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Foreword

The various papers presented in this RECORD represent an over-view of various elements of the urban transportation planning process including design elements, transportation planning techniques, legal aspects of planning and decision making, and legal controls. It is not the intent of this RECORD to cover all the technical or component elements of the transportation planning process. These papers only highlight a few of the policy, legal, and broad planning questions that are of vital importance to the total transportation process.

Charles Blessing discusses the overall importance of urban design as a vital link in the total comprehensive planning process. Alan Voorhees discusses current transportation planning techniques and their ability to shape the structure of the urban form. Daniel Mandelker in his paper reviews the overall legal framework for planning and decision making.

The three papers by Mathewson, Fonoroff, and Curry deal with the problems of planning and the process of making policy decisions directly related to transportation in urban areas. Kent Mathewson discusses the overall framework of planning and decision-making with Detroit used as the specific example. Alan Fonoroff discusses the relationship of control of traffic through control of land use, while Leigh Curry contrasts the various problems of urban renewal planning with transportation planning.

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Urban Design and Its Relationship to the Comprehensive Planning Process

CHARLES A. BLESSING, Director of City Planning, Detroit City Planning Commission

•THE PROBLEMS of planning design and development confronting the cities of America today, when measured in social and physical terms, are vastly more complex and more difficult than those faced by urban societies at any other time in the history of the world. To understand the relationship of urban design to the comprehensive planning process, it is necessary first to clarify the contribution of a well-designed physical environment toward the fundamental needs and goals of urban society. A well-designed physical environment has a significant beneficial effect on the physical, psychological, and social health and welfare of people.

A basic question is what proportion of the total resources of a society can be invested in improving the design quality of the environment. To determine this we must first establish the relative value which society places on good design in the urban environment in relation to the achievement of other specific goals such as safety, convenience, mobility, efficiency, economy, and general functional utility of the environment. It appears to be necessary to attach quantifiable measurements to the degree of achievement of beauty, plasticity, and clarity of form. Does society today really care whether or not we have beauty in our environment? If society does care, what price is it willing to pay for the achievement of a physical environment humane in quality and beautiful in aspect as well as efficient in function and economically sound in operation?

There has been in the last few years inadequate understanding between those interested in physical planning and development and those concerned primarily with the social services and with human resources programs. The significance of this divergence in professional attitudes is directly relevant to the discussion of how urban design should relate to comprehensive planning. The basic question, I believe, is this: How can design-oriented physical planning and development contribute to the welfare of society? Can there be a good life or a great society in a dilapidated, disorganized, dangerous and ugly physical environment? We would not be engaged in urban design at all if we were not convinced that a good environment relates directly to the goals of a good society and unless we believed that a good physical environment is a fundamental requirement of a good society. We must continue to explore and specifically identify the interrelationships between the basic physical, political, economic, and social aspects of urban change. The physical planner and the design planner are receiving increasing support from the psychologist in identifying the beneficial influence of well-designed urban space on the quality of urban life.

As an observer and student of American cities, I have been impressed and inspired by the uniqueness of the natural setting and of the natural characteristics of the physical sites of many of the cities of America. I have admired the beauty and historic richness which is such an important heritage of our cities from coast to coast. I have been concerned by the failure of American cities to achieve a coherent overall metropolitan development pattern whether in the New York region, Miami, Chicago, southern California or on Puget Sound. Because of this I have been pondering the contrast between the uniqueness of the natural setting of our great cities and the sameness of the man-made patterns. Only where the terrain has shown marked characteristics of

slope or coastline, as in San Francisco, Boston or Washington, D. C., does one feel that nature has somehow prevailed in spite of all that man would do. And yet there is a compelling quality in the situation and landform in so many of the great urban centers. If no two city sites are really alike, why should not these great cities be also unique in their man-made characteristics? Is it not our responsibility to work constantly toward the goal of having each city become its own best self, a sensitive response to a unique setting, rather than an expression of uniform mediocrity?

Ian Nairn, an English journalist and critic, described the urban scene in America as

. . . an endless proliferation of every kind of artifact without purpose, without pattern, without end. The landscape is a melange of diners, gas stations, subdivisions, a few battered farms and fields, motor car dumps, motels, supermarkets, quite literally for miles on end. Cleveland to Sandusky, fifty-nine miles; Providence to Boston, forty-three miles; Riverside to Los Angeles, fifty-four miles.

The fragmentation of all relationship to life and environment has already occurred and the silent main of universal anonymity and mediocrity comes flooding in behind them, and the survivors do not know what has happened. I hope in the name of all the splendid things in America, that I am wrong.

I hope that in all of our cities we will in the future prove him wrong, although today we recognize harsh justness in much of his indictment based on what met his view across our land.

During the past ten years there has been a growing interest in organized research in the developing field of urban design, environmental design, and community architecture. Most architects recognize now that architecture is more than the design of individual buildings. The architect I. M. Pei has said, "A city, far from being a cluster of buildings, is actually a sequence of space enclosed and defined by buildings." This thought is the essence of urban design. A most encouraging aspect of the advance of growth and understanding of urban design is the increasing volume of well-oriented research on the subject. In a recent article, "The City as Environment," published in the *Scientific American*, Kevin Lynch has stated that the physical form of a city has a sensuous impact that profoundly conditions the lives of its people, and this is often ignored in the task of city building. Lynch identifies four major physical deficiencies which today make large cities less than satisfying as places in which to live. First is the excessive stress of the city including noise, uncomfortable climate, and polluted air. Second is the lack of visual identity of the parts of the city which has lead many critics to speak of the vast dull gray areas extending for miles without relief or variation. Third is the illegibility of cities; the lack of a favorable relation of one part of a city to another, the general incoherence contributing to a sense of alienation. Fourth is the rigidity of the city, its seeming rejection of human activity instead of the stimulation of a wide variety of pleasurable activities.

These four points, I believe, represent in general terms the reason for the present indifference or hostility of urban dwellers to their environment. The evident alienation of large numbers of people in the city can be measured in terms of a mounting disaster already approaching crisis proportions: social maladjustment, delinquency, crime, growing mental disorder, lives warped by poverty and neglect. This evidence of increasing social disorder is out of all proportion to the reasonable expectations of the world's most affluent society. Lack of employment, often reflecting lack of education and lack of skills, and the resulting poverty are basic causes of much of the human suffering in cities. These problems must be solved as a prerequisite to the creation of a great urban society. We must take the position that the blight of poverty can be overcome in the world's wealthiest nation, that the design of a beautiful physical environment can contribute to human dignity, self-respect, and the sympathetic response of man to his natural and man-made environment. It is

here that creative urban design comes into play as one of the essential elements in comprehensive urban and regional planning.

Urban design has become an essential activity in comprehensive urban planning as a basic planning tool to combat the blighting effect of a monotonously uniform and regimented urban environment on the lives of city people. Encouragement of creativity and human individuality is difficult in an environment of urban squalor.

In the American city the places where people spend most of their lives are those places where society has all too often created confusion and visual blight. It is inconsistent to expect civic pride and appreciation of creativity and human individuality if we deny children and adults beautiful surroundings. To believe that beauty is essential and that it will leave lasting impressions on the minds of children and adults alike, to stop feeling apologetic about attempts to fight spiritual hunger, to stop trying by computers to justify every item of expenditure intended to add beauty to the city—these will be long steps toward the creation of beautiful cities. The faculty of imagination is the principal source of human improvement. To appreciate great music one must hear it. To appreciate beauty one must be exposed to beauty.

Cities must recognize creative design as an essential component of comprehensive planning, as important as any of the other basic elements of the ten point program which is a part of the standard metropolitan area land-use and transportation plan. These basic elements are: (a) economic factors affecting development; (b) population; (c) land use; (d) transportation facilities including those for mass transportation; (e) travel patterns; (f) terminal and transfer facilities; (g) traffic control features; (h) zoning ordinances, subdivision regulations, building codes, etc.; (i) financial resources; and (j) social and community-value factors, such as preservation of open space, parks and recreational facilities, preservation of historical sites and buildings, environmental amenities, and aesthetics.

Urban design has been the subject, during the past ten years, of extensive research, experimentation, testing, and modification. There has been increasing acceptance by the design professions in many cities of the need for urban design. However, regrettably, many city planners and highway planners, understandably preoccupied with an already long list of complicated planning requirements and demands relating to the orderly development of cities and metropolitan regions, have not accepted this new and at times seemingly obscure responsibility. Only a few of the 225 standard metropolitan areas which are now conducting land-use and transportation studies are undertaking an orderly investigation of urban design as a heretofore missing element in a comprehensive regional planning program.

There is a fundamental and compelling need for the development of pioneering studies of the role of comprehensive visual design in the preparation of city and regional transportation and land-use plans. The Detroit region has proposed such a study as a part of its comprehensive transportation and land-use study. Detroit has had the benefit of several years of experience with an urban design study, as a part of the Community Renewal Program. This study has produced a design concept for the heart of the metropolitan region, an inner city area of approximately 20 sq mi. This study has placed in logical context an analysis of the historical and physical characteristics, the natural and man-made design resources, the design framework, including present and future land-use patterns, and circulation patterns and the basic exploration of all those factors which taken together will determine the quality and characteristics of form and space in the inner city. A fundamental objective has been to create a clearly articulated urban image, making conscious use of a well defined system of open spaces, a coordinated circulation system of freeways, major thoroughfares and local streets, and a pattern of architectural focal points in the establishment of what has been called a comprehensive skeletal design concept for an inner city which will accommodate up to one-third of a million people. Thus, a design based on the foregoing will replace the present poorly articulated assemblage within the central 30 sq mi of the city of some 1,500 isolated blocks averaging less than 5 acres each. The design framework acknowledges the all-important role of the Detroit River as the principal natural design feature, forming the basic pattern of the comprehensive freeway system in the inner city, which sets boundaries for, and provides access to,

large-scale planned land-use areas, including a proposal for two new towns within the inner city, each designed for 100,000 people, a central business district, a strong institutional corridor accommodating a medical center, the cultural center, Wayne State University, and a multiple-use commercial and residential axis along Woodward Avenue. The comprehensive design plan provides for the recovery of much of the blighted riverfront area for recreational and residential uses as well as for model industrial parks and comprehensive port facilities.

The articulation of the image of the inner city will be accomplished basically by the interaction of the three major form determinants: the circulation pattern, the open-space pattern, and the architectural pattern relating major focal points and major use areas to each other and to the entire inner city area. The elements identified in Lynch's research on the image of the city find expression in the Detroit urban design study. The paths range from freeways to neighborhood pedestrianways, edges range from the predominant waterfront along the Detroit River to the boundaries between the residential and industrial districts. Clearly defined nodes such as the skyscraper towers of the Central Business District and of the New Center Area are complemented by the towers of Lafayette Park and Elmwood Park and those proposed as visual features of the future centers of the new inner cities of Forest Park and University Park.

The total effect of the design of Detroit's inner city will be to overcome the four basic deficiencies referred to earlier: (a) perceptual stress leading to confusion; (b) lack of visible identity of the parts of the city; (c) general incoherence and lack of relation between one area and another; and (d) the monotonous rigidity and resistance of the city to free and varied human response.

The design developed for Detroit's inner city area, we believe, goes far toward correcting these ills: discomfort, lack of diversity, rigidity. A most important lesson learned in the past three years of developmental urban design work in Detroit has been that design, in the hands of sensitive architects, landscape architects, and urban designers, has contributed on an equal basis with the established standard elements of comprehensive planning such as the economic-base study, the land-use plan, the circulation pattern, standards for public facilities (schools, parks and playgrounds) and location relationships for specific functions (special purpose commercial, industrial and institutional areas). Urban design also helps to define the relationship of the housing cluster, the residential neighborhood, the community with its center and its clearly defined boundaries, to the entire city. In an extended period of cooperative effort occasionally marked by well-founded conflicts and disagreements, it has been amply demonstrated that creative design can hold its own in a comprehensive process of survey, research, analysis, and synthesis in relation to the more traditional planning justifications and rationale based on functional criteria and quantitative measurements. The experience from this inner city study in Detroit leads us to the hope that the redesigning of the urban landscape will become in this generation the greatest public art, and that it will be no longer limited to the central city renewal area alone, but will embrace the total Detroit metropolitan region with a projected population of eight to ten million people by the year 2000.

A specific and detailed study of environmental design quality which should be a central feature of a continuing investigation of community goals and values, and an essential basis for the regional plan, will include as a minimum the following major objectives:

1. Examination and analysis of the region's historic development in sufficient detail to understand the natural and man-made resources responsible for shaping the three-dimensional form of the region.
2. A visual analysis of the significant natural and man-made features of the region to utilize these resources to their full potential as enrichment and focal features of the visual region. Steps to preserve these features during future urban expansion or development will require specific study.
3. Creation of an organized regional design framework recognizing the visual and spatial implications of existing and potential design resources.

4. Clarification and strengthening of the visual form of the region by developing a plan which will make the major natural and man-made features of the region as well-structured, distinct and geographically far-reaching as possible.

5. Development of an open space and recreation plan incorporating significant areas of natural beauty, ample public recreation areas, and generous rights-of-way for connecting parkways and service drives.

6. Development of a regional freeway, highway, and scenic route plan of such quality and vision that it may become the most essential man-made feature in the entire regional development effort. Such a highway plan must be viewed as a major form determinant in assuring sound structure to the total comprehensive regional design plan.

No city can be planned as an abstract two-dimensional "zip-a-tone" pattern on a map and expect to be less flat than the paper on which it is drafted. No city, however naturally flat its terrain, can suffer its essentially two-dimensional character of street pattern and land-use pattern to be dealt with apart from its third dimension without isolating its architecture from its site. No town or city can be great, let alone even good in design, if its two-dimensional pattern is conceived as a land-use and circulation plan alone, however efficient those arrangements may be.

Current Techniques to Shape the Urban Form

ALAN M. VOORHEES, Alan M. Voorhees and Associates, Inc., Washington, D. C.

•IT IS difficult to determine the proper critical approach to a subject as broad as urban form. In this case, however, it would seem best to break it down into the following components: travel patterns, transportation systems, land-use activities, and goals.

TRAVEL PATTERNS

Planners currently know a great deal about metropolitan travel patterns, factors influencing the number of trips made each day, and the number of trips generated by various land uses. Knowledge of the ways in which these trips are distributed throughout the metropolitan area, when combined with good estimates of land development, enable the planner to forecast traffic quite effectively.

However, a second generation of traffic models is now being developed which requires even more detailed knowledge of travel patterns. In the larger metropolitan areas, for example, it becomes necessary to stratify work trips by income class or by occupation, because new trip generation equations are sensitive to the accessibility of people to the particular activities involved in their trips and to the competition between types of activities. Further, techniques of trip distribution need to consider both the impedance to travel and the spatial arrangement of opportunities. In the case of modal split techniques, the special characteristics of the zones of origin and destination are weighted by the levels of service provided by various modes of travel to those zones.

Many of these improvements are being incorporated, either partially or entirely, in recent studies. They are helpful to regional analysis, but they also point up shortcomings in knowledge at the microscopic level. Still relatively unknown are the travel characteristics of the local hardware store, bakery, or post office; the seasonal, weekly, and hourly fluctuations in their trip generation; and their causes.

In addition, the influence that detailed site planning has, or can have, on trip making has not been firmly established. How much will the provision of pleasant walkways between homes and shops, or between homes and work places, reduce auto driving? How much can increased transit orientation in residential design increase actual transit usage?

Detailed investigation of these areas of concern should certainly produce findings valuable to the planning of areas, whether downtown-renewal or suburban-community, of our cities. Once these plans are set in concrete, there is not much that can be done to change them, and it is of great importance that they be done well, that they reflect the most accurate knowledge of traffic possible, and that they be designed to cope effectively with the traffic demands of the future.

TRANSPORTATION SYSTEMS

In recent years considerable information has been gained concerning transportation systems. Knowledge of speed-volume relationships is improving and is being used to develop better theories of traffic flow.

However, there is much still to be learned about system operation. Such factors as the effect of travel time or fares on usage are not well enough known, but should be made more clear by the additional application of traffic models.

As in the case of travel patterns, understanding of transportation systems is better on a regional than on a neighborhood level. Techniques are beginning to be developed to apply this understanding to the smaller area, and proper use of these techniques will be necessary to the planning of downtown, urban-renewal, and suburban-community locations.

The present development of cities is making clear the necessity to modify some previous concepts of the urban street system. The concept of radial expressways feeding a downtown loop is yielding to that of a more decentralized system of freeways with concentrated transit service downtown. The planners of Leningrad, USSR, have recognized this change, and are modifying their original loop-radial plans to reflect it. This service of downtown by a generalized grid system of streets, in conjunction with concentrated transit, is also developing in many American cities.

A review of the classic concepts of street systems at the community or neighborhood level has begun. Swedish planners are using extensively, and experimenting with, specialized streets. The success or failure of these streets, which usually have controlled access, will no doubt be reflected in the future street systems of this country.

Transit service is also undergoing intensive review. The concept of special "transit streets" for new residential neighborhoods deserves exploration as a possible means of providing optimum transit service in the suburbs. In downtown areas, special bus services like the Minibuses in Washington, D. C., are being tested and observed for the improvement they may provide in older, more compact areas.

Better urban development in the future will depend greatly on efforts made today to modernize the concept of the transportation system. Research and experimentation to bring about this modernization is taking place in many fields and in many places. It will remain for planners to keep up with the developments and to use them.

LAND-USE ACTIVITIES

Although there is considerable existing knowledge in this field, there has not been sufficient explanation of the interrelationship among land-use activities, transportation systems, and travel patterns. As a result, metropolitan growth models reflect only the crudest of these relationships.

Some experimentation with the effects of various land-use alternatives on transportation requirements has begun. It appears to indicate that no particular regional configuration has a greater effect on transportation than any other. Studies on a regional scale in Baltimore-Washington, Hartford, and Minneapolis-St. Paul are the basis of this inference, and thus no conclusion can be drawn for its validity on a neighborhood scale. The importance of the neighborhood, then, requires continued research and experimentation into its specific behavior.

In the general area of new urban forms, American planners are only beginning to experiment. New town development, like that of Reston, Va. and Columbia, Md., although somewhat derivative from British experience, involves much that is new. In Sweden, there is experimentation with town centers built around transit stops. It is to be hoped that these developments will bring some answers to questions of walking, as well as transit and vehicular, patterns. In particular, will the anticipated residential, commercial, and industrial forms of Reston result in the predicted pedestrian patterns? Will the proposed development of activities along the busways of Columbia bring about the expected level of transit usage? Such insight will help form the basis of research that will permit improvement of the national environment.

GOALS

Recognition of the goals of metropolitan development is the most complex of the problems which must be faced, and is further aggravated by being only recently recognized as such by planners, and by the fact that it has not been effectively integrated into the planning process.

There are two types of techniques for goal establishment. First, on a regional basis, methods are required to determine accurately the overall goals of the large area in question. On the neighborhood level, techniques are needed that will reflect not only the goals of the locality, but also the effect on the people of the construction of some "goal," like a freeway, through the neighborhood itself.

The interdisciplinary approach to goal establishment used in planning Columbia, Md., has shown the advantages which can result from such an approach to the environment. The desires of educators for a new 4-4-4 school system (four elementary years, four intermediate years, four high school years), along with the contributions of sociologists, led to the development of a new type of neighborhood. It differs from the classic form in that it would consist of two or three hundred homes built around a store, a swimming pool, and a small elementary school. The desire of transit authorities for linearity in these neighborhoods led to the placement of the bus system in its own right-of-way, so that children might move freely and safely around the town. Thus, these features of the new town are the products of varieties of experience, as reflected by the feelings of many specialists and brought together by the planner. It would appear, then, that the crucial procedure is not the consideration of the impact of land use and transportation on each other. It is, rather, the use of all disciplines and all interests to design cities as integral projects. Such integral design demands that local and regional goals for development be consistent with knowledge of all forms of land-use patterns and activities, travel patterns, and transportation systems.

CONCLUSION

A look ahead is in order. Better techniques are needed for planning the development of large and small areas: techniques for the New York region and others for the lower tip of Manhattan Island. It appears that, in many ways, planning has over-emphasized the regional configuration, and underemphasized the community, in which most lives are spent. This paradox is apparent in the new developments around Stockholm, Sweden, where the planned nature of the community is less obvious than the consistency of that community with the residents' goals. This is not to say that large-scale planning should not continue. However, "big" planning should not be allowed to overshadow the important "little" efforts, with which most people live out their daily lives.

The Legal Framework for Planning and Decision Making

DANIEL R. MANDELKER, Professor of Law, Washington University

•MANY of the problems of devising a legal framework for planning and decision making are illustrated by the papers in this Record, and particularly by the extent to which they focus on data-gathering methods. The lawyer must start his work with data, and it is important to him to know what kinds of data are considered relevant by planners, highway engineers and others before he can structure a legal system. What is relevant is not always obvious. A good example is provided by the typical metropolitan transportation planning study, which in spite of its highway and transportation-oriented base must also concentrate on housing location and on the nature of the housing supply. Trip generation and highway demands are largely a function of the distribution and character of housing in the metropolis, and so housing information is important to the highway planning study.

But collecting housing information opens up a new data universe, which in its general dimensions is not very different from the natural resources universe which has been described. The data are different but the purpose is similar, and the demands on our data-gathering capacities are substantial. Consequently, we get into such matters as average rent, average value of homes, average income, changes in property values, deterioration of housing, population shifts, and similar questions. As a lawyer I feel somewhat overwhelmed, because I think we have become over-fascinated, to some extent, with the data we have been collecting.

Often the programs we adopt affect the data-gathering process, and the content of these programs is affected in turn by the legal framework in which they are placed. In England, for example, where for a long time they have had good data about their environment, they first embarked on a policy of agricultural preservation in their land-use planning program. And, of course, if you have that kind of a policy, then you need all kinds of data about natural resources, especially agricultural resources. But policies change programs, and with an explicit if not implicit shift in English land-use planning away from agricultural preservation, some of these data are less relevant to the decision-making process.

So it seems that one of our first tasks is to get more of a consensus on policies, and only after doing so can we look at our environment more critically. One of the reasons why we have had a proliferation of legal tools is that we are not clear about the major land-use and planning policies that we wish to follow. It is not fair to say this, but I was struck by the fact that when other papers spoke of foreign programs they tended to speak about accomplishments. When they spoke of American programs they told what was "just happening" and what was being planned.

This observation leads me to two major points about our legal system: the governmental arenas in which we operate our legal controls and the scope of the substantive powers which we use. Looking at the problem of governmental arenas first, I think the point can be made in terms of the Southeastern Wisconsin region which was previously discussed. It has seven counties, and within one of them there are over 400 governmental units. It is not just a problem, however, of Balkanized urban areas which

cannot function efficiently and which would work better if they were somewhat brought together under a common tent. Difficulties would remain with us even if we had federated governments in all of our urban areas, because I see the principal problem as one of intergovernmental adjustment, rather than intergovernmental merger.

Let us take, for example, an important traffic artery that passes through several counties and municipalities. I thought of several examples of this type, but the best and simplest is the Rocky River Bridge controversy. As I remember it, there was a bridge which carried the highway over a river between two suburban Cleveland cities. It became impossible to straighten this highway because one of these municipalities was an upper middle class area which resisted the straightening because it would take out some good homes. It was able to do this under Ohio law, which gives municipalities the right to protest highway locations to some extent. This city was successful until the highway department went to the Ohio Supreme Court, but when the adverse decision came down the Mayor said, "Well, we've lost the fight in court, but we still have a lot of de facto tools at our hands. We can hold up this bridge for the next 8 to 10 years." He was referring to political pressures and delaying tactics. I do not know if the bridge has been built yet, but this controversy points up the nature of the intergovernmental adjustments we have to make.

What solutions do we have for dealing with this kind of conflict? At present, a situation which has been characterized as one of "local autonomy" is not really an instance of local autonomy at all but a situation in which there is divided responsibility. I think the best example of divided responsibility is the one I just gave—a case in which the state highway department, the city, and eventually the Ohio courts (because of the way the legislation is written) all had a say in where the highway was going to go.

There would also have been a Federal interest in the Rocky River Bridge controversy if the highway had been in the Interstate system. In the Federal-aid highway act there is a section which authorizes the Secretary of Commerce to condemn land when the state highway department cannot. A broad authorization, but that is the way it reads. Had this highway been an Interstate, the Secretary could have entered the dispute. This is a solution, but only a partial one. The Secretary cannot enter all of these controversies, and the solution is one-sided to the extent that the courts seem willing to say that the plenary Federal power will supersede a state or local objection.

What we have to do, therefore, and ought to be thinking about, is to find some method of rationalizing this division of responsibility among and between government units, some way to mediate and compromise the conflicting interests that arise not only in the highway field but in other areas involving urban development and planning. For example, there are conflicts between city and county, in which the county might take a broader view of development planning than the city. Or we may find the city and the county both arrayed against a state highway freeway plan. Or we may find individual neighborhoods, represented through neighborhood groups or possibly through an urban renewal or poverty agency, arrayed against the city, the county, or some other governmental unit. In other situations we may have an individual property owner arrayed against all of these governmental agencies. There is no easy way to arrive at a solution to these intergovernmental and governmental-private conflicts. One reason why is that we have a Federal system of government and our Federal division of power makes it difficult to select any one level to exercise enough leverage to make these decisions, even if we wanted the decisions made this way.

The Federal interest is largely a financial one—the Federal government provides the major financial share of many urban projects and can influence policy in that way. The state interest has so far been an enabling one. The state enables local governments to act, and it is the local governments that carry out the operating programs. It is not going to be easy with this tripod-like governmental system to find satisfactory answers when conflicts develop. There are several possibilities and one is to give the power to decide to one agency. We did a review recently of the extent to which a local zoning ordinance can influence or control a decision by a public or private utility to locate a structure in a section of a municipality. In these cases the utilities are state-licensed. The question is: "Can that state-licensed entity be subjected to a local zoning ordinance?"

There have been all sorts of legislative answers. One is to say that all the power resides in the state public utilities commission, and that its licensing decision pre-empts any local zoning ordinance that may be enacted. Another possibility is to have two or more governmental agencies share power, and in some states that is what happens. The best example is the California statute applying to boards of education, which makes local building regulations applicable to school buildings unless state contracting procedures are followed. The third possibility is one or the other of the above, choosing one or more governmental agencies to make these decisions and then providing for some kind of outside review. Outside review is difficult to find in the American context. It is provided in England and in some of the continental countries by a national ministry that has a strong political base. In this country we have had to rely on the judicial process, which has not been entirely satisfactory.

Turning to the question of legal controls over land use and development, the writers have indicated that in the transportation field the real need is for a system that can provide more directive powers over land-use location. The name is not important. What we need is to be able to place development, and to have better legal control over its location and over the time when it occurs. For example, it seems that we ought to think about designating highway interchanges for different types of development. We ought to be able to say that out of three interchanges along a stretch of highway the first may need a regional shopping center, the second nothing at all, and the third a major industrial park. Under our present system, it is very difficult to make a positive directional order stand up. One reason is that the interchanges themselves will probably be in different municipal jurisdictions and perhaps in two or more counties. This split of authority among governmental units is an important limiting factor. Another is that we have not yet geared our land-use controls to make these kinds of positive directions.

We also need to make negative as well as positive decisions about the location and timing of development. In a sense, I just gave you a negative direction when I indicated that one of the hypothetical interchanges might have no development at all. Going even further, in order to develop our environment properly, we will have to make decisions to take large quantities of land off the market for long periods of time or even permanently. For example, we are not going to get new towns around Detroit or any of our large cities unless we can deal in an effective legal way with the intervening land. This issue presents one of the most serious of today's legal problems. We have not really faced it. We have so far legalized a system of land-use control that provides a permissive framework in which development can be carried out. To make the next step, to restrict development in order to further planning goals, I think we need a change in our statutory framework and conceptual ideas. Primarily, we need to bring eminent domain and police power ideas together, so that we can restrict by regulation when desirable and pay for the restriction if necessary.

Two or three years ago we did a study that covered the temporary reservation of advanced right-of-way for highways. Some of us came up with a new statute which was premised on a regulatory control over land in the proposed right-of-way, but which would have given land-owners the right to petition the state highway commission for relief if they felt they were unduly restricted. The highway commission could have said "(a) We believe that our controls ought to stand, or (b) we are going to buy you out, or (c) let's hit a compromise and a temporary easement restricting the use of your land." A whole series of different choices that cover the legal spectrum would have been available and these choices would be reviewable judicially. The point is that this statute was an attempt to take compensatory and noncompensatory controls and marry them in an effective way to accomplish a negative control of land use to implement a planning objective.

In conclusion, we face serious problems in the United States in deciding on the critical elements of urban development policy. I believe that the present fragmentation of legal power and the limitations on its exercise partly reflect the failure to develop a consensus on those policies. Even if we develop this consensus, we face difficulties in defining the arena in which legal power will be exercised and in defining

its scope. I have suggested that we must face explicitly the challenge presented by the division of responsibility between different levels of government in our Federal system, and we must also fashion our substantive legal framework so that we can provide most positive direction for urban development and change.

Planning and Decision Making in the Detroit Metropolitan Area

KENT MATHEWSON, President, Metropolitan Fund, Inc., Detroit, Michigan

•IT SEEMS to me that the assigned title of my topic might more aptly be changed to "Relating the Planning Function to the Decision Making Process in the Detroit Metropolitan Area." For if we are in fact achieving some success in attaining our goals in our region, it is mainly because we have begun with the realization that decision making is not an automatic and routine function and an outgrowth of planning, but that extraordinary effort must be made to relate the two; for regional planning, unfortunately, in the Detroit metropolitan region, as in other metropolitan areas, is a far cry from regional decision making.

I am reminded of a recent study of the 85 transportation studies which were financed by the Urban Renewal Administration of the former Housing and Home Finance Agency and the U. S. Bureau of Public Roads. The unequivocal conclusion was that the voice of local government was not being clearly heard in the development of regional transportation plans. Yet, who can deny the importance of the role of the local governments in making the ultimate decision to implement, or to not implement, regional transportation plans? Or, to put it more strongly, what good will it do to produce a transportation plan with which the local governments involved cannot agree? As editor-in-chief Vincent Ostrom put it in the December 1965 edition of "Public Administration Review," the test of any plan lies in its ability to sustain affirmative decisions by all of the decision centers which can establish or affect its enforcement. He goes on to state that "a plan which cannot meet the test of legal and political feasibility is little more than a pretense, a proclamation—or an editorial comment."

More recently than the aforementioned inventory of transportation studies, a massive study conducted for the U. S. Senate's Committee on Government Operations (1963) again reflected the same schism between planning and decision making by disclosing that the great majority of the planners themselves felt that they did not possess the government support or the public support required to do an adequate job. Only 20 percent of them expressed the view at that time that metropolitan planning was being accepted.

Victor Fischer, the Assistant Administrator for Metropolitan Development of the Department of Housing and Urban Development, offered his own opinion of this condition during a speech delivered before the 47th Annual Conference of the American Institute of Planners in 1964. In his opinion, not one of the recent transportation studies can result, for example, in a subway system for a community which does not have it today. He went on to say that the transit proposals and action in Toronto, San Francisco, Atlanta, Boston, and Los Angeles are all a result of community will and political decisions made, in large part, outside the framework of transportation planning.

The thesis that a wide and deep gap exists between regional planning and regional decision making has been reconfirmed within the past year in our own region during the course of a comprehensive study of local governmental organization in the six counties of southeast Michigan. As part of this study, which was initiated and financed

by the Metropolitan Fund, Inc., the regional planning agency in our area was subjected to a thorough and searching analysis. No one familiar with the studies or statements to which I have just referred, the problems of regional planners, or the current limitations of regional planning would be shocked or even mildly startled by the resultant findings. Despite many pages of highly complimentary description of the Detroit Metropolitan Regional Planning Commission's studies and activities over the past 20 years, the report contains repeated conclusions that final decisions on virtually all the really important regional physical problems which arose during that period were made completely apart from the mechanics of regional planning.

Please do not misunderstand me. We have an excellent regional planning agency in the Detroit metropolitan area. The report to which I refer presents numerous instances of truly outstanding professional accomplishment. For example, the Garbage and Refuse Disposal Study, the Recreation Study performed for the Huron-Clinton Metropolitan Authority, the Airport Environs Study, and the Rain and Stream Gage Project are products of the Commission's recent endeavors. I serve as a member of the Commission Executive Committee, and I am very proud of our staff and of the things we are doing.

Nor do I deprecate the essential nature of regional planning. President Johnson has repeatedly stressed, in the State of the Union Message, in the Economic Report, in the Message on The Problems and Future of the Central City and Its Suburbs, as well as in other public utterances, that the separate units of a metropolitan area must plan together in the effort to improve urban life. This regional approach is increasingly required as a condition for receiving federal grants; it has been endorsed by the Council of State Governments, and it has been encouraged by much enabling or mandatory legislation below the federal level. And the tide is running strong in the direction of an ever-greater degree of interlocal cooperation to meet our future needs and progress.

It is necessary to be realistic, to accept the obvious. In the words of the governmental organization report in southeast Michigan referred to earlier, "The governments concerned with major regional problems have slugged, slogged, waded, swum, stumbled or staggered through to solutions (or stalemates) largely without reference to regional planning or the Regional Planning Commission." That much is history.

This obvious lack of impact of the fine work of our planners on community decisions is not really difficult to understand in view of our recently acquired insights into the decision-making process. Michigan State University's Institute of Community Development, which is working with the Metropolitan Fund on several of our current projects, has recently compiled a large number of abstracts of articles on community decision making. These have been published under the title "Main Street Politics—Policy Making at the Local Level." A vast amount of research has been conducted since men like Robert K. Merton, C. Wright Mills, Floyd Hunter, Melvin Ulmer and Frank A. Stewart produced the early works in this field. This past decade will be regarded as the "golden age" or the "classic period" of decision-making literature, and I believe that it has produced an understanding of community action which has never existed before.

In community after community, the hows and the ways of a multitude of decisions have been probed, analyzed, and debated until there can no longer be room for doubt. The traditional institutional approach to community action is thoroughly discredited. We do not obtain action by creating an organization—a regional planning agency, for example—and assigning it duties and responsibilities. People produce action; and words and phrases like "incentive," "motivation," "interaction," "behaviorism," "power structure," "grass-roots involvement," "participation of affected parties," "interest group," "the establishment," and "influence" now predominate in our plans.

It is time that we make use of this new knowledge and understanding of decision making, and accept the fact that the planning agency is but one element in the community action process. We can then determine what must be done to increase its importance and impact. This, I am confident, can be accomplished.

In Detroit we are attempting to achieve this goal in a number of ways. First, we are convinced that in a metropolitan region such as ours, one of the most significant obstacles to the implementation of regional plans is the difficulty inherent in having a multitude of independent local jurisdictions act in concert with one another. The

question arises, "To whom do the planners present their recommendations for regional progress?" And the inescapable answer is that there is no one recipient with authority to act on behalf of the entire region, and also the multiple recipients (and they number into the hundreds) have no ready means of joining together to do whatever should be done to translate the recommendations into regional decisions.

Accordingly, we are now well on our way to organizing all of our local governmental decision makers into a formally established agency which can consider and act on regional matters on behalf of the entire region. This organization, which is expected to take the form of a council of governments comprised of our 404 cities, townships, counties and school districts, was recommended by the study on governmental organization to which I referred earlier. When established, it will provide a continuing forum in which all of the public officials of our region may, among other things, discuss those subjects which properly claim the attention of professional planners. It will also provide those planners with a source of direction and advice on the social and economic and political realities of regional development. And, most important, this voluntary association of local decision makers will provide an official agency for the implementation of planning recommendations. Fortunately, we have a sound foundation on which to erect this structure: the Supervisors' Inter-County Committee, an association of county officials of the six counties of southeast Michigan which has provided significant interlocal communication and cooperation during the past 11 years.

Second, we are currently doing everything we can to incorporate the regional planning process into the decision-making hierarchy where we believe it properly belongs. The concept of independent regional planning commissions which seek funds from, but bear no authoritative obligation to, the local jurisdictions whose facilities and land usages they are planning, is obviously a poor one, and it has not succeeded. Local officials who have no significant role in initiating the planning process other than paying for it will not feel bound by its results whether they view these results individually or collectively.

Our proposed means of restoring regional planning to its role as a service to the regional decision makers also stems from the Metropolitan Fund study on governmental organization. This study recommends that the professional and technical staff of our Regional Planning Commission be transferred to the proposed metropolitan council of governments, where it would constitute the official planning arm of all of the local jurisdictions in our region. The citizen members of the existing commission might then become members of an advisory committee on planning which could be of assistance to the council of governments. And regional planning would no longer take place in a vacuum, running the risk of producing sterile "textbook exercises." Like every other element of public administration, it would fit within an ordered and operative structure.

Third, we are doing our best to increase the involvement of the lay citizenry in all matters relevant to regional planning. For the present, this is being done through a variety of methods. We have, for example, an organization known as the Detroit Forum for Metropolitan Area Goals which holds periodic conferences on regional topics. These conferences, which have been partially sponsored and financed by the Metropolitan Fund, have exposed substantial numbers of individuals and civic associations to the regional planning process during the past several years.

In the future, however, we expect to go well beyond this level of citizen involvement. Another recently completed Metropolitan Fund study recommends a region-wide citizen information-education-response program which should reach our regional residents in greatly increased numbers and which should enable their views and attitudes to become a very real part of the regional decision-making process. There is much to be done before this recommendation becomes a reality. But we now have the guidelines and the proposed process and organization for a system which should produce a regional constituency and a regional consensus as needed for satisfactory regional development.

Fourth, we are attempting to give the more influential members of the region the opportunity to evaluate and to endorse regional planning as a means of assuring its pertinence to regional decision making. The so-called power structure studies clearly

demonstrate that prominent lay leaders of our communities are extremely important in the process of reaching regional decisions. Granted, these nongovernmental leaders may be difficult to identify and their influence may vary with the issues. Nevertheless, it is abundantly clear that if regional plans are to be implemented, the leadership community must be fully involved.

In the Detroit region, we believe that in many instances the Metropolitan Fund provides the mechanism for such leadership involvement and commitment. We have on our Board of Trustees 57 leaders from all sections and all major occupational and professional interests within our region. Business is represented by the presidents and other top officials of Ford Motor Co., General Motors Corp., Chrysler Corp., American Motors Corp., the four major utility companies, the Greater Detroit Board of Commerce, the leading department store chain, four major banks, and several other outstanding commercial enterprises.

Labor is represented by the president and vice president of the United Automobile Workers, the president of the Wayne County AFL-CIO, and the Secretary-Manager of the Detroit and Wayne County Building Trades Council.

Education is represented by the presidents and several of the vice presidents of the University of Michigan, Michigan State University, Wayne State University, the President and the Chancellor of the University of Detroit, and the Superintendent of the Detroit Board of Education.

Government is represented by the mayor of the largest city in each of our six counties, the chairman of the Board of County Supervisors in each of the counties, the Chairman of the Regional Planning Commission, the Executive Directors of the Supervisors Inter-County Committee, and the Huron-Clinton Metropolitan Authority.

And, finally, the Board includes outstanding regional leaders best identified by their several religious, ethnic, professional, and judicial affiliations.

This is clearly a broad spectrum of regional representation, particularly considering that, except for the 12 mayors and county board chairmen, each of the trustees reflects area-wide interests as well as occupational or functional interests.

Thus, when the Metropolitan Fund presents to its trustees the results of a study on some regional matter and develops an official position on that matter in which its trustees can concur, it is immediately contributing an important degree of support to necessary regional action by the leadership of the region. We feel that such evidence of leadership may be the most important key to bridging the gap between planning and decision making.

I have mentioned four essential prerequisites to relating the planning function effectively to the decision-making responsibility in a metropolitan environment; namely, providing a governmental forum for regional review and action by local governmental units, incorporating the planning agency in that governmental structure and hierarchy, informing and involving the citizenry in regional matters, and garnering the support of the important leadership elements within the region.

There is certainly much more that might be said on this subject. I would not want to omit the value of outstanding political leaders whose vision goes beyond the confines of their own jurisdictions and whose statesmanship recognizes the interdependence as well as the moral obligation of our local communities to one another.

Nor would I want to ignore the value of adherence to several highly significant and modern trends in planning. Jerome L. Kaufman, Director of Special Studies for the American Society of Planning Officials, has enumerated these very capably in a recent article, and I am particularly pleased with his prediction that planning programs of the future will become broader in coverage, more reliant on facts for substantiation, more flexible in implementation, and that they have, in short, entered a new era of maturity and sophistication.

And, finally, I would not want to overlook the need for a great deal of thought, research, and experimentation concerning the fiscal aspects of metropolitan planning. To date, no adequate philosophy of financing regional needs has been developed. Decision makers, presented with a technically acceptable proposal for a regional facility, are faced with the question of who is to pay for it and how. More than political or legal considerations, inability to reconcile costs with benefits, lack of grant-in-aid

subsidy formulas based on precise needs and resources, failure to determine the nature, extent, and dollar value of the benefits to the community affected, and the question of the proportionate shares to be borne by federal, state and local governments in paying for regionally required services, doom many reports and recommendations on regional development to the proverbial shelf.

The 1966 State Legislative Program of the Advisory Commission on Intergovernmental Relations points out that the financing of services needed only in a portion of a county has often resulted in the creation of special districts to the detriment of orderly local government. The Commission suggests a way to minimize the need for special districts by authorizing counties to create subordinate taxing areas and to permit the county governing body to set tax rates within such areas at a different level than the overall tax rate.

There have been a few notable examples of regional financing, one of the best known of which is the Toronto Debenture Plan, which has resulted in broadly expanded credit and lower interest rates for all of the jurisdictions within the metropolitan area, including Toronto itself. Another is the four-county Denver metropolitan area capital improvements district, in which the voters of the region approved a tax to finance a variety of physical improvements. Here, the plan has run afoul of the Colorado constitution, but the principle of regional financing of regional facilities has nevertheless been established.

These proposals and experiments and others like them are certainly worthy of careful scrutiny. At the Metropolitan Fund, we are already in the process of seeing to it that they, as well as several other possible means of overcoming the fiscal obstacles to implementing regional plans, are thoroughly analyzed, and that conclusions tailored to our own regional requirements and goals are developed.

Planning and decision making in a metropolitan area can become two smoothly integrated steps in a single process. But this is not accomplished in the absence of several very explicit actions, nor can it be realized overnight. Many of our metropolitan areas are working toward that end. Hopefully, the title "Planning and Decision Making in the Detroit Metropolitan Area" will be fully appropriate for a presentation in the not-too-distant future.

Control of Traffic Through Control of Land Use

ALLEN FONOROFF, Director of Planning, University Circle Development Foundation, Cleveland, Ohio

•THIS PAPER is concerned primarily with managing our existing street systems, especially within the urban areas, because this is where I believe we have fallen down, and fallen down very badly. In the year 700 BC a road was constructed between the Persian Gulf and the Mediterranean Sea. The ruler of the day decided that no man should be permitted to encroach upon this road. The penalty for any encroachment was to be impaled on a pole. This is rather drastic treatment for those who would violate the right-of-way.

Perhaps we ought to look at what we have today and deal more effectively with the way in which the land is used and controlled. I think that we can assume that from now on we will be dealing with a multi-billion dollar highway program. Some of these highways will tear the guts out of our cities; some of them will perform a service without doing this while preserving more of the urban qualities that make up the "good life." But until either of these is done, we must take a hard look at what is happening and do everything possible to make our existing street system more functional. I would submit that one of the best means of control is that very maligned concept known as zoning.

Many of my colleagues have been singing a requiem for this land-use control, but I would like to infuse it with a little life so that it can accomplish what it was designed to accomplish. One of the reasons that zoning has failed, or supposedly has failed, is that it has been twisted out of shape by administrative procedures through boards of zoning appeals, or otherwise forced to do things that it was never meant to do.

This reminds me of a story. The owner of the Leaning Tower of Pisa applied to the Pisa Zoning Board for a variance. He wanted to put a clock in the tower. The customary public hearing was held after due notice, and, as expected, the neighbors turned out and objected vigorously to the clock: it would generate traffic, it would bring undesirables into the neighborhood, it would devalue their property. The Chairman turned to the owner and asked why he wanted to put a clock into the tower. The owner answered simply that it was his feeling that "Anything that had the inclination ought to have the time."

Obviously, the investment in private autos and public streets has increased at an unbelievable rate since World War II. This is evidence of the determination of the people for physical mobility. The problem is compounded as the percentage of people living in metropolitan areas and their fringes continues to grow. It will increase.

There probably is no solution to the problem, but rather an attempt at a series of adjustments. One such attempt to meet this new condition has been the construction of freeways. In addition to the expense of the freeway, both in land acquisition and construction costs, the public pays a heavy toll in social and economic disruption. All of the freeways carry significant volumes of traffic which might otherwise congest the streets; within a short period of time the number of autos increases to such an extent that the street is already overburdened and the vehicular traffic is frozen into concrete rigor mortis. What usually follows is that more freeways are built, more tax money spent, more social costs are incurred and the irrevocable stamp on urban real estate of ribbons of concrete remains permanently.

I would suggest that a less expensive adjustment is to increase the traffic-bearing capacity of the existing street system. There are many ways of doing this, and many skills that can be brought to bear. Zoning is but one. Zoning ordinances requiring off-street parking spaces and loading berths represent an attempt to get cars out of the curb lane, in effect a way of widening the street system. If the primary function of zoning is to control the use of land and bulk of buildings, then the application of these principles directly affects the traffic-generating capacity of land use.

One of the most important reasons for the first comprehensive zoning ordinance in New York City was to prevent congestion of the streets, especially Fifth Avenue, by regulating the traffic-generating capacity of the users. The use of zoning to regulate the types and sizes of these land uses for the purpose of controlling traffic volumes, although slow to gain official recognition, is, I submit, a proper use of police power. Obviously, zoning alone cannot solve this problem. But I suggest that before we bury this concept, we allow it to function effectively to control the traffic-generating capacity of the land use.

Curb-cut regulations are designed to decrease the number of turning movements into and from traffic lanes. They operate to cut down on the points of conflict in traffic. The selection of uses permitted to front on the major thoroughfares, including the highways, would affect the number of vehicles that would otherwise be attracted to these points of conflict. The safe and efficient movement of persons and goods from one point to another is sufficient reason for government to operate and regulate streets. It is also sufficient reason to control and regulate the types of streets needed. Inasmuch as the only way to provide efficient major arterials is to minimize the amount of local traffic on these streets, there is also sufficient reason to control and regulate the land use of the frontage.

Land-use regulation would eliminate many hazardous curb cuts, reduce the number of turns and movements into and out of traffic lanes, and minimize the conflict of incompatible traffic. Such regulation would benefit the traveling public, the owners of abutting property, and the government by increasing the utility and beauty of the streets.

Major thoroughfares present a variety of problems to planning and zoning officials. Heavy traffic tends to discourage the residential use of land and many uses are dependent on traffic flow and safety. To zone all such abutting land, either residential or commercial, obviously would not solve the problem. The dilemma cannot be avoided, because a decision not to regulate the abutting land uses would cause equally serious and permanent damage.

The common practice in most American cities has been to allocate too much land for commercial use. This policy presents problems of almost the same magnitude as no zoning at all, and at the same time creates a vested-right psychology on the part of the affected land owner. Overzoning for commercial use generates traffic movement which is incompatible, and interferes with major through-traffic circulation. The pressure then begins to build up for street widenings and new highways, and the spiral downward begins as evidenced by the decline in value of nearby residential properties, difficulty in providing off-street parking, a lack of conveniently located shops, and inconveniently interspersed noncommercial activities. These objections appear to justify a change in land-use classification, at least in marginal commercially zoned land. Another related problem concerns the owner of commercially zoned land which is not commercially developed.

The indiscriminate commercial zoning of major street frontage prevents the development of a rational land-use pattern. Because of the congestion created on the main street, through traffic will seek out parallel residential streets as an outlet. The resulting increase in traffic will tempt the entrepreneur to extend commercial uses into the residential areas, and if such inroads are permitted and the traffic congestion is not relieved, the two effects will spiral and deterioration will increase.

To avoid these problems, it becomes exceedingly important for municipalities, through zoning and other means, to regulate the allocation of land in accordance with criteria that include the traffic-generating capacity of the various permitted uses. I would suggest that strips of business zoning along major arteries be replaced with

land-use classifications that are compatible with safe and efficient thoroughfares. It was reported some time ago that an Australian metropolitan area attempted to limit the amount of traffic generation and the number of curb cuts on major thoroughfares by prohibiting all new traffic generators and by allowing all existing establishments to expand.

In most cases, commercial development and zoning along major streets abut on residentially developed or zoned land. Moving traffic seems to create less conflict and is less obnoxious to residential than commercial development.

The traffic-generating capacity of the land use is one of the primary criteria applied when developing a list of uses that are to be permitted in the various use districts. There are exceptions to these general rules where the general welfare requires it. In this situation, electric power substations, telephone exchanges, fire stations, police stations and other community facilities are permitted in the residential districts. However, even in these situations these uses are, in some cases, required to front on streets of insufficient capacity to carry the increase in traffic. They are further required to provide off-street parking and loading facilities. For the same reason, zoning techniques can be used to protect the public welfare when it is demonstrated that the various uses interfere with the safe and efficient flow of traffic.

Zoning ordinances can be structured to contain the minimum safety features required in the construction and development of each commercial land use in accordance with its traffic-generating capacity. These features might include: minimum and maximum widths of driveways, and minimum distances between driveways and between driveways and intersections. Application of zoning controls in this respect, to insure less hazardous traffic conditions, is again a legitimate exercise of police power.

Another primary objective of zoning is to segregate incompatible land uses. This is not a new concept in law or in zoning. However, when it is related to traffic regulation, some courts seem to lose sight of the objective. It is important that commercial zoning be extremely limited on highways and major thoroughfares. Where the courts have approved the segregation of certain traffic generators, such as hospitals or other nonresidential uses, from the residence districts, they have done so on the grounds that these uses are likely to generate traffic that is detrimental to the residential uses within the area. Perhaps this dire result might be avoided if there were additional requirements for off-street parking, or if the lot area for the particular nonresidential use was large enough. However, the courts have recognized the validity of traffic generation as a criterion of compatibility, and are content to rest their findings on the fact that additional traffic would be detrimental to the surrounding land uses. Therefore, unless a compelling public necessity requires otherwise, those uses which generate traffic that is incompatible with the surrounding land uses can also be regulated and, where required, prohibited. In this respect, the public welfare is served. In other words, if a rational land-use plan exists, and if the community is to be serviced by land uses according to function, then unless public necessity requires otherwise, those uses which generate traffic and congestion incompatible with neighboring land uses should be, and can be, prohibited.

It has been suggested that secondary or small lot commercial development be prohibited along state highways where the increased speeds of automobiles would increase the hazards and seriousness of accidents. These pressures result from a recognition of a greater public value in efficient thoroughfares, whether in city or country, than the uncontrolled and indiscriminate development of traffic generators which increase the amount of traffic friction and congestion. Again, the key is public welfare.

Perhaps the most widespread evidence of the fact that traffic considerations justify zoning is in the new-accepted practice of requiring off-street parking and loading. The justification for requiring parking and loading at the expense of the owners of improved property applies equally to the regulation or prohibition of traffic generators on lands that front on congested thoroughfares. Obviously, a balance must be achieved between the public welfare and private property rights. This is the dilemma we constantly face.

Controlling traffic through zoning is not without precedent. Many cases have recognized the need, and those that have not have usually fallen back on the convenient

argument that zoning depreciates the value of the land. There is no indication that these cases consider depreciation of the value of the commercial frontage as measured against depreciation of the public value of its streets, or against depreciation brought about by the congestion on neighboring property values.

It is important to remember that one of the objectives in planning is to attempt to measure the impact of a particular land use on neighboring land uses. The traffic-generating capacity of land use is one element of impact and sufficient justification for regulation or control.

I would urge that you consider a multiple and coordinated study to deal with the problem of traffic congestion. We need increased capacity to move people and goods in the existing street system as well as in the new traffic corridors; we need a balanced transportation system, including rapid transit. We need to experiment with one-way streets and with the staggering of working hours. These techniques are beyond the jurisdiction of zoning. But we must also consider carefully the use of this very potent and well-established land-use control. We need zoning to control the frontage of the major thoroughfares. We need to use it in conjunction with subdivision regulations so that development does not necessarily back up to, or front on, major streets by taking advantage of marginal roads. We need zoning to allocate land uses, thereby decreasing the number of curb cuts; to have better terminal facilities in the right place; and to have better provisions for off-street parking and loading. Zoning can segregate incompatible land uses, and a criterion for this segregation is the traffic-generating capacity of the land use. Zoning can limit the bulk of the buildings in an attempt to limit the intensity of use and therefore the amount of congestion created on the streets.

Urban Renewal and Urban Transportation: Contrasting Concepts and Methods

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•THE URBAN renewal program came into being as an effort to cause and control change, rather than to suffer it, in the declining areas of urban America. This paper examines two problem areas which exist both in urban renewal and in transportation planning and development in urban areas: first, public acceptance and support; and, second, effective planning.

Public acceptance and support have been and still remain a problem in urban renewal, and will increasingly become a problem in transportation, particularly in highway programs. I would like to indicate some of the things that have happened in urban renewal, because in the cities we have been challenged perhaps more strongly than any other public program. Moreover, we have had to struggle for support from the beginning, unlike the highway program and other public enterprises which involve the taking of land.

Since 1949 federal law and most state law statutes which authorized urban renewal projects have required a public hearing on every urban renewal plan. These public hearings have been held where they are most accessible to the people directly affected by the projects. They are legislative in character: they do not determine rights; their purpose is instead to inform and advise local decision makers of the sentiments of all parties affected by the proposed urban renewal plans. In turn, however, these public hearings have served urban renewal well by helping it to meet legal challenges and to win public acceptance.

Since 1954, one prerequisite to urban renewal, the workable program, has stressed meaningful citizen participation, and this emphasis continues to increase. Citizen participation and the involvement of citizen committees in renewal leads to planning with people, which is today a reality in many renewal programs. Involvement and participation of people in the planning process, which has so benefited urban renewal, can serve other programs equally well, as they confront the public relationship problems.

Urban renewal started out as a program of which any citizen might ask, "What right have you at City Hall, in the Renewal Agency, to come and take my land away from me, and then turn it over to some other private owner for reconstruction?" We've always had to explain the constitutionality of eliminating slums and blight conditions through the taking of property for clearance, and the return of that property to private ownership for development is only incidental and does not wipe out the public purpose of blight elimination. And because we have had this problem from the beginning, our experience may be of value in programs such as highway acquisition, where the purpose is clearer but where the full impact on urban homes and neighborhoods is only gradually coming to be felt.

One of the things that has grown out of our experience is the array of relocation requirements and aids which are beginning to apply to the highway program and other federally aided programs. First, of course, were the provisions requiring relocation housing to be offered to those displaced by urban renewal; next, relocation payments to displaced families, individuals, and businesses; finally, as an outgrowth of these,

attention to the personal and social problems of the people displaced. These measures are clearly coming in other programs and, ultimately, I believe, in all public acquisition programs. They are being extended now; federally, relocation payments are provided for by law in a number of programs already; locally, relocation services first established because of urban renewal are beginning to be applied to other city programs because they simply must be applied.

Whether administrators like it or not, citizens are beginning to play a role in the planning and shaping of these programs. Relocation aids are only one of the consequences. These and other services are rapidly developing, first in our urban centers where those affected are the poor and the disadvantaged. There will be tie-ins with social service agencies and poverty program activities, and, ultimately, all of these measures will extend to all programs in all areas.

Another aspect of this struggle to maintain public support by recognizing the effects of public action on private citizens is involved in the actual acquisition of land. The recent report of the Select Subcommittee on Real Property Acquisition of the House Committee on Public Works recommended a variety of aids to owners and tenants of property which is acquired. These are proposed to be applied to all federal and federally aided programs. In urban renewal three of these provisions have already been made applicable by Section 402 of the Housing and Urban Development Act of 1965. All property acquisitions in urban renewal provide that negotiation must always precede the filing of condemnation proceedings; no man's property can be taken from him without paying 75 percent of the estimated value of the property; and no one can be dispossessed from his property without 90 days advance notice. These requirements have also been written into four or five other programs in the Department of Housing and Urban Development.

These developments will undoubtedly continue as the problem of public acceptance becomes more important.

Closely related to public acceptance is the question of effective planning. Therefore, I would like to indicate what we have experienced in the urban renewal program and related programs.

From the beginning of the urban renewal program there was federal financing for planning urban renewal projects. That was not left to local initiative, or local lack of initiative. Urban renewal was regarded widely as a planning program for the first four or five years of its existence, and with some justification. It seemed to be years before we got out of the planning stage. Also, from the beginning of the program there was a requirement that individual urban renewal projects must be found by the local governing body to conform to a general plan for the development of the community. This requirement actually led to the development, or in some cases reconsideration, of general community plans all across the nation. How good those plans were from today's perspective is, I believe, irrelevant. The fact is that the requirement did a great deal to encourage local planning programs throughout the country.

Next, the planning base for urban renewal was broadened and deepened. Federal assistance was provided for general neighborhood renewal plans for areas that had to be planned for urban renewal on a larger basis. Finally, Section 701 of the Housing Act of 1954 provided federal aid on a two-thirds basis for general community planning in smaller communities. This, too, was an outgrowth of the urban renewal program and represented recognition of the fact that general planning had to be more valid, broader and deeper, and also that it must include the whole community, before it could be a meaningful base for renewal. Also, Section 701 provided federal grants for metropolitan and regional planning, as further broadening of the planning basis for program decisions. Aid for transportation planning was also added, within the context of metropolitan planning.

Metropolitan plans began to appear out of this aid process. It was as though this were the final goal, the end of the road. I think some of us were misguided enough to think that once you had a metropolitan plan the problem was solved, the direction was there, and it would be carried out. But this did not happen, and because it did not our latest effort to connect planning with decision making was developed. The new section 701(g) of our planning assistance program authorizes two-thirds federal grants

to organizations of public officials. These grants are intended to permit organizations representing the political jurisdictions in a metropolitan area or urban region not only to plan and develop programs but also to see to their implementation on a coordinated area-wide basis. These organizations may be assisted to undertake studies, collect data, develop regional plans and programs, and engage in other activities which contribute to the solution of metropolitan or regional problems. Since we expect most of the participating public officials to be elected officers of the included local governments, they should be able, as planning agencies seldom are, to translate the jointly developed plans and programs into action.

We suggest such organizations of public officials as ideal mechanisms for achieving the continuing comprehensive transportation planning process required in urban areas by federal highway legislation. They can serve to develop an effective planning framework within which we may successfully collaborate in meeting the challenge of change.