areas in the country.

Although discussions about the "exploding metropolis" and "urban revolution" are often greeted with skepticism and apathy, in many senses these phrases are fully justified. Despite some notable exceptions, on the whole shockingly little is being done to understand this major phenomenon of the times, or to prepare for coping with its problems, or for making the best of the opportunities it presents.

In selecting study areas from among the scores or hundreds of facets of urban life that might be studied, the program recommended focuses on subjects, topics or areas in which competent studies would seem likely (a) to add to basic understanding of urban growth and change, (b) to aid in public and private policy formulation and revision, and (c) to have some bearing, direct or not too indirect, on the job of moving goods and people in urban-metropolitan areas.

Following these three criteria, the program proposes inquiries into the nature, functioning and interrelationships of what have been called "the four cities"—the economic, governmental, physical, and social cities—and contemplates direct research into urban phenomena, the evaluation of policies and measures, and estimates of the costs and consequences of possible but non-existent arrangements or urban facilities and agencies.
Clearly, the most-to-be-desired objective of urban studies is a basic, useful theory or urban development—growth, deterioration, and equilibrium. No intellectually respectable approach or conceptual system, new or old, should be ruled out of this search.

Standards set by a variety of public and private agencies strongly influence many phases of urban development. Many standards tend to become rigid and, eventually, obsolete. Studies are needed of the substance of many standards, how they are determined, their results (direct and by-product) in practice, the probable consequences of revisions or new formulations, opposition and resistance to them, and their administration.

Urban planning is defined as essentially the continuing process of preparing, in advance and in a reasonably systematic fashion, recommendations as to courses of action to achieve agreed-upon goals or objectives in the common life of urban communities. Despite its recent rapid growth in coverage and in the phases of urban life to which it is applied, it has been relatively neglected by students of the urban scene. First, thorough studies are needed of the planning process as carried on by planning departments and agencies, their relations to legislative and administrative agencies as well as to groups and organizations of citizens, the setting of goals, the identifiable results, direct and indirect, of planning, etc. These basic inquiries should be supplemented by others, including those of the planning done by state highway departments and other state and metropolitan-wide agencies, and their relations with urban planning. Special problems now confronting planners and their ways of dealing with them should not be overlooked. Examples are the growing need for recreational areas and facilities in metropolitan areas, the future of central business districts and their immediate environs, and the absorption of crop land by the burgeoning suburban and rural-urban fringe areas.

One of the most serious—and, perhaps, anomalous—of the cluster of problems harassing many urban areas is that of local government finance. Inherent and traditional fiscal weaknesses of urban governments are now being added to and aggravated by others traceable in part to the rapid population growth and its shifting and sorting previously outlined. These call for a wide range of studies—from those on the incidence of the principal local taxes to the optimum sizes of local communities for the provision of major public services, and from the administrative and political problems of municipal income taxes and of so-called nuisance taxes to the demonstrated and probable influences of grants-in-aid and shared taxes on local budgeting, administration, political responsibility, and citizen interest.

Increasingly over the past generation or two, urban governments have been undertaking services and activities that affect quite directly the physical and social character of their neighborhoods and communities—land-use planning, zoning, subdivision control, redevelopment, commissions on racial and inter-group relations, major highway and transit facilities, etc. How can the citizen understand the essentials of these programs, take some part in their formulation, and effectively control them? Various devices to these ends are being tried; but knowledge of the results, let alone understanding of them, is meager. Here is an area for case and comparative studies of crucial importance to the future of urban democracy, as well as for evaluations of analogous problems and their treatment in other fields.

Although the program of studies suggested in this report does not include inquiries into the survey and other techniques of highway and traffic engineers, it does propose exploration and analysis of several major issues in current planning and development of highway and transit facilities that are of comparable public significance to the other policy matters discussed earlier. These problems and issues are (a) the location of expressways; (b) reverse commuting, inter-suburban, intra-fringe, and urban regional travel; (c) the role of mass transit in various kinds and sizes of urban centers; (d) the relations between existing as well as emerging land-use patterns and travel volume; (e) eminent domain and other land acquisition procedures; and (f) the relocation of displaced families and land-uses.
Although assigning priorities to the major parts of the proposed program is an almost impossible task, one possible three-way classification of study areas is suggested.

The proposed program is wide-ranging, but it is not all-inclusive. And it has two unifying themes: the need for basic understanding and for a theory of current urbanization, and the need for intelligent, far-sighted, and democratically formulated policies for dealing with the problems and realizing the potentialities of an increasingly urban civilization.
A Framework for Urban Studies

*Current Urban Growth--A Revolution?*

The lead review in the "New York Times Book Review" for October 5, 1958, begins with the following paragraph:

It could be argued that the greatest revolution in progress today is not in Soviet Russia, Red China, or the emerging national states of Asia and Africa, but right here at home in your city and mine, in your suburb and the one next door. It is transforming the rolling farmlands of Pennsylvania, the sandy flats of Long Island, the fertile irrigated valleys of California and the heart core of every city of more than 250,000 population (and many smaller ones) in the entire country. It is a heedless movement whose catalytic agents are social mutation and technological change—and its symptoms are big-city decay, rural blight, sponge-like population cancers spreading remorselessly along the arteries of the great motor-car routes.

As colorful and subject to some qualifications as these sentences may be, their shock value is strengthened by the fact that they were written by Harrison E. Salisbury, a former "New York Times" foreign correspondent, who since his return from Russia has inquired into and written on various problems of current urban life. Elsewhere in his review it is clear that he shares with other professional students—and with some amateur observers—of urban growth both amazement and annoyance at the widespread ignorance of what is happening on the urban scene and, until very recently, the apathy toward it and its probable consequences.

Clearly, the United States is undergoing a strong, and apparently an increasingly rapid, urbanization of population. According to estimates of the U.S. Bureau of the Census, approximately 95 percent of the population increase of the country from 1950 to 1956 was accounted for by the 168 standard metropolitan areas marked out by the Census Bureau in 1950, plus urban places outside metropolitan areas. Not all metropolitan residents are, by the Census Bureau's definitions, urban. In fact, in 1956 some 2.3 million persons in metropolitan areas were living on farms and some 14.7 million in the rural nonfarm category. From the definition of standard metropolitan areas, however, it seems fair to say that a large proportion of these technically nonurban metropolitan residents quite surely are urban in employment, orientation, and ways of life. If this extension of "urban" is accepted, national population growth in the United States today is almost entirely urban growth.

By the same Census Bureau estimates, nearly 85 percent of the 1950 to 1956 national population increase was accounted for by the 168 standard metropolitan areas of 1950. Only in lesser degree, then, national population growth is predominantly metropolitan growth.

Metropolitan areas may be broken down into three broad and crudely defined sub-areas: (1) central cities; (2) suburbs, the more or less densely built up areas, incorporated and unincorporated, outside the central cities (urban fringe in Census Bureau terms); and (3) rural-urban fringes, the remainder of the metropolitan areas (that is, outside of both central cities and suburbs). For the 1950-1956 period, the central cities had 15.6 percent of the national population increase; the suburbs, 27.2

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percent; the rural-urban fringes, 41.5 percent. Thus, over a recent six-year period of rapid population increase, more than two-thirds (68.7 percent) of the national increase went into metropolitan areas outside their central cities and more than two-fifths (41.5 percent) into metropolitan areas outside of both central cities and suburbs.

It should be remembered that many areas called "metropolitan" by the Census Bureau are, in fact, not as large or as complex in structure as this term connotes for most people. Of the 168 standard metropolitan areas of 1950, 80 had central city populations of less than 100,000 and 55 had total populations under 150,000. It should be emphasized, too, that many smaller urban centers show the same patterns of growth as the metropolitan areas. These smaller centers, both those that meet the Census Bureau criteria for "metropolitan," as well as those that do not, may not add up to as impressive aggregate figures as do the larger centers, but they should not be brushed aside or counted out for that reason. Many of them present the same kind and complexity of problems as all but a very few of the largest areas. When one considers the local resources available to attack these problems, the plight of these smaller centers is often just as serious as that of the larger ones—or more so.

The Census Bureau's estimates just cited contain unmistakable evidence of what Luther Gulick first called a "new pattern of settlement" that marks mid-Twentieth-Century urbanization. Almost by definition nearly all of the rural-urban fringes and, in fact, many of the suburbs, are poorly prepared—in governmental structure and finances, in customs and tradition, in civic organization, even in prevailing attitudes—to take care of this flood of new inhabitants and their needs.

Another significant fact is that, unlike the more sedate suburban movement of earlier decades, this headlong spreading out of urban population is accompanied by a major dispersal of many commercial and service activities, particularly retailing, and by a less marked but substantial diffusion of industrial employment. A recently published U.S. Department of Commerce study\(^a\) compared retail store sales in 45 metropolitan areas for 1948 and 1954. Over this six-year period the dollar volume of retail sales for the United States increased by 30.8 percent. For the 45 metropolitan areas the corresponding figure was 32.3 percent, not far from the national increase. For the central business districts in the central cities of these same metropolitan areas, however, the increase was only 1.6 percent, which, taking account of the rise in price levels during this period, quite surely indicates a decline in the volume of goods sold in downtown areas. The burgeoning outlying shopping centers, plus most of the established suburban retail areas, are increasing their proportion of total sales.

This dispersal or diffusion of residential and other urban land uses is, of course, no simple phenomenon. The trends just mentioned are the net consequences of many shifts or movements of population into, out of, and within metropolitan areas. Not much is known about some of these shifts, and undoubtedly they vary considerably among metropolitan localities.

In broad perspective, however, one other characteristic of metropolitan growth is highly significant for the present purposes: as among the three major sub-areas, current growth is selective. It is concentrating a large proportion of the recent migrants to metropolitan areas in the central cities. Most of these newcomers are poor, unskilled in urban vocations and in the ways and manners of urban living. Many of them are Negroes and Puerto Ricans. The central cities are coming more and more to fit the phrase first applied, it is believed, to New York City: the home of the rich, the poor, and the childless. The old image of the suburbs as predominantly bedroom towns of the wealthy and well-to-do is no longer valid. More and more suburbanites are now in the middle and lower middle income ranges. Some students of the metropolitan scene predict that before long many suburbs will be receiving an increasing proportion of low income in-migrants. Today's suburban populations have a disproportionate share of

young families with children. One recent study of nearly 400 suburban communities of
10,000 and more showed that only 46 percent of them were, by one method of measure-
ment, essentially dormitory towns. Heterogeneity seems to be the chief characteris-
tic of the rural-urban fringes. Their populations range from the very wealthy to the
very poor. They include refugees from central cities and the older suburbs, often a
sizeable indigenous population, and, in at least some fringes, a substantial number of
recent migrants from rural and small town localities.

These, then, in broadest outline, are some of the principal characteristics of cur-
rent metropolitan growth. It is a rapid, almost headlong growth heavily concentrated
in the fringe and suburban sub-areas of metropolitan localities. It is producing a dis-
persed, land-devouring pattern of settlement, which in many respects deserves that
derogatory label, "urban sprawl." Although many of the most dramatic forms of this
development are residential, it is not limited to this kind of land use. From the point
of view of public policy, the dispersal itself is not more significant than the selective
or sorting out process that is changing markedly the population and social character-
istics of central cities, suburbs, and fringes. This process is not only confronting
each of the major sub-areas with thorny problems, but it also seems to be aggravating
the difficulties of communication among them and throwing additional strains on the
never very robust sense of community in most metropolitan areas.

One sometimes comes upon objections to such phrases as a "new pattern of settle-
ment." According to the objectors there is nothing new about current urban growth;
cities always have grown at their peripheries; current growth is following that same
pattern; to be sure it is now recorded in larger figures because the nation's population
is larger and more heavily urbanized. This view deserves consideration, and possibly
rejection, not because newness per se is very significant, but because this objection
(a) mistakes the essential character of current growth and (b) if accepted may lead to
a serious underestimating of the problems that now have to be faced.

A comparison of one or two characteristics of metropolitan growth from 1950 to 1956
and from 1920 to 1930 may throw some light on the point. The decade of the 1920's is
selected for comparison because it, too, was a period of rapid urbanization. And its
urban growth was not inhibited by a great depression as was that of the 1930's, and was
not distorted by the conditions and controls of a war economy as was much of that of
the 1940's.

During the 1920's, in the same localities that qualified as standard metropolitan
areas in 1950, only 9.9 percent of the nation's population increase was accounted for
in what is now called the rural-urban fringes. From 1950 to 1956 the proportion was
41.5 percent. Adding together the rural-urban fringes and the suburbs, for the 1920's
the proportion was 34.5 percent; for 1950 to 1956 it was 68.7 percent—not quite twice
as great. On the other hand, the corresponding figures for the central cities were:
1920's, 46.4 percent; 1950-56, 15.6 percent.

These percentages are not rates of growth, which might be misleading because of
substantial differences in the size of the base figures on which they were computed.
They are proportions of national population increase and, therefore, are fair compari-
sions between periods in which the total populations of the country and their increases
were quite different. This does not imply that some instantaneous change occurred in
1950 or in any other year. The fringe areas became more substantial areas of growth
in the 1930's and 1940's than they were in the 1920's (and, in fact, the 1920's showed
an increase over the preceding decade), but their recent mushrooming is quite unre-

9 Jones, Victor, "Economic Classification of Cities and Metropolitan Areas." The
Municipal Year Book, p. 49-57 (1953).
States by Type of Residence, March 1956 and April 1950." Series P-20, No. 71 (1956)
for 1950-56.
cedented and should not be blurred by some ambiguous generalization like "growth at the peripheries."

For those who can remember the physical appearance of a few metropolitan areas during the 1920's, the figures just cited simply state in other terms an easily observable difference from the present. In the earlier period most urban growth outside the central cities took place in or near nucleated suburbs either close-in to the central cities or farther out along railroad lines or, occasionally, major highways. (To be sure, in many parts of the country land subdivision ran riot over other and much larger areas, but relatively few of these lots were, in fact, built upon.) Actual growth was a rather orderly process taking place within and enlarging the areas of reasonably compact "sub-urban" entities or nucleations of development. Now the physical scene outside the central cities is markedly different. Of course the relatively compact suburbs still exist and many of them are growing substantially. Beyond and among them, however, development has exploded—to use a word that is in danger of being overworked. It shows up in individual units and in chunks and strips and other forms of varying sizes scattered far and wide over the landscape. These are the areas that currently are accounting for more than two-fifths of the population increase of the entire country. One leading student of urban affairs has a memorable phrase for this aspect of urban growth. He says it "... shows a conspicuous tendency to ignore contiguity."

Finally, it is a mistake to write off all changes in size of suburban and fringe populations as "just more of the same." This warning may be emphasized by a short quotation from Dr. Thomas H. Reed's article on "Metropolitan Areas" in the Encyclopaedia of the Social Sciences. In a volume dated 1933, his article dealt chiefly with the conditions that had developed in the 1920's and before. He wrote:

"... At the same time the old city has not only maintained but actually increased its dominance as a center of trade, banking, amusement and culture. The whole increasing population—the overtaken farmer as well as the invading suburbanite—more and more seek the stores, theaters, churches and professional services of the center to the detriment of the crossroads store, the wayside church and the country doctor...."

This, indeed, must have a comic or even a bitter ring today to many central city merchants suffering from the competition of new outlying shopping centers and suburban retail areas, to redevelopment and other city officials in the older centers trying to combat serious and spreading blight, to church leaders in many central city congregations and parishes, and to many others. Yet undoubtedly it was a true statement at the time it was written. The change to the situation today admits of no simple explanation, but clearly a major factor is simply the difference in the relative size of central city populations, on one hand, and those of suburban and fringe areas, on the other. In many of the latter, something analogous to a "critical mass" has been reached. Some of its effects are now unmistakable. There is no reason to believe that all of them have as yet been manifested.

Complex and disquieting as some of the current problems of urban growth may be, no introduction to them ought to omit at least a quick look at the probable volume of growth in the foreseeable future. Quite surely this will not calm the nerves or brighten the smiles of those who already appreciate many aspects of the current urban scene. It may, however, emphasize again the view that metropolitan centers and their problems present one of the sternest challenges, as well as one of the finest opportunities, of any major sector of the national life.

According to recently published projections of the Bureau of the Census, the popu-

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6 10 Encyclopaedia of the Social Sciences 396 (1933).
lation of the United States in 1975 may be between 215.8 million and 243.9 million people. For purposes of this study, 220 million may be taken as a round and conservative figure. This would mean an increase of roughly 70 million over 1950. If metropolitan areas should continue to get 85 percent of the national population growth (the proportion they are thought to have received over the first six years of this 25-year period), their increase would be about 59.5 million.

An increase of 59.5 million in metropolitan populations in 25 years may seem off-hand a substantial volume of growth. Two comparisons may give it more meaning. For example, in 1950 the officially designated metropolitan areas had an aggregate population of 83.8 million. Thus, the increase projected for 25 years is approximately 71 percent of the total metropolitan population at the beginning of the period. Also, if the standard metropolitan areas are arranged by size of their populations in 1950 and then these population figures are added cumulatively 38 areas would be included before the total of 59.5 million persons was reached. In other words, the projected metropolitan population growth from 1950 to 1975 is slightly more than the 1950 populations of the metropolitan areas (not of their central cities alone, but of the entire areas) of New York—Northeastern New Jersey, Chicago, Los Angeles, Philadelphia, Detroit, Boston, San Francisco-Oakland, Pittsburgh, St. Louis, Cleveland, Washington, Baltimore, Minneapolis-St. Paul, Buffalo, Cincinnati, Milwaukee, Kansas City, Houston, Providence, Seattle, Portland (Oregon), New Orleans, Atlanta, Dallas, Louisville, Denver, Birmingham, San Diego, Indianapolis, Youngstown, Albany-Schenectady-Troy, Columbus, San Antonio, Miami, Rochester, Memphis, Dayton, and Norfolk-Portsmouth.

When one tries to visualize the aggregate of the residential development of all these great centers plus a substantial proportion of their public and private facilities for non-residential purposes, and realizes that it is approximately equal to the physical metropolitan growth needed in the United States over a short generation that is now about one-third past, he may grasp something of the truly enormous pressures that soon will be thrown on the local governmental structures and on much of the private institutional and other social fabric of the major population centers. When he also tries to see in his mind's eye this vast army of nearly 60 million human beings and to imagine something of their individual, family, and group activities, needs, aspirations, ambitions, and conflicts, he may sense how important it is, in terms of human welfare, that the problems of urban growth in the United States be dealt with intelligently, humanely, and in time.

If population growth in cities outside of metropolitan areas is estimated for the same 25-year period in the same way—that is, by applying to the projected national increase (70 million) the percentage of the national increase they obtained from 1950 to 1956 (9.5 percent)—the total is about 6.6 million. What proportion of this may be in urban centers of sufficient size to have all or most of the problems characteristic of the metropolitan areas? At a very rough guess, this probably would amount to about one-half, or 3.3 million persons, which would add about 5.5 percent to the metropolitan total. It would be a little less than the 1950 population of metropolitan Philadelphia (3.67 million) or a little more than that of metropolitan Detroit (3.02 million).

It does not seem an exaggeration to say that by 1975 or so most of the larger urban areas of the United States will be as unlike the cities of the last quarter of the 19th century as they, in turn, were unlike those at the end of the 18th century. Will the changes on the whole make for cities more favorable to the multifarious activities carried on within them and more kindly in the lives of their citizens? Nobody can answer that question authoritatively today, but the answer is being pieced together now and the verdict will be largely determined before many more years are past. Maybe this will result in simply putting together the most stupendous job anyone could imagine for the urban redevelopers of the future.

Only a little thought about these recent happenings and their prospects is needed to reach several quite obvious conclusions, as follows:

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1. Sweeping transitions in land use are going on apace and seem likely to accelerate in the future.

2. An enormous and increasing volume of capital investment, private and public, is and will be called for in the form of housing, shopping facilities, highways, utility lines, water, sewage and transport facilities, schools, parks, playgrounds, churches, hospitals, etc. (Outstanding local government debt in this country, a very large proportion of which must be that of urban governments, increased by 107 percent from 1950 to 1957.)

3. As previously mentioned, the processes of assimilation of in-migrant groups to urban centers are becoming ever more crucial to their economic and social health.

4. The fragmented local government structure typical of metropolitan areas handicaps all efforts to plan and carry through programs and policies aimed at orderly and satisfactory development.

These are only the most massive, obvious implications of current and prospective urban growth. It is a sad commentary on the uses of intelligence in public affairs that, with the exception of Item 4, relatively little serious study is being given today to these clearly apparent problem areas. To be sure, some phases of land-use transition are being looked into, but in a scattered, ad hoc fashion. Except for two or three descriptive studies of new settlements around major military or industrial facilities and of the operations of one or two very large scale tract developers, which clearly are untypical, where are the systematic analyses and evaluations of public and private activity in areas of rapid transition? The latest major work on local government finance (Hansen and Perloff's "State and Local Finance in the National Economy") was published in 1944. Most of what is known about assimilation comes from work done some thirty or more years ago. The problems of Negro migrants, of course, have attracted considerable attention, but most of it has been focused quite narrowly—primarily on questions of radial prejudice and discrimination or on the Negro's constitutional rights.

As explained previously, it is suggested that assimilation should not be included within the framework of the Urban Research Committee's program, but certainly the program should help to correct the deficiencies in these other areas of study.

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This Report--Purpose, Limits, Guides

The purpose of this report is two-fold:

1. To sketch in broad strokes the main features and some of the chief characteristics of current urban-metropolitan development in this country.
2. To outline, in general but quite concrete terms, a program of urban studies that could appropriately be endorsed in principle and encouraged in action by a Committee affiliated with the Highway Research Board.

LIMITS

At the present embryonic stage in the development of urban studies in the United States, this is an ambitious undertaking. It does, however, have certain limits that, although quite obvious, should be noted at the outset.

First, it presents an outline or framework for urban studies—not a set of fully developed study or research designs. Although all of the major study areas suggested are, in varying but considerable degrees, researchable, to prepare reasonably detailed specifications for work in all of them would be a collaborative job for several persons over months or years.

Next, this framework at best is a preliminary, expendable devise in the shaping and prosecution of a program. It surely will have to be revised and modified from time to time, and may well have to be redrawn in the not distant future. If one knew enough about a large and complex field to be able to prepare a definitive study outline for it, his knowledge would be so great that the areas of further study would be relatively small. Certainly in urban studies today the relative sizes of the known and what seem to be the knowable are just the reverse.

Third, no emphasis has been given to novelty of approach or in the substance of proposed study areas. In fact, in many of them useful and promising work has been done or is now under way. Proposing further studies in them is not, in any sense, to be little or disparage what has been done. Rather, it simply points to the need for further testing of hypotheses, for wider and firmer bases for generalization, or for checks on significant changes that may be occurring over time. Replication of some of these studies may prove to be quite as valuable or even more so than initial efforts in sub-areas in which little or nothing has been done so far.

Finally, the recommendations of this report do not include studies aimed primarily at improving the methods or techniques of more or less routine surveys now being carried on by traffic engineers, city planners, or others (for example, origin-and-destination or economic base studies). Excluding them does not imply that these studies are unimportant or that no significant improvements could be made in them. Neither does it rule out variations in accepted techniques that might be developed as parts of more inclusive studies. Rather, it is believed that methodological studies can and will be undertaken without the Committee's encouragement. To include them might divert some considerable part of the Committee's attention and effort from other work of even more promise and potential significance.

GUIDES

Criteria

A primary concern in this framework study has been to avoid two obvious pitfalls, as follows:

1. A definition of urban studies so narrow and constricted that it can lead only to highly specialized, fragmented, and on the whole insignificant results.
2. A definition so broad and loose that its natural consequence is an almost endless hit-or-miss list of possible projects of the general order of "wouldn't-it-be-nice-to-know."

Although both dangers are real, in urban studies today the second probably traps
more well intentioned people than the first.

In other words, the primary and most persistent problem is selection. The author has relied mainly on three admittedly general but useful criteria. To be included in the framework being here put together, a possible subject, topic or area of study should either (a) seem likely to add to the basic understanding of current urban growth and deterioration; or (b) seem likely to produce information useful in the difficult but unavoidable tasks of formulating policies and courses of action, public and private, affecting urban development and redevelopment; and (c) have some reasonably clear bearing, direct or not too indirect, on the job of moving people and goods into, out of, and within urban-metropolitan areas.

Although criteria (a) and (b) are stated as alternatives, most studies (but not necessarily all) that would meet (a) would also qualify under (b). Criterion (c) has been added to distinguish this framework for urban studies from others that might be prepared for, say, a large foundation or university. Actually it is a rather broad and flexible requirement. The crucial phrase is "direct or not too indirect." Without it, one could argue that every study that helped to explain urban growth or deterioration or was useful in deciding on policies for urban development or redevelopment would, ipso facto, qualify under (c). To be sure, such a line of argument would become rather tenuous at points, but it could be made. Perhaps two illustrations may make clearer the distinctions indicated by "direct or not too indirect."

Any study that would add to the basic understanding of the factors accounting for the present widespread dispersal of development in most metropolitan areas quite surely would enable predicting, or at least guessing, more intelligently as to the probable volume, character, and pattern of residential, industrial or commercial growth in outlying parts of metropolitan areas in the short-range future. Thus it would "have some reasonably clear bearing, direct or not too indirect, on the job of moving people and goods...."

On the other hand, take a study of the processes by which in-migrants to central cities of metropolitan areas from rural backgrounds learn the ways and manners of urban living: call it, if so desired, a study of assimilation, acculturation, or of the "house-breaking" of new urbanites. No aspect of the current urban scene deserves more thorough and thoughtful study. These processes underlie and contribute to many urgent problems of urban life; for example, those in respect to juvenile delinquency, segregation, blight, relocation in redevelopment programs, enforcement of housing and sanitary codes, machine politics, etc. In the opinion of many knowledgeable persons, commonly held notions about them are full of nonsense and half-truths. As the flood of urban in-migrants rises over the next 15-20 years, many central cities (and probably other parts of metropolitan areas as well) are headed for serious trouble unless much more is learned about these processes and that knowledge applied to improve them.

Despite their crucial importance from many points of view, studies of the processes of assimilation would fall outside this framework. They would not meet criterion (c); they would not have "a reasonably clear bearing, direct or not too indirect, on the job of moving people and goods...." Of course, it could be argued that if the processes of assimilation could be made more rapid and effective over the next generation or so, many in-migrants would move out of the slums and blighted areas of central cities more quickly. Thus, the volume of growth in suburban and fringe areas would be increased, and the problems of moving people and goods would be aggravated. Or, conversely, if assimilation became more rapid and less painful, the in-migrants might not contribute to the outward flight of so many older residents and thus transit and transport problems would be lessened or, at least, not markedly changed. Or, some persons might feel that both of these consequences might follow and that they would roughly offset each other. In any event, the bearing on transportation would not be reasonably clear; it would not be direct; it would be too indirect and conjectural. These studies, then, would be excluded from the framework or program. (Maybe at some later time they should be added.)
The Four Cities

In looking at urban studies it is suggested also that an apparently simple question be asked: What is a city or an urban area? At this point there is no interest in a dictionary-type definition or in hair-splitting. It seems clear, however, that many of the difficulties in formulating programs for urban studies stem from faulty communication. When someone says "city" or "urban," the images in the minds of others may differ among themselves and with that in the mind of the speaker. There is no panacea for this difficulty, but possibly it may help to be reminded of what some persons call "the four cities." In other words, a city or an urban or metropolitan area may be looked at in at least four ways:

1. As an economic unit or entity producing goods and services and exchanging them within its own boundaries and outside of them.
2. As a conglomeration of local governments and of public and quasi-public agencies, most of them corporate, legal entities with various powers, functions and responsibilities.
3. As a gigantic physical plant: the land, buildings, streets, transit and transport lines, parks, public buildings, utilities, and other artifacts within and through which the economic, governmental and other social activities are carried on.
4. As a social structure or, if the term be properly qualified, a social organism made up of various groups and institutions in various stages of growth, equilibrium and decay, and with almost numberless ties and relationships among themselves and with communities outside.

These four cities, of course, are not separate, discrete entities; they are simply different aspects of the complex reality. They are tied together and influence each other in numberless ways. No framework for urban studies will be very useful if it fails to recognize all four cities and at least the principal ties and influences among them.

Range of Studies

As to distinctions among study methods or between "pure" and "applied" research the proposed program is catholic or, if desired, eclectic in character. No reasonable method, conception or approach to urban studies has been excluded. In general, three kinds of studies are contemplated. They should not be confused with the more specific study or project areas dealt with later in this report. The kinds of studies are:

1. Direct research into urban phenomena. An example would be attempts to explain the current dispersed pattern of urban residential growth. Here, despite formidable difficulties in trying to research into it, a phenomenon does exist. The task is to describe it meaningfully, to distinguish between its essential and its superficial characteristics, and, in some sense, to explain the former—to say why this growth is happening. This framework, it should be noted, does not try to specify in what terms the explanation should be couched or by what methods it should be arrived at.

2. Evaluation of policies and measures. Clearly urban development and change related to the movement of goods and people are influenced by many policies, programs, measures and controls. Many of these are public actions taken to achieve certain ends. Questions constantly arise as to whether these ends are in fact being reached; whether some other means would achieve them more economically or satisfactorily; whether other, by-product effects, often unanticipated when a measure was initiated, may not indicate a need for changing or even abandoning it; etc.

The program of urban studies outlined hereafter calls for many evaluative studies of this kind. Although they often seem fairly simple and straightforward undertakings, they often do involve one difficulty that is easily overlooked. In the absence of any adequate, basic understanding of urban phenomena it is very difficult, sometimes almost impossible, to say that certain results are largely attributable to policy A and that they would be changed substantially if policy B were substituted. Maybe the results
identified follow largely from other forces or factors. It is usually even more difficult to establish such a connection between a measure and its by-products than between it and its intended results. It does not seem necessary here to cite examples of the old fallacy—post hoc, ergo propter hoc.

A variant of these evaluative studies is also contemplated in the program. Sometimes a new measure proposed in one sub-area of urban affairs calls for evaluation of similar measures in other sub-areas. For example, some persons have been talking about state aid to encourage metropolitan area planning. To some this seems to be a promising and needed step; others fear a variety of side effects, such as state domination, shortcutting local citizen opinion and participation, etc. The only basis now available for judging these contentions is from the experience of grant-in-aid programs in other fields. Here the difficulty is a double one: both that of attributing results to specific measures in a field with experience and making certain that conditions in the two fields are sufficiently parallel to support the probability of similar results in the second.

3. Estimates of the costs and consequences of hypothetical (that is, possible but non-existent) arrangements. For example, many persons have asked in effect: What would be the results if, by means of common ownership and management or by some other device, every facility (except private cars and trucks) for moving goods and people in a large metropolitan area—streets and highways of all kinds, mass transit, rail commuting, lines and terminal facilities—were put together, extended or contrac ted, and operated as an integrated system with each class of facility performing the functions that, in the opinion of knowledgeable persons, make up the optimum use of such facilities in the area?

In the sense of research in Item (1), this is not a researchable question. There are no fully integrated transit and transport systems that could be analyzed, compared, and their functioning explained. Admitting, however, that making and working with such estimates would be a difficult task and that in one sense it is not research, it could be done. Various of these hypothetical or synthetic (in the non-derogatory sense) systems could be posited and their costs and consequences could be estimated and compared.

This is an extreme example of the kind of study that is called for in several parts of this framework or outline. Whether it is called research or not may not be too important. It certainly is one form of study. It would seem that it can be usefully employed in this field and that its possibilities have not been adequately explored. 

**Applicability**

Finally, an added word on the applicability of the results of studies (or research) to specific problems. With few if any exceptions, studies will not produce "answers" or "solutions" to specific, local problems—for example, whether City A should spend x million dollars on parking facilities in and around its central business district. Careful studies (not just one quick survey) can contribute to understanding and insights as to what is happening to central business districts in City A and other urban centers like it, and why. Whether more parking facilities would be in the public interest in City A and, if so, how much money should be put into them now in relation to that for other needs are, basically, matters of judgment. Understanding and insight derived from studies can help to inform and guide those responsible for making the judgments—but that is all.

Perhaps the studies would show that parking difficulties are not a factor of first-order significance in the stagnation or decline of some central business district activities in City A and others like it. Perhaps they would show that they are, but that, in other cities like A, more parking spaces have not long relieved the congestion and have contributed to the deterioration of mass transit services. These would be facts worth knowing and, particularly if they fitted into some intelligible theory or explanation of other aspects of current urban growth and change, they should be useful to those who have to decide about x million dollars for parking in City A. The studies, however, will not "tell us what to do," and no proponent of urban studies ought to say or imply that they will.
In short, preparation of this program in framework or outline form has been guided by several considerations, as follows:

1. To focus on subjects, topics or areas in which studies would seem likely to improve basic understanding of urban growth and change, to aid in policy formulation and revision, and to have some bearing, direct or not too indirect, on the job of moving goods and people in urban-metropolitan areas.

2. To include within the range of studies the economic, governmental, physical and social cities.

3. To keep the program broad and flexible as to methods and kinds of study, including in the latter direct research into urban phenomena, the evaluation of policies and measures, and estimates of the costs and consequences of possible arrangements not now in existence.

4. To make clear that policy questions inevitably involve judgments and that in respect to them no study will "tell us what to do."
Areas of Study

TOWARD A THEORY OF URBAN DEVELOPMENT

In light of these facts about the scale and other general characteristics of urban development, it does not seem necessary to argue here either the importance of more reliable and detailed knowledge about it or the value of a theory or theorems that would explain it—at least in major part. Not long ago someone remarked that various public and private agencies, as well as individuals, are daily operating on the body urban in the light of an understanding of its anatomy and physiology roughly equivalent to the notions about the human body held by an old-time medicine man at the country fair. This may be an exaggeration, but certainly it is not a gross one. And this ignorance is shared by urban planners, highway and traffic engineers, public works officials and others who must try to cope with the urgent difficulties of the day, as well as by scholars, researchers and citizen leaders who ought to be able to help the responsible practitioners.

The earlier references to urban development have stressed the rapidity and the new or emerging pattern of urban growth. Unquestionably these are significant aspects of the urban scene, but they are not the only ones. "Urban development," as the term is used here, includes also the blighting and deterioration that are now spreading so relentlessly in many parts of nearly all sizeable urban areas. It also includes the much rarer instances of relative stability—districts in which some kind or degree of equilibrium seems to have been attained.

The earlier references also are in terms of national totals or aggregates. This seems proper enough for the purpose of that section of this report. As a matter of fact, some of the data—for example, the Census Bureau's estimates of 1950-56 population increase in metropolitan areas and their major sub-areas—are now available only in national aggregates. When, however, one comes to studies looking toward an explanation of urban development, the differences in these phenomena from area to area are of utmost importance. Comparative studies of many areas or groups of areas may be the road to some explanations that no consideration of the aggregates alone or of individual areas could reveal. Through such studies one can test possible relations between certain measurable characteristics of urban growth and such "independent variables" as size, age, employment status of population, density of older districts, etc.

The explanations or theories that are needed should apply not only to the structure of urban areas—that is, to the relationships existing at any one time among various districts or groups or other units—but also to the processes of change that are going on around us continually. In respect to the latter, more is needed than names or labels for the processes. Calling some combinations or syndromes of events "obsolescence," or "invasion," or "decentralization," is not explaining them. Identification and labeling may be a necessary first step toward explanation, but they are not more than that.

This search for a basic, useful theory seems the most fundamental, the most difficult and exacting, and potentially the most valuable section of this or any other program of urban studies. The heading of this section—"Toward a Theory of Urban Development"—may seem to imply that a grand, inclusive theory or a systematic explanation of the phenomena of urban development may be expected soon. Although this is the long-term goal, quite probably it will be necessary to get along for some time with lesser explanations or theorems on some phases or aspects or functions of urban development—say, of residential dispersal; suburban stratification; civic and political

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8 A needed study would identify the earliest indications or symptoms of blight and suggest ways of recognizing and, if possible, measuring them before they become sufficiently widespread and serious to attract attention. This study should include blight in all major kinds of urban land-use districts—residential, industrial, commercial and mixed.
apathy; decentralization of retailing, wholesaling, service trades and industrial pro-
duction; land value redistribution following changes in means of transit and transport.
This kind of start should not discourage anyone. The biological and medical sciences
have made remarkable advances, particularly in recent years, without reaching any
basic explanation of animal or human life.

On the other hand, it is suggested that the search for a systematic theory should
not be written off as hopeless or impractical. Progress toward it may come slowly;
it may depend in part on much more detailed, reliable, sensitive and voluminous data.
If, however, any analogies between the social and the natural sciences are useful,
studies toward a theory of urban development ought to emphasize also the task of de-
veloping and testing concepts of wide range and scope. There are very few of them in
the study of urban affairs, possibly because few if any persons have had opportunities
to try to develop them in collaboration with others, as theoretical (or mathematical)
physicists, for example, have been encouraged to do in their field. (This is not to
suggest that the new, basic concepts needed in trying to understand urban development
are necessarily mathematical or that many of them will not come from people engaged
in empirical research.)

As to the methods appropriate to projects in this section of the program, the prin-
ciples of flexibility and catholicity should apply. Probably no one is capable, at the
present time if ever, of saying in advance and in general terms that method A or ap-
proach B or conceptual system C is superior to all others and should be relied on en-
tirely or primarily in the search for understanding of current urban development. To
illustrate: some scholars may wish to push farther the approach and concepts of urban
or human ecology. This has been a useful and honorable discipline and, as redefined
and enriched more recently by Hawley and others, it certainly holds promise of even
more contributions. Others undoubtedly prefer to look upon urban development as the
consequence of millions of judgments and decisions by hundreds of thousands of indi-
viduals and families and by thousands of business and industrial enterprises, public
bodies, quasi-public organizations, groups and associations of many kinds. They may,
therefore, look for the keys to explanation in the attitudes and motives of these "deci-
sion-makers" and in the social relationships that influence their definitions of the sit-
uations they face and the steps they decide upon. Similarly, still others may continue
with essentially statistical methods and their techniques, such as multiple regression
and covariance analysis, or with the model of economic competition and a hierarchy of
rent-paying ability among land uses, or with some more sophisticated formulation than
is now available of the relations (for example, "lag") between technological change
and urban development.

All of these and other approaches to an explanation of urban development have made
some contribution to the present understanding, inadequate and weak though it may be.
All of them seem to have the seeds of growth. In respect to all of them, nearly all
persons professionally concerned with urban studies (and many others) have their
preferences and prejudices, but it would seem not only unwise but positively detri-
mental to exclude any of them from the formidable task ahead. To be sure, many pro-
jects will run into dead-ends or add little to the search. But if the various possible
avenues to understanding are kept open and passable, sooner or later there may come
a Darwin with a relatively simple key idea that transforms an ages-old concept into a
major theory, or a Keynes who more or less turns a body of learning inside out with a
fundamentally new approach and a set of new concepts. But as Keynes himself said,
if he had not known and studied the older economics, in all probability he never would
have arrived at his new and quite different system.

STUDIES OF STANDARDS

To a much greater degree than is often recognized, standards set by public and pri-
ivate agencies influence markedly the character of urban growth, particularly physical
growth. Zoning and subdivision control ordinances are the chief, but not by any means
the only, devices for such standards. Mortgage lenders, insurance underwriters, local
and state departments and agencies for education, recreation, conservation, redevelop-
ment, public health, fire protection, and highways all have a hand in this process. Some of these standards are quite effectively enforced; some are often evaded or watered-down; some are little more than distant ideals recognized more in the breach than in the observance. Some are controls on or requirements for private developers; some are self-imposed conceptions of good practice for public or private agencies.

Most of these standards have accumulated over the years. Often some of those in one locality are copied in another, and so on almost ad infinitum. Some are clearly and directly grounded in careful studies; the rationale of others seems uncertain or has been lost over the years.

The studies needed would deal with the substance of the standards, how they are determined, and with their administration. Some studies would try to assess the results, direct and by-product, of particular standards; others might review their bases and rationale in light of present day knowledge from the natural and social sciences. Some might point to simplification or cutting out of deadwood; others might indicate holes to be filled or neglected areas to be dealt with—some of them probably the consequences of recent changes in the character of urban development or of recent technological developments. Others might try to devise and estimate the consequences of radically new formulations aimed at the same objectives as some orthodox standards. Certainly some should be concerned with the newer forms of regulatory standards (for example, performance and "progressive" zoning). Others would look into the misunderstandings of, the resistances and opposition to, prescribed standards of various kinds.

Unfortunately, this area of study has been relatively neglected in recent years. Possibly this has been due, on the one hand, to a feeling by some professional scholars that it involved "value judgments" and, therefore, was not sufficiently "scientific" and, on the other, to fear by public officials and others that showing much interest in matters related to regulation and control was not in keeping with the spirit of the times and, therefore, would arouse suspicion of them and of other parts of their programs. Whatever the causes, it is high time that neglect be replaced by concern and activity. The present formulations of too many standards are poor and obsolete. In the absence of straightforward study and discussion based on it, the formulations remain relatively rigid and revisions are made, in practice, by various forms of evasion and pressured interpretations.

OTHER MAJOR POLICY MATTERS

Most of the studies in this area would be aimed at (a) clarifying problems and needs now the object of or seeming to require public action (other than the setting of standards or norms for development); (b) helping to trace and to evaluate the direct results and the by-products of courses of public action now under way; and (c) analyzing the procedures, broadly defined, by which policies are established and the methods of administering them.

Clearly this is a large and complex study area. Major subdivisions of it would be (a) city, county, metropolitan, state and state-agency planning, including capital budgeting or programing; (b) urban (local) government finance (taxation, borrowing, grants-in-aid, etc.); and (c) ways and means of informing and educating various groups and classes of the citizenry in urban affairs, problems and possibilities, and of making use of their knowledge and preferences in determining and administering policies or courses of action.

One has only to look at this area a short time to see that many of the issues in it involve inter-governmental relations—local-state, local-federal, local-state-federal. This is most apparent, perhaps, in respect to urban public finance, but it is increasingly true in other sectors as well. Governmental affairs and those in which governments play a major part in this country can no longer be conceived of meaningfully as a layer cake with each layer (local, state and national) different in flavor and texture and neatly separated from the others. Rather, as has been suggested by Joseph E. McLean, formerly Commissioner of Conservation and Economic Development in New Jersey and now at the Brookings Institution, the analogy should be to a marble
cake made with the same ingredients and qualities but with markedly different structure. Certainly the combinations of local, state and federal government action and responsibility in existing programs are varied and sometimes ingenious. It seems likely that other patterns and variations will be tried in the future. Any realistic program of urban studies must recognize this fact of the present and probability for the future. And these changing patterns and variations make the preparation of studies in this area somewhat more difficult than if any one project could be focused solely on local or state or the national government. They also suggest some projects to analyze inter-governmental relations in action as guides either to revision of present programs or for the planning of new ones.

Urban Planning

As used here, "planning" is essentially the continuing process of preparing, in advance and in a reasonably systematic fashion, recommendations as to courses of action to achieve agreed-upon goals or objectives in the common life of urban communities. It is being used more and more in the broader process of policy formulation by urban public agencies. In John Gaus' phrase it is "the effort to improve the making of decisions."

By no means all public planning powers and responsibilities are found in agencies with the word "planning" in their names. Operating departments and units of local governments—school boards, public health departments, recreation departments, housing and redevelopment authorities, for example—plan in various ways and for various ends.

The scope of over-all urban planning departments (boards or commissions) has changed materially in recent years and quite probably will continue to do so. Only a confirmed doctrinaire would attempt now to say in detail exactly what the limits of their activities should be or are going to be. At present they are concerned primarily with broad allocations of land areas to various uses and densities of development; shaping and often administering police power measures affecting such uses; the location, priority scheduling, and financing of public works and facilities of many kinds; identifying the kinds of industries and other economic activities needed to strengthen a community's economic base and suggesting ways and means of attracting them; preparing the way for various projects of urban development and redevelopment; and, to a limited degree, with encouraging citizen participation in the steps leading to policy decisions in these and related matters. In all these sectors of their work they try to keep an eye constantly on the connections between or the inter-relations of the parts to the total development of the locality—for example, of circulation facilities and different kinds and densities of residential or industrial development, or of capital needs for highways, schools, public recreational facilities, etc. They also try to look to the future, as well as at urgent needs of the day.

The place of planning in urban development has been brought sharply to many people's attention recently by criticisms exchanged between some urban planning officials and state highway departments in respect to the Interstate Highway System. Clearly these exchanges are not between planners and non-planners, but are between practitioners of different kinds of planning—with differing objectives, standards, and methods. Probably they have served some useful purposes, particularly in highlighting these differences and in making clear how little really effective planning is now being done for the future development of the rapidly growing urban areas. If carried on in their present vein much longer, however, they will become both tiresome and harmful. Undoubtedly the publics in some sense represented by local planning agencies, state highway departments and the U.S. Bureau of Public Roads have important stakes and legitimate interests in the planning and development of this highway system. These interests, however, will not be served by ill-tempered quarreling about who should be able to do what to whom. Neither will they be served by bland generalities about the beauties of cooperation.

It would seem that the beginning, although not the end, of wisdom on this issue would be fair sample studies, realistic and thorough, of urban and metropolitan planning and
its relations, formal and informal, with state and federal agencies. These studies should go beyond enabling acts and organization charts to the actual processes and relationships of urban planning. They should include not only inter-agency relationships but also forms of professional collaboration among planners working for various units and agencies of government. What are its place, limits, most effective methods? These studies also should try to assess results as well as methods; to identify objectives of goals and particularly to analyze the processes by which they are determined. Not a single recent competent study of this kind is known. Probably no other government function of comparable value, actual and potential, in the well-being of society has been so consistently neglected by professional scholars and other researchers.

The other step needed in trying to resolve this controversy between local and state highway planners would be similar inquiries into the planning done by a number of state highway departments. If several competent studies of urban and state highway department planning were available, it might be possible to define this present controversy in terms that could lead to better planning and to more effective collaboration on both sides.

Although undoubtedly the Interstate System is a major enterprise of the times and has great potential influences for good or ill on urban localities in the United States, it would be a mistake to link all studies of planning in this program to it. Even if the system had never been proposed, planning would still be a pressing need and, in some respects, an urgent problem in urban public life. Still needed would be both thorough and thoughtful studies of planning as a function of urban government, as well as similar inquiries into sub-areas of planning practice and problems. High on the list of the latter would be (a) consideration of recreational needs of the major urban areas and of planning to fill them; (b) planning for the future of central business districts, particularly those in the central cities of urban areas, and of areas immediately around the central business districts; and (c) absorption of good crop land by urban development, notably of course by the rapid spread of suburban and fringe areas. Each of these deserves a quick exploration here.

Anyone who tries to identify factors or influences contributing to the emerging dispersed pattern of urban development would be almost certain to list the recent increase in and the wider distribution of leisure time. More leisure time for more people means more opportunity and more energy for the activities and ways of living common to suburban and rural-urban fringe areas. It also makes more nearly intolerable for many people the limitations imposed by the cramped and congested areas so common in central cities and in some of the older suburbs. Furthermore, increased leisure seems likely to be an even more powerful force in the future than it is today, regardless of how the increase affects the length of the work day, week, year, or lifetime of various classes of those gainfully employed.

Partly as a result of leisure time increases, the land areas needed for many kinds of recreation are almost certainly going to increase, probably greatly. Questions of area, location, access, advance acquisition, operation and maintenance expenses, and relations among urban, state and national government facilities are all involved. Yet with only a very few exceptions, urban area planning is paying relatively little attention to them, and the steps now being taken in accord with plans are even less adequate.

The plight and prospects of central business districts have been so much in the public eye lately that they hardly need be stressed here. Although some urban planning agencies have addressed themselves to these sub-areas of their jurisdictions, probably no one believes that their problems have been satisfactorily analyzed and their most likely future status agreed upon. The basic questions seem to be: (a) What functions seem likely to decline, at least relatively, in these areas and what ones to hold their own or to increase? As it is sometimes put: what functions really belong in a central business district; (b) In light of the answers to these questions, what changes in size, density, and facilities, public and private, in these areas seem indicated so they may perform their essential functions in a satisfactory manner? Certainly much more work will have to be done before there will be any basis for a consensus on these planning questions. Although much of that work will have to be done city by city and no one should assume that the future central business districts will fit some one pattern,
comparative studies would seem to promise to be most useful.

Closely related are the problems of the immediately adjacent areas—those not in what is usually thought of as the central business district but as parts of the larger central areas. Ordinarily, most of the land in these fringes around the central business districts is used by wholesaling and storage facilities of one kind or another (many of which are now in the process of relocating), by business services linked to functions carried on in the central business districts, and by various small manufacturing operations. Many in the last category are new enterprises that are in this location because it provides them with cheap space, some access to a sizeable labor pool as well as to related enterprises, to specialized maintenance and repair services that small manufacturers seldom can provide economically for themselves. Some observers call these old, nondescript, obsolete areas the chief seed bed for new urban enterprises.

Yet some redevelopment proposals call for the clearance and rebuilding of substantial parts of these fringe areas, often for upper middle or high income housing in tall apartment buildings. Is this sound policy? How much land can be absorbed by this kind of housing? Are there equally suitable alternative sites and buildings for the new, as well as for the displaced enterprises, at rents they can afford? Here, too, are planning problems that will have to be dealt with city by city. But, as in respect to those of central business districts, comparative studies undertaken as a part of this program should help by providing information and insights not readily acquired in analyzing only one district, and by suggesting new lines of inquiry and analysis.

As might be expected, the land-devouring type of urban growth now under way has aroused considerable concern among some agricultural economists, conservationists, and others. In "The Yearbook of Agriculture, 1958" at least two articles deal primarily with this matter and others touch upon it. In a talk at the University of Missouri on September 13, 1958, the Director of the National Science Foundation said:

From an economic point of view, the heedless destruction of natural resources threatens the ability of the land to sustain us. Mr. Donald A. Williams, Administrator of the U.S. Soil Conservation Service, points out that in 1956 alone

1,250,000 acres of our very best farmlands were buried under the steel and concrete of housing developments, factories, highways, shopping centers, and went into other non-agricultural uses. Since the beginning of World War II alone we have lost a twentieth of our present croplands (that's equivalent to wiping off the map nearly 250,000 of our most productive farms and ranches).

He cites the example of a rich farm in a fertile valley near San Francisco that was displaced by 750 ranch-style homes, and goes on to point out that 'by careful planning, this housing development could just as well have been built on barren acres a mile away' and the farmer could have continued to provide food for San Francisco's growing population.

One aspect of this problem is indicated by a rather obvious question suggested by the quotation: If the 750-house tract had been developed a mile away from the fertile farm and if, as would happen in most jurisdictions, the subsequent property tax assessment on the farm would reflect the possibility of urban use of the land in the area, how much longer would the farm be likely to remain in agricultural use?

Many urbanites, of course, have a ready response to any mention of this problem. They say in effect: "All my life I've been hearing about agricultural surpluses. The national government is spending billions of dollars trying to cope with the problems they create, so far apparently with little success. Yet just as soon as some development begins to reduce the amount of land under cultivation, it is pointed to as a calamity."
This view, too, indicates an aspect of the matter that ought to be analyzed, but it hardly seems to dispose of the underlying problem. If, as the quotation indicates, all or nearly all of the area being absorbed by urban uses is "our very best farmland(s)," this would seem a poor way to deal with surpluses—that is, to drop out the best productive units, and particularly to do this through a hit-or-miss and, from the point of view of agricultural uses, an irreversible and irresponsible process. Also, if the population of the United States is likely to increase by 50 percent or more and the metropolitan population by more than 70 percent from 1950 to 1975, and if it be true that a large proportion of the human beings on the earth go to sleep hungry nearly every night of the year, and if one has any faith in the ability of men to order their economic and political affairs so as to deal with such a monstrous condition, there ought not to be a jumping to too many glib conclusions about agricultural surpluses. These are a lot of "if's," but they point to some of the complexities of this issue and the need for careful study of it.

In Great Britain, for obvious reasons, this has been a matter of widespread concern and considerable controversy for years, particularly since World War II. Although the basic conditions are dissimilar in many respects, something might be learned from British consideration of their problems. For example, they have found that often a reasonably compact and dense form of urban development cuts down agricultural production more than a more open kind for the same number of families. The latter takes up more land area, but a considerable proportion of it is kept in food production in the form of vegetable gardens.

Quite clearly this is a problem not of urban planning alone, but for collaboration between urban and other planners and public agencies. Aside from a satisfactory definition of the problem itself, studies should include urban and rural zoning; tax and assessment policies; the place of farmlands, with or without limited rights of public access, as greenbelts around urban development; and ways and means of joint planning and carrying out of policies in various kinds and sizes of urban areas and their environs.

Although the need for public recreational space, the problems of central business districts and their fringes, and of agricultural land absorption, pose serious and significant questions for urban planners that should be looked into, outlining them here should not divert attention from studies of the processes of urban planning, its goals and how they are determined, its relations to other governmental units and functions, administrative and legislative, as well as to non-governmental organizations and to various groups and classes of the citizens of urban localities. These are basic areas of study. Improvement in urban planning, and through it of urban development, may depend in some considerable part on studies of this kind and the uses that are made of them.

**Urban Government Finance**

Looked at in broad perspective, the present picture of urban government finance in the United States appears as a paradox. Its urban areas are the greatest aggregations of income-producing power the world has ever seen. Current (1956) revenues of local government, except counties (those of cities and other incorporated general purpose governments, townships, school districts, and special districts) are only about 5 percent of the gross national product of the economy—less than 4 percent if intergovernmental revenues (from state and national governments) are not counted. Since the beginning of the Twentieth Century this proportion has risen only moderately, despite the increased urbanization of the population and the fact that over this period most local governments have added literally scores of activities and services to their citizens. Yet today most urban governments are in more or less severe financial straits. More-

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10 For local government revenues: Bureau of the Census, "Summary of Governmental Finances in 1957." Table 1, p. 22. For gross national product, "Statistical Abstract of the United States, 1958." Table 380, p. 303. The revenue figures are for all local governments except counties, not of urban governments.
over, in most of them the condition is getting worse rather than better—and often the rate of deterioration seems to be increasing.

What is the explanation of this contradictory state of affairs? Of course, there is no simple answer. But much of the difficulty may be summed up in the statement that, by and large, the financial systems of urban governments are weak and inadequate; they do not tap the flow of income in their localities fairly and effectively. To this result many conditions and factors contribute. A quick review of some of them may make the generalized answer just given a little more meaningful, and at the same time, indicate several major areas for study.

Although the recent growth of state grants-in-aid and shared taxes, as well as the development of various local service charges and supplementary levies of many kinds, has reduced the relative position of the property tax as a revenue producer for local governments, it is still their chief source of income nearly everywhere in the United States. (In 1957, for all local governments, including counties, property taxes provided about 44 percent of total revenues—those from taxes and other sources.)

Not many years ago property tax rates in most suburban and fringe areas were well below those of their central cities. The principal reasons for this relationship are fairly obvious. In many of the higher income suburbs of the time the property valuation per family was high and the number of children of school age was fairly low. In other suburbs and in much of the fringe area population was sparse and the number and level of public services were low. More recently, with rapid population increases in these areas and the onset of the shifts in population previously mentioned, this spread between rates in the central cities and outside has narrowed rapidly. Sometimes, now, rates (equalized) in some suburbs, and even in parts of the fringe areas, are as high or even higher than those of their central cities. Nearby everywhere they are rising more rapidly. Outlying population growth is forcing up the number and level of public services and some of the postponed facilities are now being built at the highest construction costs in the history of the country.

Not only does this latter factor influence tax rates by raising the charges for debt service, but it also is highlighting other long-smouldering difficulties of local government debt and its administration. As previously pointed out, from 1950 to 1957 the outstanding debt of local governments in this country, most of which is that of urban governments, increased by 107 percent. The recent fiscal policy of the Federal Reserve System has rubbed salt in these sores by raising substantially the costs of money to local governments. In 1950 the yield on high-grade municipal bonds, according to "Standard and Poor's Index," was slightly under 2 percent; in March 1957 it was 3.32 percent; in September 1958, 3.96 percent; and on July 15, 1959, it was 4.05 percent.

The "Balkanization" of local government jurisdictions in metropolitan areas, plus the dispersal of industrial and commercial land uses, has produced some suburban and fringe localities that so far are, happily, largely free from these financial stringencies. Most of these, of course, are the ones that have in their tax bases certain kinds of industrial plants and the burgeoning shopping centers. Usually, however, their good fortune only underscores the plight of their less fortunate neighbors whose residents contribute to the high property valuations by buying at the shopping centers, working in the plants, and even by buying some of their products. But their local governments get no direct benefits from these activities because of the more or less chance position of their boundary lines. Consequently, they must struggle along with property tax bases made up largely of modest housing.

By no means all of the financial difficulties of local governments, however, are in suburban and fringe localities. The shifts of population and land-uses previously examined are weakening the property tax bases of central cities at the same time that they are increasing the need for more and improved services for the low-income, urbanly inexperienced in-migrants. As these milestones grind more and more closely together, more and more complaints are heard from central city officials, agencies and civic associations about what they say is the unfairness of conditions requiring central cities to provide public facilities and services for daytime populations that pay most of their local taxes outside. (Often this argument includes references to "suburban parasites" and "freeloaders." These names frequently are more than matched
by the suburbanites' unflattering views of many central city inhabitants, officials, and institutions. Thus is calm analysis and democratic discussion of a complex and difficult issue furthered.)

At least one central city measure designed to offset this alleged weakness of the property tax has gained some momentum. It is the municipal income tax. In many localities where it has been tried it is a flat tax, usually 1 percent or less, on wages and salaries paid in the city.

On the other hand, spokesmen for the suburbs and fringes deny the validity of the central city case. They urge that, in economic fact, suburbanites and fringe area inhabitants pay property taxes in three ways:

1. On property they own or rent.
2. Less directly, but nevertheless actually, by buying in shops and stores, thus helping to create high property values in retail districts and the income to pay taxes on them.
3. By manning industrial plants and offices and thus, again, helping to produce both substantial property values and income from which the taxes are paid.

According to this view, the commuting suburbanite and fringe area inhabitants do in fact pay taxes both in the localities in which they live and in the central cities in which they work. Of course this argument applies as well to the reverse commuter, the now quite numerous group in many metropolitan areas that lives in the central cities and works outside.

Without some empirical base for estimating, however crudely, the relative size of the tax payments made in these three ways, it is practically impossible to decide how much weight to give to this argument—to whatever area it is applied. It does, however, make quite clear the difficulty underlying many of the tax problems that have been mentioned and other, allied ones, as well. In metropolitan areas the subdivisions of which, by definition, are tied together in many ways economically and socially, can any equitable and effective system of local taxes come from piecing together the actions of many (in some areas scores and even hundreds) taxing agencies and jurisdictions, each concerned primarily with "getting as many feathers with as little squawking as possible?"

Another defect of urban revenue measures is that most of the forms of taxation now used are essentially regressive in nature; that is, they bear harder on individuals and families of low income than on the more well-to-do and thus contravene the principle of ability to pay. Here, according to the usual analysis, the problem lies not so much in the crazy-quilt character of local government jurisdictions as in an essential fiscal weakness of all urban and metropolitan areas, however large. Because many well-to-do individuals and some successful corporations are quite mobile, if any metropolitan area by whatever means should turn to progressive taxes, it simply would find itself losing to other areas not only some of its existing taxpayers but also a considerable share of those it might otherwise attract. One proposed remedy is for a substantial part of local government revenue to be collected through taxes levied by states and the national government, and then returned to the local units through grants-in-aid or as shared taxes.

Evaluation of this argument and of the proposed remedy is clearly beyond the scope of this report. The most common objection to the proposed remedy ought, however, to be stated: it is that any such system of collecting taxes and of granting or sharing the revenue with local governments is bound to weaken or cripple them. Is this opinion soundly based? Or is it just another example of what someone calls "the folk political science"—plausible, often repeated, but without any firm basis in fact and careful analysis. Today about 25 percent of aggregate local government revenue is in the form of grants and shared taxes from state and federal governments. Most of this revenue now comes in not as the result of any carefully considered general policy but in consequence of a number of separate, ad hoc programs or measures designed to deal with specific problems of individual local services. How much, if at all, have they
weakened local governments? This is not a rhetorical question, but a topic for serious study.

Clearly, the range of topics for useful studies in this area is great: for example, the incidence of the principal local taxes; their effects, if any, on the economic growth of local communities; the optimum sizes of local communities for the provision of the major local public services; the demonstrated and probable influences of state and federal grants-in-aid and shared taxes on local administration, budgeting, political responsibility, and citizen interest; the relative advantages and disadvantages of various methods of debt limitation; the rationale and practices of capital budgeting or programming; policies and practices in the pricing of public services not financed entirely out of tax revenues; the administrative and political problems of municipal income taxes and of so-called nuisance taxes; the demonstrated advantages and disadvantages of revenue measures tied directly to certain classes of services or expenditures; evaluations of various forms of state supervision and control of certain aspects of local government finance; the invention of new revenue and fiscal systems for different kinds of urban areas and analysis of their probable consequences, direct and indirect.

Public Education and Participation in Urban Affairs

The fairly long look backward at urban affairs, which has been invoked in the foregoing, can help again here. Not only have urban governments greatly increased the range and variety of their activities since the turn of the century, but during approximately the latter half of that period many of these newer activities have had to do quite directly with the physical and social development of their communities—for example, zoning (now dealing in some localities with nonconforming uses and the esthetics of buildings, as well as with classes of land use and the characteristics of improvements), subdivision control, housing codes, commissions on race and inter-group relations, public housing, major highway and transit networks, urban redevelopment, which, it is now clear, is more than putting up new buildings in place of old ones, but cuts deeply into the social and political fabric of some districts and through displacement and relocation of families affects many others.

Public activity of this kind almost literally hits people "where they live:" it helps determine the characteristics and quality of residential districts, the attractiveness of an urban area for various industries and businesses, the distribution of purchasing power within sub-areas or districts of the urban area, how one goes to work and where, who his neighbors are and are likely to be, etc. Of course, individuals have considerable ranges of choice, varying usually with their income status, as to where and how they live, but it seems undeniable that today public policies and action play a considerable part in determining the qualities and ways of urban life and, in fact, a much greater part than they played a generation or more ago.

With this evolution in the factors in urban development, increasing concern is being expressed by many people as to how and in what degree citizens of a locality may effectively influence and control these forces in and on their lives. Sometimes this concern is cast in the form of the old question of what is the proper role of the expert, specialist, or technician versus the non-expert in public affairs. Sometimes the formulation is in terms of political responsibility or accountability. Sometimes governmental organization and practice are questioned: can a citizen do what, in his own or the public interest, he ought to do in respect to these matters by voting every two or four years for a mayor and alderman and complaining to them, often intemperately, when he thinks, often late in the game, that he is about to be hurt by some program or action.

Other people often come upon the same basic issue, although they see it in a rather different light. Officials of, say, a redevelopment authority, or of a local chamber of commerce or civic association, often in collaboration with public officials, develop, carefully and in great detail, a project or proposal for public action. When it is announced, they often are genuinely astonished at the opposition it encounters. Apparently, it rarely occurs to them that those that oppose it may not define the underlying problem in the same way, that they have not gone through the same process of analysis and dis-
discussion, that the proponents themselves, if they were in the others' shoes, might re-
sent what would appear to be an ignoring of them and "springing something on them." 
When, therefore, the opposition arises, some of the proponents calmly or heatedly at-
tribute it to the ignorance, stupidity, or general cussedness of the opponents. There 
is nothing to do but to try to roll over them. Others conclude that they need the ser-
vices of another expert, a public relations man, to "sell" the proposal to enough per-
sons so that it will have some prospects of being carried through.

Various attempts have been and are being made to deal with this important issue in 
public life. Official advisory commissions and quasi-administrative boards are fairly 
common devices. Sometimes and in some circumstances they seem to help; sometimes, 
apparently, they make matters worse. Some civic associations are trying to broaden 
their membership and bases of support. Parent-teacher associations have been devel-
oped partly in response to this problem. The local "workable program" that is now a 
condition of federal aid for urban renewal includes "citizen participation," which usually 
takes the form of some city-wide official advisory body, and often committees in the 
areas of major redevelopment or rehabilitation projects. Public planning agencies in 
Cleveland, Philadelphia and elsewhere have experimented with various methods of dis-
trict or neighborhood education and consultation, particularly in respect to programs 
focused largely in these areas. In Kansas City, officially sponsored and aided com-
munity councils have been in operation since about the end of World War II. At least 
a few similar organizations have been set up more recently in Baltimore.

So far, however, there is very little reliable tested knowledge about these experi-
ments, let alone any satisfactory explanation of their accomplishments and failures. 
Of course many firm assertions as to what "everybody knows" about such matters are 
readily available, but nearly all of them are so superficial and so contradictory among 
themselves that they are properly suspect. There also are available few if any con-
vincing or penetrating discussions of the problem itself that could guide further experi-
ments or help in formulating studies.

Here, then, is another area of study that ought to be attacked at once. In almost 
any circumstances it would be a significant area, but with the present and impending 
rate of urban population growth, much of it made up of in-migrants from rural areas, 
some progress in it fairly soon might well make the difference between more orderly, 
intelligent and democratically planned urban development, on the one hand, and either 
continual delays, confusion and frustration or a desperate adoption of heavy-handed 
high-pressure tactics that would sooner or later be regretted, on the other.

To develop this study area adequately, the first need is for as careful analyses as 
now can be made in the light of what is known or there are some grounds for believing 
about urban communities and government, of the fundamental problem. This should be 
followed by thorough case studies of some of the experiments in urban areas, as well 
as of the similar attempts in various rural and farm programs, where the body of ex-
perience is considerably greater. As soon as these studies begin to throw some light 
on the matter, they should be followed by comparative analyses beamed at what seem 
to be crucial factors and elements in some or all of the experience to date—possibly 
the question of how various groups and classes of urban populations define or perceive 
typical problems or issues in urban development; or the questions or issues that var-
ious groups wish to have a hand in and those that they are quite willing to leave to 
others, and why; or the leadership and followership patterns in different but rather 
common types of urban districts; or the urban areas, if any, in which some reasonably 
effective sense of community may be found. Finally, this would seem to be a study 
area in which, after some of each of the kinds of studies just mentioned have been done, 
new approaches and devices might be proposed and, on a small scale, actually tested 
in practice. These tests, of course, should be carefully prepared, recorded, and 
analyzed.

POLICY QUESTIONS RE URBAN CIRCULATION

For reasons given in the introductory section of this report, this framework or 
program does not include studies concerned primarily with established methods of
survey and analysis by highway engineers, urban planners, and others. Nevertheless, there are some crucial questions in providing the means and facilities for urban circulation that ought to be included. Most of them are customarily dealt with or at least acknowledged in preparing and carrying out highway and transport programs, but very few if any of those responsible seem even moderately satisfied with the ways they are now being handled. All or nearly all of them quite logically could be subsumed either in the section on urban planning or the one on finance. All things considered, however, they seem to deserve a separate listing. This may emphasize the importance of circulation in the urban areas of today and tomorrow, as well as the relative paucity of information and understanding of the problems themselves. Six questions or issues of this kind may be identified.

Location of Expressways

The location of expressways within urban areas is a difficult and troublesome task. Many pertinent considerations are quite obvious: for example, the capital outlays and upkeep expenses of alternative routes; the dislocation of residential, industrial, commercial, recreational, service, and institutional facilities in prospective rights-of-way; the probable effects of the artery on property adjacent to its right-of-way, at its interchanges, and along feeder and unloading streets; public pressures and preferences of various groups; the availability and expense of terminal or parking space at various places; the possibility of excessive lengthening of trips of many prospective users; the disruptive effects of some possible routes on established neighborhoods, school districts, and other important urban units; the possibility of combining the expressway, in one or more ways, with mass transit facilities; and the costs and benefits of by-pass routes for various commercial and residential districts in urban centers of differing size and pattern.

Clearly there is no one unit—capital outlay, time of acquisition, average length of trips, convenience, or whatever—by which all aspects of various possible routes can be measured and compared. Some of the pertinent considerations can be subjected to quite precise measurement; others cannot. Here, it would seem, is a prime example of a problem that never can be solved by studies, but in respect to which more rigorous analysis and comparative studies of methods and results should be able to enlighten and guide judgment.

Reverse Commuting and Inter-Suburban Travel

Although the phenomena called reverse commuting and inter-suburban travel (and even intra-fringe travel) are easy to identify, it seems agreed that they have not received the study they deserve, particularly in light of the possibility that they may soon become first-order components in both rush-hour and off-peak travel. Some substantial increase in their volume seems almost certain as the dispersed pattern of settlement continues to develop. If so, it is not too soon to learn much more about them as the basis for reasonably prompt and economical provision of facilities to serve them and for the insights that might thus be obtained on the changing social and economic organizations of urban areas.

The Role of Mass Transit

Many persons are inclined to classify mass transit services and their many problems as examples of the pathologies of urban life. One does not have to agree with this view to argue that these services and their role in the circulation systems of urban areas of differing size, density, and economic character merit thorough study. Because of the financial difficulties and operating troubles of many mass transit systems, their place in rush-hour travel in the larger urban areas (even in the most thoroughly motorized ones; for example, Los Angeles and Detroit) is often grossly underestimated. Many of their basic troubles seem to stem largely from three facts: (a) Rush-hour travel is now largely a five-day-per-week phenomenon rather than a six-day one, therefore revenues from it have been drastically reduced but the necessary capacity has not;
(b) Furthermore, low-density residential development favors use of the motor car for most travel purposes; and (c) Even in urban areas with severe rush-hour congestion on arterials and other main highways, many of these streets are quite easily traveled in off-peak hours. Hence, mass transport has lost heavily in competition for this travel. In addition, of course, mass transit systems are expected to provide stand-by service for extraordinary demands (for example, those from major athletic contests) and on occasions when storms or other conditions temporarily cut down the use of private automobiles.

Certainly, however, very little in the traffic situations in the most thoroughly motorized cities supports the rather common opinion that mass transit, per se, is obsolete and soon will be only a relic of the past in the United States, except in New York City and perhaps one or two other centers. And perhaps it need hardly be said that little understanding of urban circulation and less sound policy in respect to it are likely to come from constantly viewing the motor car and mass transit as natural enemies locked in a death struggle. In fact, a major—possibly the principal—object of studies of the facilities and problems of circulation in urban areas should be to explore the ways and means by which individual and public transport might most effectively share the job of moving people (and goods) at all times and for all purposes within areas of differing size and character. The ways and means considered would range from such obvious devices as park-and-ride plans and the staggering of work hours in major travel generating districts to more expensive and possibly more questionable schemes, such as the sharing of rights-of-way and some terminal space, and to such controversial proposals as joint financing and administrative arrangements.

In some of the larger urban areas at least, the position of mass transit, particularly of rail commuting, seems to be at or very near a crisis. Apparently many such facilities cannot operate within their present revenues. It is not certain that higher rates will remove their difficulties, at least for very long. They may simply cut down, sooner or later, the volume of traffic on these facilities by encouraging further dispersal of residential development and decentralization of business and industry, as well as by raising the pressures for more express highways. Surely needed is a factual and analytical basis for evaluating this and related problems, as well as proposals for various forms of subsidy to mass transit. Surely there would be dangers in such proposals—dangers of slack operation, continuance of lines and facilities that ought to be dropped, etc. On the other hand, mass transport is an excellent example of a service that, under prevailing economic and legal practice, simply cannot tap for revenue many of the indirect benefits of its operations. The riders, of course, benefit and pay. But how about the benefits conferred by mass transit lines on property owners, notably those whose land is at or near transit stations or terminals? If the transit agencies could tap only a relatively small proportion of the increase in rental or annual value of such land that is attributable to their services, certainly they would be better off financially. They might be considerably better off even if they had to compensate some other land owners whose annual values have been depreciated by the noise and confusion along their lines.

It may be too late to initiate means of tapping the indirect benefits of the older parts of many mass transit systems, but at least the existence of such benefits is a pertinent fact in considering the pros and cons of various forms of subsidy and their alternative of further curtailing these services. Competent studies on the order of magnitude of these benefits, as well as of the gains and losses likely from various possible courses of action in respect to mass transport services, could help substantially in the complex and difficult task of arriving at defensible policies in this whole matter.

Incidentally, it is not too late to begin studies of the comparable benefits (indirect) of the newer traffic facilities (for example, expressways). They surely seem to be raising the rental or annual value of very considerable areas of land in urban areas, notably around major interchanges. How substantial are these increases? What other factors, if any, contribute importantly to them? If it seemed wise public policy to tap some part of them for public purposes, could it be done equitably and without too much cost? By what means and methods? What might be the indirect consequences of such a policy?
Admittedly, issues of this kind may seem to some people rather far removed from the "practical problems" of urban traffic and transport. Unless many signs are wrong, however, at least some of these questions are going to seem much more immediate and practical in the near future. Philadelphia already is experimenting, for a limited period of time, with subsidy of some rail commuting lines. So is Boston, apparently in a less imaginative way. And if anything is clear about the persistent problems of urban circulation it is that they will not be substantially ameliorated by minor improvements in design, construction and operation of facilities. Many of these have been made and no one should belittle them or their results. After a few months or years, however, the problems usually are just as severe as they were before—or more so. It is necessary to face up to some complex and difficult questions of public policy. And these policy questions can be defined adequately and considered intelligently only if there is available much more inclusive and reliable knowledge of the kinds just mentioned and some understanding derived from that knowledge.

Land Use Patterns and Travel Volume

Many planners and others concerned with urban development have been interested for some time in the possibilities that traffic and transport problems might be considerably eased by over-all land-use patterns substantially different from the one most common in American urban areas, which has one or two or sometimes a few major travel generators (or attractors) in central locations (that is, the central business district, major industrial centers) with much of the traffic and transit facilities funneling people and goods into these centers during part of the day and reversing this movement at other times. Why should not some of these travel generating centers be smaller in size and distributed somewhat more widely over the urban area? Quite surely such a changed pattern would reduce the rush hour journey-to-work load on some traffic and transit facilities. It also would require additional facilities to serve the newer centers, but presumably they could be provided more easily and less expensively. The average length of trip quite probably would also be reduced. In respect to some of the most troublesome problems in urban circulation, this line of argument would seem to make good sense. Would such a rearrangement, however, impose handicaps on the businesses and industries that might go into these alternative locations? And how about the travel costs in money, time, and general wear-and-tear on employees and customers? Where does the balance of advantages and disadvantages, of costs and benefits, fall?

Until quite recently these were matters largely of conjecture and argument among specialists. Today, as previously shown, these newer patterns of land use are being developed or approximated in some degree in many sizeable urban areas. In Great Britain they are the objective of a deliberate policy embodied in the New Towns program. Are they a "wave of the future" or primarily the consequences of a general failure to deal promptly, effectively and imaginatively with the accumulating circulation and land-use problems of the older pattern?

It would seem high time to explore this whole matter. Clearly it involves more than questions of circulation facilities and services, but they are an important part of it and are inextricably tied in with many other aspects. There are now the emerging new patterns to be analyzed and compared. And it would not be too difficult to put together hypothetical patterns or "models" for further studies.

Eminent Domain and Other Land Acquisition Procedures

Although no quantitative measures of the use of eminent domain in urban areas are available, it probably has been used (or has been available for use) increasingly over the past several years. Moreover, it seems likely to be employed as much or more in the immediate future for urban renewal projects, expressway rights-of-way, street and highway improvements, parking lots, and for park, school, playground and other public purposes necessary in the urban development that lies ahead.

Although it is an essential tool in all these programs, it is a drastic and even a dan-
gerous one. It can work injustice and create resentment—justified and unjustified. These are signs that all is not well on this front. Officials, of course, are likely to point to the length of time required by such actions, the uncertainty of awards, and the shortcomings of some trial procedures as means of arriving at reasonable conclusions in highly specialized and technical matters. Others would emphasize the kinds of evidence permitted in some jurisdictions, the date as of which the valuation is supposed to be made, and the tactics used by acquiring agencies prior to eminent domain proceedings.

Both the long-term interest of the public agencies and of property owners might be well served by several competent, thorough, comparative studies that would cover basic legislation, specified procedures, tactics of various users of the power, statutory provisions and court rulings on admissible evidence, various forms of "quick-taking," and the attitudes of various groups toward the use of this power for various purposes and toward the ways in which it is exercised. Although these studies probably would be of special value in programs of highway and transit facility improvement, they should not be limited to these uses. Takings for the other public purposes just mentioned ought also to be included.

Unlike many of the study areas dealt with here, studies of this kind would suffer from no shortage of materials, except in one or two of their parts. At least one specialized type of inquiry in this field probably would share this common difficulty: examination and evaluation of the proposals recently advanced and others that might be formulated for the public acquisition of development rights in certain lands that might be needed for future recreational uses, forest or wildlife preserves, or greenbelts; or even for protection of highways from dangerous clutter and unsightly uses on bordering property.

Relocation of Displaced Families and Land Uses

Some public programs requiring substantial land acquisition (for example, urban re-development) have recognized and made some provision for relocation of families and non-family activities displaced by their operations. In redevelopment, despite some attention to this cluster of problems in the earlier statutes, years of trial and error have been necessary to devise measures that are even half-way satisfactory in practice. Even today, difficulties in relocation are probably the most common and serious stumbling blocks in most local programs. In most other urban programs, including those for highways and other circulation facilities, displacement and relocation seem to have been dealt with in a more or less ad hoc, catch-as-catch-can fashion. Attitudes toward this phase of these programs have ranged from definite concern to outright contempt for "a lot of soft-headed nonsense," and practice has varied accordingly.

In respect to practically all programs, displacement and relocation have taken on new dimensions recently. For this three facts are largely responsible. The first is simply the order of magnitude of the displacement. It is one thing when a few feet are added to an arterial street for a relatively short distance to eliminate a bottleneck; it is something quite different when a new expressway takes hundreds of acres out of other urban uses. The second is that relatively tight markets for housing and for other types of real estate, as well as very high construction costs, make a substantial difference between the problems in, say, the 1930's and now. Finally, the large volume of Negro, Puerto Rican and other low-income rural in-migrants in recent years should not be overlooked. When displaced they face many difficulties in finding other accommodations because of racial and ethnic segregation practices, their low incomes, and other characteristics.

Like other policy and problem areas mentioned in this report, displacement and relocation seem almost certain to bulk even larger in public and professional attention in the future than they do today. The redevelopment of American cities has only just begun. It involves much more than the activities now carried on by redevelopment authorities. Major highway programs are only the most obvious addition. Those officials and others (fortunately relatively few) who think all they have to do is to help improve the physical city at whatever cost to the social, political, and even the eco-
NOMIC CITIES, are doing a disservice to their programs, their agencies, and their cities.

Much of the study needed here requires little explanation. Scores of cities have had experience of one kind or another on this front and have tried out various ways of handling the job. The only warning would be not to restrict the studies to comparisons and evaluations of the more or less mechanical features—relocation offices and their management, joint offices serving people displaced by more than one program, payments for moving expenses, the timing of relocation efforts, etc. These are not unimportant, and much can be learned from study of experience on them. But several less tangible matters may, in the longer run, prove to be quite as significant if not more so. At the least, the needed studies include inquiries into such matters as the relations between relocation and various programs of public education and participation in urban affairs, and the implications and by-products of such practices as putting into public housing families or households that will not be admitted into other low-rental properties.

Finally, although some of the most difficult questions of relocation policy and practice will be centered on the blighted and slum districts of urban areas, the studies should not ignore the problems, attitudes and responses to displacement of families, business men, and others elsewhere. These may differ substantially from one kind of area to another. And in the future considerable public acquisition of land seems likely in non-blighted districts. It will be needed in developing further the network of circulation facilities and also in making good the deficiencies in public space and improvements due to hasty and shortsighted layout and building in recent years.
Priorities

All of the study areas and sub-areas outlined in the foregoing should be attacked in force and as soon as possible. More accurately, the advance forces now in most of them should be re-enforced as soon as possible. Both in time urgency and potential usefulness, leaving aside differences in the size and complexity of the areas, all of them, with only one or two possible exceptions, rank very close together.

Nevertheless, a three-way priority breakdown is suggested, as follows:

Class 1 - (a) Studies toward a theory of urban development, starting perhaps with research in residential dispersal, industrial and commercial decentralization, and suburban and fringe area stratification.
(b) Studies of urban planning, including not only the urban planning process per se, but also highway department planning in urban areas, planning for open space and recreation needs, the future of central areas, and the problem of the absorption of agricultural land by urban uses.
(c) Urban government finance.
(d) Studies in public education and participation in public affairs.

Class 2 - (a) Studies concerning location of expressways.
(b) Studies in reverse commuting, inter-suburban and intra-fringe travel.
(c) Studies concerning the role of mass transit.
(d) Studies in land use patterns and travel volume.

Class 3 - (a) Studies concerning relocation of displaced families and land uses.
(b) Studies of eminent domain and other land acquisition procedures.
(c) Studies of standards.

There is no significance in the order of listing within the three classes. It would be extremely difficult to make such a schedule.

Approximately equal weight has been given to several considerations, including:
(a) the basic nature of the research (the degree to which competent work in an area might be expected to inform policy formulators and administrators, and to throw light on other research needs and areas); (b) the need for early information and insights into a subject area (that is, time urgency); (c) the probable length of time before significant findings might be forthcoming, which, of course, is simply a guess; and (d) the likelihood that reasonably adequate studies in a few of the areas might be undertaken soon without the urging and encouragement of the Committee. In this study, quite possibly, rather more weight has been given to consideration (a) than to the others.

CONCLUSION

No useful purpose would be served here by an attempt to recapitulate the suggestions already made on research areas and sub-areas. The areas are listed both in the "Contents" and in the section on "Priorities." As to the further breakdowns indicated in the discussion, it is emphasized again that they do not indicate research projects, but only study possibilities. When it comes to preparing actual research projects, it may be desired to combine several of these possibilities, or to subdivide some of them. Decisions on questions of this kind will depend on a number of considerations—for example, the time, money, and personnel available; or what further exploration turns up as to the availability of materials; or other work in process. No generalizations about such matters are meaningful; therefore, this report does not take this next step. It presents a suggested framework for urban studies and indicates the range and character of the research possibilities in its principal sections, as well as their probable or possible significance in the life of urban communities now and in the immediate future.

The rationale of this report rests on three assumptions or opinions. First, Amer-
ican society and its economy are predominantly urban and are rapidly becoming more so. The probable rate of growth of urban areas over the next twenty years or so is appalling. Second, the basic understanding of urban communities and their development possessed by even the most thoughtful and best informed persons is elementary. Both scientific curiosity and the welfare of our society call for strengthening and deepening it as rapidly as possible. Third, over the next several years at least, the citizens of urban communities, directly or through their representatives and agents, will have to pass upon a formidable array of questions and issues regarding urban development, broadly defined. The chances for the formulation of wise policies will depend in considerable part on the availability of facts and expertise in many fields. Even more they will depend on a true and clear perspective on the issues and on means of learning, promptly and thoroughly, from the mistakes as well as from the accomplishments of the past.

From these views come the major emphases in this framework for urban studies: on research for basic understanding and theory, and on studies to illumine the substantive problems as well as the methods of policy formulation in urban communities.

The program of studies proposed is not all-inclusive. It is, however, wide-ranging and ambitious. Limiting the major sections to those with clear implications for urban circulation excludes some areas, but leaves in so many others of so considerable variety that many scholars and organizations should be able to find in the program work that will interest and challenge them.

The Committee for Urban Research can play a key role as a clarifier of research needs and opportunities, as instructor of many professional men and community leaders, and as an encourager, guide and adviser of researchers and those who can support research. To judge the potential significance of the Committee's work, one has only to look at the widespread ignorance about urban development and its problems and to consider the present embryonic state of urban studies. His conclusion may then be re-enforced by recalling again the almost fantastic magnitude of the probable urban increase of the future and the needs it will create for basic understanding of urban development and for guidance in public policy formulation.
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The NATIONAL RESEARCH COUNCIL was established by the ACADEMY in 1916, at the request of President Wilson, to enable scientists generally to associate their efforts with those of the limited membership of the ACADEMY in service to the nation, to society, and to science at home and abroad. Members of the NATIONAL RESEARCH COUNCIL receive their appointments from the president of the ACADEMY. They include representatives nominated by the major scientific and technical societies, representatives of the federal government, and a number of members at large. In addition, several thousand scientists and engineers take part in the activities of the research council through membership on its various boards and committees.

Receiving funds from both public and private sources, by contribution, grant, or contract, the ACADEMY and its RESEARCH COUNCIL thus work to stimulate research and its applications, to survey the broad possibilities of science, to promote effective utilization of the scientific and technical resources of the country, to serve the government, and to further the general interests of science.

The HIGHWAY RESEARCH BOARD was organized November 11, 1920, as an agency of the Division of Engineering and Industrial Research, one of the eight functional divisions of the NATIONAL RESEARCH COUNCIL. The BOARD is a cooperative organization of the highway technologists of America operating under the auspices of the ACADEMY–COUNCIL and with the support of the several highway departments, the Bureau of Public Roads, and many other organizations interested in the development of highway transportation. The purposes of the BOARD are to encourage research and to provide a national clearinghouse and correlation service for research activities and information on highway administration and technology.