NEW HORIZONS IN PLANNING

1937

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AMERICAN SOCIETY
OF PLANNING OFFICIALS

NEW HORIZONS IN PLANNING

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American Planning and Civic Association
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National Economic and Social Planning Association

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The opening session of the Conference, Tuesday morning, June 1, was presided over by James S. Holden, first president of the Detroit City Plan Commission.

The first four speakers at this session are members of the research committee on urbanism of the National Resources Committee. Their papers are based largely on the committee's forthcoming report.

The Urban Community and Its Problems

L. Segoe
Director, Urbanism Committee, National Resources Committee

WITH the speakers who are to follow me on this morning's program discussing several major aspects of the subject of the urban community and its problems, my contribution might properly consist of an introduction and of sketching with broad strokes the outlines of the whole subject, to serve as a background for these more detailed discussions.

A major inquiry on a comprehensive scale into urbanization, the city and its problems, was recently completed by the Urbanism Committee of the National Resources Committee, with which among many others, three of the speakers who are to follow were associated. It is only natural that all of us should lean heavily on the material and findings brought together and uncovered by this study. For myself, I feel that with the summary report of the Urbanism Committee shortly off the press, I can take the liberty of being quite categorical in this paper and need not buttress and clutter up my statements by substantiating data. These can be found in profusion by any disbeliever in the report of the Committee and the twenty-five monographs on the many special aspects of urbanism from which the report itself was distilled.

Let me begin by noting that the subject of the urban community and its problems, urbanism for short, can be and should be viewed from two major angles in order to see it in the proper perspective—the national angle and that of the urban community itself.

From the national standpoint we are interested in the amount, rate, and distribution of urbanization—the national urban pattern—and the forces and factors that produce it. In the role that the urban community

plays in our national life—economically, culturally, politically. In an appraisal of the effectiveness with which the urban community performs its role and the obstacles which prevent it from playing its role satisfactorily; and, as planners, we are, of course, curious to inquire into the probable extent and form of future urbanization—the future national urban pattern.

From the standpoint of the urban community itself, we are interested in the characteristics and conditions of life—economic, social, cultural, political—of the urban population and the suitability or defectiveness of the physical urban environment which conditions the quality of the urban way of life in all of the above aspects. We are concerned with the reasons for our failure to achieve a standard of urban existence, in one or another respect, potentially available, with isolating the principal problems confronting the city and the city dweller, and we must ferret out the fundamental causes of the presence of these problems and defects in an endeavor to find the ways for the removal or remedying of the deficiencies and defects which obstruct the road to a more satisfactory and more satisfying urban existence.

What then are the conditions, trends, problems and prospects of urbanization and the urban way of life, and what suggestions can we advance to enable the urban community better to perform its role in the national economy and to improve the lot of the urban dweller?

National Aspects of Urbanization

Rise of the City: In the brief period of a little over one hundred years our country has been transformed from a primitive rural frontier settlement with a handicraft economy into an urban industrial society of a most advanced type. Since 1920, or shortly before, the majority of our people has lived in urban places[1] and, by 1930, almost one-third of them in the 93 cities of over 100,000, nearly one-half in or within the environs of these cities. Of other countries of the world, only four may be said to be more urbanized than the United States—England and Wales, the Netherlands, Italy, and Germany—where a smaller proportion of the population is found in places under 10,000. Only England and Wales, and Germany have a larger proportion of their population living in great cities of over 100,000.[2]

However, these population figures do not begin to give an adequate measure of the urbanization of our country or of the dominant role the urban community has come to play in the life of the nation. The city has become not only the principal place of residence of our people, but the primary workshop of the nation, the heart and nerve center of our intellectual and cultural life, and the seat of our most important division of government.

[1]Definition by U. S. Census: with few exceptions, incorporated places of over 2,500 population.

[2]With 28.6 per cent of its population in the city of Vienna, as a result of dismemberment of the Austrio-Hungarian empire after the war, Austria cannot fairly be used in this comparison.

Varying with the unit of measurement used, from three-fourths to four-fifths of all the goods we produce are made in 155 urban industrial counties (of the 3,070 counties in the United States), and the 93 cities of over 100,000 account for more than three-fourths of the total wholesale trade. Far from being the parasite it was once accused of being the city not only provides our entire population with practically all the manufactured goods it uses, but even performs some of the farmer's work and prepares some of the food for the farmer's table. The city, moreover, is the center from which our cultural life emanates and spreads throughout the nation, where our cultural institutions, facilities and personnel are predominantly found—the newspapers, radio stations, libraries, museums, theaters, operas, symphony orchestras, hospitals, and the higher educational institutions. As to government, urban governments have become more important, in point of personnel employed, expenditures and the services they render, than either the federal, state or local non-urban governments, and have come to play an important role in the economic life of the nation.

Lag in Recognition: Curiously, this rise of the city to a dominant position in the national scene was not accompanied by its adequate recognition in the legislative halls of the nation and in councils of government. In many respects we are still dominated by a rural outlook—the city pays most of the taxes but the country makes most of the laws. In comparison with the attention given to rural areas, the city remains the neglected child of the national family. Its problems are not receiving the attention they deserve and, until quite recently, it was not or only rarely consulted in the formulation of national policies, nor were its peculiar problems considered. The city suffered from legislative under-representation and its government was handicapped by inadequate powers for a successful attack on its own problems. Even in the matter of information and data the urban community is a neglected field of governmental reporting in comparison with rural areas. The facts about city life and city people from governmental sources are utterly inadequate for a thorough and comprehensive study of urbanism. In continuity, periodicity, consistency and comparability, the collection of urban information by governmental agencies retrogressed, relatively, with the advance of urbanization.

Preconditions and Forces of Urbanization: Here, as in other industrial countries of the western world, this urbanization and the assumption by the city of the primary role in national life were made possible by, or were due to, a number of major factors and forces. A surplus of agricultural production, and the consequent releasing of a substantial part of the rural population, coupled with the development of transportation—plus modern sanitation—were the preconditions of industrial urbanization. Power driven machinery, the application of steam as a source of power in production and transportation, scientific inventions and continued technological developments in manufacturing, transportation and communication, promoted and hastened the process.

It is important to recognize, if one is to understand the resulting national urban pattern, as well as the structure of the modern city—the

concentration of larger and larger proportions of the population into a small number of great cities of very restricted areas—that, with the exception of the quite recent development of electric power and the internal combustion engine, which are factors of the dispersive category, all earlier forces which conditioned urbanization have operated cumulatively and progressively to promote concentration. The economies of large steam plants and severe limitation on power transmission favored centralization, and the early forms of transport but accentuated this trend. While new forms of transport and successive advancements in transport technology created increased possibilities for the diffusion of urbanization, the policies and practices pursued by private enterprise in respect to both, the providing of facilities and the fixing of charges, operated to further concentration, had the greater weight, and thus controlled the course of urbanization. Our national urban pattern and the structure of our cities bear the imprint of these concentrative forces and policies and are still influenced by them. Nor is there any indication of a major shift in direction of these trends. In most industries the cost of electric power used is a small item in the total cost of production. Improved highway facilities and the automobile have extended the range of choice in location for industries, communities, and people, but they are permissive rather than controlling factors.

Outlook for the Future: As regards the future, changes are taking place in the relative potency of the forces that influence the amount, distribution and form of urbanization, but there is no definite evidence of a major change of direction in the trends which they collectively produce. After the temporary reversal for two years (1930-1932) during the throe of the depression, the trend in migration is again from the country to the city. Urbanization can be expected to continue even after the total population may cease to increase, although the growth of our cities is not likely to proceed at anything like the rate during recent decades. Metropolitan areas are likely to continue to draw population from the rural section and small urban places and to absorb a larger proportion of the future urban growth than would be their share, although the central cities themselves may not hold their own and may even decline. Further diffusion of the population in these metropolitan areas may be expected, but not wholesale decentralization. The cities of declining population will continue to be mostly the smaller ones.

For one thing industry is not decentralizing in the sense of leaving established industrial areas in large numbers for widely scattered small communities. Such industrial shifts as are taking place are largely between industrial areas of similar character and from central districts to outlying sections of the same industrial area. There is an indication that in this process industrial locations are becoming rationalized and the industrial pattern stabilized. The greatly increased mobility of the population, the availability of flexible transport facilities, the wider distribution of cheap electric power, continuous improvements in the means of communication, are making possible and will tend to facilitate the "loosening-up" of the most intensive concentrations in the national urban

pattern. Guidance and direction through planning and through the regulation of transport and other utility enterprises of general public concern, would greatly aid in producing a sounder industrial and urban pattern, an economic and social organization better attuned to the public interest and, in the long run, the interest of private enterprise as well.

These conditions, trends and prospects concerning the process of urbanization in the nation are of fundamental significance to the cities. They are the basic factors that operate to produce the city, influence its present and shape its future. They are the over-all controls and general directives for the formulation of policies and plans by which each city may aim to achieve the optimum of its possibilities. But what of the city itself? What are the conditions produced by rapid urbanization within the American city, what are some of the salient problems and difficulties it faces?

Variations Among Cities

It is recognized that it is difficult to discuss the city in collective terms. There are great variations between cities in size, age, growth, function, and in their relationships to other cities and their surroundings. The average American urban community counts 21,800 inhabitants but they range from 2,500 to 6,930,446. Over 2,000 of the 3,165 urban places attained urban status only within the last fifty years. During the last census decade 532 declined in population in the face of the spectacular growth of others. The figures given in the table attached are suggestive of the range of variation in physical structure and the social and economic condition of the population of our cities. There may be greater differences between two cities of about the same size and type, one within a great metropolitan area and the other in an isolated location than if the two were quite different in size or function. These differences notwithstanding, urban communities and urban life exhibit many significant common characteristics. At any rate, we are forced to generalize.

City and Country Compared

Lest the pointing of a finger in this paper to the many shortcomings of contemporary urban existence and the host of problems which confront the American city should be interpreted as substantiating the words of Cowley, "God the first garden made, and the first city Cain," and Cowper's later version, "God made the country, man made the town"—oft repeated by the advocates of a rural society—with their implied indictment of the city as the home of the lawless, shiftless and derelict, an unwholesome place, the hotbed of crime, vice and godlessness—in short, as a place in which there is nothing good and which drags down the nation towards the fate of Sodom and Gomorrah—it may be well to state here, and emphatically, that examination of available comparable evidence by no means supports such a summary condemnation. The controversy on the relative merits of the urban and rural ways of life has been

going on since cities first came into existence. Libraries have been written in denunciation or defense and praise of each; philosophies, cults and religious societies can be traced to this controversy.

This is no place to present an extended review of the facts, opinions, beliefs, doctrines and prejudices in this debate. An interesting monograph of the urbanism study is devoted to the subject. Nonetheless a few general facts should be noted here.

Some time ago the city may have been the place where pestilence and disease were rampant and exacted their heaviest toll, but today, as a result of modern sanitation and advanced public health services, it compares favorably with the country, at least in respect to infant diseases, water-borne diseases and tuberculosis. In fact, measured by infant mortality rates and the availability of medical help, the people of medium-sized cities are better off than those in the large places or in the country. Death rates, too, are generally but slightly higher in the cities than in the rural sections. Neither can it be said that living and housing conditions in urban communities are inferior in every respect to those in rural areas. For while it is true that a substantial proportion of the population of the largest cities lives in substandard homes and under conditions of overcrowding which deprive them of adequate light and air, and that these at least are available in ample quantities in the flimsiest tenant cottage, and while it is also true that the rural dweller can better manage without modern sanitary facilities—it is nevertheless a fact that rural people are much farther removed from the comforts and sanitary conveniences which the majority of our people in the cities already enjoy. Neither is it generally true that cities are the characteristic home of lawlessness, crime, delinquency and vice. Certain types of crimes, notably those against property, are proportionally more numerous in the cities than in the country, but crimes against persons are proportionally more frequent in rural areas, and such forms of lawlessness as lynching are limited almost exclusively to rural areas and small urban places.

In education and culture the city, of course, has much more to offer than the country, although, unfortunately, to many of these facilities a large segment of its population has no access. School attendance figures, for example, are uniformly higher in the cities than for rural areas (except for girls over sixteen). Conversely, illiteracy, ignorance and superstition are more prevalent in rural districts. Even in respect to religion, commonly held not to thrive in the city (which has been denounced by its critics as the home of immorality, materialism and skepticism)—insofar as the facts about churches can be accepted as evidence—the city is not the godless place it is accused of being. Sixty per cent of the urban adults are claimed as church members in contrast to only 50 per cent of the non-urban adult population.

While in some respects there are greater hazards and handicaps, greater extremes in wealth and poverty, and more tenuous economic existence in the city as compared with the country, there also are greater opportunities for stimulating associations and for material and cultural personal achievement and community development. A true balance of the advan-

tages and disadvantages of the urban and rural ways of life would be difficult to strike. But anyone who has read the report of the FERA on "Six Rural Problem Areas," or the recent report of the President's Committee on Farm Tenancy will agree, that compared with some of the conditions there described even the urban slum dweller's lot seems more compatible with civilized existence. At any rate, while the controversy was going on from King Hammurabi of Babylon (2250 B.C.) and Zarathustra through Plato, the Apostle John, Rousseau, Adam Smith and our own Jefferson, Franklin and Hamilton to the present—whether through free choice or through economic necessity—our people have given their verdict in the matter. Since 1790 our farm population has increased but 15 times while that of urban places has increased 300 times—from 5 per cent to 56.2 per cent of the total population. It seems also probable that in gaining the greater security which the country might offer to a larger proportion of our population, we would have to forego many of the present day material and cultural advantages. Except under the pressure of irresistible forces this will not happen. "Rurbanism" in the small places and in the environs of better articulated metropolitan cities along the lines first advocated by Ebenezer Howard, might prove a happy compromise. But the city is here to stay.

Problems of the City

What about its problems then? And what can be done about them? It is possible to touch but sketchily on the many problems for which solutions will have to be found if our cities, and life in our cities for a large segment of their inhabitants, are to be lifted to a standard which is potentially within our means.

Economic: It should be recognized at this point that some of the most fundamental problems of the city are not peculiarly urban but rather national, and are becoming increasingly so. Poverty and inequality, insecurity of employment, alternating booms and depressions, and the personal, social and governmental problems these engender, are the basic weaknesses of life in both city and country differing only in degree and their manifestations. The slum, for example, and the problems of delinquency, crime, health, fire hazards, etc., associated with it, are fundamentally traceable to these economic causes. Insecurity of income, particularly, is an ever-present threat in our industrial society to a large proportion of the city workers, against which they haven't even the defenses which in rural areas at least help to sustain life on a bare subsistence level. Many of the most serious urban problems will be incapable, or very difficult, of solution unless larger and more secure incomes can be brought to a larger segment of the city people. The standard of our national life, even the very survival of American democracy, may depend on the solution of the economic problems of the city worker.

Population: Foremost among the problems created by urbanization is the biologic suicide of the cities. Their phenomenal growth was due principally to migration from the country and from foreign lands. Cities

do not produce enough children to maintain their numbers. Only three cities of over 100,000 had a reproduction index in 1930 high enough to maintain a stationary population. This class of cities on the whole had one-fourth fewer children than necessary for a stable population, while rural communities had a surplus of over 50 per cent. This reproduction index increases consistently and inversely with the size of the city, but the only urban places that as a class have an index somewhat above that required for a stable population are those in the 2,500 to 10,000 class. This failure of the city to reproduce itself is common to all industrialized countries. Apparently urban life is not conducive to family life and reproduction. Considering that the birth rates in rural areas are also decreasing rapidly, one is inclined to the belief that this general decline of reproduction rates is characteristic of contemporary civilization.

The city is the principal consumer of human resources but does not principally produce them. Its population is derived largely from rural areas, often of extremely low material and cultural standard. Many of the social problems of the city arise from the difficulties of this immigrant population to adjust itself to the conditions of urban living for which it has been ill prepared. Our cities, therefore, have a vital interest in extending greater material and cultural advantages to the rural areas which produce and tend this human crop.

Social: In spite of the great advancements made in sanitation and public health services, without which as already mentioned the great cities of today could not have come into existence, also in building regulations and provision for public recreation, much remains to be done to overcome or lessen the many dangers to health in the city. Population densities are all too high in many sections and large numbers are often housed in overcrowded obsolete structures which do not admit adequate light and air; playgrounds and parks are far from being adequate, especially in the congested residential areas where they are needed most. There are still too much smoke, dust, too many objectionable odors and waste of all sorts, too much unnecessary noise and too much ugliness in our cities—sapping away resistance against respiratory diseases and against the strains of urban living on the nervous system. Courageous and tenacious attacks on these dangers to health, as well as against social diseases, are still to be launched. Some of these matters are problems of urban local government; others like the drive on social diseases call for aid, cooperation and leadership by government on higher levels. As in the case of many other problems, extension of the legal powers and areal jurisdiction of local government, greater financial resources, and more effective cooperation among governmental agencies on different levels are prerequisite to success in these fields.

So, too, with crime, vice, and delinquency. These, like diseases, do not respect the city limits or state lines. Deep-rooted as they may be in the defects of our economic and social system, much could be accomplished by more emphasis on preventive and curative treatment in place of punishment, by minimizing poverty and inequality, by providing better housing and a decent urban environment for the lower income groups;

by the fostering of neighborhood and community spirit, better provision for wholesome recreation and guidance and opportunity for self-expression and self-development. The police, prosecutors, judges and jails will not solve these problems.

Governmental: I have referred repeatedly to certain shortcomings in the machinery of local urban government which handicap it in coping with some of the problems touched upon and others to be discussed in the following. Inadequate legal powers and tax revenues, failure to adjust the spatial limits of their jurisdiction to correspond more nearly to the boundaries of the urban area in recognition of its social and economic unity, especially in metropolitan regions, to rid these of the maze of overlapping, duplicating and often conflicting authorities—are basically at the root of the difficulties. Others have to do with inadequate recognition of the peculiar problems of the city and, in general, the city as a city, by the state and until recently by the federal governments. Also with the constitutional systems which force the city to look to an unsympathetic and, judging by the record of the recent emergency, an impotent state government, for its legal powers and for assistance in the solution of its problems, and prohibit direct relations with the federal government which has shown willingness and capacity to come to its rescue.

There is an amazing lag between the structure and legal powers of local urban government and its present-day functions and responsibilities. The former are still fundamentally the same as granted by the states a hundred or more years ago, although in the interim cities have come to play the leading role in the national economy, and six of the largest cities, New York, Chicago, Los Angeles, Detroit, Boston, and St. Louis, have risen to greater importance in fiscal matters, for example, than the states which contain them. Our great cities overflow township, county, state and even national boundaries—22 of the 96 metropolitan districts containing 26,000,000 people, nearly 40 per cent of our urban population, straddle state lines—but these facts are disregarded, and no adequate political and governmental machinery has been provided or invented to meet the needs of this modern product of urbanization—the metropolitan region. Instead we find in the Chicago metropolitan district 1,621 local governmental units, 454 in the Los Angeles metropolitan area, cities, villages and boroughs, counties, townships, school districts and a great variety of other special districts—to give but two examples. The almost impossible task of bringing about collaboration in the solution of common problems among such a bewildering number and variety of local authorities is further complicated by legal difficulties and inadequate administrative mechanism for intergovernmental relationships between governments on different levels, especially between the cities and the states and the cities and the federal government.

One of the most serious consequences of this disorganization of governmental units and areas is the confusion of conflicting and overlapping taxation, the vying of federal, state and local governments with one another for the sources of taxation and for the tax revenues themselves. I feel that I have already permitted myself to dwell on these govern-

mental problems at greater length than I should have since they are the special subject of another address this morning by Dr. Lepawsky, and therefore will add only that, as a result of this chaos, there is no defensible relationship between tax revenues and the functions and responsibilities of the several forms of government and that in this contest, with their hands and feet tied, the cities are consistently among the "also ran's." The present situation places an unsurmountable handicap on the cities in their efforts to meet their problems and improve the quality of urban life. Nothing short of revising the national public revenue system from top to bottom, as a cooperative undertaking by all levels of government, will remedy these conditions.

Development and Planning: Turning next to the problems of the physical development of our cities which are of special interest to many attending this conference, I would be but squandering precious time by a detailed discussion of each of the long array of maladjustments, defects, and difficulties in our cities, largely due to our past neglect to give adequate attention to the planning of their development. With these the audience at this conference is quite familiar.

Concentration and congestion of every sort—population, buildings and traffic—and inadequate public facilities in the center; haphazard dispersion, unnecessary or premature subdivisions and superfluous public facilities in the outskirts. Over-intensive land uses in small central areas; under-use and deterioration in large sections. Indiscriminate intermingling of incompatible uses everywhere, save the more recently built-up areas. Lack of public spaces for recreation and other socially desirable purposes, and an excess of unproductive privately owned land. Lag in needed public improvements. Despoiled water fronts, unattractive general appearance, obsolescence, inconveniences, inefficiencies, and waste of material resources and human effort, public and private. Such is a more or less representative partial list of the most prevalent evidences of our failures in city building. The list could be easily extended. However, it may be more profitable to dwell briefly on some of the fundamental causes to which these deficiencies may be due, beyond the commonplace generalization—our failure to plan.

First among these causes is the extremely rapid rate at which urbanization has taken place and the even more spectacular growth of many of our cities, especially the larger ones. Of these, Chicago, growing from a trading post of about 3,000 to a metropolis of over three and a third million people in less than a hundred years, is the outstanding example. Los Angeles and Houston exceeded even this rate. Others like Seattle, Detroit, Cleveland grew almost as fast. Even during the last census decade, nine of our 96 metropolitan districts increased in population from 50 to 100 per cent; and ten of the non-metropolitan cities of between 50,000 and 100,000 increased from 50 to 157 per cent. The difficulty of achieving orderly development at such rates of growth should seem easy to understand even if adequate machinery for guiding it had been available—which was not the case.

Still more damaging to the orderly development of our cities was the

ideology fostered by this rapid growth—the worshiping of bigness and the disregard of quality. In the race to advance their position in the census volumes, our cities competed with one another, using every available means at their disposal, and thereby not infrequently laying the foundations of many of their present difficulties. They built or helped to finance often unnecessary competing transport facilities, prematurely annexed outlying areas; they competed for industry without discrimination, offering free land, tax exemptions, free rent, payroll subsidies, low utility rates, etc., thus encouraging the selection of unsound industrial locations and the building of a weak and unstable industrial structure. The consequences of such errors were saddled on the community and are being paid in fluctuation of employment and low annual family incomes, handicapped industries, heavy tax burdens and a low standard of urban living.

Another consequence of rapid growth has been the orgy of speculation in urban land which it spurred and which, in the absence of social control through appropriate land policies, had free play. Cities that were fortunate enough to own much of their land sold their holdings in haste and at ridiculously low prices—frequently in order to raise funds with which to finance improvements and services to keep abreast with the fast growing demands—only to buy some of these back later at exorbitant figures. This speculation, absence of social control, plus the mistaken belief that whatever serves best the interest of the individual, serves best the community, resulted in desultory or all too inadequate attention to proper neighborhood and community development and militated against the creating of lasting values, sustained stability, and soundness.

Land speculation, non-recognition of the fact that the use of land is vested with the public interest, and neglect of the long-range view, has led to many abuses in the utilization of urban land. Most of the defects in the physical development of our cities and many of their social and economic ills flow from these causes. We know that misuse and over-intensive use of agricultural land lead to depletion of productivity and erosion, and in the long run a low standard of living. But in the country these consequences befall only the land so abused and those who so abuse it. In the city, however, misuse and over-intensive use of land invites or produces erosion of a different sort, spreads its blight over much larger areas than the land so abused, and causes depreciation, obsolescence, decayed residential neighborhoods, dilapidated business districts and ramshackle industrial sections.

The subject of urban land policies is to be treated more fully in an address this morning by Mr. Buttenheim and I shall, therefore, desist from dwelling on it further, except to add that the zoning and subdivision regulations instituted a few years ago in many cities, although a great advance, are at best of very limited effectiveness for checking the abuses in urban land utilization. The eradication of the slums and the rehousing of the low-income families at an acceptable standard, the prevention of unnecessary or premature subdividing and the forming of suburban slums, the providing of more adequate public facilities especially for recreation,

the redevelopment of waterfronts and the rebuilding of the basic structure of our cities—all these still await the formulation, adoption and enforcement of land policies that will effectively promote desirable urban development.

Another of the major reasons for the physical maladjustments and deficiencies in our cities is identified in their characteristic basic structural form, the inarticulated mass of their development. The city grows by continuous accretion around the periphery, by adding street on street and house on house endlessly. As the city thus spreads outwardly, its center rises skyward and more completely covers with buildings every foot of available land. The streets and other public facilities and utilities originally provided to serve a development of modest density and height, are no longer capable of handling the load thrown upon them by the immeasurably more intensive use of properties. The balance between the use and the occupancy of private property and public facilities is destroyed. Reduced accessibility, traffic congestion and hazards, overloaded utilities, increased dangers from fire, inadequacy of light and air, are the results. Augmenting public facilities in these central areas is made extremely difficult and lags behind the need because of the enormous cost of acquiring land, the inadequate financial resources of local government and the absence of legal powers or other difficulties to use advanced methods of financing improvements, such as special district assessments, excess condemnation, or the land value increment tax.

The general lack of adequate legal powers of local urban government and its insufficient financial resources have already been pointed out. The discussion of one of its recently assumed functions—planning (including zoning)—has been reserved for special attention.

Considering that planning as a municipal function is less than a quarter century old, and judging solely by the number of municipalities in which it is now established, planning and zoning seem to have been widely accepted. According to a recent survey by the Urbanism Committee there are at present in the United States, 1,073 town and city planning boards of which 933 are official and 84 are unofficial; also 128 zoning boards and 515 cities which have adopted some kind of zoning ordinance—a total of 1,716 communities. Although there are many individual instances in which planning has definitely improved and even governed the physical development of communities, it is difficult, even impossible, to appraise the total effect of city planning by itself as a preventive or remedy for the physical defects and social ills against which it is directed. This applies particularly to the larger cities. On the other hand, the pronounced success of planning has been demonstrated beyond a doubt by the case studies of 144 planned new communities made by Messrs. Arthur C. Comey and Max S. Wehrly for the Urbanism Committee. These planned communities, largely as a result of planning, were found comparatively free of the physical defects and deficiencies common in unplanned communities. They offer their inhabitants not only a more satisfactory environment but, in a great measure, a more attractive existence.

Although city planning has made a fair record on the whole, considering

its much belated acceptance as a function of local urban government, it has fallen short of expectations and potentialities. To begin with, it is handicapped by the same limitations that obstruct the more effective functioning of local urban government itself. City planning bodies lack adequate legal powers for guiding effectively the physical, social and economic development of the community. They have to struggle against uninformed public opinion and officials who do not appreciate the basic importance of community planning and its influence on community welfare. The planning commission is often looked upon as another "independent board," frequently the newest, and often encounters jealousy and even opposition on the part of administrative officials. Planning suffers from niggardly appropriations and scarcity of competent planning personnel. In some places, though, the fault lies with the planning body itself, because its members lack the interest, the vigor, the courage and the prestige necessary, or have but a limited understanding or an all too narrow view of their task.

In order to be more effective the sphere of city planning will have to be extended spatially and functionally and will have to be vested with legal powers commensurate with such expanded sphere of activities. Unless a county or regional planning agency exists, municipal planning bodies should have jurisdiction over the entire area now urbanized or likely to become urbanized and as much of the surrounding area as bears relationship to the proper development of the community. They should have the same jurisdiction over all public improvements, not alone over those of their own municipal government, but of any other local authority and of the agencies of the state or federal governments. In addition, their jurisdiction should be extended to facilities of public utilities such as transportation and transit terminals and facilities, for these profoundly influence the development of the community, whether publicly or privately owned, and whether or not the proposed changes affect directly publicly owned land or facilities.

Planning bodies should not leave it to the chambers of commerce and the industrial departments of transportation companies to shape the industrial development of their communities. They should concern themselves with the intelligent planning of the industrial structure of the areas under their jurisdiction, with the view of enhancing its soundness and stability on which the future of their community will largely depend. Another aspect of urban development to which little attention has been given thus far by city planning agencies is the minimizing of the technological tenuousness of our cities, especially the great cities. The recent floods in the Ohio and Mississippi valleys demonstrated how vunerable the city is, that it is almost completely incapacitated by the disruption of vital services—water, power, transportation, communication. A modern city is a delicate mechanism that can be paralyzed and demoralized by attack on a few vunerable points—through conflagration, earthquake, war, internal strife or sabotage. European authorities are taking steps to reduce this vulnerability of the cities by providing emergency facilities and by the more fundamental method of drastically replanning and reorganizing them.

The suggested extension of the sphere of local urban planning and the sharpening of its tools will have to be accompanied by advances in the art of planning itself. Intensive research is needed on many problems and this, in turn, requires more adequate information and data about cities than at present is available. The Urbanism Committee's study covered the field broadly, but was necessarily of limited penetration. It cannot be regarded as more than a reconnaissance. It should be continued either by government or by our universities and research institutions, or by all three collaboratively.

It is time, it seems, that there be established in the federal government a Bureau for Urban Research that would perform for urban communities functions similar to those which have been performed for rural areas for years by the Bureaus of Agricultural Economics and Agricultural Engineering. Like these bureaus, the proposed agency of urban research should cooperate with universities and stimulate research into urban problems by educational and research institutions and planning agencies throughout the country. Likewise, in order to systematize the periodic and consistent collection of comparable data about cities for use in this research, a Division of Urban Information should be created in the federal government and charged with the responsibility of coordinating the activities of agencies now collecting urban information, extending the collection of such data in accordance with demonstrated need and of organizing all urban information in a manner most useful in this research. Based on adequate, comparable data the bureau of urban research could undertake the periodic appraisal of the conditions and progress of urban life in the United States, and any city could obtain a more accurate picture of its own conditions in the light of those prevailing in similar comparable communities. It would be quite appropriate, it seems, for this Conference to request and urge the federal government to establish these two agencies for the purposes here outlined.

Although an all too dull tool in competent hands under its present limitations, city planning is dangerously sharp when wielded by amateurs or dilettants. It can be worse than just ineffective. Planning cannot be done successfully by people who are not intelligent, alert and enthusiastic about their work per se, or whose minds are cluttered up with details or befogged by generalities; or who are opportunistic, inconsistent and easily swayed. Encroachment on the proper field of administrative agencies and dwelling on Olympian heights are the Scylla and Charybdis of planners and planning. There is a need of a greater number of competent planners and, as in many other professions, higher average competence. This need should be recognized by our universities and governments.

Finally, city planning, if it is to become a vital force in the development and redevelopment of our cities and in the improvement of urban life, will have to gain for itself a place in the structure of local urban government where it will be closer to the local legislative body, the chief executive and the administrative departments—all of whom it serves in an advisory capacity. A planning department, as one of the staff agencies of local government, in place of the present independent planning com-

mission, might be the answer ultimately. However, the making of this change will have to await a better understanding and appreciation of the importance of planning by the local legislative body, the chief executive and the citizenry.

Interdependence of Problems: The segregation of the problems of the city into groups—social, economic, developmental, and governmental—has been resorted to solely for the purposes of organization, simplification and condensation. Actually no dividing lines are recognized between these groups or problems. Many, if not all, of them are intertwined in complex and often reciprocal cause-effect relationships which find their ultimate expression in the shortcomings of urban existence. The slum, for example, is both a developmental and a socio-economic problem, and who can tell which derives from the other? It is also a governmental problem (recently recognized as such, we are glad to say), and one of governmental and private finance. Planning for a socially more desirable and economically more effective distribution of economic activities on a national scale will have to furnish the framework for local efforts to improve the balance and articulation of the industrial structure of our urban areas. The problems of our cities are closely intermeshed, and the enhancement of the contribution of the cities to our national life and the making of the life of the urban dweller a more satisfying one, will require intelligently planned and coordinated efforts on all fronts by all levels of government and private enterprise.

Conclusion

There is no doubt about it, our cities are beset by a great variety of serious problems. It should be remembered, however, that some of the most fundamental of these are not peculiarly urban but rather are national in character. Enormous as may be the task of correcting or mitigating their many shortcomings, the abandonment of our cities and rebuilding according to a new and more desirable pattern seem even more staggering, not only because of the cost of scrapping the cities themselves, but because our entire national plant for production and distribution would have to be re-created. Such an undertaking would be beyond the means of a country even as rich as ours.

From comments here and there throughout this paper it will be suspected that I do not advocate this solution. It should be recognized that we have submarginal cities, just as we have submarginal rural areas, which will either have to be treated to get back to health, if this is possible, or provided for the resettlement of their population. But where the community has a sound economic base, its defects, numerous as these may be, can be corrected, I believe, if we really have the will. We need not start from scratch.

It is proposed instead that we admit having done a bad job in the building of our cities, proceed actually to control henceforth their future development and undertake their judicious redevelopment, in accordance with intelligent comprehensive plans broadly conceived; that we attack

boldly the fundamental causes of our urban problems, instead of staying close to the surface and skirting the edges.

As to the general principles that should guide us in this process and the specific recommendations we can make now for a campaign on a broad front against the ills of our cities, an impressive list of these will be found in the report of the Urbanism Committee, shortly to be released.

The need for the wiser use and conservation, nay, the restoration, of our national resources has received renewed emphasis in recent years and has been widely recognized by our people. The theater of operations, it was tacitly understood, was to be all of our agricultural areas, forests, lakes, rivers, mines, and oil and gas fields. No one to my knowledge suggested that we extend the program to urban areas, except for the constructive proposal made by Deems Taylor that Manhattan Island be evacuated and preserved as a national park. The city, where most of our national wealth and the majority of our people are concentrated, has been overlooked in the conservation program. In addition to all other grounds, I wish to make a plea for immediate national attention to the problems of the city, on the ground of conserving our man-made wealth and human resources.

Our natural resources may be located mostly in the country but our national resources as represented by the majority of our people with their talents for organization, management, inventions, their learning, skills and culture, and our national plant for production and distribution, are concentrated in our cities. The origin of our human resources is mainly in the rural areas but it is in the cities that the majority of these are used in our national economy, in providing for the needs of the present and adding to our national wealth. It is in the cities, too, that these country born and bred people find the greatest opportunities for their talents. The wiser use and conservation of this most precious of our resources, in terms of which all others must be measured, is preponderantly an urban problem. It should, therefore, seem most appropriate that the first comprehensive study of urbanization and the problems of the urban community should have been undertaken by the National Resources Committee and that it should be further pursued by it.

If we continue to permit a large segment of our urban population to go ill-fed, ill-clad and ill-housed, if we fail to create for them a better environment, and take adequate steps to improve their health, to bolster them against delinquency, crime, etc.—we will continue to have with us in our cities most of their present day problems, defects, and deficiencies, inconveniences, inefficiencies and ugliness. Under such conditions, with a larger and larger share of our people in the cities, the outlook for the nation's future seems anything but bright. It must seem evident to any thinking person that in the long run, the standard of material and cultural existence of the nation itself will largely depend upon our success in improving the quality of life in our cities.

Attached to Mr. Segoe's paper was a table which is illustrative of the trends he described. This appears on the opposite page.

RANGE OF VARIATION AMONG CITIES
As Measured by a Few Available Significant Indices

	Metropolitan Districts		Non-metropolitan Cities of 50,000 to 100,000		Non-metropolitan Cities of 25,000 to 50,000	
	High	Low	High	Low	High	Low
Percent of increase in population, 1920-1930	100.6 Okla. City, Oklahoma	—8.3 Norfolk-Portsmouth-Newport News, Va.	169.7 Greensboro, N. C.	—8.4 Charleston, S. C.	207.3 West Palm Beach, Fla.	—7.9 Petersburg, Va.
Population density per square mile	4,336.1 New York Northeastern New Jersey	274.9 Sacramento, Calif.	13,830 Charleston, S. C.	1,760 Sioux City, Iowa	8,620 Lexington, Ky.	393 Concord, N. H.
Number of males per 100 females	115.3 Sacramento, Calif.	90.0 Savannah, Ga.	111.0 Port Arthur, Texas	83.8 Charleston, S. C.	128.2 Aliquippa, Pa.	84.1 Columbus, Ga.
Percent Negroes to total population	47.1 Savannah, Ga.	0.3 Scranton-Wilkes Barre, Pa.	45.4 Montgomery, Ala.	0.4 Portland, Maine	44.1 Petersburg, Va.	0.0 Sheboygan, Wis.
Percent native born whites to total population	95.4 Lancaster, Pa.	38.8 El Paso, Texas	95.4 Springfield, Mo.	52.3 Charleston, S. C.	96.4 Marion, Ohio	26.0 Laredo, Texas
Percent of population 45 years of age and over	30.6 San Diego, Calif.	16.3 Flint, Mich.	30.1 Portland, Maine	11.7 Port Arthur, Texas	34.7 Concord, N. H.	12.0 Aliquippa, Pa.
Percent of population 10 years old and over gainfully employed	58.2 Washington, D. C.	44.5 Altoona, Pa.	60.7 Winston-Salem N. C.	46.9 Pueblo, Colo.	59.7 Greenville, S. C.	43.1 Johnson City, Tenn.
Percent of gainfully employed in manufacturing and mechanical industries	58.5 Lowell-Lawrence Mass.	19.1 Washington, D. C.	59.0 Manchester, N. H.	21.4 Austin, Texas	72.3 Aliquippa, Pa.	15.3 Butte, Mont.
Percent of gainfully employed in manufacturing and commerce	77.0 Allentown-Bethlehem-Easton, Pa.	40.1 Washington, D. C.	76.0 Manchester, N. H.	47.0 Austin, Texas	83.7 Aliquippa, Pa.	45.2 Ann Arbor, Mich.
Per capita estimated true value of property subject to general property tax	$5,119.00 Miami, Fla.	$885.00 Peoria, Ill.	$3,047.02 Madison, Wis.	$789.97 Pueblo, Colo.	$4,052.30 Santa Barbara, Calif.	$825.82 Aurora, Ill.
Median value of homes owned	....	....	$7,996 Madison, Wis.	$2,535 Pueblo, Colo.	$9,019 Ann Arbor, Mich.	$1,341 Laredo, Texas
Percent of families residing in one-family dwellings	....	....	89.7 Terre Haute, Ind.	44.9 Charleston, S. C.	92.0 Bay City, Mich.	37.4 Lewiston, Maine
Number of income tax returns per 1,000 population	102.9 Washington, D. C.	25.5 Scranton-Wilkes Barre, Pa.	69.6 Madison, Wis.	20.6 Springfield, Mo.	82.4 Santa Barbara, Calif.	20.1 Riverside, Calif.
Average wage per average wage earner in mfg. industries	$1,177.00 Youngstown, Ohio	$918.00 Knoxville, Tenn.	$1,508.00 Lansing, Mich.	$798.00 Augusta, Ga.	$1,960.00 Amarillo, Texas	$696.00 Petersburg, Va.

Land Policies

Harold S. Buttenheim
Editor, The American City Magazine

(In this paper Mr. Buttenheim summarizes some of the principal facts and recommendations which will appear in a section called "Urban Land Policies" in the report of the Urbanism Committee.)

THROUGHOUT the United States, as elsewhere in the world, the development of urban communities falls far short of attainable ideals. No city is wholly free from avoidable physical handicaps to the welfare of its present and future inhabitants. Congestion of vehicular traffic, dark and badly ventilated dwellings and offices, the overcrowding of sites and buildings, an irrational distribution of different types of structures, a deficiency in public open space combined with a surplus of vacant private lots, undue concentrations of land values, and unfair apportionment of the local tax burden—in varying degrees there are to be found, in practically every American city, these or other detriments to urban well-being.

How and Why Existing Conditions Developed

Urban growth has been accepted heretofore as normal and almost inevitable. More recently the stoppage of immigration and the slackening of the birth rate, coinciding with a generally desirable centrifugal movement of urban dwellers, have tended towards a vacuum in the older portions of many of our cities. This trend may become even more pronounced with increased economic recovery, as tenants will be in a better position to abandon decadent neighborhoods. New methods of transportation have made unprecedented urban decentralization possible. Our out moded street systems and the interior planning of our cities have not, however, been changed to conform with the new mobility. Nor have the legal and economic controls of land tenure and use kept pace with modern requirements. These conditions have been among the factors which have produced blighted areas and slums, premature subdivisions, and jerry-built potential slums.

These plights of our cities are commonly ascribed to the unbridled exploitation of land by private owners. But in fairness the blame cannot so simply and definitely be fixed. Indeed, candid analysis must place the major responsibility on our lack of urban land policies and on the consequent failure of our public bodies to afford to private owners and developers adequate opportunities for wise and profitable land uses.

It is the guidance and protection rather than the restriction of land users that needs major emphasis in the formulation of land policies for rational urban development. For every land owner who wishes to exploit his property to the detriment of his neighborhood or community there are

hundreds who desire to be safeguarded against such anti-social uses. But where community protection is lacking, it is quite natural for the average property owner to try to secure, in self-protection and at the expense of his neighbors, advantages which they might otherwise secure at his expense.

To the absence of sound, long-term city planning, and of enactment or enforcement of adequate zoning ordinances and building codes, must be ascribed much of the blame for the deplorable housing conditions existing throughout the country and for the speed with which new housing accommodations deteriorate. Responsibility must be placed also on our inefficient methods of assessment and unscientific systems of taxation of real estate.

The Chief Problems

Urban land policies cannot be fitted neatly within the legal boundaries and powers of cities, as the sole concern of the municipality where the land is located. It cannot be doubted, for example, that the growth and welfare of very many individual cities in the near future will be profoundly affected by recent nation-wide population trends, by changes in methods of production, transportation and distribution, and even by national policies with reference to interstate commerce, tariffs, and international relations. The chief problems affecting the ownership, transfer and use of urban land are, therefore, not merely problems of local public opinion and legislation, but are intimately related to state and national constitutions and laws and to other factors even more difficult to control. The contingency, however, that uncontrollable forces may wreck a city is no excuse for neglect of the controllable forces which may save the city.

Once its areas are subdivided into the wrong kinds of streets, blocks and lots, a city will be permanently burdened with some or all of these mistakes. The difficulty here has been our past failure to appreciate the essential dissimilarity of land and the products of human labor—the extent to which the marketing of new lots requires restrictions far different from those applicable, for example, to the marketing of new potatoes. We now know differently; but lack of adequate control of the planning, sale, and use of urban areas has involved financial and social costs to our cities of staggering amounts. Bitter experience is demonstrating that the great American game, gambling in land values, instead of being an innocent business venture or a speculation of concern only to the private individuals who play the game, is too often a public tragedy, financial and social, with most of the losses underwritten by the general public. How best to regulate this game, with justice to legitimate and socially useful business interests, is one of the most important and difficult of civic problems.

In current attempts to rehabilitate slum areas, the chief problems center around the cost and financing of such endeavors and the difficulty of assembling areas adequate for large-scale developments. Owners too

generally base their claims for compensation on the unwarranted assumptions that population will grow and business expand in the future as in the past. Meanwhile, rational development is prevented by the high land prices, and property stagnates. The deflation of these excessive costs is a fundamental concern in many cities, as are also the right to utilize eminent domain and acceptable procedures thereunder.

Recommendations

City planning: Street and highway location and design, as factors affecting land uses, need much more consideration than heretofore. By proper layout and spacing of major and minor thoroughfares, locations can be marked definitely for future development as residence, business, or industrial districts; and such mistakes as the location of schools, libraries and hospitals on through traffic streets can be avoided. For the widening of narrow streets, the use of building setback lines is a device too little employed.

By advance planning, rational zoning and the reservation or location of public facilities in advance of need, not only qualitative but also quantitative control may be realized. In almost every city there is need for new land-use studies and traffic surveys as bases for replanning, rezoning, and rehousing, and for the determination of reasonable land values.

Zoning ordinances and building codes: Practically all existing zoning ordinances and building codes need modernizing to prevent future overcrowding of land and to provide more adequate space and safeguards for residential and recreational areas and structures. Specific needs include more effective limitation of the height and bulk of buildings, and better regulations affecting setbacks, towers, and the size of courts and yards, which have seldom been formulated with adequate consideration to the laws of natural illumination.

On the one hand, existing zoning regulations are so elastic as to permit in many instances the continued extension, even within the protected zones, of the very conditions which zoning was intended to remedy; on the other hand, the less restrictive zones are so large that much of the city's area is not protected against out-of-place building. Not only do the regulations need to be improved, but the zones, too, should in many cases be adjusted more accurately to reflect existing conditions. That these mistakes are especially prevalent in the earlier ordinances is traceable in a large degree to the fear, very general at the time, that the courts might frown upon regulations and zones which admitted comparatively little latitude to the builder. Now that the courts have sustained the constitutionality of zoning, no justification exists for longer deferring the adoption of adequate regulations and zones for the protection of present and future development.

Even retroactive zoning has been sustained in some court decisions, and the time may have come for a concerted effort to rid residential districts, over a period of years, of non-conforming uses.

Neighborhood planning: The building and maintaining of well-planned neighborhood units is an essential of rational urban development. To insure stability, the neighborhood unit should be as nearly self-contained as practicable, providing for common interests binding the population together and maintaining a desirable residential environment. Its basis and the space it should occupy are fixed by the best working of its four major functions. Three of these are services—schools, playgrounds and retail shops; the fourth—residential environment—is dependent, partly at least, upon the fitness and the harmonious play of the other three functions. The neighborhood unit should be bounded by main traffic routes or other physical barriers, without any main traffic passing through it.

Subdivision control and reorganization: In subdivision control the more progressive viewpoint contends that what is needed now is some mechanism to prevent the premature subdivision of land in parcels, irrespective of the issuance of building permits for such land. Among the most promising methods of such control appears to be legislation requiring the developer at his own expense to install necessary public improvements such as sewers, water mains, streets and sidewalks, as conditions precedent to the approval of the plat, and to set aside an appropriate percentage of the land for parks, playgrounds, schools, and other public purposes. Certain advocates of still more drastic methods of subdivision control go so far as to favor legislation which would require some sort of "certificate of necessity" before a permit would be granted for the subdivision of land.

Because of the large number of defective subdivisions, the problem of reorganizing them is just as important as the problem of preventing a new crop of such subdivisions. Various methods of group action, depending upon cooperation, have been suggested. A few have been successfully carried out. The final solution of this problem may require the grant of a definite authority to municipalities to step in, adjust property rights with the owners who still have equities therein, to close streets, replot where necessary and readjust the financial structure. The details of such methods have not yet been worked out, but they present a problem of growing importance which must be solved.

Rehabilitation of slums: The suggestions for improvement include: (a) action by official agencies, such as public slum reclamation and housing authorities; (b) the use of incidental or excess condemnation as a tool which will facilitate rehabilitation; and (c) group action initiated and executed primarily by the owners and others interested in specific areas. We recommend that efforts for the rehabilitation of slums and blighted areas be turned from debate into action, and that experiments along all three of these lines be undertaken promptly.

Land for housing, green belts or wedges, or for other municipal purposes, should be acquired gradually over a long period. A municipal real estate department, such as is found in a few cities, guided by a comprehensive plan for the city, indicating the amount and approximate location of land needed for all public uses, could appear as a party whenever land was offered for sale and buy suitable land when the price

was reasonable. Tax-delinquent property could be taken over and managed by the city. By trading parcels with private owners, scattered holdings might be consolidated and large assemblies be made, with resort to eminent domain only in the case of key plots.

Better use of land in private and public ownership: Recent studies have shown the serious weakness of the common type of zoning ordinance, in permitting degrees of urban congestion which ought not, and indeed cannot, ever be realized. In almost every city large numbers of lots on which such congested development is legally possible remain idle year after year—to the detriment of the community, which obviously would profit if every acre of its site were at all times put to some socially beneficial use.

This does not mean, of course, that the best ultimate use for every acre of urban land can immediately be found. But it does call for recognition of the social and economic wastes involved in unemployed land, even though fairly assessed and not tax-delinquent. For land as well as for men, useful jobs, whether temporary or permanent, are much to be preferred to unproductive idleness. A most urgent urban need, therefore, is to devise ways and means for bringing into at least temporary public use all urban land which the community could use to advantage and for which private initiative cannot promptly find desirable uses. Under such public ownership or control our cities would speedily be supplied, more adequately than ever before, with neighborhood parks and playgrounds, public golf courses, allotment gardens, parking spaces, artificial lakes, town forests, improved waterfronts, tennis courts, swimming pools, and other opportunities for recreation, culture and esthetic enjoyment.

Nearly all modern ideas of both low-cost and medium-priced housing revolve around the notion of large-scale operations, neighborhood units and community planning. The fulfillment of these ideas requires the acquisition of large tracts of land, which, as already pointed out, can generally be assembled in desirable locations only with much difficulty and expense. Cities, therefore, should be encouraged to acquire gradually adequate areas of land suitable for housing both within and outside the city limits.

Land on reasonable terms would then be available for housing projects, public or private, in times of depression or housing shortage; publicly-owned land could serve as a "yardstick" for site costs; by withholding land from the market in boom times, excessive building could be discouraged; more effective zoning and architectural control would be possible; and by checking uneconomic expansion, substantial economies would result in the public provision of parks, highways, transit lines, schools, utilities, etc.

If such lands, however, are acquired under the limitations imposed by present policies, the costs may often prove prohibitive for the municipality, and cause inflated speculative prices which will be harmful to private development. Such handicaps may be largely obviated by the application of the changes in acquisition policies and in methods of taxation recommended elsewhere in this report.

In order further to control city growth, provide breathing spaces and recreational areas, and promote the development of satellite towns, it is desirable that cities acquire or zone, wherever possible, green belts of recreational, agricultural and forest land surrounding their built-up area. Green wedges or parks extending from the open country in toward the heart of the city, are also desirable, both alone and in combination with green belts. In cities where the acquisition of continuous green belts or wedges is impossible, such tracts as can be bought might be connected by parkway strips. In many communities financial and esthetic benefits would result from retaining open streams for surface water drainage and parkway development. Most cities fortunate enough to be located on a river, lake or ocean could advantageously give increased consideration to the public ownership and improvement of bathing beaches, waterfront parks and parkways, and in some cases to more adequate flood protection.

Land Socialization

Unless our state and municipal governments have the foresight and the courage to adopt rational land policies, the alternative might conceivably be a growing demand for the complete restoration to the people, as a present rather than an ultimate reality, of the land-ownership which, in the constitution of the state of New York for example, is guaranteed to them in the clause which declares that: "The people of this state, in their right of sovereignty, are deemed to possess the original and ultimate property in and to all lands within the jurisdiction of the state."

The authors of this report are not prepared to accept as conclusive the case for the public ownership of all urban land. They do believe, however, that the time has come for a nation-wide acceptance of the facts that the tenure and use of urban land are matters of urgent concern; that a larger measure than heretofore of public ownership of land, and of protection of socially beneficial private uses, would be in the public interest; and that orderly—and, in some cases, quite speedy—reform is essential to the well-being and future progress of our American municipalities. Among readers of this report there will surely be general agreement that there is no inherent natural right for any individual to claim inalienable ownership or uncontrolled use of a section of the earth's surface; and that in a democracy that system of land tenure and taxation ought to prevail which will confer maximum public benefits with minimum private burdens.

The Urban Mode of Life

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IN THE establishment of its Urbanism Committee the National Resources Committee apparently for the first time in our history has given overt recognition to the fact that cities are an important phase of our national life. They have acquired such a central place in the lives of our people and

in the activities of government that they can no longer be left out of account in any effort to deal realistically with the nation's problems. It is especially important to consider the city in national planning activities because planners tend to approach their task with a characteristic emphasis upon land and the physical structures that have superimposed themselves upon it. The rise and the phenomenal growth of the city, however, have progressively complicated the relationship between man and the soil, so that the actual problems of human social life involve an increasingly indirect nexus between human welfare and the natural resources. Typically in the modern age the difficulties of social adjustment are less and less to be understood in terms of man and resources alone, but must increasingly reckon with the patterns of life that have already developed out of previous efforts at adjustment: i.e., with the technology, the habits, attitudes and ideas, the customs, rules, laws and social structures, in short, with the web of social life that has been generated in the course of historical development. The planner no longer confronts the simple objective of adjusting man to the natural habitat,—which was really never the case—but of adjusting man to man through the manipulation and guidance of a whole complex of factors including among many others the physical environment. It is not that the land is no longer important, but rather it is that we can no longer effectively deal with the land directly and independently. If we would deal with it all or if we would use it as an instrument in the enhancement of human welfare we must not overlook the complex technological and social superstructure through which it has been modified and which limits and conditions our use of it.

It may seem strange to some of us that in our governmental activities and structure and especially in our fact-collecting and research activities such an overwhelming emphasis has been laid upon agriculture and rural life, and so little attention has been paid to the city and urban life. This may in part be due to the fact that the interests of rural life are fairly coterminous with agriculture, but the interests of urban life are not coterminous with industry as apparently has been naively supposed. While the city is characteristically the industrial workshop of mankind the interests of the city dwellers are by no means covered by industry and commerce alone.

Causes for Neglect of Urban Problems

One historical fact that may account in part for our relative unawareness of the significance of the city is that the United States has been urbanized so recently. When the nation was founded and the framework of its government was shaped the United States did not have a single town with even as many as 50,000 inhabitants; not until 1820 could it boast of a single city with over 100,000 and not until 1880 of one with a million. As late as 1870, 52.8 per cent of American workers were still engaged in agriculture and almost until the world war we were still considered a country that produced agricultural products and raw materials for the world market. The transition from a crude and simple handicraft and agricultural economy to a highly advanced and complicated industrial society

has been accomplished so recently that some time will elapse before we can give due recognition to the new basis of our national existence in our governmental organization, functions and outlook. The great depression did something to shock us into an awareness of our newly acquired status as an industrialized and urbanized nation.

Aside from the recency of our industrialization and urbanization the enormous rapidity with which these changes have proceeded has left its imprint upon our contemporary life and is responsible for our failure to devote serious attention to the urban phases of our national problems. Fifty-six and two-tenths per cent of our population lives in urban places, nearly 30 per cent in cities of over 100,000, and almost one-half either in or so close to cities over 100,000 that for all practical purposes their life is urban. Only 21.3 per cent of American workers were gainfully employed in agriculture in 1930, while the overwhelming majority lives and makes its living in industrialized and urbanized communities. While the countries of Europe that came under the magic spell of modern technology grew into their present urban stature gradually over a period of several centuries, this country took the leap from frontier agriculturalism to mature urbanism in the course of a few decades. This unprecedented speed of change in our mode of living and making a living may help to explain our staggering problems, our appalling disorder, our abysmal ignorance and our blithe apathy.

The New American Frontier

The geographical frontier that in our national history has always lain to the West has suddenly disappeared; the new American frontier is in the city, for it is here that the significant changes in our life are being wrought and it is from there that they will reverberate throughout the land. It is not merely the people who actually live within the boundaries of the legally defined municipality that have their mode of life determined for them by urban civilization, but those beyond the geographic limit of the city boundaries as well. The city has become the dominant influence upon national life. It is both symbolic of modern civilization and the principal medium through which the mode of existence of mankind is being remolded.

The inferences and interpretation that we draw from existing facts about cities must be qualified in two principal directions. First it is important to recognize that existing data about cities for the most part give a picture only of the city proper as if the conditions of life prevailing in cities stopped abruptly at the city limits. It needs no elaborate argument to prove that this is not so. Especially in our great cities it is apparent that a large proportion of their inhabitants, by virtue of the fact that our Census enumerates the night population rather than the day population, is to be found in the suburbs and satellite settlements which are economically and socially an integral part of the metropolis although legally a thing apart. The seeming loss of population of our central cities to the suburbs on the peripheries is merely an instance of the characteristic

way in which cities grow, namely by emptying their population at the center. As the residential telephone directory of Manhattan grows thinner the suburban telephone directory gains in bulk. It would give a false picture of cities therefore to interpret the facts about them as if each city that is a legal unity were also an independent economic and social entity. Secondly it is important to make allowance for the enormous variation in the conditions of life both within cities and between cities. The 3,165 urban places which the United States Census records are obviously not all alike. There would be few generalizations one could make about all of them that revealed significant uniformities. Our cities differ from each other not merely in size (from 2,500 to several millions of inhabitants and from a few blocks to many square miles in territory) but in age, rate of growth, location, function and in countless demographic, economic, governmental and cultural respects. Similarly, although American cities tend to follow a typical pattern of internal structure which we have described in the report of the Urbanism Committee, there are enormous variations in the character of life in the various sections of the city. Indeed, it is one of the outstanding features of the urban scene that it exhibits wide variations and glaring contrasts.

Despite the striking variations between cities and between the different component parts of each city, there are clearly distinguishable differences between urban and rural ways of life finding expression in different technologies, economies, social organizations and institutions, personalities, and biological, technical and social problems. Historically the country and the city represent different stages of civilized life; contemporaneously they reflect the two poles of social existence.

Population Characteristics of Urban Centers

Urban life is significantly conditioned by the characteristics of the population. Cities contain a larger proportion of persons in the prime of life, while the country has more old persons and children. Women outnumber men in cities, generally speaking, although the largest cities which have been the beneficiaries of immigration from abroad, industrial cities, and the frontier cities of the West represent exceptions. Cities have always been regarded as the melting pots of races and cultures, and American cities as might be expected, exhibit this function to an extraordinary degree. Not merely the European immigrants, but in recent decades the Negroes have flocked city-ward and have given the great American cities their striking ethnic heterogeneity.

Throughout history cities have been known as the consumers of manpower produced in the country. One of the most striking facts about the urban population is its failure to reproduce itself. Even though the enormous death rate characteristic of cities before the Industrial Revolution and before the introduction of modern forms of food, and water supply and sanitation has been considerably reduced until it is only slightly higher than the rural death rate, the cities must still rely for the maintenance and growth of their numbers upon the rural areas. Urban

women, whether native, foreign-born or Negro, have fewer children than the rural women, and the larger the city the lower is the rate of reproduction. Obviously those who see some virtue in numbers have reason to feel alarmed especially in view of the fact that the urban pattern of life is rapidly becoming diffused among the rural population as well. But the planners might have cause for rejoicing for they can look forward to a more stable population base.

The low urban reproduction rate suggests that the city is not conducive to the traditional type of family life. Industrialization, education, insecurity, the appetite for a higher standard of living and the physical crowding under urban housing facilities are among the factors which discourage marriage and the rearing of children, and encourage family disorganization. Mothers are more likely to be employed, lodgers are more frequently part of the household, the traditional family functions are given over to agencies outside the home and each individual member of the family is more inclined to lead his own existence. In these respects the suburban community resembles the rural areas more closely than it does the city.

Urban Health

As merely one case of the need for caution in generalizing about cities I shall cite some facts about health. In recent years cities have rapidly improved in public health facilities. Since 1929 the urban mortality rate has fallen below the rural. Urban health controls are responsible for bringing the urban mortality rates from influenza, smallpox, malaria, and dysentery below the rural rates, although the urban rates for venereal disease, tuberculosis, epidemic diseases, alcoholism, drug addiction, insanity, heart disease and suicide exceed the rural rates. Cities as a rule not only have more and better private medical services but spend more on public health facilities than do rural areas. Nevertheless, under the present distribution of income the vast majority of the population, both urban and rural, is not in a position to obtain the accessible services and is incapable of meeting the financial burden of illness individually. The physical risks to which urban life exposes the population, coupled with the fact that disease is no respecter of persons makes the democratization of health facilities an urban necessity.

What has been said about health applies equally to education, public welfare, recreation and to other aspects of urban life. As a rule cities, in the aggregate, differ from the country, but there are often greater differences between cities of different sizes and types than between city and country. Similarly, the differences between the various sections of the same city often exceed those between cities. Moreover, no general class of phenomena or problems such as health, safety, and welfare can be compared precisely as a whole. Each of them must be broken down into more minute units for purposes of analysis.

Employment and Income

The great city of today rests upon a technological base in which steel and steam have played a pre-eminent role. Free individualistic enterprise whose essential elements are competition, credit and speculation furnish the economic counterpart to this technological base. The concentrative force of steam has herded large aggregations of workers into gigantic industrial plants which have been brought into existence through corporate enterprise. This tendency has not as yet been markedly mitigated by the potentially dispersive force of electricity. The economic opportunities created by industrial and commercial establishments have served as a magnet attracting the young potential workers from near and far. The minute division of labor accompanying the displacement of the simple economic society cumulatively resulted in ever sharper differentiation of occupation, income and status. Generally a larger proportion of the adult urban population is gainfully employed than is the case with the adult rural population. This applies to men as well as women, but not to children. That these are specific characteristics of contemporary urban life is indicated by the fact that the larger the city the more prominent these features are found to be. The white-collar class, comprising those employed in trade, in clerical and professional work, are proportionately more numerous in large cities and in metropolitan centers. While the city offers a greater range of vocational opportunities it also undermines economic security by reducing the span of the working life and by discouraging self-employment.

The incomes of city people are on the average higher than those of country people. The larger the city the higher the per capita income, but the more industrialized the city the lower the income. No direct correlation between size of city and living costs can be established, but the cost of living seems to be highest in the largest cities. Home ownership is rarer and involves greater burdens in the city than in the country and in the large cities as contrasted with the small. Rents are higher and absorb a larger proportion of family incomes as city size increases. Urban families spend a larger proportion of their incomes for clothing, recreation and advancement and a smaller share for food than do rural families of corresponding income levels. While the urban dweller has the benefit of many communal services which the rural dweller must provide for himself or do without, he does not have that margin of subsistence to fall back upon which might mitigate the severity of his lot in time of personal disaster or economic crisis.

The Individual in the City

On the whole urban existence involves a much greater degree of interdependence between man and man, a much more fragile and complicated web of technical and social relations depending upon the smooth functioning of a complex and delicate apparatus than does rural life. Moreover, since the ties of kinship and of neighborhood in the city are reduced to the most tenuous level the urbanite must rely largely upon either the

pecuniary nexus or upon the organized community for his safety and his welfare. The individual in the city is forced to live in a complex and highly volatile situation over many phases of which he can scarcely exert any control. Being reduced to a stage of virtual helplessness as an individual he is bound to exert himself through joining with others of similar interests into organized pressure groups to obtain his ends. This results in the enormous multiplication of voluntary organizations organized for as great a variety of objectives as there are human needs and interests. The creation and perfection of a host of private and governmental services and institutions in the fields of safety, health, education, religion, recreation, culture and welfare to which the city has given impetus, reflect the resourcefulness of mankind in responding to the new problems which a new civilization has generated. Many of the problems of urban living still remain unsolved and some of them are just looming up on the horizon of national awareness. They cannot be solved single-handed by any one group of specialists even if they call themselves planners.

The glaring contrasts of wealth and poverty coupled with the commercialized interest in the stimulation and exploitation of appetites, tastes and needs, the great heterogeneity and mobility of population, the minimal ties of family and neighborhood, the mechanization, the individuation and the atomization of life, the accelerated tempo and high tension of urban work and living, and the great economic insecurity prevailing in the city, generate acute and widespread problems of human adjustment. Personal disorganization, mental breakdown, suicide, delinquency, crime, corruption and disorder might under these circumstances be regarded as indigenous to the urban world. The wonder is that they are not more frequent.

Close and frequent physical contact coupled with great social distance and impersonal, anonymous relations may produce loneliness, irresponsibility, indifference and mutual exploitation. But they also give birth to initiative, rationality, emancipation from tradition, invention, grandeur and freedom. The city provides a wide range of opportunities, puts a premium upon talent and creativeness, generates change and by presenting the need, offers great incentive to organization, collective action and social control on a broad scale. City men typically do not live in the same place where they work nor do they own the place in which they live. Property in the city is generally intangible. Employers and workers live worlds apart both physically and socially and those who live next to one another often have nothing more in common than similar economic status. Men do not have claims on one another, responsibilities toward one another nor loyalties to one another. Masses are moved by symbols and stereotypes rather than by the realities for which they stand, and these symbols are manipulated by experts from afar or working invisibly behind the scenes.

The Evolution of Urban Living

Thus urban life as we have seen it develop thus far in this country—and it is still in process of evolution—exhibits three phases of a still incomplete cycle. It first uproots the rural migrants from their personal relations and folk traditions, and atomizes their life. This reduces social control to a formal and elementary level where great heterogeneous masses are held together merely by the division of labor, an intricate technology, ruthless competition and manipulable slogans. But the mere complication of urban life, involving similar interests, similar risks and dangers and communal crises tends to mold the urban population into a new community in which common objectives, rational programs and intellectual leadership emerge.

There are some tender-hearted, if not tender-minded, romanticists who seem to be so gravely affected by the staggering problems of urban living that they seek to escape from the city or even advocate its destruction. But escape is possible for only a few individuals and for them only partially or temporarily, for the lure of the city and its great cultural advantages is virtually irresistible.

But even conceding that a few can find refuge in pastoral pursuits or in "rurban" settlements, and admitting that our cities, especially our metropolitan super-cities, could be loosened up considerably in the interests of economy and livability, it is idle utopianism to assume that human satisfactions could be increased by dismantling our cities. Without great cities we could not possibly hope to enjoy some of the most cherished advantages that we have come to regard as essential ingredients of modern civilized life. In the interests of the millions of people who live and work in our cities and of the advancement of our national life a nation-wide program is urgently needed, designed to make the cities better fitted as dwelling places, workshops and cultural centers and more effective mechanisms in the national economy. In these tasks the planners have a significant function to perform.

Planning and Urban Government

Albert Lepawsky
Assistant Director, Public Administration Clearing House

A CITY plan is dependent upon every branch of the city hall for its final fulfillment and its actual administration. Consequently, so far as planning at city hall is concerned, if we expect to administer the plan we must plan to administer.

Now, with reference to the administration of urban government, what are the outstanding facts which the planners of this country may want to bear in mind?

1. Planners cannot escape the fact that urban government has become one of the nation's major industries "and it therefore ranks with the nation's network of manufacturing enterprises whose factory-sites and even labor

supplies the planner has not hesitated to concern himself with." Urban governments in the United States employ 1,125,000 persons, who constitute one-third of all the public employees or one-thirtieth of all gainfully employed persons in the country. Urban government, moreover, spends annually some four billion dollars which is one-third of all the governmental expenditures of the country and represents about one-twelfth of the total national income. The long-range planner certainly cannot afford to disregard the operation of this vast slice of the national economy.

2. Locally as well as on a national scale, the city hall plays perhaps a major role in the entire community. It is at city hall where questions of the city's population and industry, its business and transportation, its health, education, crime, and recreation, are ultimately translated into social policy and administrative action. The urban governments of the United States perform those essential public services without which its concentrated urban centers, containing the majority of its citizens and the bulk of its enterprises, could not continue to exist. They provide water, dispose of sewage, prevent epidemics, guard public health, protect life and property, control traffic, and regulate and facilitate trade and industry. Over the long span of years, city services have become the public utilities of the community. Municipal water supply has undergone an almost complete change from private to public ownership since the Civil War, and now even the supply of electricity is again witnessing a revival of municipalization. These are the services which constitute the going community, and planners, even if they persist in drawing up plans only for the physical plant of the city, can disregard these growing municipal services no more than they can neglect urban industry and urban transport.

3. The planner cannot escape the intimate relationship between his city plan and the entire city hall, especially as cities recognize the importance of continual planning. The planner may learn to his dismay that the viaduct project so dear to his heart and so essential a link to his entire plan falls through because the city finance officer possesses some strange power over the capital budget. That residential zone upon which his heart was so set gets into the courts. If only he could get the city attorney to tell the judge what was so thoroughly understood by himself but cannot as easily be put in the form of a legal argument! Thanks to the Civil Service Commission, he is able to obtain the services of a good highway engineer who fortunately is a tactful local boy capable of handling the "resisters" in the highway department. But then, that large bridge which had been worked out on the basis of extensive data was, think of the nerve, actually closed to traffic for a time by the police because it did not suit their traffic plans. Then, tan their hide, the building department still hasn't got the whole idea about enforcing the demolition ordinances. Worse still, the health department now informs him that the noxious odors in Pig Iron Creek behind his favorite new housing project cannot be abated because the industrial waste section of the sewage department is not sure it has proper legal authority to proceed. Putting the plan into operation may not be the planner's job,

but he cannot escape a few sleepless nights when these unforseen governmental tangles cripple his plan.

4. Thus planners are also interested in the powers the city may exercise in putting the plan into operation. About one-third of the cases involving the ten major classes of municipal powers which have come before state and federal supreme courts in the past twenty years are cases in the general field of building regulation and zoning. Moreover, while the city generally loses only one out of three cases concerning municipal powers, generally the planner will find that in cases involving his functions the city loses every other case. The planner therefore has reason to be interested in, if not dissatisfied with, the range of powers granted to cities for planning and related functions either by courts or state legislatures.

5. If the planner is disgruntled because the administrative mechanism of the city does not enforce his plan readily enough, perhaps he will find some encouragement in learning that on the whole, the machinery of urban government has been undergoing one of the most extensive transformations in our national life. The organization of city government has in the past few decades been growing more unified and coordinated through the concentration of executive responsibility in a single municipal executive either of the traditional mayor type or the rapidly spreading city manager type. Urban governments have experimented with and have made widespread use of such administrative devices as executive budgets, central purchasing, and central registration. They have pioneered with some of the country's most dramatic mechanical devices and scientific techniques, including traffic signal lights, police radio broadcasts, sewage treatment processes, epidemiology, lie detectors, voting machines, and parking meters. Structurally and technically, then, contrary to opinions widely held, urban government has witnessed a development comparable to, though less heralded than, the growth of the nation's private corporate system and industrial machine.

6. If the planner further grows impatient because the government's servants or rather its techniques seem to be at fault, he will be further interested to learn that as a whole, city employees and officials are developing these skills that are essential for the responsible operation of their rapidly growing functions. The expert for years now has been displacing the untrained amateur in key positions in the city hall. Tenure in the ranking administrative and technical posts has become more secure. The irresponsible urban boss of the previous generation is extinct today except in a handful of cities. A whole series of advanced personnel devices has developed, including standard classification and salary plans, pensions, efficiency ratings, in-service training and non-partisan elections. Selection through merit examinations has begun to displace the rampant spoils system through the establishment of civil service agencies in 38 per cent of our cities over 10,000, thus affecting 80 per cent of the municipal employees of the country.

7. The planner's suburban and regional problem seems less hopeless as he studies what cities have done in the field of metropolitan goveru-

ment. To be sure, the 96 metropolitan districts of the country, containing 55,000,000 people or 45 per cent of our total population, are ruled by bewildering layers of independent and overlapping authorities including suburban and satellite cities, counties, townships, school districts, sanitary districts, park districts, utility districts and even mosquito abatement districts. However, cities and their village suburbs together with their overlapping counties, though they have resisted annexation and consolidation, have not hesitated to coordinate services in functions where in the past they have been most jealous of their autonomy. The Chicago police radio hookup, for example, includes 56 suburban police forces and Cincinnati's police broadcasting system covers 4 counties in Ohio, 2 counties in Kentucky, 51 townships, 12 cities and 65 villages. Certainly this should encourage the planners in their own regional ventures.

8. Even on a national scale we are witnessing an organized movement for municipal reconstruction and this is tied up with the planning movement itself. For a generation or two, cities throughout the country have been exchanging facts, ideas and programs, through their national associations of public officials. The American Society of Planning Officials is making substantial contributions to this field. Officially, the National Resources Committee has stimulated not only planning but the national clearance of municipal information and practices and has been supplementing other agencies of the federal government long engaged in advisory and administrative services for cities. And now the President's Committee on Administrative Management recognizes what may be as true for all the cities of the country as for the nation itself, that planning is, coordinate with financial control and personnel administration, one of the three major arms of the American executive. The planner who takes the long view may not be far wrong if he looks at his work in the same light, whether he is planning for the nation or the nation's cities, whether he is called in at the White House or city hall.

The city plan, then, cannot be separated from the city hall. In a sense, city planning and the replanning of municipal government in the United States is one and the same problem. For only by means of a planned system of administration will urban America achieve what city planning itself ultimately seeks to achieve: a coordinated administration of local services and a well-rounded municipal life. Only by planning to administer are we going to be able to administer our plans.

"Of Things to Come"

Miller McClintock

Director, Bureau for Street Traffic Research, Harvard University

(Dr. McClintock's paper was illustrated with stereoptican slides of a model of a projected future city by Norman Bel Geddes.)

LESS than half a century ago the automobile made its appearance upon the American scene. In all of the history of civilization there has never been a comparable development. In the space of a generation a great nation has become motorized, fundamentally changing age-old habits of transportation. No phase of human existence, economic, social or political, is untouched by this phenomenal development.

This movement may be aptly described as the automotive revolution. It universally applied power to the machinery of distribution just as its technological counterpart, the industrial revolution of a century earlier, applied power to the machinery of production.

Notwithstanding the universality of the motor car in America today, it is still largely a foreign and unassimilated substance. Whether it will develop into a partially malignant growth or a pearl of great price will depend primarily upon the vision, initiative and boldness of American planners.

For two decades the implications of automotive transportation have been clear. To the security of the life and limb of the normal citizen the automobile is hazardous and increasingly so. To the efficiency in the transportation of man and his goods the automobile has brought unprecedented values but, by the mere weight of its numbers and by maladjustments in facilities for its use, only a small fraction of its efficiency is available today.

We cannot look with equanimity upon a transportation mechanism which takes an annual toll of 36,000 lives and more than a million injuries, nor can we, in this mechanized age, look with tolerance upon the shackles which fetter this newest servant of mankind. For many years we have been hopeful that, through some conversion of man's attitude, we could bring him to a more intelligent use of his automobile; that, through rules and regulations backed up by punitive sanctions, we could force the anti-social individual into a recognition of his responsibilities; or that, through the application of mechanical control devices, some semblance of safety and efficiency might be achieved. These efforts have been intelligent, sincere and not without valuable results. A broad review of the entire problem must, however, force one to the conclusion that there are basic maladjustments in automotive transportation which will never yield to palliatives but can be cured only by major surgery.

It would be difficult to conceive of any mechanism less well adjusted to its function of carrying traffic safely and efficiently than is the standard street system of any American city and much of our highway system.

Our physical facilities have inherent frictions which are the primary cause of our current "stop-and-go" traffic problems. Unless these frictions are removed the future development of the American city and, for that matter, of general land use will be distorted, and automotive transportation will continue with a high level of hazard and a low level of efficiency. This analysis is not a criticism of past or current activity on the part of planners or engineers. It is merely, today, a recognition on their part that the street and highway systems of the nation must be rebuilt if the automobile is to be used efficiently just as they originally recognized that hard roads were necessary if the automobile were to be used at all.

The controlling principles now generally recognized dictate the details of the plan and pattern for traffic of the future. Where possible, opposed streams of traffic must be physically separated, the roadway margins must be protected from obstruction and interference, intersections on major streets and trunk routes must be provided with grade separations and, within the streams of flow, provision must be made for a segregation of functionally different types of movement. As a natural corollary, adequate terminal facilities must be created. In other words, our urban areas must be provided with rapid transit facilities for automotive traffic just as, in the past, the major cities have been provided with rapid transit for mass carriers. Indeed, with present trends in mass transportation, there is definite reason to believe that the provision of such facilities may bring a much closer correlation, if not an actual identity, as between the facilities for general traffic and for mass transportation traffic.

These basic adjustments in our street and highway system will inevitably have broad effects upon the character of the city of tomorrow. It will be an automotive city. In its provisions for the safe and orderly movement of persons and commodities, it will make possible, for the first time, the full benefits of the automotive revolution and, concurrently, will become in all of its arrangements and functions a city of which our prophetic planners have dreamed.

Not the least of these prophets is that master of functional shape and form, Norman Bel Geddes. Inspired by the seriousness of the automotive problem as it distorts human and social values today and stimulated by the available principles for reconstruction, he has looked over the horizon of today to glimpse the automotive city of tomorrow. You may be interested in following him, for I am privileged to show you, for the first time, the concrete projection of his vision.

The City of Tomorrow

So from a great height and out of some coming dawn this city takes form below you. Improved facilities for mobility have made it possible for your future disciples to achieve maximum efficiency in human relations through even greater concentrations of building mass than would be dreamed of for today. Buildings of 2,000 feet in height are not exceptional and each accommodates entire economic or professional units. But, concurrently, this very concentration has made possible the achieve-

ment of open areas filled with free air and sunshine, a goal for which every socially minded planner has been striving. Health, serenity, order and beauty are the objectives of the builders of the new city. The structures, themselves, whether they take these forms conceived by Norman Bel Geddes or other forms, are designed not only for efficiency within themselves but for a maximum utilization of the advantages of their surroundings.

Grouped together at the natural focal points of traffic, transportation and terminal facilities, are those groups of buildings providing for intimately related activities. The entire city, in its various functional parts, is tied together by provisions for communication of varying capacities according to actual needs, and local areas, themselves, are provided with facilities for freedom of movement as between buildings in the same area. People are able to move between buildings with the same convenience, insofar as traffic interference is concerned, as they are within single buildings.

But the new city is not careless or intolerant of the older racial customs and habits. They are integrated in the mass and form of the new city.

All of the land uses are so arranged and interconnected that man, as an urban animal, for the first time in centuries is able to use his oldest form of transportation — walking — with some degree of security and dignity. No longer is he required to fight his way across roadways filled with uncongenial vehicles. He moves on his own level raised above the flow of vehicular traffic.

Terminal facilities for transportation, serving the suburban areas and more distant areas, are strategically located at natural points of origin and destination and these, in turn, are interrelated with distribution systems serving local needs. Nearby airports serving continental and intercontinental lines are connected by direct limited-way routes. Primarily, however, the internal and external transportation of the city of tomorrow is automotive, not because of spectacular developments in either private or mass transportation units but, rather, through the provision of facilities for the efficient use of the inherent potentials of automotive equipment. Internal storage facilities are a natural, integral part of every building.

Norman Bel Geddes conceives a major automotive route elevated in character, although it might, with equal efficiency, be depressed. The essential point is that, whether elevated or depressed, it provides for an elimination of those four types of friction which were inherent in the surface street systems of the old city and from which all accidents and all congestion arose.

Naturally, such major constructions are not provided for every street. This is too costly and, likewise, unnecessary. The city of the future is provided with a grid of limited ways so that all parts of the city are conveniently served. Distribution to areas within the grid of limited ways is by means of streets not unlike those of the old city except that there is no pedestrian traffic, as this is raised to an upper level along the streets and bridging the intersections.

Where these great limited ways intersect, their levels are separated,

one passing over the other. Thus, intersectional friction which was the major cause of congestion in the old city is entirely eliminated. Consistent speeds materially higher than those on the old open highways are possible with complete freedom and almost complete safety. Provision is made for interconnection between the various limited ways so that direct routing is possible to normal destinations. Connection between the limited ways and the surface pattern of streets is by means of conveniently located ramps. Here one glimpses a relic of the past—the Woolworth Tower—a monument to man's architectural daring a hundred years ago.

That is the practical artist's concept of how available engineering principles may serve to shape the growth of a future great metropolis. Do not be misled, however, into thinking that those principles are useful only when applied in gigantic scale. The same principles in lesser scale will be equally applicable to smaller communities. Nor should one assume because of a view so far into the distance that those same principles are not practically applicable today. Frank T. Sheets, a leading highway engineer, estimates that it will take $57,000,000,000 to rebuild the street and highway system over the next quarter of a century but every penny can be liquidated in 43 years through economies and current automotive revenue. There is less difference between the dream of tomorrow and the practical accomplishments of today than one might imagine.

Today's City Forecasts Tomorrow's

Here, in the distance, is the world's most modern metropolis of 1937, sufficiently like the vision of the city of tomorrow to forecast its shape and form. Down in its busy streets one finds, however, not order but chaos. The automobile and all forms of transportation are reduced by confusion and congestion to a pathetically low degree of efficiency. Automobiles, capable of carrying their occupants safely at high rates of speed are forced to crawl at a snail's pace, (if, indeed, they can move at all) with resultant inconvenience and hazard.

In its appearance, however, the city of today begins to forecast its successor. This cathedral-like tower of Radio City belies its bulk. A side view reveals its gigantic area and in the distance one sees another prophetic form, the Empire State Building. These structures and their successors could not exist without traffic and transportation facilities. The efficiency of their use and their untrammeled development, together with all of the other facilities of urban life, must depend upon the capacity of the future planner to provide them with a flow of persons and commodities. This will de done.

The planners and engineers of today now recognize the full implications of the automotive revolution and their present works give hope for a speedy elimination of many present-day maladjustments. The cloverleaf design in New Jersey forever eliminates the causes of congestion and hazard at this important crossing of trunk routes. Again, in this so-called "traffic sorter" of the Triborough Bridge of New York City, one sees the ingenuity of our engineering colleagues in designing traffic facilities not only for utility but for beauty as well. In the New Jersey approach

to the George Washington Bridge, itself a monument to engineering daring, one finds all of the elements of plan and design which may be expected in the major routes of a coming city. In the Outer Drive in Chicago, winding from one man-made island to another, one finds an almost ideal combination of traffic efficiency, safety and beauty. Daniel Burnham did dream no small dreams and inspired his city to continue to dream. Los Angeles carries one of its great major streets through a mountain side in tunnels and open cuts which, with its efficiency, has a beauty that would do credit to Norman Bel Geddes. St. Louis, too, builds for the future in its super-express highway which carries traffic safely at open highway speeds through the heart of the city. San Francisco is justly proud of each of its two great bridges. Here is the $77,000,000 trans-bay Oakland Bridge which for sheer size is breath-taking, but inspires one to believe that the dreams of the future may not be so impractical as they might appear. Less inspiring in its beauty but no less so in its utility is the West Side elevated highway in New York City carrying 35,000 to 40,000 vehicles per day at safe highway speeds over what has long been known as "Death Avenue." In a humble way it forecasts its prototypes.

Again we may turn our eyes to the future. Not now for the details of the pattern for the future but for a symbol forecasting the things to come. Through the continued processes of obsolescence and reconstruction, our cities are being rebuilt day by day. Is this rebuilding to follow the old forms and functional maladjustments or is it to be directed by scientific and artistic principles which will give it not only efficiency but beauty? Are we to have an opportunity to utilize the full efficiencies of the automotive revolution or are we to continue to suffer the inconveniences and hazards of the present day? The answer to these questions lies largely in the hands of the planning profession.

What Is This Planning?

Charles W. Eliot, 2nd
Executive Officer, National Resources Committee

(Mr. Eliot made the following address before an impromptu luncheon following the first morning session of the Conference.)

"A speaker should cultivate brevity,
Occasionally salted with levity.
It's a prevalent crime
To take listeners' time
For general verbal longevity."

HOWEVER cordial and hearty your welcome, you are all doubtless wondering what sort of ideas this National Planning Conference will discuss? What sort of people are interested in planning? What brings these people from Oregon and California, Vermont and Connecticut, Georgia and Tennessee?

It has been customary for the last ten years to start all discussion of "planning" in a negative way—explaining what planning is not—to distinguish between planning and "regimentation," to denounce autocratic planning as contrasted with democratic planning. Do I have to go through all that again, Mr. Chairman? I really think this audience will understand, for once and for all, that I am talking about a peculiarly American custom based on an enthusiastic belief in the ability of a democracy to utilize intelligence.

We all plan—we try to look ahead, to think of eventualities for ourselves, our families, our business, and sometimes even for our common welfare. We get an "estimate of the situation," as our military friends put it, involving more or less conscious research and appraisal of the facts. We think we might do this, or we think we might do that to meet a given situation. That is rudimentary planning. We develop a plan or alternative plans. If we are wise, we look before we leap. Planning is using our intelligence.

Perhaps I've over-simplified my idea of planning—what I have just said sounds as though the "planners" were a "brain trust." Far from it! There is no "combination in restraint of trade" possible in planning. You may remember what President Roosevelt is said to have remarked about there being no such thing as a brain trust but that he trusted brains. I'm not so sure that there is any group that could properly be called "planners," but I do believe in "planning," if we will all apply our brains to the job.

I believe in advisory planning—pre-planning, if you like,—getting ready for the next job. We can distinguish, in big enterprises of business or of government, between planning and execution, and between planning and decision. We can plan or suggest what we think the situation requires and leave it to higher authority to decide what shall be done. Like an architect bringing to his client plans for a house, we can lay our plans before our elected representatives in city, state or federal government for decision and for execution if our proposals can win the needed public support.

But, and here is the hard part about planning,—the job is never done! We can't depend on a "blueprint," however useful it may be as a record of what we once thought. Happily, in this world there is nothing certain—except change. Plans that are well suited to conditions now, may be ill-suited in a short time; for new inventions, new standards of living, new customs, new concepts of the "abundant life" will force changes in the "best laid plans of mice and men." We must have continuous planning.

Perhaps this all seems obvious to you. You are saying to yourselves, "Sure, that's all right; I'll agree that I do that kind of planning in my business and I suppose my wife does the same in planning the meals or planning the table decorations—so what? What is there in that to have a conference about? What are these planning guys so excited over, anyway?"

It may seem strange—but they are excited about planning. Some of these people at this Conference have almost a religious fervor in their belief and faith in planning. Some of us even go so far as to quote Scripture—"Without vision, the people perish," you remember. I would apply that statement to our own situation by saying "without planning, democratic government cannot survive."

We face serious issues in this country—peace-time issues as serious as war emergencies. Nowadays, we take it for granted that we should make plans for war situations. We have a General Staff on the job continuously revising plans for defense. It is hard to realize that thirty-five years ago the late Elihu Root was finding it difficult to get a General Staff established. He had to marshal his arguments in his reports as Secretary of War to get the war planning board set up. He succeeded. His arguments are applicable today to the need for a peace planning board which can suggest alternative lines of attack on the peace-time issues that confront us. The President's Committee on Administrative Management has recommended a permanent national planning agency.

The kind of problem such a national planning agency must tackle and a variety of methods of planning have been shown in the work of the National Resources Committee and in the work of its many predecessors running back through American history. Of course, there is nothing particularly new in all this. We've had homestead plans, trust busting policies, conservation plans, studies of economic changes, and recent social trends. What is new, is the public realization and recognition of planning in these policies.

As you will hear, if you attend the sessions of this Conference, the National Resources Committee is concerned with national plans for conservation of our natural resources,—for wise use of our farms, forests, pastures and countryside, to control soil erosion and leaching; to secure multiple use of our water resources, to mine our rich ore deposits with avoidance of waste and with due regard to the rights of future generations in our exhaustible resources. The Committee is concerned with our human resources and has been working on problems of a changing population. We have not forgotten the new inventions which have such a great influence on the way we live and which cause so much change in our social organization. There is a staff in Washington analyzing the consumption budgets of some 350,000 American families to find out what production is needed to attain the much vaunted American standard of living. These are sample activities.

Much of the work of the National Resources Committee is pre-planning, preparatory, finding the facts,—attempts to "estimate the situation" rather than to prescribe the remedies. All of the work is strictly advisory—with recommendations for public works, land use, drainage basin programs, conservation of minerals or for economic or social policy submitted to the President and Congress for their use as the American people may desire.

The National Resources Committee has always believed that the very nature of planning makes decentralization essential. We must have the participation and understanding of the people back home in planning to meet the problems of a democracy. Through its district chairmen, through regional planning commissions, and with the cooperation of such agencies as the Council of State Governments, the Committee has aided interstate planning efforts in the Pacific Northwest, New England, the Ohio valley, the Delaware valley, the upper Rio Grande valley, the Red River of the North, the Central Northwest, and other areas. You will hear about the planning work in some of these regions at the session on Thursday afternoon.

Forty-Six State Planning Boards

Perhaps the most surprising growth of the planning idea has been in the field of state planning. In the autumn of 1933, when Chairman Harold L. Ickes suggested to the governors of the several states the desirability of following the example of New York, Wisconsin, and a few other commonwealths in the establishment of state planning agencies, we had few examples to point to. There was some activity in land-use planning here in Michigan, and in New York, Wisconsin, Illinois, and Iowa a beginning had been made.

Chairman Ickes' suggestion was received with enthusiasm—much greater enthusiasm than we had expected. Within a year and a half, thirty-two state legislatures passed acts establishing planning agencies on a continuing basis, and during the last two or three months, Louisiana, Georgia, Iowa, Nevada, Nebraska, and Alaska and Hawaii have joined

the procession. Today, there are forty-six state planning boards with whom the National Resources Committee keeps in touch through consultants and district chairmen who are available for advice and assistance, to help the state agencies carry out their plans. Through the liberal and hearty support of Mr. Harry Hopkins, work relief help has been available to state planning agencies, and this year some million and three-quarters dollars will be expended on planning staff projects employing relief workers in various state capitals.

I said, a while back, that these so-called "planners" who have come to this Conference were enthusiasts and armed with a kind of "religious fervor" for the planning cause. They feel it their duty to be missionaries. I know you will understand that it is all in the "spirit of service" if they exercise their missionary zeal on you. They think you ought to know that a bill (H.B. 55) is pending in your Michigan legislature to establish a Michigan state planning board and to give that agency the wherewithal to make plans.

District Agencies for Rural Planning

The Resources Committee has always maintained that it was the primary responsibility of the state planning boards to keep in touch with planning agencies covering areas less than the state. Under that principle, it would be one of the duties of the newly established Michigan Planning Board to keep the problems of Detroit on its agenda. The new board would also keep in touch with county and inter-county planning agencies in the state.

In recent years, partly through the stimulation of soil conservation, large numbers of county planning boards have come into existence, particularly in the northwestern states. The growth of these boards to some four hundred in number is an encouraging sign of the awareness of the rural population to planning problems.

An especially significant aspect of this rural planning movement is the effort in a few states to group together county planning boards into what we have called "district" planning agencies. In eastern Georgia, in eastern Tennessee, in Idaho, Montana, even New Hampshire, movements of this sort are under way. These twenty-seven district organizations have great possibilities, not only for planning the better use of the physical resources of the areas in which they are working, but also for the reorganization or consolidation of our county governments. They recognize that with the automobile, the limitation on the size of a county to one day's driving distance with a horse and buggy is no longer a valid excuse for the duplication of governmental costs. We have come to a period of consolidation of school districts with the use of automobile buses. I need carry the analogy no further. Suffice it to say, that by far the biggest element in the much criticized cost of government in this country is due to the fact that we have some 175,000 separate governments in these United States. Any efforts to consolidate them into a fewer number would seem to be worthy of support.

Seventeen Hundred Cities Plan

All this new and revived activity in national, regional, state and district planning has come out of the city planning movement. These planning conferences have been held every year for thirty years, and through these annual discussions the idea of planning has spread from coast to coast. From small beginnings—from experience in our own backyards—people have grown accustomed to the idea of arranging what we have for better use and more pleasure. We have found that our best use of our own backyard depended on what our neighbors did with theirs, and so we got into planning groups of houses, subdivisions or neighborhoods. We found our neighborhoods were not the only ones in the city—we must have city planning. We found that the developments in one city affected its neighbor, and so, we have gone from linking the relationship between city and city, to county and county, from state to state, region to region, and so to national planning. There is nothing very startling or fearsome in that development. It has been a natural process with constantly larger groups of people seeing the relationship of one problem to the next.

A recent check by the National Resources Committee shows that over 1,700 towns and cities have developed some form of planning or zoning to promote the "good neighbor" policy within our cities and to protect investments in homes and business. Some 1,200 cities and towns have continuing planning boards for necessary adjustments in their zoning ordinances and to develop major thoroughfare plans, proposals for playgrounds and parks, to keep pushing for decent housing conditions, and to develop civic consciousness concerning all the problems of our physical environment. The growth of these local planning agencies has practically all come in the last twenty-five or thirty years; but city planning is not new—it is just a renewed consciousness of the problems which we must solve if life in our cities is to be a true expression of our ideals for American civilization.

Some years ago, the city planning movement spread beyond the political boundaries of the city into the metropolitan area. Metropolitan, or, as it was then called, regional planning, supplemented the efforts of individual cities, counties and towns around Detroit, Buffalo, Boston, New York, Philadelphia, Cleveland, Cincinnati, Chicago, San Francisco, Denver, and many other urban centers. The idea of metropolitan planning recognized the unity of the urban community with its market area. The work in this wider field had an economic and social significance as well as physical.

The Urbanism Study

What is to become of our great cities? Is "suburbanitis" a kind of disease with everyone rushing to the fringes of the urban area or is it a healthy growth? What is to become of property values downtown? Are our great cities going to continue to attract population from rural areas? The urban birth rate, you know, is not high enough to reproduce the present city population. With the tendency towards a stabilized popula-

tion in this country as a whole, should our cities be looking forward to a change in the curve of population growth, with even a possibility of a dipdown? Have we Americans reached a stage in our development where we can separate "bigger" from "better" and concentrate on the quality of urban life instead of the quantity of inhabitants, factories or stores?

These are questions which the National Resources Committee asked a special group to examine a year or so ago under the able leadership of Clarence Dykstra, city manager, and, during the flood, "Cincinnatus" of Cincinnati, now president of the University of Wisconsin. A far-flung study of urban problems is now nearly complete, as we have heard this morning. In a few weeks we hope to issue a major report from the National Resources Committee in Washington with the findings of that committee. We hope it will throw some light on the questions I have raised. It should lead to new and even more vigorous action by the people of Detroit squarely facing the situation here, and—through planning—to the command of their own destiny.

And so my plea is for your participation and your cooperation in planning. To provide full and wise use of the natural and human resources of this great country, we must all do our share of planning for our homes, for our neighborhoods, for our cities, our states, our region, and for the nation.

The second session of the Conference, Tuesday afternoon, June 1, was presided over by Alfred Bettman, president of the American Society of Planning Officials.

Where City and County Meet

Earle S. Draper
Director of Land Planning and Housing, Tennessee Valley Authority

THIS topic was given me as one for a fifteen-minute paper. An egg that boils fifteen minutes is bound to be hard-boiled. My paper is a fifteen-minute egg—hard-boiled!

First let me say, planning is no panacea, no substitute for good citizenship. An educated and enlightened citizenry can accomplish more without benefit of planning or zoning authority than can an apathetic city loaded to the gills with state enabling powers to control civic growth and development. Public opinion is still our greatest force and most important energizer of activity.

Except where local issues or prejudices have temporarily obscured and prevented the exercise of good judgment, there are but few instances where an educated and enlightened city has recognized a vital need yet failed to provide itself with the tools by which that need could be satisfied. There are many such tools available: adequate powers of management, budget control, facilities for the cooperation of the city with county, state, and regional authorities and with the federal government, and, not least among them, opportunity—usually through planning and zoning authority—for foresighted provision for expected growth and sane adjustment.

These powers are available, but it is not enough for the city to secure them for use merely within the city limits or even to extend some of them to an encircling strip of land three, or perhaps five, miles without the city limits. You have to go back pretty far in history to find cities or towns possessing a high measure of self-containment. In medieval times, some cities did succeed in living smugly within their own walls. But even then the feudal barons had to collect their wherewithal from the surrounding countryside. Today, the city and its surrounding area are interdependent. But that is not all. As a unit, city and trade area function in a vast pattern interwoven with social, economic and political ties. They cannot afford to profit—the city and its surrounding area—one at the expense of the other. They must for their mutual salvation fit themselves into the larger scheme. The city and its surroundings today rise

or fall together. Hence, it behooves them to work together. They have the tools. Just as some are of recent innovation—a definite response to broader conceptions—others will be invented as the needs arise. It is time to start swinging them!

We have learned a lot about planning these past few years. Perhaps the most vital lesson has been that of the very real and present interrelationship in all activity of state to larger region to nation. The problems of the National Resources Committee, of the TVA, of state planning boards have certainly made that apparent. No less important is that web of interrelationships between city, county, and state. Planning has a great deal to do in determining whether that web of interrelationships shall become a snare or an orderly, working pattern.

City planning studies must be broadened. The economic and physical basis for data collection must be extended. Metropolitan districts, trade areas, counties must form the basis for studies. Judgments should not be formed without consideration of the important relationships of the city to its hinterland—the county and trade area—and to states and federal bodies whose activities in various fields have a direct relationship to civic activities.

What is the basis for these mandates delivered from the Mount, these seemingly Olympian pronunciamentos? Let's take a look at some of the trends about us.

The Census Bureau tells us that in 1930, the urban percentage of the total population for the United States was 56.2 per cent, while in 1920 it was 51.4 per cent. The census further reports that for the decade 1920-1930 the urban growth was 27 per cent as compared to 4.7 per cent rural growth.

Diffusion of the City and Its Industries

These figures must be broken down, however, to realize their true significances. It must be remembered that the census arbitrarily defines "urban" as incorporated places having 2,500 or more inhabitants. This means that much of the urban growth was due to growth of crossroad communities to an "urban" status and to extension of city limits to include suburbs. Some of the growth was due merely to a new change of definition with respect to townships. Particularly significant are the growth figures when analyzed with respect to metropolitan districts. Thompson and Whelpton found that rural areas within metropolitan districts increased in population during this same decade (1920-1930) at a rate of 54.8 per cent, while the small cities (suburbs and satellites of 2500 to 5000) increased at a rate of 68.8 per cent. So the greatest increases—and here is an unmistakable trend—actually have taken place not in the large cities themselves but in their outskirts.

This trend toward the diffusion of the city will continue. In most instances slum clearance should bring about reduction of housing density in the heart of the cities as well as conversion to other types of urban land use. In the residential-building program which is now gathering

momentum, I venture to say that residential increases in the suburbs and satellite communities of the large cities will outnumber the residential increases in the densely or comfortably built-up sections of the cities at a ratio of 100 to 1.

So with industry is this trend toward diffusion apparent. Craemer's study of locational changes in manufacturing employment shows it, and the New York Regional Survey is eloquent with it. This trend is most apparent in such industries as the heavy chemicals, copper refining, paint and soap, slaughtering, woodworking—in fact, all those industries of comparatively large size dependent on other than the local market, in which the time or service factor is relatively unimportant, requiring large ground area per person employed, having nuisance features such as odors, noise, high fire hazard, requiring specialized buildings, faced with serious problems of waste disposal, and demanding large quantities of water. Note, however, that though these industries are diffusing to the outlying areas, the city is still their focus. Most of them are not going too far away. Universal availability of electricity, improved highways, use of the motor truck, congestion and high taxes have rendered industry at once more mobile and less of a nuisance to other land uses. However, the city still has some magnetic attraction—less forceful than in the past, but still very real—in such factors as established economic relationships, an important immediate market, advantageous freight rates, marketing facilities, supplementary service industries, and a large and varied labor supply. So the movement is more a gradual diffusion, not so much a scattered dispersion. The city is still the focus.

Our compact city, in other words, is gone. It has been bursting its bounds since medieval days. The city must become more cognizant of the functional relationship between it and its hinterland; indeed, as Dr. McKenzie over at Ann Arbor puts it, of the functional reorganization that is taking place between the two. Some functions—particularly communications, finance, management, and specialized commercial and professional services—are becoming more concentrated in the centers of the "big" cities; while other functions such as manufacturing, dwelling, ordinary retailing and recreation are becoming more diffused.

Perhaps diffusion is too kind a word for the process. In bursting its bounds, the city actually has "sprawled"; and made the countryside ugly from the standpoint of esthetics, uneconomic from the standpoint of its demands for services, and of doubtful social value in its present form. There has been much trend, but little direction!

Tracing the influence of transportation on such diffusion during the past several generations we come first to the railroad. After all, the railroad didn't do such a bad job. From the time in 1830 when the B. & O. made its first run from Baltimore to Ellicott City and for the next 75 years that the railroad invaded the countryside, it maintained a right-of-way; it kept people off; it allowed no rights to adjacent land; it provided underpasses and overpasses for men and animals (where forced to); and it developed the interior of the country. True, it aided the growth of our key cities and towns, and it concentrated industrial activity and residen-

tial growth, but by and large it left the countryside unspoiled. Along came the automobile and good roads with their unquestioned benefits to mobility and activity to spread the scars of the city almost overnight throughout the country.

With the good that the auto did came a lot of bad! A bewildered nation has never caught up. So far we have been powerless to control this hydra-gadgeted monster as an instrument of death and destruction. The three-year period 1923-1925 was long after the days of Oscar Wilde's wise-cracks, the first Winton automobile. We had some of the makings of civilization even at that late date in motor transportation. But automobile fatalities have been ever mounting until in 1936 we had 38,500 deaths from this source—an increase of 94 per cent from the period 1923-25. Along with death, the slums of the city rode into the countryside. Only now, with our feeble attempts to control roadsides and to determine suitable land use, have we started to apply some semblance of direction to this haphazard movement, some measures to protect our countryside from economic and esthetic despoliation.

My point is that in planning for the economic stability and social benefits that should come from the city structure, this planning must derive as much from a study of conditions outside the city limits as within the cities themselves. To apply needed directional measures, we must know the trends and the physical and economic conditions in which they are taking place. The yarn ball of the city has unrolled and the fibers have spread into the country. Take the matter of land use. Most cities of 50,000 or over have within their trade areas a number of smaller cities and towns that look to the larger city for leadership and guidance. It is important to the life-blood of the dominant city that these smaller communities and the intervening rural areas make wise use of their land. The special interests of the area—whether they be agriculture, mining, manufacturing or tourism—must be considered in every planning move that the "big" city makes. The city should be as jealous of the welfare of its satellite communities as is a hen of her chicks!

Within the city much that can be done is in the realm of correctives, changes to fit developments of modern life. Without the city and beyond the immediate suburbs lie areas of countryside, in many areas largely unspoiled except for questionable roadside developments. Rural uses dominate; the tempo is peaceful and serene. Yet overnight this can become a sprawling area of subdivisions, ugly industrial development, denuded forests. Ill-considered, loosely directed development can ruin a countryside in short order.

City and County Meet All the Way

Here is opportunity for, and need of, directional measures. The basic trend of diffusion is taking place, and will likely continue. A rough calculation has been made that in order for unemployment to drop to the 1929 level, goods and services produced would have to reach a point 20 per cent higher than that in 1929. This will happen when our economic

house is in order. As there seems to be some evidence of this taking place, the city and its countryside should begin preparation for expansion and development. Working together, sane direction can be given to changing land uses in the area.

Let's get down to concrete examples. The city affects the use of land in its neighboring rural communities in several ways. On the one hand, the city affords a ready market for farm products and affords employment opportunities to rural people. On the other hand, the people of the city go to the rural communities for rural residences, for parks, for hunting and fishing areas, to get water and power, and to purchase summer-home sites. These are interrelationships with which planning must be concerned. They govern wise use of land. For instance, a county highway may make an ordinary farm area into a potentially good dairy district, or may open up residential possibilities for an urban population. Thus does a county highway become a directional measure involving urban-rural relationships. Thus, too, do county highway planning, land-use planning and city planning interrelate. There is opportunity and need for a get-together.

Let's take another example: land use in our suburbs. The people of our cities must be aroused to the dangers of unwise and uncontrolled suburban land use. A city of 100,000 population and occupying approximately 25 square miles of area should be actively interested in its entire trade area, and violently concerned with developments in land use within 15 to 25 miles of its city limits. A report on the Baltimore-Washington-Annapolis Area (not yet published), in the formulation of which several planning bodies and other agencies cooperated, makes the problem of land use within that area very vivid. The report points out that many people moved from the city to be close to more or less open country. But it is quite likely that continued development will cause a filling-in of the present open spaces between communities, so that there will ensue a fused urban blanket development and the original purpose of the suburbs will be thus defeated. This filling-in process is quite apt to be accompanied by scattered clusters of development that are too small to have adequate community services. There is a definite need to guide each development in a more orderly and acceptable manner. With the pressure of public opinion behind such a plan, the tools with which to do this job can be found if they do not already exist.

The control of use of open land is the most important matter before the American people today. Fortunately, on a national, regional and state scale, much constructive work is being undertaken. "Erosion" has become a household word and "deforestation" a leering villain to most movie audiences. Public opinion will support the large scale attack on wind and water erosion, deforestation, and soil depletion that is rapidly getting under way. I believe the American people have the intelligence, the perseverance, the energy required to conserve our natural resources and repair the depletions of former generations.

The planning fraternity must seek this backing for a score of other activities. Many of our problems are so big and involved that they need

a united opinion to overcome them. We are working with interrelationships because that is the stuff the functions and forms of society are made of. That is the reason I have delayed so long in speaking directly on my topic, "Where City Meets County." I have attempted to show that there is really no sharp dividing line; that it is almost impossible, and well-nigh futile, to say generally: "Here is where you stop; here is where you begin." The interrelationships are too many and too complex for such a simple delineation.

But these problems must be tackled. There must be some sort of a bulwark from which we can begin our attack. The city is of necessity interested in the county; the county likewise is of necessity interested in the city. The city may well be located on the border of a county and be equally interested in several counties. These were the sorts of points that faced the Tennessee State Planning Commission when it began to establish a planning framework within which to attack its problems. The method finally adopted by Tennessee seems most logical. County regional planning commissions were set up in the counties having the leading urban centers such as Shelby (Memphis) and Hamilton (Chattanooga). Another commission was set up in the northeastern part of the state to cover the several counties and the trade areas of several smaller urban centers; another for the trade area of Nashville, the state capital. These area commissions are responsible to the State Planning Commission, which, in turn, works with the National Resources Committee. This set-up recognizes the vital relationships existent between such focal centers as cities and their trade areas which may spread over several counties. The trade area concept is valuable in city planning if only for the fact that it emphasizes the city not as an independent unit but as a functional focus of a multiple-center region. In so doing, this concept leads to a better understanding of the city itself and a more intelligent disposal of its problems.

Such an arrangement as I have described seems, as I say, logical. To the captious, to those enamored of precise classification and delineation, this arrangement seems to invite a good deal of conflict. That to me is one of its virtues. When conflicts are presented and aired, they can be ironed out. When the city and its county or its trade area clash, it is the signal for cooperative action. There is a need for ironing out a problem of interrelationship. One acting without the other can achieve some control, some planning direction. But they must all function together if their work is to benefit all. While there are county lines and counties, we must work in reference to them. We must adapt somewhat to existing conditions, existing frameworks for action. We can't plan effectively in a vacuum.

Where do city and county meet? They meet all the way!

Monroe County, an Urban Area

J. Franklin Bonner

Director, Monroe County (N. Y.) Division of Regional Planning

(In the absence of Mr. Bonner, his paper was read by Flavel Shurtleff, Counsel for the American Planning and Civic Association.)

MONROE COUNTY, about 670 square miles in area, bordering on Lake Ontario in Western Central New York, lies in the junction of the Genesee Valley and the Lake Ontario Plain.

Prior to 1821, the territory now known as Monroe County was contained in parts of two counties, Ontario and Genesee. The village of Rochester, the actual center of trade and industry, was divided by the county line. A concerted movement by the Rochesterians resulted in the formation of Monroe County (named in honor of the President, James Monroe) on February 23, 1821. Rochester was made the county seat. The county as now constituted consists of the city of Rochester, nineteen towns (townships) and ten incorporated villages.

Monroe County has an urban population of approximately 361,000, and a rural population of 63,000. Of this so-called rural population, approximately 12,000 are "rurban." I prefer to use the term "rurban" for "urban-rural" areas.

The soil, climate and topography of rural Monroe County lends itself to intensive and profitable agricultural pursuits. Monroe County is the leading county of New York State in value of farm products. In 1932 and 1933 the U. S. Bureau of Chemistry and Soils classified 32 soil series consisting of 114 phases and types. The new soils map is now being published at the scale of one inch equals 2,000 feet.

Along the shore line of Lake Ontario is a sloping lacustrian plain particularly suited for the cultivation of fruit; the middle tablelands are adapted to the production of general farm and cash crops. To the south, to the county line, rolling hills provide pasture for dairy cattle.

In 1935 the acreage and production of wheat was largest of any county in the state; however, apples, cherries, and other tree fruits give the greatest financial return to the farmers. Over one-half million trees produce apples of the finest flavor. Other major crops grown are potatoes, cabbage and those for canning. Of the 5,000 farms operated in 1935, 77.8 per cent were by owners, 20.8 per cent by tenants and 1.4 per cent by managers.

In the city of Rochester and its environs quality products, such as photographic supplies, chemicals, scientific and optical instruments, clothing, electrical, laundry and dental equipment, railroad specialties, and machine tools are manufactured.

Monroe County has 382 miles of state highways and 1,104 miles of county and town roads, 95 per cent of which mileage is improved, is serviced by five railroads, the Barge Canal, the Port of Rochester on Lake Ontario, and a modern municipal airport.

There are five assembly, two state senatorial, parts of two congressional, 342 voting, 185 school, and 434 special improvement districts. The city of Rochester is governed by a mayor and 9 councilmen and employs a city manager. The county at large is governed by a board of supervisors (43 in number), who in 1936 employed a county manager.

Planning in Monroe County is organized as a division of the Department of Public Works, with a director responsible to the director of public works and the county manager. There is no planning board. The term "regional" is included in the name of the Division, as required under the original legislation which authorized county planning boards. The planning procedure used by the Monroe County Regional Planning Board, now the Division of Regional Planning, was early established on a deductive rather than upon an inductive basis. Each phase of the work in the Division has been cooperative, in that no planning work has been undertaken without the support of town and county officers, and in nearly all cases with consulting services supplied by the state or federal governments.

The original program for planning in Monroe County was laid down in a series of studies developed for the Monroe County Park Commission in 1927 two years prior to the creation of the Monroe County Regional Planning Board. The program has been continued with but few changes, made to meet new conditions and new needs which have arisen in the social, economic and governmental life of the county.

With the creation of the planning board, the program was more fully developed. Topographical and aerial maps were made and foundations were laid for the making of soil surveys and economic studies.

Early in 1932, under a county work relief program, persons were assigned to the county planning board to assist in advancing and developing the planning studies.

During the early days of work relief and CWA, it was necessary in many cases to adapt the program to meet the type of personnel available. We are fortunate, under WPA to have assigned competent technical, professional and clerical personnel. Cooperation of the county board of supervisors, the county manager and all county and town officers has greatly simplified a very difficult task. Recently the planning officials and building inspectors of the various towns met with the director and staff of the Division of Regional Planning and worked out the first steps for closer cooperation in planning and zoning.

It was early recognized that in order to do effective planning it was necessary to have trained personnel. Since trained persons were not available from the relief rolls (and I doubt if they could have been procured from civil service or elsewhere) it was necessary to educate them as to the work to be done, train them in the details of procedure and methodology involved, acquaint them with the objectives of the program and the application of results. This procedure is based upon the premise that education is mightier than legislation.

The major problems to be faced in the Monroe County planning program were the necessity for the study of the needs and conditions of old

subdivisions in special districts, bonded for public improvements and with large and increasing tax delinquencies, and the control of the future subdivision of land in order to prevent as far as practicable a reoccurrence of the conditions which might again lead to economic blight.

In the "rurban" areas, much attention is being given to the control of subdivisions and the guiding of land into the use for which it is best adapted. This required information as to soil productivity, soil percolation ability, ground water supply, sewage disposal, housing trends and traffic conditions.

In the rural areas, land use including reforestation, soil erosion control, and the conservation of ground water and wild life are of prime importance. No attempt toward rural zoning is anticipated, as it is evident that but a small portion of the land of Monroe County needs to be zoned permanently out of agricultural use.

The subject of this discussion, "Monroe County, an Urban Area," as announced in the preliminary program, is partially incorrect, as Monroe County has at least two hundred square miles of productive farm lands where the density of population is not greater than forty persons per square mile.

Monroe County as an urban area has urban-rural, rural and soil conservation problems, which are so closely interrelated that the discussion of one phase involves the problems of the others.

The scope of activities of the county planning unit does not include any of the incorporated area of the city of Rochester, but deals exclusively with problems beyond the city's physical limits.

Beginning about 1923, the New York state legislature enacted statutes permitting the development of unincorporated areas through the establishment of special improvement districts.

Under this legislation special district boards were permitted to construct water lines, sewer systems and streets, and pay for them with funds realized from bonds sold on the faith and credit of the town. To meet the required annual payments of principal and interest on its several improvement district bond issues, the town assesses each parcel benefited for its pro rata share of the cost, payable in annual installments. Under the New York state laws, if a town fails to collect its taxes, the county treasurer must advance to the town that portion of the levy necessary for town purposes. This has brought about a condition whereby the County is now paying for sewers, water and street improvements constructed in the areas adjacent to the city of Rochester, because of the default by the owners of vacant lots in the payment of their taxes and assessments. During the period beginning 1930, and continuing through to 1936, the County has advanced to five urban towns approximately $6,500,000 in payment of taxes and assessments on about seventeen thousand vacant lots in approximately one hundred subdivisions, serviced with water, sewers and/or pavements.

The work of the Division of Regional Planning includes studies which take into consideration the events which have led to present conditions, so as to evolve a program which will permit the economic rehabilitation

of these prematurely subdivided areas. The county manager has created a special committee on foreclosures, and that committee, using much of our data, is now foreclosing the most desirable of the delinquent properties. As the lots are foreclosed, it will be necessary to redraft the areas so as to bring about better physical relations among the many independent subdivisions and special improvement districts. This is "corrective planning."

The analysis of present needs and conditions provides a basis for the making of future plans to guide the development of land into the use to which it is best adapted. This is our most important task—preventive planning.

In our attack on these problems we follow active rather than passive tactics and have deployed our forces along two major lines:

1. The control of the filing of subdivision maps with the county clerk.
2. The requirement of evidence of a potable water supply and an adequate disposal of sewage.

In 1931, the board of supervisors, by resolution required that all maps submitted to the county clerk for record must have the approval of the county planning unit. This resolution requires that all surveys must have reasonable closure and the lines must be monumented. Such maps must have the approval of the town planning boards so as to check their compliance with town zoning ordinances and street layout. In order to assist property owners in submitting maps to proper officials, this procedure is being coordinated by the organization of the town planning officials, who not only cooperate, but demand that we also furnish basic material to aid in the solution of their problems.

Under section 89 of the state health law, enacted by the legislature in 1933, all subdivision maps involving ten or more lots must have the approval of the State Department of Health before filing with the county clerk.

Section 334 of the real property law requires that before offering lots in subdivisions for sale, maps must be filed with the county clerk.

A new article of the real property law provides that when vacant lots are offered for sale on the installment basis, the operator must register with the secretary of state.

These state laws are enforced in Monroe County through the cooperation of town planning officials, the resident engineer of the State Department of Health and the directors of the County Division of Sanitation and of Regional Planning.

Proposals have been made to the various town and village boards of health suggesting that they require the approval of the town health unit for the installation of individual septic tanks and the use of private water sources so as to prevent the pollution of surface and ground waters, and to insure a safe source of potable water for domestic purposes. Two of the towns have included these requirements for obtaining building permits and the indications are that within the next few months we will have uniform subdivision codes as a result of the fusion of the principles of health and zoning ordinances.

There are many other physical, economic and social problems which enter into the planning and zoning of urban areas adjacent to the city to which we are giving considerable attention.

Some months ago we received questionnaires from the Urbanism Study section of the National Resources Committee, asking for information relative to the character and status of urban lands. It was possible for us, at that time, to answer only a few of the questions. In the near future we expect to have, as by-products of our research, all of the essential data necessary to complete the questionnaires.

We also received an inquiry relative to the status of properties in blighted areas, and the suggestion that studies might be made of the relation of the assessed valuation of land compared to total valuation. In the course of our regular studies we have accumulated the data necessary to investigate further this problem and have included such analysis in our 1938 work program.

In 1932, in order to determine the habits and trends of commuters, we made a house to house canvass in the "rurban" and rural areas. We found commuters in 27 per cent of the homes. The results of this survey were analyzed by Leland B. Tate and published by Cornell University's agricultural experiment station, under the title of "Rural Homes of City Workers and the Urban-Rural Migration."

The rural planning program provides for the reforestation of lands of low productivity and subject to erosion, so that Monroe County through the conservation of its productive soils shall continue as the leading agricultural county of New York State.

In 1932, using the new U.S.G.S. maps (scale—one inch equals 2,000 feet, with contour intervals of 5 feet), the aerial mosaic (one inch equals 1,000 feet), the new soil maps (one inch equals 2,000 feet) we made a series of five maps of the Irondequoit watershed.

1. The drainage basin.
2. Slopes in excess of 4½ per cent.
3. Soils of low natural productivity.
4. Areas in woods.
5. A composite of these four maps so as to show soils of low productivity not wooded and subject to erosion.

Using the new assessment maps the lands were segregated according to ownership. A cooperative agreement was worked out with the State Department of Conservation whereby the State would furnish the Division of Planning with trees for distribution to land owners, who could procure trees without charge if planted on areas requiring treatment. Under the original program one million trees were to be provided by the State Department of Conservation, but this quota has since been increased to include sufficient trees to plant 7,000 acres of poor soils subject to erosion.

We now have an experimental nursery and expect to produce deciduous trees to supplement the conifers supplied by the State. One hundred and ten land owners in the Irondequoit Creek watershed are now cooperating in this conservation program.

County zoning has not received popular support in Monroe County, as we feel that in a county such as ours the towns should have that responsibility.

The Division of Regional Planning coordinates the work of the several towns and assists them in making decisions.

County Planning in California

Wallace C. Penfield

County Planning and Public Works Engineer, Santa Barbara County

COUNTY planning has had eight years of experience in California. It has definitely passed the period of experimental pioneering and is now generally accepted as a legitimate and proper function of county government. The degree of acceptance of planning in counties has depended in a large part upon the local recognition of planning problems and availability of means for their solution.

In rapidly growing, urban Los Angeles County, planning has reached its most effective stage. In the eleven other counties where urban development is a significant factor, planning receives generous official and citizen support. The majority of counties of predominantly rural character have no planning commissions because of their slow rate of change and lack of local comprehension of regional or large scale planning programs.

Experience in California has shown that county planning has a technique which differs from that of city planning. It is apparent that the original emphasis upon the city type of master plan was somewhat misplaced. The value of a master plan varies directly with the rapidity of growth and inversely with the size of the area. It has been proved that principles and standards are more important in the planning work of large, slowly developing areas than the ordinary city planning technique which depends upon rapid change and restricted area for its effectiveness.

The original California county planning act of 1929 was based largely on past experience in city planning. The law designated the preparation of a master plan as the chief function of a planning commission. The master plan as defined, was composed of the major highway plan, recreation and park plan, districting or zoning plan, transit plan and group-building plan, each to be adopted officially and enforced by law.

All provisions of the act applied to both cities and counties. Both city and county commissions, therefore, operate under the same law. When the act was drawn, the concept of county planning was quite nebulous and the law consequently reflects the idea that county planning is but an application of the principles of urban planning on a larger scale.

Through a separate map filing act, control of land subdivision was given to city and county planning commissions in their respective areas. Provision was also made for cooperative action on subdivision maps in the environs of incorporated cities.

In the eight years since these laws were passed half of the 58 counties in California have organized planning commissions.

The most active commissions have generally been established in counties f increasing population accompanied by expansion of urban centers, ighways, utilities and growth in the number of land units to be served. 'his activity has created many challenging problems in which the gov- rning bodies have recognized the value of planning. Eleven of these ommissions receive yearly appropriations in the county budget for the mployment of technical assistance in carrying on their work.

The counties with inactive or with no commissions are generally of a ural character where the rate of change is slow and urban problems are nrecognized or do not exist.

During the past eight years it has become evident from the work of the ctive commissions that there is a fundamental difference in the approach o county planning problems as compared to cities.

The master plan as conceived in the planning act has its greatest effec- iveness in urban areas where land is being subdivided and changes are apid. But in the problems of the larger rural areas, the master plan ecomes less significant because of the difficulty of accurate determination f future problems. In Kern County, for example, which is as large as he state of Vermont but with a population of only 70,000, the perplexing ossibilities of future development can easily be imagined. Consequently, o date no county has adopted a complete master plan as defined by he act.

Counties have, however, generally adopted those portions of the master lan which required official action for the immediate solution of a par- icular problem. Los Angeles County has adopted a complete major high- vay plan to insure a proper highway network to serve its forty-four rowing urban communities. Through the highway plan, many miles of ight-of-way have been acquired at no public expense. Similarly, set-back ines have been established on major highways to preserve rights-of-way.

San Diego and Los Angeles counties have adopted official civic center lans for their chief public buildings.

The most adaptable phase of the master plan act has proved to be the rovision for a districting or zoning plan. Santa Barbara, San Diego, Monterey, and San Mateo counties have adopted zoning plans in urban reas of the county. Los Angeles and Orange counties have adopted zoning lans which include the entire area of each in an unrestricted district. Detailed zoning has then been applied to certain urban districts by amend- ng the basic ordinance.

Most of the zoning in California counties has been in the environs f incorporated cities. Exceptional are the several highway frontage oning projects in Monterey, San Mateo and Kern counties for the pre- vention of unrestricted business enterprise along several major highways.

Park and recreation plans have been chiefly confined to individual park lesign and acquisition problems. No master plans for transit or trans- portation have been found necessary in any California county.

Though not included in the planning act, the state law recognizes the importance of county planning commissions in the control of land sub-

division. No subdivision map can be accepted without the approval of the planning commission.

It is significant that this responsibility has been accepted uniformly throughout the state by even the relatively inactive commissions. Where technical assistance is available, subdividers have been given help and advice in preparing plats.

The ordinary subdivision represents the final land pattern upon which the community must grow. The guidance of this process toward a co-ordinated community development provides a planning opportunity which every commission understands. It is a definite addition to the master plan and usually requires a thorough study of adjacent areas and many related factors of community development.

The guidance and control of land subdivisions is necessarily based on policies and standards established by the commission.

The same principle has been found successful in the solution of other problems of a planning nature. Location of new roads, road classification plans, cooperative projects with state and federal agencies, fact finding reports of various natures, advisability of establishing special districts, public works programs and many other such matters have at one time or another been referred to commissions by the governing bodies. It is evident that the diversity of such problems would render the ordinary master plan inadequate. But boards of supervisors continually refer matters of this kind to commissions. They rightly believe in establishing first class standards and policies for the solution of difficult current problems in preference to detail planning for possible contingencies fifteen years hence.

No planning commission or board of supervisors can accurately predict the future of such a large and indeterminate area as the average California county. With sufficient facts, however, certain fundamental policies may be formed, under which such a territory may be reasonably guided toward a well-planned development.

The time may come when the future of rural areas will be definitely regulated by land use control. But until an exhaustive and scientific analysis is made on a national scale, and planned with a careful economic balance, the ordinary planning commission, meeting once a month and working on a limited budget, cannot be expected to attempt such a program.

For the present, planning in distinctly rural areas should be established upon a basis of conservation. As the area develops, more definite and precise plans may be made and enforced when needed.

The main emphasis of county planning in California seems to be placed on the guidance of development in an emerging form, rather than on the inclusion of huge areas under a legal "mold." A revised planning law, now in the legislature, has been drawn to recognize this theory. The making of a master plan is still designated as the function of the planning commission, but with a greatly widened scope. While the highway, zoning, recreation, transit, transportation and civic center plans are definitely authorized, the new act provides for additional and possibly

more vital needs of the rural and urban areas of which California counties are chiefly composed.

Conservation, land use, public services and facilities, community design and housing plans are added to give the commission more latitude in working out problems of county welfare. These plans may be prepared by the planning commission as a basis of policy. Then, when conditions warrant, more precise official plans may be adopted which bear the stamp of approval of the governing body and the backing of law. In many instances, other agencies may be called upon to help in the preparation of the official plan, such as the state water engineers, the State Planning Board, federal forest, agricultural and housing agencies.

The act also provides for the establishment of regional planning commissions so that arbitrary county boundaries need not hamper planning work in natural planning areas.

Through the establishment of a state planning board, county commissions have even greater opportunities through contact with a common agency to assist in the solution of their problems and to set up uniform methods of procedure. The state planning board will act as a clearing house through which counties may work to a better mutual interest and avoid duplication of effort. It will also tend to create interest among the inactive commissions and create new ones where none now exist by its interest in problems which some rural counties do not recognize at present.

County and Community Planning in Oregon

Dr. Philip A. Parsons
Oregon State Planning Board

THE Oregon State Planning Board began its official life with nearly a year of planning experience behind it. In the absence of a legally constituted board, the Oregon State Planning Council, a voluntary organization, had endeavored for over nine months to keep the state abreast of the planning programs going forward in surrounding states. The planning council had been recognized by the National Planning Board, now the National Resources Committee, as its official representative in Oregon, and the chairman became a member of the Pacific Northwest Regional Planning Commission. Two consultants were assigned to the council by the National Resources Board. These were Mr. V. B. Stanbery, who acted in the capacity of state consultant, and Mr. A. S. Burrier, who was appointed as land planning consultant. Mr. Stanbery is at present consultant and executive secretary of the state planning board. With their able assistance and with enthusiastic and highly efficient cooperation of a large body of officials and private citizens the Council made significant progress in preliminary planning.

When the state planning board was created by the 1935 session of the state legislature its members were appointed from among the group of men who had taken a most active part in the work of the Council. As a result the planning program went forward without interruption. The

State Planning Council continued to exist as an advisory research body and in that capacity it rendered invaluable service to the newly created State Planning Board.

When the board held its first official meeting a committee on planning coordination and development was created as one of several functioning committees. It was to be the work of this committee to organize the planning program throughout the state and coordinate the planning programs of the different state, federal, and private agencies and interests dealing with the same and related resources.

During the session of the legislature and in the organization period which followed, the board enjoyed the effective cooperation of the newly elected governor, Charles H. Martin, who championed the planning movement as one of the foremost policies of his administration.

At this early date those who were actively engaged in getting the planning program under way felt the need of closer contacts with the people of the state. That need made itself apparent in two ways. The greater number of those persons who were taking an active part in the work were officials of various state and federal agencies which were already engaged in the conservation and development programs. As a result, much of the planning was, so to speak, coming from above. These men realized that their plans could only be made effective when they were understood and to some extent concurred in by persons and groups affected. There was some indication of restlessness and suspicion manifested among those officials, interests, and individuals who would be affected when the time came to put the plans into operation. In order, therefore, to acquaint the public with the designs of the planners, to allay suspicion, secure cooperation and to start suggestions coming up from persons on the ground, it was decided to launch a program of organizing planning groups in districts, counties, and in communities when necessary.

County and community planning are not new in the United States.

Significant accomplishments marked the efforts of county planners in widely separated parts of the country some time before the national planning program was thought of. It may be said, however, that most of this early county planning had some specific objective such as the control of the use of land for residence, commercial and recreational purposes as in some California counties, and the control of submarginal areas such as the cut-over lands in northern Wisconsin and Michigan. As distinguished from these, planning in the Oregon counties involved sparsely populated areas with a wide variety of resources, in which the objective was to assure conservation and the best possible use of resources, and above all, accomplish this in a manner to preserve existing relations between public and private interests without injuring either.

Personnel Chosen on Merit Basis

The job of getting planning started upon the ground was assigned to the committee on planning coordination and development. The methods employed differed in different counties for several reasons. That method

which was used most often and, we believe, most effectively was employed because of limited time and funds. Because of previous contacts with the counties through various service functions of the University and the State College, and the business relations of the several governmental agencies designed to deal with the depression, such as the PWA, the CWA, and the Relief Administration, outstanding men with a reputation for disinterested public service were known to the committee. In counties where such men were found one such leader was contacted by correspondence and asked to arrange a meeting for the chairman of the committee, to which ten or fifteen outstanding leaders of the county were to be invited. These men were to be selected as follows: One man should be selected for each of the more important resources of the county. He should be selected because of his knowledge of the resource, because of his disinterested service to groups interested in the resource, and because of his recognition by such groups as a trusted leader. The size of the group, consequently depended largely upon the number of resources to be affected by planning in the county. To this number were to be added several well known men not directly connected with or interested in any particular resource but whose county-wide reputation would inspire confidence in the group in the minds of the general public. It was a notable fact that at the meetings arranged in this manner the men who came together to meet with the representative of the state planning board were, almost without exception, the best men who could have been brought together by any other method. At the meetings of these groups the reasons for organizing county planning boards were explained and a list of names suggested for nomination to the governor for appointment. It was understood beforehand that the selection of men for the county boards was to be on the basis of fitness and that politics were not to be taken into consideration.

After these conferences the representative of the planning board sometimes discussed the list of names with one or more of the outstanding men of the county but few changes resulted from such interviews. The list of names secured in this manner was then submitted to the governor with the recommendation that these citizens be appointed by him as county planning commissioners for their county. Since there is no Oregon law providing for the creation of official county planning boards, this procedure was employed so that these unofficial boards might cooperate with the state planning board under the state planning board law. The effect of this was to make county planning boards advisory committees of the state board. In the cases of the first few counties organized in this manner the recommendations of the committee were followed and the men and women nominated were appointed. Very soon, however, the impression got about over the state that these boards were to have considerable prestige and patronage, and political influences got to work which soon disrupted this arrangement. Efforts were made to resist this pressure for a time but it eventually proved to be too powerful to overcome. In several counties the planning movement lost the cooperation of a number of very useful and influential men because of this fact.

In counties where conflicts of interests were known to exist and where it was feared that the method of organization described above might not get the best results a second method was employed. The representative of the planning board went into the county unannounced and held interviews with leading citizens and secured from them suggestions as to the persons in the county most likely to succeed as members of a county board. After a series of such conferences it was found that a group of names appeared on all or nearly all of the lists suggested. This was taken as an indication of general confidence in their ability and leadership. Tentative lists made up in this manner were then discussed with persons familiar with the county and the final list was recommended to the governor for appointment. Several of the best boards were secured in this manner.

The great distances in Oregon, the lack of time on the part of the chairman of the organizing committee and the limited funds for travel led to the trial of another method which worked as well, apparently, as any other. After the organization of counties had been under way for some time, outlying counties began writing for assistance in setting up planning boards. Because of the delay involved in getting about to the county seats of each county it was decided to try a regional conference to which leaders of five counties were invited. Lists of persons to be invited were provided by agricultural county agents, regional foresters, public officials and chamber of commerce executives. Until the meeting convened no one knew how the plan would work because there was not time between the sending out of the invitations and the date of the conference to permit of replies to the invitations. To our great surprise and gratification every county was well represented. At a general meeting the reasons for the conference and the needs for organization were discussed. In the afternoon each county delegation met separately with the representative of the planning board and the tentative list of names secured. Because of the widespread interest in the movement, this method appeared to have worked about as well as any other.

Finally, on account of the size of the state and the extreme difficulty of getting about, together with the multiplicity of forces which had come to bear in the total situation, original plans for organization broke down and some counties were organized by correspondence directly between the communities and the governor's office, and a number of boards were appointed by county judges under circumstances where it seemed expedient not to disturb them.

Mention should be made also of the fact that at the recommendation of the state planning board, the governor in April, 1935, appointed a special promotional organization known as the Willamette Valley Project Committee to aid in promoting the development of the Willamette drainage basin. At the governor's request the State Planning Board prepared a preliminary report outlining programs for development of this area as an integrated substate region, but since the planning board had no desire or powers to engage in promotional work, the board's studies and plans were made independently of the promotional committee. About the

same time the counties of the valley became interested in forming county planning commissions. The ones in Lane, Washington and Columbia counties were recommended to the governor by the state planning board; other counties of the valley were appointed by the governor, however, without clearing through the state planning board.

Probably the most serious weakness of the initial county planning efforts was the inability to tie the county judges in closely with the initial organization. It has only been during the last six months after constant and intensive efforts that the planning board has succeeded in bringing the county judges into close cooperation with their county planning commissions. This has now been successfully done in Clatsop, Tillamook, Douglas, Coos, Josephine, Jackson, Lake, Deschutes, Crook, Baker and Wallowa counties.

Since the primary function of county planning commissions is to act as advisory bodies to county courts and county officials, it is highly important that close and harmonious cooperation be established between the county planning commissions and the county courts as early as possible. When the results of this failure to tie in the county courts more closely with the planning program became apparent, Governor Martin appointed all county judges and county commissioners as ex-officio members of their respective county planning boards. Unfortunately this action came a little too late to obtain the best cooperation, although this difficulty has been solved gradually in the active counties.

The process of organization described above took a long time. Long before it was over some of the first counties organized began to require a great deal of attention. It was then that the planning board first began to realize the difficulty of the job which it had undertaken. It may be said of practically all the county boards organized that they were willing and in some cases eager to work, but they did not know what to do. Unfortunately the state planning board itself was inadequately staffed to give them the assistance they needed in getting started.

Immediately following the appointment of each county planning board, Governor Martin personally wrote to each member, asking him to assist in preparing a coordinated program of selected improvement projects needed for development of his county which could properly be carried out by public agencies and financed by public funds. The governor also asked the county planning boards to start studying the resources and needs of their county in cooperation with the state planning board's studies for state development. The governor asked the county planning boards to serve not as promotional organizations or booster clubs, but to assume the greater responsibility of planning for conservation and development of their natural resources, and acting in an advisory capacity to their local officials and federal and state agencies. Instruction sheets and bulletins were sent to the county planning boards at the same time, giving suggestions for reviewing PWA and WPA projects, and acting in advisory capacity to these emergency agencies. Additional bulletins were also sent out discussing county problems in general with the suggestion

that the county boards select the problems they considered most urgent for their first efforts.

As a result the first few meetings were given over to acting upon works projects submitted to the boards by local public agencies in the county. Since these projects required considerable sums from local contributions these lists were soon exhausted and the county planning boards were then left without much to do.

The state board's staff suggested that county planning boards start thinking about long range planning and study of resources, problems, needs and opportunities. It soon developed, however, that this could not be done without technical assistants and continued consultation service. It was also obvious that the state planning board had more work cut out for it than it could do, and it was then decided not to organize any more county planning boards until the ones in existence had gotten further along with their work. During the summer and fall of 1935, twenty-eight county planning committees were organized and appointed, of which twelve are now active.

Partly to help the county boards and partly as a means of educating the people of the counties, a series of county and regional planning conferences were held to which were taken several experts from the agencies dealing with the more important resources, such as the forests, wild life, recreation, water conservation and soil conservation. These meetings were remarkably well attended and were considered to be very helpful. They served to clarify the minds of the local planners and the public to some extent as to the objectives of planning, but they accomplished very little in solving the problems of mechanics or techniques. It was becoming increasingly obvious that even the most elementary planning was more or less of a technical job which few persons in the communities were capable of undertaking. It was also obvious that the state planning board could not do all the technical work for them.

Cooperation of Federal Agencies

When Federal Project No. 3, co-sponsored by the NRC and WPA was initiated in the fall of 1935, arrangements were made whereby some of the workers on this staff project were assigned to assist both the state planning board and the county planning boards by assembling data and preparing maps in county planning board offices. This project has been of great value to both the state planning board and county planning boards in Oregon. Without it our accomplishments would have been very greatly reduced.

This seemed to open up a new era in county planning. In reality it presented a new set of problems which, although anticipated, were not prepared for—difficulty in finding eligible WPA workers in various counties for planning board offices, difficulty in finding trained planning supervisors competent to direct these workers. A small intensive class in county planning was therefore started under our consultant's direction to train several WPA engineers and statisticians in county planning. Although a class was held daily for about three weeks the results were

somewhat disappointing. However, two capable workers were discovered—a statistician and an engineer—who seemed to grasp the problems facing us. Ultimately they proved very valuable in helping develop the technical procedure of county planning as it has been evolved in Oregon.

During the first few months of operation of this staff project there was considerable floundering around in trying to help county planning boards study their own local problems. It was soon found, however, that very few people in the county had any clear understanding of the larger problems facing them, or how to plan for resource conservation and development. During this period numerous pamphlets and bulletins were issued suggesting different approaches to county planning.

Then information about the National Resources Committee's drainage basin study was received and the need for diverting some WPA workers to help on this project was apparent. Since work in three of the county planning commissions was lagging we released their workers and adopted a policy that in the future workers would only be assigned to county planning commissions which are interested, active and holding regular monthly meetings. After a few months of this "cut and try" procedure we found that practically every county had one important problem, that of establishing sound policies for the management and disposition of its county-owned lands. Oregon counties had been gradually acquiring a new and extensive county domain of tax reverted lands.

With the help of the board's technical advisers and research staff, detailed procedure for assisting county planning boards in making a thorough inventory and study of their county-owned lands was worked out. During the last eight months this has proved highly successful in seven counties and we believe will be the ground-work on which future county planning will be built in Oregon.

This county land inventory comprises the preparation of a physical base map of the county, land ownership plats and maps showing ownership of all rural lands within the county, a map showing tax delinquency of these lands, a map showing assessed valuation of rural areas and a complete card record inventory covering each separate parcel of county-owned land. Special procedure and symbols were devised so that necessary data could be platted simply and clearly on the maps and card records in such manner that the completed work would be easily and readily usable by the county planning commission and county officials. At the same time the data will be of much help to the state planning board on statewide studies of rural land problems. Gradually, through discussions with county courts and other county officials which showed them that they had urgent problems in managing their increasingly large areas of county lands to best advantage for their county, the interest of these officials was awakened and they are now enthusiastic about this work, even contributing funds, personnel and equipment to help carry on the study. Workers engaged in these county land inventories are supervised by two field supervisors mentioned before, who regularly visit the county planning board offices.

Two reductions in the quota of workers allotted for our staff project—

one in August and the other in December, 1936—prevented our expanding this basic planning study to other counties. Sudden changes in WPA allotments have also greatly handicapped our efforts in establishing county planning on a solid continuing basis. However, if our present organization can be maintained another year we will probably be "over the hump" and county officials will probably contribute funds for further county planning activities, particularly in those counties where the county land inventory has been definitely useful.

Our experience has shown the great difficulty in developing county planning procedure in these sparsely settled Oregon counties of such large area. The first hurdle is to show county officials that their county planning board can actually help them by assembling and analyzing data, a task which they normally have neither the time nor the facilities for.

Since it was soon discovered that county planning boards were unable to furnish adequate technical supervision of our WPA workers an appeal was made to agencies having field representatives in the counties who might help in providing this technical supervision. The U. S. Forest Service and Resettlement Administration offered their cooperation. The forest supervisers in several counties directed our workers in assembling data and preparing maps, and arrangements were worked out by our consultant with the Resettlement Administration in January, 1936, whereby the Resettlement Administration would furnish the services of trained land planning specialists to supervise our workers in making exhaustive land use studies in five counties having urgent and complex land use problems. These detailed land use studies did not duplicate or conflict with the county land inventory program described above, being instead, a comprehensive analysis of all the principal physical and economic factors required for determination of the best long time use of all rural lands in these counties, both public and private.

This arrangement was very satisfactory as our WPA workers were thus competently directed and their efforts produced reliable and valuable data. This land use study has been completed in one county and an exhaustive report published; studies will be completed in the four other counties within the next few months. These land use studies are of much value to federal, state and local agencies dealing with the problems of land use adjustments and to the state planning board in showing the major conflicts of land use throughout the state.

In addition to these two separate land studies, detailed procedure was prepared for surveying existing recreation areas and facilities for the county as a unit. Two counties were selected in which to try out this procedure and a great deal of data has already been gathered.

In addition, several county planning boards have initiated and carried on studies of special county problems such as school district organization and school costs, drainage and irrigation development, fish conservation and surveys of mineral deposits. A comprehensive report describing the accomplishments of county planning boards in Oregon was published by the state planning board in December, 1936.

The county planning boards and the workers assigned to them have

also been very helpful to the state planning board in collecting and transmitting data to state board's headquarters on special problems requiring local data. Several of the planning board's reports were made possible through data obtained by workers in the counties.

Another distinctive feature of the county planning work was the successful employment of youth workers between the ages of eighteen and twenty-five on a state-wide National Youth Administration project sponsored by the state planning board last year. A number of youth workers have been assigned to county planning boards to assist them and our adult WPA workers in transcribing records and doing typing and other clerical work in the county planning board offices. This youth project has worked out much better than expected. The educational values of this project have also been important. Youth workers have been given opportunity to observe technical procedure, methods and practices, and to gain experience as stenographers, typists and office workers. At present approximately twenty-three adult WPA workers and twelve youth workers are busily engaged in twelve county planning offices.

The development of simple technical procedure which inexperienced county workers could follow successfully has been one of our problems. The board's several technical advisory committees could not always agree on procedure and our consultant and research staff had to experiment continually with new methods and practices to see how they would work. For each different county study it has been necessary to develop new kinds of detail procedure.

Many Oregon counties felt themselves so hard up that they were reluctant to furnish any funds to help finance county planning activities. This feeling is gradually changing, however, and county officials are beginning to provide some funds, personnel and equipment to help their planning board. Our experience has shown that it is best to establish firmly one county planning board at a time and gradually increase the number of active county planning commissions rather than to organize a large number at once and leave them largely to their own devices. In order to establish county planning we have found it necessary to give the new county boards some technical and clerical assistance before they could take hold of and become interested in their work.

So much for the experiences of the Oregon State Planning Board in attempting to organize county planning. We shall now turn our attention to an appraisal of what may be called definite results. Later we shall consider some less definite results which undoubtedly may turn out to be definite achievements at a later date. It will not be necessary or desirable to enumerate all of the things accomplished or attempted in all of the counties. We shall, rather, call attention to outstanding results as a reflection of what the county boards are attemping to do.

Best Results in Conservation and Resources

Immediately following their reorganization, the state board attempted to get the county boards to study their public improvement needs and make long time construction plans so that the expenditure of federal

and county funds for public buildings, roads, and conservation projects could be made on a basis of present and growing needs. With one or two outstanding exceptions, the county boards failed to take advantage of this opportunity. Some of them saw the opportunity but public agencies in the county were unwilling to obligate themselves for match money. In one county where the achievement in this direction was outstanding it is probable that the far-sighted persons who shaped the program would have done so without the board, as one group did in a neighboring county where the county planning board never functioned.

In the following appraisal of planning in Oregon counties, the results are considered from three different standpoints: namely, the number of different projects completed, under way, or contemplated within a general plan; the importance of certain projects from a planning standpoint; and the amount of local appreciation and understanding of the planning movement itself, apart from individual projects and the present state of local programs.

From the standpoint of awakening interest in public improvements and promoting the construction of improvement projects the Clackamas County board is easily outstanding in the state. During the first year this board concentrated on a public building program for the county, which included 11 buildings, a water reservoir and a sewer system. This county board was also able to convince the State Highway Commission that future road programs should be designed to meet the county's needs and road projects should be approved by the planning board before work was started. At last year's national planning conference a paper was presented describing the major planning accomplishments of Clackamas County, and hence these will not be repeated here. Since then this county planning board has devoted most of its efforts to organizing irrigation, drainage and flood control projects in cooperation with the army engineers.

When we turn to the consideration of significant achievements under division two we find a considerable number of counties have made progress in special phases of planning for the conservation and use of resources. Notable are the county land inventories in seven counties, the mineral survey in Douglas County, the detailed land use studies in five counties, recreation surveys in two counties, and flood control and drainage studies in others. In Clackamas and Clatsop counties the county courts have found the planning programs extremely helpful. In the latter there is an interesting example of the practical value of planning to a county. Clatsop County has extensive areas of cut-over forest lands. The timber companies have allowed the lands to revert to public ownership for taxes. Many counties have followed the short sighted policy of putting these lands upon the market to get them back on the tax roll at the earliest possible date. This has led to attempts to farm non-agricultural lands, to soil erosion, forest fires, and much personal dependency upon county relief. The Clatsop County planning board, at the request of the county court, is thoroughly investigating all county owned lands to determine the most economical use, whether for agricul-

ture, reforestation, watershed protection, recreation or other possible uses. On the basis of this evaluation the court will hold out of the market all lands not available for agricultural purposes and determine the value and most practical use of such lands as have value for agriculture. Similar projects are under way or contemplated in a number of counties. In several of the counties, responsible groups are ready and willing to adopt broad land use programs as soon as the necessary surveys can be made. At present technical services required cannot be secured under the limitations of federal grants and funds are available from other sources only in limited amounts. Several hundred thousand dollars would be needed for detailed studies of the agricultural lands of the state. At present funds for completing this classification program are not in sight. Much planning in the counties will have to wait the provision of such funds from some source or other.

Less tangible but none the less real results have been obtained in several counties where little or nothing has been done of the character described above. In these counties the importance of planning is appreciated, even though definite plans have not yet been evolved. In these counties the nature of the problems confronted is such that broad general plans will have to be worked out; for example a sustained yield program in the yellow pine timber counties, where grazing, water-shed protection, erosion, flood control, wild life preservation, and recreation are important factors in areas which overlap county boundaries. Here planning will have to be done by regions of the state. Planning has been held back in such counties by the absence from the relief rolls of such skilled persons as could be used in a planning program, but it is not dead. It awaits only the propitious circumstances when it may be expected to quicken into effective action. When over-all plans applicable to the problems of such counties have been worked out they will be carried out locally. Unless undue time elapses before that time arrives, or the state planning board is woefully inefficient in the performance of its task of keeping an interest in planning alive over the state, such counties will not need promotion activities again.

The efforts of the state planning board to develop planning in the counties was not without resistance. In some counties resistance came from the county courts who could not see the value of having planning bodies. In other counties there was indirect resistance from groups interested in exploiting certain resources who feared planning might impose restrictions upon private industry. In several counties the representatives of the planning board were unable to convince leaders of the practicality of a planning program, but it must be said that most of these unconvinced persons are still willing to be shown.

As for trying to educate the people upon the ground as to the nature and values of planning, it may be said that relatively little has been accomplished to date. There can be no doubt that the program adopted by the state board to interpret planning to the state through its conferences and newspaper publicity has done much to disarm suspicion among the people. In spite of this fact, relatively few of the rank and

file and not more than a few of the outstanding business, industrial, and professional people of the state know anything whatever of the ideals and purposes of planning. However, the publicity given to planning has been highly popular with the local papers. The regional and county conferences have been well attended, and the first statewide public planning conference in January this year, drew a large and representative attendance, even from those counties where little or nothing has been done.

Establish County Planning By Law

In several counties where planning was appreciated by county officials a desire was expressed to have the county planning boards established by law in order to permit the courts to budget funds for planning purposes. Consequently a bill was introduced in the recent legislature to legalize the appointment of planning boards by the county judges. This bill was defeated by the counties themselves. In two of the counties where the unofficial boards were succeeding, it was feared that the passage of the bill would eliminate the present boards and result in the appointment of entirely new and inexperienced boards and that in this manner much valuable ground already gained would be lost.

As indicated above, the planning movement has not really reached the rural folk as yet. In plans for the conservation of certain intangible resources and human values, certain members of the Oregon State Board feel that some means will have to be found for carrying planning right into the communities where the people live. As a sort of preliminary exploration in this field, partly to determine whether local leadership existed with which local planning could be identified, a study of what have been called the natural communities was undertaken in three counties. Based on previous research carried on for a number of years at the University of Oregon the natural communities were taken to be those areas from which the population gravitates to some common center habitually and regularly, to carry on activities designed to serve their own cultural and social needs. Some extremely interesting results were secured which need not be presented here. It was found, however, that the natural communities could be located with a high degree of certainty; that responsible leadership was almost always available in such communities; that the bulk of the rural population lives in and gets the major part of its cultural and social satisfactions in such community activities; and that a real basis for rural community planning could be found in them. It was discovered that those communities in which the educational and cultural-social interests, and to a certain extent, the political subdivisions coincided more or less closely with the natural community were doing a much more effective job of meeting their own cultural and social needs than those in which there was no such coincidence. The study was by no means exhaustive, but it was carried far enough to make it appear pretty conclusive that planning for such things as rural school consolidation, union high school districts, recreational programs, and programs designed to enrich the cultural and

social life of the people upon the soil would have to be based to a considerable degree upon these natural groupings of the country dwellers.[1]

After acting for one year as chairman of the state planning council and for two years as chairman of the committee on planning coordination and development, the writer of this paper is convinced that it is highly important that the encouragement of planning in the counties should continue. Sooner or later the plans will have to be fitted to the land and the people upon it. Much grief and confusion can be eliminated if the people on the land, owning the land, or using the land can be carried along and have a part in the plans which are ultimately to affect them. It may be found necessary, also, to do this if planning itself is to continue in the state with state support. If such planning is to go forward until the time when it will receive financial support adequate to its needs from state and county sources, it seems highly important that funds be made available to provide the state planning board with adequate facilities for promoting county planning and making it effective. The pressing problems of rural resettlement and rehabilitation and land reclamation, not to mention many others, make it highly important that the planning program should not be limited to federal and state planning alone.

Summary and Conclusions

Following is a brief summary of the conditions and needs for planning in Oregon counties as the situation is viewed by our consultant, Mr. V. B. Stanbery, and me. It has not been considered as a matter of policy by the state planning board, but I believe that the members would concur in the opinions therein expressed:

1. Oregon counties comprise large sparsely populated areas whose principal problems and needs are determination of economic land use and sound land management policies, conservation of forest and water resources, development of recreation areas, school consolidations and better adjustment between the tax base and the resource base.

2. There is a real need for a simple approach to county planning which the people can understand and grasp: first, it must show the people the complex problems facing them in a manner which they can grasp and second, point out the need for thorough study from many different viewpoints to determine how these problems may best be solved.

3. The county planning boards are unable to do any real planning unless competent and adequate technical assistance is furnished to them. Many counties feel they cannot afford the money to finance county planning.

4. Our experience has shown that the best organization procedure is to establish firmly one county planning commission at a time and gradually increase the number of active county planning commissions, rather than to organize a large number at once and leave some of them without help.

[1]Philip A. Parsons, *A Survey of Natural Communities in Lane, Clackamas and Multnomah Counties* (Oregon State Planning Board).

5. It should be emphasized that county planning boards are essentially advisory agencies to county officials and that there must be close and harmonious cooperation between the county planning boards and the county officials. Without this harmonious relationship, success will not be attained.

6. The board has met with a very real difficulty of developing a simple technical procedure for county planning studies under which the relatively inexperienced WPA workers can operate effectively. One of our greatest difficulties was that our advisory technicians could not agree in detail on symbols, maps, standards, etc. We have had to evolve our own original procedure for most of the county planning work.

7. It must be remembered that the visible results do not always constitute an adequate measure of the success achieved. Subsequent developments alone can reveal the full extent of the success or failure of our efforts in county planning.

Rural Zoning in Wisconsin

J. M. Albers

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TWENTY-FOUR of Wisconsin's seventy-one counties are now zoned. The proper commissions have been organized and basic studies are nearing completion in thirteen others.

The statutes under which this work is prosecuted are sufficiently broad to include necessary authority for the development of plans more comprehensive than would be included in zoning alone. The acts affecting county planning are, in some of their aspects, broader in scope than are the parallel acts having to do with city planning. In fact, a comparison of these Wisconsin statutes shows that the county may exercise its police power for planning purposes with less speculation than can urban communities.

The various statutes establishing the power to plan are, essentially, as follows:

Section 59.97, Subsection 1: "The county board of any county may by ordinance regulate, restrict and determine the areas within which agriculture, forestry and recreation may be conducted, the location of roads, schools, trades and industries, the location, height, bulk, number of stories, and size of buildings and other structures, the percentage of lot which may be occupied, size of yards, courts, and other open spaces, the density and distribution of population, and the location of buildings designed for specified uses, and establish districts of such number, shape and area, and may also establish set-back building lines, and may further regulate, restrict, and determine the areas along natural water courses, channels, streams, and creeks in which trades and industries, and the location of buildings for specified uses may be prohibited, and may adopt an official map which shall show thereon the natural water courses, channels, streams, and creeks and the areas along such natural water

courses, channels, streams and creeks which may be restricted, outside the limits of incorporated villages and cities, as such county board may deem best suited to carry out the purposes of this section. For each such district, regulations may be imposed designating the location, height, bulk, number of stories, and size of buildings and other structures, percentage of lot which may be occupied, the size of yards, courts and other open spaces, and density and distribution of population, and the trades, industries or purposes that shall be included or subjected to special regulations and designating the uses for which buildings may not be erected or altered; provided, however, that the said county board shall before it adopts such ordinance or ordinances, submit the same to the town board or town boards of the town or towns in which may be situated any lands affected by such ordinance, and thereupon obtain the approval of said town board or town boards, so far as the same affects the lands in such amend any ordinance, which have been adopted as herein provided, shall be submitted to said town boards of the towns in which said lands are located and their approval obtained as to each such change before the same shall be adopted by the county board. Such ordinance or amendments thereto may be adopted as to such town or towns which shall have given their approval thereto."

Section 59.97, Subsection 4 reads in part: "The county board shall prescribe such rules and regulations as it may deem necessary for the enforcement of the provisions hereof, and of all ordinances enacted in pursuance thereof. Such rules and regulations and the districts, set-back building lines and regulations specified in subsection (1) shall be prescribed by ordinances which shall be designed to promote the public health, safety and general welfare. Such ordinances shall be enforced by appropriate fines and penalties."

Section 59.98 permits the counties to acquire lands by tax deed and otherwise for the purpose of establishing county forest reserves.

Section 59.99 provides for a county zoning adjustment board and defines its powers and duties which are substantially those of any zoning appeal board.

Section 80.64, Subsection 3 reads in part: "The county board of any county in this state, where it is deemed the general welfare will be promoted thereby, may establish for streets or highway widths in excess of those actually and presently in use, upon obtaining the approval of the governing body of the municipality in which each such street or highway, or part thereof, is located, and may likewise adopt plans showing the location and width proposed for any future street or highway."

Section 27.02 provides for the appointment and defines the power and duties of a county park commission which is the body having power to make the necessary studies and recommendations for county plans. We rely on this group more than some others which might be used because its members—which number seven—are appointed for seven-year terms only, one term expiring each year.

Section 27.20 sets up the state planning board, creates the office of

director of regional planning and defines the duties, one of which is "To cooperate with all county, city, town and village commissions, boards or committees charged with the responsibility of planning or zoning certain areas or districts within their respective corporate limits. . . ."

Section 20.49 makes an annual appropriation for the state planning board staff.

Chapter 236 makes the approval of the director of regional planning necessary before any subdivision plat, subject to town government, may be recorded.

The planning of counties, in general, has not yet reached the same degree of popularity as has the planning of cities nor has it acquired the large mass of court support. But, since both have the same foundation in law and are based upon the same broad principles, past experience with city planning and zoning should form a sound general guide for county planning and zoning procedure. In Wisconsin, we look upon court decisions with much respect. We believe it sound policy to follow the implied admonition when a court says:

"Municipal corporations are bodies politic, vested with many political and legislative powers for local government and police regulations established to aid the government of the state. The necessity for their organization may be found in the density of population and the conditions incidental thereto."[1]

Further: "The purpose of the law is to bring about orderly development. . . . If such regulations stabilize the value of property, promote the permanency of desirable home surroundings, and if they add to the comfort of the citizens, they, therefore, promote the general welfare. . . . We do not hesitate to say that the attainment of these objects offers a legitimate field for the exercise of the police power."[2] This statement surely has as much application in rural zoning as it does in urban zoning.

Again: "Zoning necessarily involves a consideration of the community as a whole and a comprehensive view of its needs. An arbitrary creation of districts, without regard to existing conditions or future growth and development, is not a proper exercise of the police power and is not sustainable."[3]

"Such a statute [zoning ordinance] is unconstitutional, if its provisions do not apply equally to all persons in the same class or if the classifications have been arbitrarily made without substantial distinction between classes to which the legislation is germane."[4]

"Zoning which admittedly limits property to a use which cannot reasonably be made of it cannot be said to set aside such property to a use but constitutes a taking of such property without just compensation."[5]

The statements above are only a few of many now existing.

The desirability of planning is not always as obvious to the rural citizen as it may be to the city dweller and, frequently questions are

[1] *Sidney Coin* v. *Forest A. Lydden, Appellant,* 343 Ill. 217.
[2] *State ex rel. Carter* v. *Harper,* 182 Wis. 148.
[3] *City of Aurora* v. *Burns et al.*
[4] *R. B. Schwan* v. *City of Eau Claire, Wisconsin.*
[5] *Tews* v. *Woolheizer,* 352 Ill. 212.

raised which are answered best when the general attitude of the courts can be set forth. It is sometimes difficult to convince county authorities that they do have the authority to regulate the use of land and that it can be exercised for certain well defined purposes. Again, the importance of necessary groundwork and factual studies must be pressed home. There is, frequently, a tendency to lean strongly toward the piecemeal zoning of specific areas in a unit as large as a county and this must be discouraged. When designing regulations for the use of rural land, we always endeavor to so draft the ordinance that acceptable alternate uses are permitted in the place of any that may be zoned out.

Land Use Regulation

In 1923 Wisconsin passed its first law permitting counties to regulate the use of land outside of incorporated cities and villages. This arose from a condition imperatively demanding relief. The use of lands which, socially and economically, were parts of the city, although not contained in it, violated every principle of order and economy. Milwaukee County availed itself of the power and passed an ordinance regulating the use of county lands for residential, commercial and industrial purposes. In accordance with the statute as it was then written, agriculture and all other uses were left unrestricted. This county is the most highly urbanized in the state, having a population density of 3,086 persons per square mile, and it is, practically, the hub of the southeastern industrial area.

At the opposite end of this scale of urbanization is Sawyer County, located in the cutover lands of northern Wisconsin, having only eight persons per square mile. In the north, there are vast areas of cutover timber lands, sparsely settled and having generally poor soil. Here the need for regulating land use is entirely different from that existing in Milwaukee County. Tax delinquency, the reversion of land to the counties and the high costs of local government due to scattered settlement, created problems of a character peculiar to that part of the state. In 1929, the zoning of this area was recommended by the Interim Committee on Forestry and Public Lands. In the same year, the zoning act (Section 59.97 of the Statutes) was amended to permit the regulation of the use of land for agriculture, forestry and recreation. The first ordinance under this amended act was adopted by Oneida County and since that time, twenty-two other northern cutover counties have followed that example. These twenty-three counties include 41.7 per cent of the area of the state and 16.2 per cent of the population. Including Milwaukee, the twenty-fourth county, we have now zoned 42.1 per cent of the area which includes 40.8 per cent of the population. All of the northern counties are sparsely populated and are at the opposite end of the urbanization scale from Milwaukee. The history of each is quite similar. Prior to the advent of the so-called blessings of civilization, they were covered with vast forests. The story of their exploitation is a sad one. As long as this basic resource remained, men were employed in the woods and wages were paid. The farm boys lumbered every winter and put in from one to five months in the camps. In the spring, the more adventurous spirits came

down the river with the "drives." They earned a money wage. This was the same thing we now call "subsistence farming." But equally as important as the wages paid for labor was the tax base afforded by the presence of large areas of timber. The local taxing bodies did not hesitate to use their prerogatives while this base remained. The hope was that as the forest retreated, the farms would advance. So it was for a time, but about 1920 this process came to an abrupt end and agriculture in general was rather brutally deflated. Much of this cutover land is marginal, if not worse. At a time when the best of the unimproved cutover land was selling for about $20 per acre, a lumber company agent stated that it cost about $1.00 per acre per year to carry it. The financial condition of taxing bodies grew worse and worse and the troubles caused by the misuse of land became more acute. There are authenticated cases where a single isolated settler in northern Wisconsin has cost the town as much as $1,400 in a single year while he was trying to farm on land which in itself was scarcely worth that much. The first idea in designating certain areas as a forest zone was to keep more people from settling and trying to farm those regions rather than to advance forestry.

The ordinances in these twenty-three northern counties were drawn by local authorities in collaboration with and under the guidance of some of the public officials, particularly with state officials associated with the college of agriculture and the conservation department who were aided by the attorney general's office. Meetings to explain the purpose and possible effect of ordinances were held in every town. After such educational discussions, it was found that the people were generally favorable to the enactment of land use regulations. It may be stated here that the most valuable work done in the development of the zoning plans was extra-legal. Meetings and hearings were held wherever and whenever it appeared that some good could be done. Much will be lost if the authorities make no effort to explain these proposals beyond that resulting from the bare legal requirements for public hearings.

The Oneida County ordinance provides for only two kinds of use districts, the one being "forestry" and the other an "unrestricted district." In the "forestry" district many uses other than pure forestry are permitted. There is included in the permitted uses all forest-allied industries and such other uses as the gathering of wild crops, berries, moss and hay. Hunting, trapping and fishing may be conducted but the district is restricted against farming and all year residence. The prohibition of these latter uses was the primary object of the early zoning ordinances and they are specifically designed to prevent the necessity of maintaining inefficient and costly schools and long stretches of roads which perform no great service. In this connection, it should be remembered that rural schools in Wisconsin receive a grant of $250 a year from the county and another $250 from the state. Further, there is an allotment of $50 a mile by the state to the towns for each mile of town road. It needs no detailed explanation to indicate what the effect of this may be in areas having only a widely scattered and largely isolated population.

The adoption of these zoning plans has resulted in the removal from

agricultural use of about five million acres of marginal and sub-marginal land in northern Wisconsin. In addition, the organization of state, county and national forests has removed from such use another million acres, making a total of six million acres of land now restricted against agriculture and which are producing a timber crop. It should be noted that this restricted area is more than one-sixth of the total area of the state and that this land has been retired from agriculture without other cost than the time of regular public officials in the normal pursuits of their duties. This whole area is very effectively protected against fire through the efficient organization of fire prevention and control methods by the conservation department.

The wide difference in the degree of urbanization between Milwaukee and the other zoned counties has already been noted. Between these two extremes, there are forty-seven other counties in the eastern, southeastern and western parts where, as yet, there is no effective county planning or zoning. In these areas, the development ranges from high type agriculture and dairy to intensive industry; the terrain varies from gently rolling to the steep slopes and deep valleys of the unglaciated southwest. For all practical purposes, the land is practically denuded of timber; yet there are localities where timber and allied crops are much to be desired over the present production. Sporadic attempts at zoning parts of these areas have been undertaken in some of the counties, notably, Walworth, Kenosha, Racine and Manitowoc. These efforts have been directed toward the protection of newly developing residence districts beyond the corporate limits of any city or village. This method of zoning has been consistently opposed by the state planning board because of its piecemeal aspect and because we believe that such zoning would not successfully withstand legal attack. This has already happened in Racine County where the circuit court has invalidated such a zoning ordinance giving as one of its reasons for such invalidation, that it was not a part of a comprehensive county plan.

It is a matter of policy with the Wisconsin State Planning Board to begin the promotion of local planning in the highly industrialized southeastern counties and to spread from that area westward and northward to finally join the planned regions of the north. In the southeastern section, we have an entirely different situation from that existing either in Milwaukee County or in the north. These counties contain several industrial cities of fair size such as Racine, Kenosha, Oshkosh, Green Bay, Fond du Lac, Sheboygan, all of which are located in a very highly developed agricultural region. In addition to the agricultural and industrial aspect of this area, the problem of zoning is complicated by the large number of summer residents who move into their cottages in the early summer and remain there for the whole season, as, for instance, in Walworth County, where the summer population is considerably larger than the total rural population of that county.

Zoning in Walworth County

In attempting to draft plans and zoning ordinances for some of these

southeastern counties, one fact is thrust prominently upon those making the studies and that is, that all such plans must take on a much more urban than rural aspect in order to cover the ground thoroughly. By this is meant the fact that, due to the complexity of the development, more numerous uses must be provided for than have been established in the northern counties and at the same time the area bears a decidedly more rural aspect than does Milwaukee County. The net result is that provisions must be made for zoning districts beginning with single-family residences all the way down, through and including heavy industry. Such an ordinance is now being developed for Walworth County which will be briefly discussed as an example of what is here involved.

As was stated previously, the summer population of Walworth County is greater than the entire permanent rural population and many of these people live in fairly well defined areas. For instance, Lake Geneva is practically surrounded by high class estates. The areas around Lakes Delavan and Lauderdale are also highly developed and densely occupied by summer homes and cottages. It can readily be appreciated that conditions such as exist around these lakes form a tax base of great significance and that it should be protected. Some of these large estates in the last few years have been placed upon the market and divided into building lots sometimes as small as 40x125 feet. One of the first problems confronting the planners is the proper protection of this area, not from subdivision as such, but from improper subdivision. To accomplish this, a single-family residence district was defined which requires not less than two acres of lot area per family. All of the regulations established in the district are such as to make it comparable to a high class residence district in any urban community.

An agricultural district is set up in which, as the name implies, agriculture and its allied industries is the principal use and it, of course, represents the larger portion of the area of the county. Here land subdivision is also permitted but a tentative density regulation of 8,000 square feet per family has been established. This is considerably larger than the average size of lots as now subdivided and platted but is felt to be desirable and, if subject to criticism, will be on the basis of the fact that it was too small rather than too large.

It is quite obvious that the large summer population requires a certain amount of service (beyond the normal needs) in the nature of retail stores, garages, etc. At the present time, such businesses are generally located at important highway intersections but are now beginning to scatter promiscuously up and down the highways. Therefore, there have been established at strategic points, largely where they now exist, retail business districts, the regulations of which are substantially the same as any "commercial district."

The county has little industry, but such as it is is provided for in what amounts to a heavy industrial district located on the railroads and generally adjacent to the existing cities and villages.

One other important district has been established which should be mentioned separately. It has been labelled a "forestry district." In gen-

eral, this includes land located in the terminal moraines in the northwestern and north central parts of the county. Those of you who may be familiar with terrain of this type know that it consists of a series of small, steep, gravelly hills with deep "kettles" between them. The land, in general, is not of high agricultural value, the slopes are too steep and the soil is too stony for purely agricultural use. Therefore, this area has been restricted to timber and other wild crops, recreation, hunting, fishing and boating. The terms of the regulations are such as to encourage forestry and soil-saving processes and to discourage general farming. It is worthy of note that in all of the discussions which have taken place in connection with the proposed regulation of land use in Walworth County, this particular proposal has been subjected to much less discussion than some of the others—in fact has met with unlooked for support.

Other things to be noted in connection with the zoning regulations of Walworth County are that there is no provision anywhere in the ordinance for the legal establishment of automobile junk yards and that billboards are prohibited in all districts, except the business and industrial districts. These proposals have also met with considerable favor. All residential uses are prohibited in the industrial districts.

The experience of the state planning board in the development of planning proposals for this section of the state has been interesting. The economic pressure for zoning in this area is not as great as it was either in Milwaukee County or northern Wisconsin but it is beginning to be felt and the authorities in general appreciate the value of such regulations. It is the feeling of the state planning board that whatever state plans are made for the social or economic development of this unregulated area must depend largely on the succescsful use of local plans drafted in harmony with a broad state base—in fact, the Wisconsin statutes make the ultimate acceptance of any plan dependent on the action of the town boards.

The Role of the State Planning Board

One thing that always appears in the early discussion of such proposals is the question of cost, particularly in these times, and we find that however great may be the willingness to undertake the work necessary for making a plan, it would be inevitably stopped, in every case, if the counties were required to lay out money for this purpose. Fortunately, Wisconsin has a paid state planning staff of sufficient experience and versatility which, when combined with the activities of other state departments, makes it possible to undertake the necessary basic studies for these counties. It has, therefore, been our policy to state flatly to the authorities that the state planning board will prepare all necessary studies and, if desired, draft legislation looking toward the development and administration of a comprehensive plan, without cost to the local units. On this basis, we have been able to make substantial advances toward the planning of seven of these highly developed counties. In other words, the state planning board here acts in the capacity of consultant and goes somewhat farther than the ordinary conception of that job in that legis-

lation as well as studies is prepared and the board participates in and sometimes organizes the necessary local meetings held for educational purposes—this without cost to the county.

In order to establish the proper factual background for planning and supporting legislation, we make the following studies and map the results.

The most complicated and detailed effort is directed toward the mapping of the present land use. This map shows the present use of all the land under the classification of crop land, permanent pasture, pasture lands, stump pasture, wood lots, marsh lands, waste lands, water, recreational lands and special uses with several sub-classifications under several of these heads. This in turn is supplemented by two others which show (a) specifically the existing wood lots and (b) those areas which it is desirable to reforest.

Other studies show the location, use and condition of every building in the county, the transportation and highway systems, bus and truck routes, existing and necessary grade separations, the age, condition and type of all highway improvements, the power transmission lines, and generating stations.

The location and extent of all tax delinquent lands by one-, two-, three-, four-, and five-year delinquencies are tabulated and mapped.

Other investigations produce maps showing the soils, bed rock, and the boundaries of rural school districts with the location of all schools, both public, private and parochial. In addition to the physical studies, there is also a series of economic investigations having to do with population, its history, forecast and age composition, the agricultural and industrial development, progress and changes, the financial setup of the county, the health facilities, sources of water supply and pollution, recreational facilities, the extent and type of land subdivision, land drainage and any other special features that may exist and which are pertinent to the subject.

We depend upon the county park commission as the authoritative body to officially undertake the work. A proposed ordinance is recommended by that body to the board of supervisors. When approved by that body, it must, before it becomes effective, be approved separately by each town as it affects that town. However, it is not necessary that all towns approve in order to put the ordinance into effect. It becomes active in a town as soon as the town board approves. The town approval comes after public hearings have been held and the number of these depends entirely on what is necessary to a satisfactory understanding by the people. The state planning board urges and participates in as many public meetings as is desired.

It is thoroughly realized that the planning of the areas in which we are now operating is different from what has gone before in Wisconsin, but it is felt that by careful and painstaking study a sympathetic attitude toward the movement is being developed and that the future will see all of Wisconsin acquiring the benefits of a sane use of its natural resources through adequate planning.

DISCUSSION

MR. EDWARD M. BASSETT, New York City: Along with other men in this room it has fallen to my lot to suggest legislation for planning and zoning. It has been necessary for us to know something about the different legislative entities in the United States. Their complexity would surprise you.

A man from Connecticut who has listened to the papers on county zoning and planning this afternoon, may go home and say to his neighbor: "Why don't we do county zoning? I have heard of states that are doing it most successfully." He will discover then that the towns of Connecticut won't allow such procedure. That which is a county in California or Oregon is a town in Connecticut; they correspond to each other. In Connecticut there are cities and towns and nothing else. No city is in a town, and no town is in a city. Go over into New York State and you will find cities, towns, and villages, and in every case the village is within a town and subject to the town's legislation.

California perplexed me for some time. It has cities and counties and the city terrain is separate and not subject to the county government. There is a county there which usually corresponds to a town in the East, and there are one or two villages. They are separate municipalities. So in every state the practice varies.

MR. S. HERBERT HARE, Kansas City, Missouri: I would like to bring up a point for discussion which was not mentioned in any of the papers.

Most of the difficulties between city and county occur at that line called the corporate limits, and in connection with the extension of those corporate limits. The policy in connection with the extension is a particularly difficult one. How far should a major city go in incorporating satellite towns or unincorporated areas which are adjacent and subject to incorporation? In many cases the city cannot provide proper facilities for its present citizens. It cannot offer great advantages by the extension of utilities to the adjoining area, and yet the people of that area experience certain advantages as a result of their proximity to the larger community. Should they not be included on that basis? Of course, many small incorporated communities do not want to come into the larger cities because they feel they have better control of their local zoning problems, better police service, and freedom from the politics of the larger municipality.

MR. RAYMOND F. LEONARD, Tennessee Valley Authority: It has been suggested that you might be interested in a description of the Washington and Baltimore plan. The plan was under the auspices of the Maryland Planning Commission. It was handled through a sub-planning commission, and the National Resources Committee furnished the technical services of Mr. Draper who was assisted by Mr. Dill and myself.

The area was chosen because of the interrelation of the suburban sections of Washington and Baltimore, one a metropolitan area of 600,000 to 750,000 and the other 800,000 to 950,000. The problems in the forty-mile stretch between the cities was felt to be a fruitful one for study because of the variety of land use. I won't go into detail, but you know

that these haphazard extensions can be very unattractive and destructive of rural values as reflected in rising tax valuations and assessments that make farming uneconomical.

The report endeavored to point the way to orderly development of a suburban community large enough, as Mr. Draper said, to have adequate community service without being too cluttered. It is difficult to zone for open spaces, however, and subdivision regulations are inadequate for an orderly pattern of suburban development. I think Mr. Eliot will be interested in this particular problem.

MR. HAROLD M. LEWIS, New York City: We have heard some discussion on roadside protection. Mr. Draper didn't mention, however, the freeway which has been such a successful solution in his territory in the Tennessee Valley. My point is that neither the freeway alone, nor the elevated highway as described by Dr. McClintock, can be used to form a complete system of through traffic ways. Each has its separate place in the scheme. Still a third method is the control of roadsides along existing highways through adequate zoning and roadside protection. These three all come together in the outer, strictly rural areas. I believe we can adequately direct roadsides to provide for through traffic movement by strict zoning and by the separation of highway grades at the important intersections. Then, as we get into the suburban areas, I believe the ideal solution is the freeway, or the highway to which the right of access is prohibited except at points where it is incorporated into the highway design. In the strictly urban areas where highways must pass through and cannot go entirely around such areas, the elevated highway is a last resort. So, each one of the three methods has its own part in a system of through highway routes.

New York State, in April, adopted a limited access highway act which authorizes a three-way type of construction. Three weeks later Rhode Island also adopted freeway legislation. I should like to know if any other states have taken this step.

MR. ALFRED BETTMAN, Cincinnati, Ohio: Can anyone tell us of an experience in taking up delinquent land, or of any other land policy which will start or aid planning?

MR. WAYNE D. HEYDECKER, Albany, New York: The city of Yonkers in the state of New York found itself confronted with a problem of the disposition of some four thousand delinquent lots. Careful analysis of the location of the lots indicated that many of them were so situated as to be suitable for future playgrounds or sites for fire and police buildings. Mr. Theodore T. McCrosky, planning director of that city, who is not here today, told me that by persuading the municipality not to dispose of the lots, the city acquired sites for its future playgrounds, schools and other city buildings which are directly related to the master plan.

MR. ALFRED BETTMAN, Cincinnati, Ohio: Is there danger that the future schools and playgrounds will be located according to individual tax delinquency?

MR. WAYNE D. HEYDECKER, Albany, New York: Only those lots which

fitted the master plan were selected. In some cases it was possible to switch lots in order to get sites of the proper size, shape and location.

MR. CHARLES W. ELIOT, 2nd, Washington, D. C.: I should like to raise another issue. We heard the discussion on the value of rural zoning and its possible relationship to the physical development of the land or to soil erosion, and although I think it is late to introduce a new aspect I can't forbear raising the question of the proper relationship between flood planning and zoning control.

It seems to me that we have a whole new field of zoning which we should get into by the local route with the participation of the local units of government. The city and county should zone the land so that the water may follow its natural course. It also seems obvious to me that if the local communities are going to demand large federal appropriations for protection, then automatically they must accept some kind of federal control over the flood plan. We have become accustomed in this country to harbor lines for the control of our harbor areas. Our acceptance of this has been in large measure, I believe, because of the federal benefits which have accompanied the regulation. As regards floods, we find a similar kind of development and control by the federal government, a combination of federal flood control appropriations and federal flood planning. Personally, I hope for a reaction against this sort of demand. Let the local communities face their own problems, let them do the planning and zoning for their own areas.

MR. ALFRED BETTMAN, Cincinnati, Ohio: Of course, it might be well for Washington to remember that what it does with the rivers within the section it may control affects what the community can do in the remaining sections. For instance, the navigation works, which the federal government has always had charge of, have been strong factors in the pollution of rivers. One can't say, "We'll tend to the navigation works as we please, you tend to the pollution." In other words, the federal government must recognize that whatever it does must be related to the work of the local communities. There is a point to be considered in the fact that the federal government can be independent of what the localities want. The psychological factor of "We will do what we please; you make the best of it," is a problem for the planners too.

MR. WAYNE D. HEYDECKER, Albany, New York: Apropos the point raised by Mr. Eliot you may be interested in the program of the New York Council with respect to the ultimate evacuation of the flood plains. I would like to read the program we have set up.

"One, it is suggested that the appropriate officer or governing body in each community so situated as to be subject to serious flood hazard determine insofar as possible, the area subject to flood damage and clearly inform the citizens of the community of the limits of such flood district.

"Two, that each river community, by action of its governing body, amend its zoning and building codes in such manner as to prevent the construction of new dwellings in the potential flood district, and to limit commercial and industrial structures in accordance with the hazard involved, in much the same manner as fire zones are now established. That

each municipality under the police power be authorized to require the gradual removal or modification of obstructions in stream channels and the removal of such hazardous structures as oil tanks which may break loose and add to the flood danger, the further danger of fire.

"Three, if it has not already done so, that the governing body of each river community create a planning board and appropriate sufficient funds for the preparation of a comprehensive city, village, or town plan, including a program for the development of suitable building sites on higher, safer land, with necessary public facilities such as streets, sewers, water mains and schools for the people now occupying land within the flood zone, to the end that as such facilities are provided there may be a gradual voluntary removal of persons and vulnerable properties out of the danger zone.

"Four, that the governing body of each such river community establish in some appropriate municipal office a committee or agency to cooperate with the residents of the flood zone and with the Federal Reconstruction Finance Corporation in financing the movement of individuals and industries from such flood districts to higher and safer land.

"Five, that such planning board also work out a plan and program for the ultimate public acquisition of the land in such designated flood district for water-front parks or other suitable public uses or alternatively to develop a plan by which such land may remain in private ownership for such uses as may not be incompatible with adequate flood protection.

"Six, such part of the cost of flood control works, such as retarding basins, regulating reservoirs, dikes, levees, walls, etc., as may be allocated to the local community should be borne primarily by the property protected by such improvements rather than by the community as a whole."

Our present procedure under the river regulating district law permits the apportionment of the cost upon the properties benefited, but in practice the assessments against a municipality are made a city or village charge and so fall upon the prudent home-owner, who has built upon the hill, as well as upon the owner of the property subject to damage.

In effect, we now subsidize the continued occupancy of the flood plain by charging the cost of protection against all the people, through general taxes.

There, Mr. Chairman, is a program which the New York Division of State Planning believes would substantially increase the protection over flood danger.

MR. DAVID N. HARSH, Memphis, Tennessee: Because I am a layman and do not know the technical angles to this subject, I do not wish to be construed as taking an antagonistic view to that of Mr. Eliot. But we do have a peculiar situation in Memphis which was brought about by a development of the federal government.

Memphis is situated on a bluff where neighboring people naturally come during a flood. The federal government has built its levees within a mile of the Tennesssee shores on the Arkansas side. Before the levees were built the river went for forty miles over to a ridge. Without the levees on the opposite side of the river Memphis was never affected by

the flood waters. In the last emergency, however, some sixty thousand people were handled by the relief agencies of Memphis. We think this is a federal problem, brought about by federal hands and one that should be taken care of by federal agencies. I think this is a point which should be considered in connection with Mr. Eliot's discussion.

MR. RAY E. BEHRENS, Milwaukee, Wisconsin: I wish to mention at this point that Milwaukee County is preparing to revise its zoning ordinance. At the present time the county is zoned for use only. The revised ordinance will be a comprehensive ordinance covering use, building site area, front, rear and side yards, density of occupation. In addition the revised ordinance will establish flood areas in the manner outlined in the Wisconsin enabling statute authorizing county zoning.

Quoting from this statute (Section 59.97, subsection 1): "The county board of any county may by ordinance . . . regulate, restrict, and determine the areas along natural water courses, channels, streams, and creeks in which trades and industries and the location of buildings for specified uses may be prohibited, and may adopt an official map which shall show thereon the natural water courses, channels, streams, and creeks, and the areas along such natural water courses, channels, streams, and creeks which may be restricted, outside the limits of incorporated villages and cities, as such county board may deem best suited to carry out the purposes of this section."

By incorporating the above provisions in the county zoning ordinance, we are planning to regulate building in the flood areas along our streams.

MR. H. W. ALEXANDER, Louisville, Kentucky: The city of Louisville has been developing its water-front for many years. At the present time 50 per cent of the water-front plans made some seven or eight years ago has been carried out. The city owns the wharves which operate at a profit. The excess earned above the cost of operation is used for the purchase of river-front property. It is our plan to convert eventually all the water-front to the park plan. We feel that if a flood control program is put into effect in Louisville it will not protect these low-lying areas and they will have to be evacuated. Some fifty thousand dollars have been raised by private subscription to purchase these lands. A great deal of difficulty was experienced because many of the houses destroyed in the recent flood represented homesteads and the aldermen hesitated to pass drastic legislation.

The third session of the Conference, Wednesday morning, June 2, was presided over by Miss Elisabeth M. Herlihy, chairman of the Massachusetts State Planning Board.

I Approach State Planning

Henry T. McIntosh
Chairman, Georgia State Planning Board

ANY consideration of state planning in Georgia necessarily must deal with planning that is to come. There has been considerable city planning in the state, some of it good. The East Georgia planning Council, WPA-staffed and with consultant direction furnished by the National Resources Committee, has made excellent progress in developing a regional program for seventeen coastal counties in Georgia and three in Florida.

But not until two months ago were efforts to secure legislation for state planning successful. Both Governor E. D. Rivers, who assumed office last January, and the legislature which convened at the same time, were in full sympathy with planning, and a bill creating a state planning board was promptly passed and approved. Seven members, of whom four are citizen appointees of the governor, constitute the board. It has $30,000 of state funds for the biennium beginning July 1, 1937, and its earlier needs have been liberally provided for by the governor out of his emergency fund.

So state planning in Georgia begins after disappointing but unavoidable delays. The penalty is loss of opportunity wherever planning might have helped government, agriculture and industry, and as a contributor to the well being of more than three million people. A measure of compensation is the opportunity to profit by the planning experience of states having more advanced programs.

Perhaps no state presents a more inviting field for planning than this rather old Southern commonwealth. While it must deal with some problems which are common to all our southern states, certain of its own are unique, needing to be approached with the realization that no proved formula for solving them is available.

It is a foolish optimism that imagines planning can solve all of any state's problems but it is a no less foolish pessimism which would deny that planning offers the most hopeful approach to programs calling for radical but necessary changes in an established order.

Georgia is an agricultural state, but its agriculture is changing. It must change even more. An intimation of the nature and meaning of the transition is found in the fact that in 1936 the value of livestock raised and marketed in Georgia exceeded the value of the state's crop of lint cotton. That had never happened before in a state whose cotton was for long years its principal money crop.

It follows naturally that a state plan for Georgia must in a certain sense be pivoted on agriculture. Industrial development will be surest of success where it seeks to make use of products of the soil.

One of the Georgia planning board's first undertakings is a new survey of the state's pine tree resources. As never before, the planned production of certain species of pine which grow rapidly in the South Atlantic and Gulf states is seen as an important branch of agriculture. Georgia can grow, in eight to twelve years, slash pines large enough for pulp mills, and Dr. Charles H. Harty, who is one of the civilian members of the Georgia board, has conclusively demonstrated that both craft and newsprint papers, as well as rayon, can be manufactured from southern pine at a new per-ton low cost. Several large paper mills using pine exclusively have been built and are operating in the South. Others are building or projected, and the number undoubtedly will rapidly increase.

State and federal agencies have fairly complete data on existing pine tree resources, but the study proposed will include acreage available for the growing of pines which is not suited to other agricultural uses; the potential production of given areas under varying conditions; such related factors as power, water supply and water analysis; labor, transportation, health conditions, markets, the location of limestone deposits, and perhaps a good deal more. The study will include also lumber and naval stores requirements, and when it is completed there will be available a wealth of information having to do with an industry certain to expand rapidly during the next few years. No such complete information is now available.

This group might not be interested in several other studies to be undertaken as initial projects, but it is in order, perhaps, to say that Georgia seems to offer unusual opportunities as a field for the practical application of the principles of planning. There are many poor people in Georgia, and they cannot improve their condition unless they have help. In the rural communities, particularly, the problem of assisting them to better living conditions presents many difficulties and discouragements. It would be risking a good deal to promise that the state planning board, even with the cordial support of the state administration and the generous cooperation of private as well as public agencies, will be able to succeed where others with the best of intentions have failed. But I muster the courage to say that we shall do our best, and that we have hopes. And, of course, fears, for it perhaps is true that the best planning board is the one that is going to do things, but has not done them yet. It is like the general staff of an army, or the board of strategy of a navy—its plans are perfect and defeat is impossible. Yet history's verdicts are made up after and not before battles are fought.

The Georgia planning board has been most fortunate in having, through the interest of the National Resources Committee and the friendly cooperation of the Tenessee Valley Authority, the expert guidance of Mr. Earle S. Draper, Mr. Tracy B. Augur and Mr. Raymond Leonard in launching the Georgia planning ship and charting its early explorations. I might paraphrase the great Scotch poet to say:

O, wad some power the giftie gi'e us,
To keep these master planners wi' us
It might fra' many a blunder free us,
And foolish notion.

We may not keep them, but we shall keep trying. I am sure you'll wish us well.

The Fallacies of State Planning

P. S. Lovejoy
Michigan State Department of Conservation

(The following letter was written to Walter H. Blucher, director of the Conference, in response to an invitation to appear on the program, and was read before the session on state planning. Considerable sentiment was expressed at the Conference for the inclusion of Mr. Lovejoy's letter in the proceedings.)

Dear Blucher:

Yourn to hand but till today I wa'nt in shape to give you an answer. No can do.

There's certainly a nice chance in it—for someone; but I'm not IT. Matter of fact I doubt anyone might properly talk on "State Planning Fallacies" until he had witnessed some bigod cap-P Planning—& I don't think I have . . . Prelim getting ready to "Plan": Yes; but per se "Planning": No. (Except perhaps in relatively minor phases & items, as roads, game refuges, state-forest extensions, etc.; & even so, each little branch going it pretty much solo.) Cause why I dunno for sure. Too many variables to juggle . . . lack of enough on-the-job practice . . . but I doubt them are "fallacies" (except as some of the Brethren get real serious & actually expect sumpin to come off as per The Dope).

Right in there, like enough, there is a fallacy—i.e., expecting the budded Plan to unfold as the rose at noon. Not yet or soon, as I callate; & the why of that (as per y v t) will be because Homos just can't &/or won't proceed in straight or "reasonable" lines if they can somehow go it a la water-bug & get there by indirections pleasantly non-rational, & with plenty sumpin-fer-nuthin around fer bait. Until planners apprehend some of that, & get its essence incorporated into their "planning" processes & time schedules, I figger that state (& other) planning is due to continue as I've seemed to note to date;—mostly mebby-ought & palaver ad lib.

But I got no license to stand in front of a mess of bigod professional planners & speak up lika thet—so you gotta 'scuse me out for this time.

Y v t,

P. S. Lovejoy

5/11/37 Ann Arbor, Michigan

Is Social and Economic Planning Over-Emphasized in State Planning Programs?

Russell Van Nest Black

President, American City Planning Institute

THE category specialists are at work again, as evidenced by this morning's program. This time they apparently hope to foment a debate as to how many grams of "social and economic" planning added to how many grams of "physical" planning are needed to produce well-balanced state planning program. I cannot, however, much blame the program makers because I too have heard and have been not a little puzzled by the shouting and the dead cats that have been flying back and forth over the imaginary wall between these two supposedly distinct approaches to planning.

Presumably there are some grounds for mutual concern by the specialists in these two aspects of planning but, as is the case with so many heated controversies, I suspect that the root difficulty springs from a lack of a commonly understood language and a lack of mutually accepted definitions. For purposes of this discussion, therefore, I shall start with definitions:

Physical planning is that aspect of planning directed toward the shaping of man's environment and the utilization of natural resources to accomplish a maximum of social, economic, and physical well being over an indefinite future period of time.

Social and economic planning is that aspect of planning concerned with directing man's individual and collective social and governmental pursuits toward a maximum of social, economic, and spiritual well being over an indefinite future period of time.

Such differences as exist are those of raw materials, tools, and methods rather than those of objectives. Good physical planning must proceed, within social and economic limitations, to achieve a socially desirable and an economically feasible purpose. Good social and economic planning must proceed within physical limitations to assure to mankind the maximum of good living and the maximum of security permissible under the limitations of man's intellect and his natural resources. Physical planning finds ultimate expression in material things like houses, roads, and parks. Social and economic planning hastens the realization of such things and increases man's enjoyment of them and his security in them, when they come.

If these contentions are approximately correct, it becomes obvious

that social and economic planning and physical planning are corollary undertakings neither of which may come to full fruition without the simultaneous pursuit of both. This does not mean, however, that progress with these two aspects of planning must be uniform nor that one may not make material progress while the other lags. Neither does this mean that both must be initiated and conducted by the same agency whether that agency be a state or a national planning board. It does mean that each avenue of approach must be followed with full knowledge of the limitations, the current status, and the future prospects of the other.

Quite separate from all questions as to whether or not social and economic planning and physical planning are parts of the same thing and properly to be handled by a single planning agency, is the question of which layer of government is in the best position to perform the various planning functions. To my mind, most of the basic social and economic problems of this country are national in their scope and can be successfully met only by national determination and national action. These problems include those of the stabilization of a national and world economy, the keying of production with consumption, the safeguarding of human resources against exploitation, an equitable distribution of income and of wealth, establishment of a broad social security, improvement of the processes of government, and raising the cultural and spiritual level of the people. As important as progress in these directions is to the ultimate in state planning accomplishment, it does not appear that the individual states, through planning boards or otherwise, can do much individually toward the advancement of that progress. For we are one nation and not forty-eight peoples. State lines are no barriers to social and economic distress nor are they walls behind which individual states may dwell in isolated security. Effectuating nationally-determined plans and policies with respect to these problems, however, may be in considerable part a function of the states. Initiation of state participation in such matters may fall to the lot of state planning boards but, in most instances, it is probable that some other state agency can do the job as well and perhaps more appropriately.

Progress in the solution of such social and economic problems measures the progress of civilization. It represents the background against which are placed our plans for the control and improvement of environment and of services. To its ever-changing form our physical plans must be continuously adjusted. This background affects not so much the shape of physical plans as the speed and completeness with which certain elements of physical plans may be carried out. For the actual physical needs of the human animal do not much vary with his capacity to satisfy these needs in any given period of time. Furthermore, it is not illogical to regard this background of social and economic trends and achievement as a corollary to and as an implement of physical planning rather than as an integral part of the physical planning process. Knowledge and understanding of these things the physical planner must have, but it is neither necessary nor quite to be expected that he produce them for himself by his own efforts. (With the physical planner I include his collective self,

the state or national planning board.) Man may have been created in the image of God but standard equipment, certainly, is something less than godlike.

In other words, broad social and economic planning is highly important to physical planning accomplishment but is not necessarily a part of the physical planning process. It is probably to be approached on a national rather than upon a state basis. And coupling the social and economic planning job with that of proper physical planning, in the same planning program, would seem to be almost too much for a single body of men whether comprising a state or a national planning board. Let the two operations go hand in hand. Make Siamese twins of them if you must. But give them something of separate minds and bodies.

Now I come to a rather fine distinction but one which I believe to be important. All physical planning, whether for a city, a state, or the nation necessarily involves many social and economic considerations related to but distinct from operative economic and social planning as I have chosen to define this aspect of planning. Population characteristics and trends, trends in industrial types and locations, occupational trends, shelter and service deficiencies, public financial capacity to provide needed services, effectiveness, and efficiency of governmental agencies responsible for carrying out the plan, and the income and tax-producing powers of localities are among the multitude of such considerations the careful study of which must be included in any well-rounded state planning program. Indeed, the broader base of departure represented by the inclusion of such factors in planning for the future development of a state is one of the state planning's principal contributions to the processes of state government. You may choose to call this also social and economic planning. To me it is physical planning with social and economic validity. I will not quarrel about terms so long as we understand each other.

I think, perhaps, I have now confused the issue sufficiently to proceed with some safety to discuss the question assigned to me: "Are State Planning Programs Over-emphasizing Social and Economic Planning?" Frankly, I do not know and will not venture a guess. I would as soon estimate the speed and the endurance powers of a hobbled horse. If there is a state planning board in the country that is proceeding with full freedom of action in a completely self-determined direction, then that board and its work have not yet come under my observation. Until such free-agent boards enter the field any effort to appraise the established direction and content of state planning is likely to be both unsuccessful and unfair.

The first prerequisites to straightforward state planning are: experienced and especially qualified personnel, generously adequate funds without strings attached, and a sense of security of position in the family of state agencies. So far as I know, all state planning boards have lacked and are still lacking one or more of these prerequisites in greater or lesser degree. Some state boards are suffering the additional handicap of insufficient basic information both factual and physical. Some are impov-

erished in important records. Others lack things as topographic maps, soil surveys, and air maps.

It has been necessary therefore for the individual state planning boards, in varying degree, to shape their work programs not in accordance with any preconceived idea of what a proper state planning program should be but making the best use of the tools and the materials at hand. Programs have been further distorted by a consciousness of need to establish state planning, with the public and with state officials, as a useful and as a harmless operation. Valuable time and energy have gone to usually futile effort to win legislatures over to making appropriations proportionate to the size of the state planning job.

The form and intensity taken by these more or less unavoidable indirections have been determined presumably by the best judgment of the individual state planning boards and their technical advisers. And judgment is a variable quality especially when applied without benefit of a well-tried body of reference.

From a distance it is impossible to distinguish between state planning board undertakings forced by expediency and work regarded by the board concerned as being a correctly evaluated part of a well-balanced state planning program. Much more than the reading of published programs and reports is necessary to an adequate appraisal of actual progress and of the actual concept of the state planning job in any state.

Superficially, and at least partly for the reasons already given, most, if not all, of the state planning programs appear to be more or less out of balance, but not especially by reason of leaning too heavily either in the direction of social and economic planning or in that of physical planning. They are out of balance rather by reason of the intrusion of a great miscellany of activities and the over-inflation of individual program items. None of this is or should be surprising.

The underlying situation is one of sudden awareness of a broadly extended horizon of human problems demanding public recognition and solution. Organized state government was caught napping. There was no existing machinery for the handling of many of these problems. In the absence of a clear definition of the nature of state planning and in the absence of any preconceived notion as to the proper function of state planning boards, these boards perhaps naturally became the catch-all for all that miscellany of jobs, important and otherwise, for which there was no pre-established pigeon hole. This procedure had the saving grace of avoiding the multiplication of state commissions. But it does not follow that all things taken under the wings of state planning boards are state planning or that many of these things cannot better be done by other agencies, existing or yet to be created.

This packing of the portfolio of state planning can scarcely be laid entirely at the door of older state agencies. In most instances, it is probable that the boards and their advisers are themselves responsible. Not knowing exactly what was or should be expected of them, planning boards came nobly to the front to tackle any and every obviously worthy job that appeared to be neglected. After all, the forty-six state planning

boards had a most unusual birth. Most governmental agencies in the individual states have sprung from some fairly clear preconception of need and function. But many state planning boards came amazingly into being out of thin air, with their first task finding out what they could do without too much nuisance to justify their existence. I recall the reported experience of one such board. After recovering from its first bewilderment over the fact of its appointment, this board began casting about for its proper job. Unfortunate board! It found parks, highways, and institutions being planned by existing state departments. Other state agencies were directing public utilities, advising political subdivisions, and leading the farmers into paths of individual and collective salvation. But nowhere in this state government was there a central information service. This the planning board was quite free to undertake and did. This particular board has since found much additional outlet for its energies. I mention its early experience only to illustrate how many state planning boards in this early stage of finding their places in state government have been like the student body of a new college, whose first collective act was the appointment of a "committee to frame a body of traditions."

Maintenance of good balance in a large-scale planning program is difficult under the best of circumstances. The course of large-scale planning is beset by many temptations and attractive bypaths. Particularly is this true of state and national planning, both offering great virginal fields delightfully unexplored. Planning's human and financial resources never have been and never will be sufficient to permit exhaustion of all or any possibilities of study and research. The most difficult first and continuous task of a planning agency is that of determining upon a breadth and scale of operation consistent with ultimate objectives. Variation in the personal interests, in the special experience, and in the work habits of those who make the decisions as to programs is inevitably a large factor in what items are included and in the relative weight and detailed study given to them. Here lies the most serious source of unbalance. Resulting distortion may and does extend in almost every direction. Sometimes it takes the form of disproportionately detailed study of one or more problems, sometimes of the introduction of undertakings of questionable validity. In other cases it may be disproportionate expenditure of effort upon the winning of official and public recognition, or overemphasis upon speed in material evidences of accomplishment.

Perhaps I can make my point clearer by comparison of the state planning process with established mapping procedures. Scale and detailed accuracy of maps are made proportionate to the purposes for which the maps are intended. Specifications range from those of reconnaissance surveys showing major physical features in approximate relation with one another to the precision of surveys needed for the placement of intensive urban development, for the projection of a tunnel, or for the construction of a bridge. The reconnaissance survey omits no essential items but neither does it include micrometer measurements to be plotted on four-miles-to-the-inch maps.

State planning has its beginnings in what amounts to a reconnaissance survey that includes all major considerations having bearing upon the use and development possibilities and probabilities of the state. State planning activities are deepened as objectives become more clearly defined and as resources become more adequate. The important and difficult thing is to advance this deepening process upon an even front. Disproportionately deep forays into special fields, whether they be those of social welfare, public finance, industry, agriculture, recreation, or highways, throw programs out of line, usually involve serious omissions, warp current determinations, and mislead both officials and the general public as to the true function and values of state planning. It is inevitable that some studies be more advanced than others at any given time but checks and balances should be in constant play to bring all of them out on the same or a comparable plane at the conclusion of the preliminary program.

I do not mean to imply that there can be or should be a standard state planning program for uniform application in all states. Basic problems, working tools, and political expediencies, differ widely and these are the chief determinants of the nature and the timing of state planning activities in the individual states. I do urge that the time has come or must be near at hand when we should break out of the experimental stage of state planning into better balanced programs and into more direct action. Not much longer can we take shelter under the alibi that no one really knows what state planning should be and do, that there are no blazed trails, and no controlling criteria. Three years is a long enough time for determining at least what we should be doing.

To the last, I maintain my resolution to venture no opinion as to whether or not state planning in general shows evidence of placing too much stress upon social and economic considerations. Neither am I inclined to predict future direction of this process. State planning is still something of a sitting toad: no one can say by looking at it how far and in what direction it will jump. Or, better, perhaps, state planning is still in pre-adolescence wth its potentialities for wisdom and foolishness still undisclosed.

Has Physical Planning Been Over-Emphasized?

Warren Jay Vinton

Chief of Research, Division of Suburban Resettlement, Resettlement Administration

WHEN I first saw the juxtaposition of the opposing titles assigned Mr. Russell Black and myself on today's program I knew that your program committee, with a laudable desire to stir up argument, was hoping to set the two of us at each other's throats.

But in thus trying to foment trouble the committee reckoned without one, at least, of its prospective antagonists, for there is no planner whom I hold in greater esteem than Russell Black. I first met Mr. Black nearly two years ago when seeking a site for suburban resettlement in New Jersey, and at once discovered in him a keen appreciation of economic

and social values, an appreciation not always found in planners nurtured in the school of landscape design. My esteem for Mr. Black was naturally heightened when we found ourselves in complete agreement as to the site we finally recommended for Resettlement's ill-fated Bound Brook Project.

My esteem for him was further enhanced last night when I had the opportunity of reading the paper which he has just delivered to this Conference. It will, I hope, be a real disappointment to your committee to learn that I find myself in substantial agreement with almost all that Mr. Black has said.

I agree with the distinction which he has drawn between social and economic validity in physical planning, and social and economic planning itself. I also agree that social and economic planning is primarily a national matter, though Mr. Black writes a pretty big order for the federal government when he sets down as its first planning objective the stabilization, not only of the national economy, but also of the world economy. And he shows a more touching faith in Washington than I have acquired when he expects it to undertake, almost single-handed, the "improvement of the processes of government, and the raising of the cultural and spiritual level of the people."

I further agree with what Mr. Black has just said about the advisability of assigning economic and social planning, if any, to bodies distinct from those concerned with physical planning.

Now I had anticipated this agreement with Mr. Black, and foresaw the need of some other catalyst to precipate my random thoughts on physical versus social and economic planning. So before leaving Washington I looked through my file of pronouncements on planning and I found exactly what I needed — a document covered from beginning to end with red pencil underlinings and notes — the paper which Mr. Charles Eliot, 2nd delivered before last year's Conference at Richmond. In taking as my text some passages from Mr. Eliot's address on "The Growing Scope of Planning" I do not intend to imply that I hold him in any less esteem than Mr. Black, but merely that I found this particular speech of his especially provocative — indeed, in spots, provoking.

This paper of Mr. Eliot's well repays study, not only for what it says, but even more for its implications and for what it leaves unsaid. As the jumping-off place for a discussion of physical versus social and economic planning, it has the great merit of having been prepared by a man with very large experience in the practical administration of planning, a man who has developed a pretty shrewd sense of just how much we can get the nation to take in the matter of planning and of how far and in what fields we can make planning function.

When I say fields in which "we can make planning function," I do not mean "We, the National Resources Committee," nor "We, the Planners," but "We, the People;" for I, with Mr. Eliot, believe in the democratic process, and am convinced that planning is an essential part and function of that process. And I second the enthusiastic belief which Mr. Eliot expressed yesterday in the ability of a democracy to utilize intelligence in planning.

One advantage of considering planning as a function of "We, the People," is that when so considered it becomes a large, unified, and understandable whole. A planned activity really embraces five steps:

1. The study and understanding of a problem—commonly called research.
2. The creative conception of alternative solutions—a function unnamed, I presume, because it is so rare.
3. The choosing between alternatives—among these, of course, being the frequent choice of doing nothing. This function of choosing is generally known as policy-making.
4. Planning the detailed execution of the chosen alternative—known in physical planning as lay-out or design.
5. The execution and carrying out in practice of the chosen solution.

When we consider the agencies available for carrying out planned activities we find that these five steps are so different in character that it is generally impossible to entrust them all to the same body. Planning boards such as the National Resources Committee and the state planning boards should, in Mr. Eliot's conception, generally limit themselves to the first two steps. The third step of policy-making may, in specific and limited fields such as the choice of park sites or the location of roads, be delegated to planning boards, though most often policy-making is reserved to the elected representatives of the people or to the executive. Lay-out and design may be entrusted either to planning bodies, or more generally to agencies concerned with the specific activitity in question, such as park commissions, road boards, or housing authorities. Execution is almost always entrusted to agencies other than planning boards, but even this should be watched and guided by planning agencies.

When we realize that it is appropriate to parcel out these various functions to different agencies we can better understand Mr. Eliot's statement last year to the effect that "personally, I think it is due to constant talk about execution of plans and controls that we have now to face the bugaboo of 'economic planning' and 'regimentation.'" When these words fell from Mr. Eliot's lips at Richmond I feared that he was attempting to put a taboo on all efforts to carry the planning process to its final state of execution; that he was advocating planning for its own sweet sake, a sort of art for art's sake. But I now see that he was referring only to the activities of certain of the agencies which take part in planned activities; and that for the National Resources Committee in particular he was suggesting a limitation of function very suitable and sensible for an agency operating in the presence of a jealous Congress and a zealous cabinet officer. I am convinced that Mr. Eliot was not advocating "planning in a vacuum"—which he, I, and Nature all properly abhor.

Let us now move on to a consideration of the various fields in which planning is proposed, as distinct from the agencies concerned in the process. Let us see to what stages we can carry planned activities in these various areas.

Mr. Eliot admits that we cannot go as far in some directions as in others. In his Richmond speech he alluded to the different fields in which

planning is proposed. As to physical planning he seconded the President's belief "that through the physical approach where people can see and feel the results from well considered planning policies, we are most likely to gain public support and understanding for future planning in government." In other words, Mr. Eliot contemplated that physical planning would be carried through to the fifth and final stage of results.

When he came to economic planning, however, Mr. Eliot limited himself to suggesting that "it is reasonable for us to ask intelligent questions as to what it is all about and as to how these things fit together." Here he was advocating the first step of research, combined with a tentative advance toward the second step of formulating alternative solutions.

But when he came to industry, the field in which capitalism most typically exercises its control of our economic life, Mr. Eliot was still more cautious. He did not suggest even the asking of questions, but merely suggested that "perhaps through the development of new techniques for measuring those capacities of production, distribution, and consumption, we will find new tools for other kinds of planning work." [1]

In passing from physical planning to economic planning and finally to industrial planning, Mr. Eliot moved ever more cautiously. Why do we all tacitly agree with Mr. Eliot that in physical planning we can go forward to the fifth stage of tangible results, while at the same time doubting the advisability of any aggressive attempts at positive planning in economic and social fields?

When we look over the sum total of activities which make up our modern economy we find that some of them, in which the social interest is uppermost, are carried on by governments and their agencies. The great majority of our activities, however, are still entrusted to private initiative, with only that minimum of governmental control which is necessary to prevent gross abuses. Between these two areas lies an intermediate zone where private initiative still operates (though somewhat imperfectly), but where the interests of society are so dominant that there is a large measure of public regulation and restriction.

The wide field of operation reserved to private initiative, the business world of today, is run and regulated by price. Price, moving up and down, regulates the quantity of goods and services which we may buy and consume. Price, moving differentially, regulates our choice between alternative commodities and services. These changing demands, motivated by changes in price, directly govern what is produced and how much is produced. And the varying prices paid for labor govern, in the long run, the choice of our occupations, and plan the economic lives of those of us who work for a living.

Theoretically, the price system even plans land use. The best use for any parcel of land is supposedly that use which yields the best return, and is therefore its most profitable use. And since economic man continually

[1] I note in Mr. Eliot's paper a further reference to "our sentimental resources." But since even the most ardent planner will, I am sure, boggle at having his love life regimented by the National Resources Committee, we may dismiss this reference as playful and immaterial.

searches profit, every land-owner will devote his land to the best use; or if he is dull and thriftless some other man seeing the most advantageous use, will buy the land and turn it to that use. Thus, presumably, every piece of land will eventually be put to its best use, and ideal and perfect cities should automatically result—only, of course, they don't.

The price system, in the fields where it works, governs supply and demand—dictating production, rationing consumption, directing the flow of labor, and regulating the use of land. This automatic control in a price economy is aptly described in the classic formula, *Laissez faire et laissez aller, le monde va de lui-même* (Let things be, the world goes of itself). In other words, the price system, where it is in full-fledged operation, automatically does our planning for us, and no professional planners are needed.

Economists would have us believe that in some past golden age the world did run smoothly on, its affairs happily responsive to *laissez faire*, and its economic life automatically planned and regulated by the price system. Private enterprise in earlier epochs did carry on most of the activities now socialized under government operation. But as civilization has advanced, one activity after another has been removed from the field of private initiative. As life becomes more complex, a greater integration of activities is found necessary, and social control tends to supplant price control.

The sphere of public initiative where social control is predominant is the only field in which planned activities can go forward to their fifth stage of tangible results. This is a continually expanding area. Roads, bridges, harbors, parks, sewers, and water systems are publicly operated. National defense has been socialized for some centuries and education for a century; while government has more recently moved into the fields of public health and social insurance. All these functions have been abstracted from the price system of private initiative because their provision by the community as a whole is more efficient and better meets our social needs.

Other activities now within the sphere of public initiative have been relinquished by private initiative because their operation no longer yields a profit. It is surprising to note how quickly unprofitable enterprises are discovered to be an appropriate field for government ownership. When canals ceased to be profitable a few generations ago they were speedily transferred to government control; more recently the trolley systems of our great cities have been passing into public ownership. The vast areas of land which have been despoiled by reckless exploitation—the cutover ranges, eroded bad-lands, dust-bowl farms, and abandoned mining areas—have been found during the depression to be very proper objects for government acquisition.

Still more recently it has been discovered that housing for the lower income groups is an appropriate field for public initiative. Private enterprise has finally admitted that no profit can be made in the housing of slum dwellers and other low-income groups—if they are decently housed. It is due to this belated recognition that public housing is now an issue of

the day, and that the Wagner-Steagall housing bill is likely of passage at this session of the Congress.

All these areas of operation—roads, harbors, parks, utilities, urban transportation, problem lands, and finally public housing—are no longer subject to the price system of private enterprise. And since they are not controlled and planned automatically by price they are appropriate and suitable fields for planning in the community interest.

It is exactly in these fields that our present day planning has its stronghold. In them we can do positive planning, planning that goes on to its completion in execution. These are the fields in which "We, the People," are content that "We, the People," should plan, own, and administer our own resources. This sphere of positive planning is also, for reasons presently to be examined, the principal field of physical planning.

Between this sphere and that of untrammeled private initiative where the price system reigns supreme, there lies an intermediate zone. In this intermediate zone operation is still entrusted to private initiative but the public interest is so dominant that large measures of social control are admitted. In this intermediate sphere the price system is disintegrating, and no longer functions with its pristine, untrammeled license. Operation is increasingly subject to governmental regulation and restriction, and public ownership tends to increase.

Our railroads fall in this intermediate zone; and the fiction of private ownership is preserved to our merchant marine only by a complicated and extensive system of government loans and subsidies. Our privately owned public utilities — electricity, gas, telephones, telegraphs, and radio—are subject to futile but ever more necessary regulation and restriction. The evil plight of our cities is forcing us to more stringent controls of urban lands and structures through the negative planning measures of zoning and building restriction. Even agriculture shows some signs of moving into this intermediate zone. The Agricultural Adjustment Act, the Soil Conservation and Domestic Allotment Act, the Ever-normal Granary, and the Farm Tenancy Act are scarcely devices of classic *laissez faire.*

This intermediate sphere expands and contracts. In prosperous times when the going is good the price system enlarges its pretensions; but when the going is bad it draws in its horns and planned control expands. Railroad rates have long been regulated, but during the depression it seemed that at length they were headed away from the price system of private initiative and into the planned control of public ownership. Mr. Joseph Eastman was making substantial progress until returning prosperity put an effective end to railroad coordination and positive planning in this sphere. During the depression, when urban real estate was in the doldrums, the gospel of zoning and neighborhood control found easy converts; but the present modest upturn in building activity has already turned our subdividers and speculative builders back to their old unregenerate practices.

In this intermediate sphere where the price system still has a foothold, we cannot look for positive planning carried through to the fifth stage of

execution and results. We must content ourselves with negative planning and exercise all possible controls such as price regulation, zoning, and building restrictions. Mr. Eliot in his Richmond paper cried out that "emphasis on controls is negative when what we want and need are positive actions." But he should have remembered that we cannot have positive action in fields where we have private ownership, and that in these fields we must be content for the time being to make social control as effective as possible.

When we come to the sphere reserved to private initiative, the great business world of today, we come to an area where we can do little or no effective planning. *Laissez faire* and the price system are still in effective control of commerce, industry, finance and credit. Here capitalism has its stronghold, and here it exercises its real control of our modern economy. Here Big Ownership brooks no effective interference with its power.

Mr. Eliot realizes this, for he displayed an excessive caution when he approached the subjects of economic and industrial planning. The *Wall Street Journal* realizes this, for in commending the National Resources Committee for minding its own business, it also warned against any encroachment on the preserves of capitalism: "Economic Planning has become a catch phrase signifying an effort to control production, prices, wages, credit, and a host of other things in accordance with the dictates of federal bureaucrats. . . . The type of planning advocated by the National Resources Committee in its latest report is of an entirely different nature." In other spheres planners may function, but not in the fields pre-empted by Big Ownership. Here economic planning is estopped by economic privilege, social planning by social prejudice.

All that Government can do in this sphere is to set the rules of the game and legislate against grave abuses. The laws which govern incorporation, erect tariffs, and set up banking systems, though economic in nature, only set rules under which capitalism operates with a free hand. And governmental regulation is, in this sphere, strictly limited to legislation such as the Securities Exchange Act, the National Labor Relations Act, and minimum wage and hour acts designed to prevent the gross abuse of power.

Any planning which we attempt in this field is limited to the first stage of research, with perhaps a tentative advance into the second stage of formulating alternative choices. In other words, planning is here reduced to wishful thinking, or at most to respectful advice and counsel. In this field professional planners stick out their necks at their peril.

We have seen that in the field of public initiative we can do effective positive planning, that in the intermediate zone we are limited to negative planning, while in the sphere of private initiative we cannot effectively plan at all. In the first sphere, where we can effectively plan, our planning is primarily physical; in the second sphere, planning has both physical and economic elements; while in the third sphere, if we could plan, our planning would be primarily economic and social.

This is no coincidence. For land, with which physical planning primarily deals, is no longer the instrument through which capitalism

controls our economic life. Its control is exercised through the intangible ownership of stocks and bonds, and especially through the control of finance and credit. Big fortunes are no longer based on the ownership of land. The control of our economy lies elsewhere, and the planning of our physical resources no longer constitutes a vital threat to Big Ownership. It is, therefore, with physical planning that planners are presently forced to content themselves.

And so, at length, we come to the subject of this paper: "Has Physical Planning Been Over-emphasized?" Certainly not. Physical planning is the tool appropriate to the sphere of public initiative, the only sphere where we can do positive planning and carry out our plans to fruition. We need more and better physical planning, and wiser and more effective execution of our plans. But this physical planning must have, as Mr. Black has pointed out, economic and social validity. Physical planners must have associates trained in political economy and sociology, or themselves have an equivalent background.

In the spheres that are primarily social and economic any attempts at positive planning under present conditions are little better than "planning in a vacuum," for we lack the power and sanctions necessary for the execution of our plans. But even here we can usefully carry out research and offer advice. We should try to see that the economic policies of government (which, of course, are not positive planning) are well advised and consistent.

I can imagine nothing more useful to the nation than an economic general staff, a group of trained thinkers and critics competent to give economic and social advice to the administration. Much of the legislation of the past five years has been inconsistent and has run at cross purposes. Competent advice could have been helpful in avoiding these inconsistencies. Such an economic general staff, however, should never attempt the making of positive plans, nor delude itself with the hope that economic planning can be carried to any such positive results as are possible to physical planners. For this reason such a group should never embark on administration, but sedulously keep behind the scenes, content to advise and counsel with a pure "passion for anonymity."

And so I end with a plea for more physical planning imbued with social and economic validity; and with a warning that economic and social planning must content itself with seeing that our legislative rules of the game make economic sense.

DISCUSSION

Miss Elizabeth M. Herlihy, Boston, Massachusetts, presiding: There is certainly a lot to think about in Mr. Vinton's paper. As I understand him, social planning is stopped by one thing, economic planning by another, and physical planning doesn't exist. I am reminded of a speech Joseph Woodruff made the other night in Boston. He enlarged with feeling upon the execution of city planning when they carried out the poor old plan.

Now, let us have some discussion on "The Critique of State Planning."

MR. ELLERY FOSTER, Washington, D. C.: You may be interested in a little background for the pine tree situation and the coastal pulp mills of which Mr. McIntosh spoke.

These mills, which draw timber from an area of about fifty miles, are planning in the near future to go in and blanket the region. Pulp mills take trees down to about three or four inches and practically strip the country. The Forest Service, in trying to do something about this situation, went to the scene of the economic power described by Mr. Vinton and on the lower end of Manhattan Island found the men who are building these pulp mills. We wanted to find out what they knew about the pine tree situation as compared to the pulp mill situation. They knew lots about pulp mills: they could liquidate one in ten years. But they gave no thought to the pine tree angle. That prompted an educational program through the press which dramatized the situation. The South got smart and has decided to insist that all the people from whom it buys pulp meet certain requirements and leave certain small trees growing. The pulp mills will take all the trees and leave nothing for the sawmills of which there are 8,000 in the South. The pulp mill industry is going to preserve itself, apparently; but whether or not we can preserve the sawmills at the same time, we don't know. The state mining boards and the Forest Service are both interested in the problem. It is too early to say, however, whether regulation, if we can get it, will be state or federal.

The evening banquet session, Wednesday, June 2, was presided over by Harvey Campbell, secretary of the Detroit Chamber of Commerce.

Detroit Plans Its Future

Judson Bradway
Former President, Detroit City Plan Commission

CITY planning might be defined as the science and art of analyzing and foreseeing the future needs of a community and preparing a set of plans and specifications to be followed by the builders of the city, unless they find better materials and better methods of construction. The plans and specifications must be broad, taking into consideration all phases of the city's life, physical, social, spiritual, industrial, commercial and civic. They must be designed to make not only a city which its citizens will love and in which they may enjoy life, but one in which they may find work and prosperity.

In most of our large cities, planning has involved another necessary and almost equally important function—that of correcting the mistakes of the past.

The first serious thought of city planning came in Detroit in 1909, when a city plan and improvement commission was appointed. It was only advisory and had no authority, but did succeed in stirring up sufficient interest in city planning during the following years to induce the city council to make the necessary appropriation to have Frederick Law Olmsted and later Edward H. Bennett make plans for remodeling the city and for its future. These plans, however, had to do principally with civic centers, parks, etc., and were never given any official recognition.

In 1918 a new city charter was adopted providing for an official city plan commission of nine members, seven to be appointed from seven professions and lines of business, and two at large. The commission began work in 1919 and can show a record of accomplishment which I believe is second to none.

Our population had grown from 265,000 in 1900 to 900,000 in 1919 with a total area of seventy-nine square miles. Detroit was laid out originally in old French claims which were narrow strips of varying width running back at right angles to the river in a northwesterly direction about two and one-half miles. Back of these French claims there was later laid out a tract of 10,000 acres with lines running also in a northwesterly and southwesterly direction. Beyond and on either side of the French

claims and of this 10,000 acre tract was the regular mile-square section development of the counties, the lines of which ran due north and south.

Almost without direction seventy-nine square miles of these irregularly shaped parcels had been made part of the city and mostly subdivided by 1919 when the new city plan commission came into being. The subdividers of each French claim and of the properties on the border lines of the French claims—the 10,000-acre tract and the sections—had subdivided their property to what appeared to be their greatest financial advantage, quite regardless of adjoining properties. This resulted in hundreds of dead-end streets, in streets and avenues with widths all out of proportion to their importance as highways, in many important highways, having jogs of fifty to two hundred feet for distances of a few blocks where some owner of a French claim had not complied with the street layout on either side. There were several streets with lots facing upon them on one side and backing up to them on the other.

Beside these errors, which should have been corrected before they occurred, there were hundreds of places where the growth and development of the city had made openings and widenings absolutely necessary. From 1919 to date the Detroit City Plan Commission has recommended 383 street openings or widenings in pursuance of a general plan, and to carry them out the city and county have expended in this time approximately $60,000,000; almost unbelievable results have been accomplished.

One of the first things the plan commission did in 1919 was to develop a very comprehensive thoroughfare plan for the Detroit metropolitan area; it was in rather complete form by 1922. Then a commission was appointed by the mayor to study the possibilities and advisability of a rapid transit system for the city. This commission, composed of well-known engineers, working with the city plan commission, developed what became known as the Detroit Metropolitan Area Master Plan of Highways. This plan calls for superhighways 204 feet wide with space in the center for rapid transit trains. These superhighways were laid out for all of the five great diagonal highways leading into the city and at intervals of three miles in the other parts of the area. Between the superhighways on the section lines at one mile intervals are 120-foot highways. The 204-foot superhighways were to come into the city as far as economically practical and then drop down to 120-foot highways for the rest of the distance to the downtown area.

A regional plan committee was created made up of city department heads of all municipal units within a fifteen-mile circle and of the road commissioners of the counties. This committee approved the master plan and in April, 1925, the city of Detroit and all of the municipal units adjoining adopted the plan and they all proceeded to pass ordinances enforcing subdividers of land adjoining the highways to make dedications in accordance with the master plan. Our legislature in 1925 passed an act whereby two or more counties could join in securing the right-of-way for a superhighway and levy a tax of not more than one-half mill for the purpose. The master plan called for 240 miles of superhighways and 730 miles of 120-foot thoroughfares. At this date 147 miles of super-

highways have been obtained or are in the courts and 121½ miles have been paved and 400 miles of the 120-foot thoroughfares now exist or are being legally taken.

It is most interesting to note that in 1807—130 years ago—after Detroit was destroyed by fire, a city plan with 200-foot superhighways and 120-foot major thoroughfares was laid out and adopted but the lack of vision or laxness of public officials allowed encroachments and changes, until there remained of this plan in 1919 only parts of a very few streets in the center of the city.

In 1830—107 years ago—Governor Cass laid out five military roads radiating from the center of the city out into the state, each 120 feet wide. These are our five great diagonal thoroughfares on which the city and adjoining counties have spent and are spending millions, re-widening them to the original 120 feet in the congested parts of the city and to 204 feet beyond.

I believe this master plan to be one of the greatest accomplishments of any city in street adjustment and planning. Detroit led the world in the manufacture of automobiles; it is only natural that it should lead in preparing a place for them.

One of the outstanding accomplishments of the Detroit plan commission is our Outer Drive, a boulevard 150 feet wide and forty-six miles in length, making a complete semi-circle of the city and connecting all of our major parks except Belle Isle. The property for all but one and one-half miles of the forty-six has been obtained (90 per cent of it by dedication by subdividers and others) without one cent of cost to the city.

Detroit has acquired over two thousand acres of new parks and recreation areas in the last fifteen years, all of which were located and recommended by the plan commission.

There is one fact of which those of us interested in city planning are much ashamed, and that is our lack of zoning. We tried hard some twelve years ago, but a handful of men succeeded by well-planned and timed attack in defeating us. In my opinion it is impossible to plan the future of a city intelligently without zoning and the passage of an adequate ordinance should be, and I am sure is, the major object and consideration of the plan commission at this time.

I believe I am supposed to talk about Detroit's plans for the future. It has seemed necessary to give you some background of the past in order that you may understand our problems and our ambitions for tomorrow and the years to come.

It should be the duty of the plan commission to watch and guard carefully our master plan of highways, lest it be raided by selfish interests or abandoned or destroyed as were our master plans of 1807 and 1830.

A zoning ordinance based upon a very comprehensive survey and drawn with all of the knowledge obtainable from the experience of other cities, must be passed for Detroit; in the lamentable absence of any great interest on the part of our city officials, it appears that our plan commission must initiate the activity and must find some way to obtain the necessary financial support to prepare and promote the ordinance.

Some way must be found to create an interest in planning among the substantial and influential citizens. We have made several attempts to organize such a body of say fifty or a hundred men and women interested in the present and future welfare of their city to act as advisers and supporters of our plan commission. Some leader must come forth with the time and enthusiasm to organize such a body and then a really big and worthwhile plan can be formulated and carried out.

The subject of housing becomes part of the city plan largely because those who would give intelligent attention to it must at least be familiar with the present physical makeup of our city and with the plans for its future. Our plan commission has done some wonderful work in connection with the so-called Brewster, or slum-clearance, project in this city, which has now been under way for some three years. They picked out and recommended for improvement that section of the city where housing facilities were undoubtedly our worst, and made a very remarkable survey of conditions as they existed in the district.

An area of forty blocks was laid out and plans developed for their improvement. Its very size was its most redeeming feature. Since it is entirely surrounded by property and conditions similar to those in the forty blocks, any smaller development in the area would not be big enough to create its own environment and would be doomed to dismal failure for the purposes for which it is intended.

I think very great and very grave problems arise when a government or a municipality enters the paternalistic field of housing. Certainly no one can be sorry to have the hundreds of old buildings in this district removed. However, any attempt to provide better housing for all of the people of the United States who are living in houses poorer than 80 per cent of those demolished in this district would cost the government, on the subsidizing basis on which they are now working, so many billions of dollars that it could not possibly be financed without a complete breakdown of our economic structure.

As you know, the section was completely occupied by colored people. The Detroit real estate board appraised the property for the government and went through approximately one-half of the houses. In one of the very worst I asked the occupant, who had been north only a few months, how she got along in such quarters, and she said, "Why, Lord, man, dis is heaven to what I'se used to down in Tennessee."

It should be borne in mind that a large percentage of these buildings were single houses and had been allowed to run down during the depression period because the occupants were not paying any rent. Most of them, however, could have been repaired into quite comfortable places when the occupants were again able to pay rent.

Subsidized housing is such a very big question, with so many important angles, some of which go to the very foundations of our form of government, that I doubt if the ordinary city plan commission is equipped to make it a major part of its activity.

I believe the Brewster slum clearance project in this city was a noteworthy experiment. It did clear up a part of the worst section of our

city, which, however, was almost a paradise as compared with some of the slum districts I have seen in other cities and some of the living conditions I have seen in rural communities.

Our parkside project, however, is in my opinion an inexcusable intrusion upon the rights of people owning property in the neighborhood and an inexcusable use of government and municipal funds. If it is handled like similar projects in other cities, it will furnish to a group of people who are already able to pay enough to obtain good comfortable housing, twice as good housing as they now have at the same price they are now paying. If you ask a promoter of this project who the people are to be thus favored, he will tell you that they will be carefully picked from among the city's population. When you ask if this is fair to the man not so picked, you are told that all of the people cannot be accommodated at once; and when you ask if it is the government's intention to furnish housing at one-half or less its actual cost to all of the people sooner or later, you will be met with a shrug of the shoulders. However, this is the only natural conclusion one can reach.

Our plan commission, now attempting to formulate, adopt and carry out a city and civic plan, is making a study of all of the city's assets and liabilities from a planning standpoint. To accomplish this many questions must be answered:

Will urban population continue to increase?

How many automobiles per 1,000 population will the future see?

Will busses entirely supplant street car transportation?

Will railroads continue to exist? Will they all be electrified?

Will industries continue their movement toward the outskirts of the city, thus increasing the unwanted areas?

Will water transportation and the use of our water front continue to diminish or will they be revived?

Will the downtown central shopping area continue of importance or will it disintegrate with the development of outlying secondary centers?

Should the city give up any idea of a subway or an elevated or should it lay plans for the time when one or both will be necessary?

What should be done about those areas just outside of the downtown section where dwellings are largely undesirable and where there seems to be no other demand for the property? Can these districts be zoned and rejuvenated as residence sections, and, if so, how shall we dispose of the nonconforming uses now there? I believe this problem is one of the greatest our large cities now have to face. Any plan for the future must be one which will encourage the city to develop all over in an orderly manner and not allow the development to take place only in spots. Someone has divided the city into thirty-six sections and so far this year 90 per cent of the building has taken place in eleven of these thirty-six sections. In several sections there has been a yearly decrease in population for several years.

Are we headed for a future city along the lines of the various conceptions of architects and others, with everyone living and working up in the sky or with the government owning all the land and furnishing every-

one with a tenement in which to live at half price or for nothing and home ownership a thing of the past?

I could go on almost indefinitely mentioning the things to which the real city planner must give his thought.

I am very certain that Detroit and other cities are headed for a great building activity to take care of the demand caused by all the various factors with which you are familiar. One of these, possibly peculiar to Detroit, is indicated by the fact that in the four years of 1932, 1933, 1934 and 1935, there were 2,934 residential units constructed within the city and during these same years there were 2,937 residential units torn down. Hundreds more have been demolished since 1935 and thousands are being made obsolete by new inventions and new methods of construction. Our plan committee is attempting to make sure that where these new houses are being erected there can never occur the many difficulties which arise in the older sections.

London, Paris, and other large cities have shown us that a city can grow to great size and still retain large sections for exactly the same uses to which they were put one hundred years before.

There is no sane reason why 75 per cent of the area of a city, especially once its trend is established, cannot continue to be used for the purpose for which it was first laid out, without interfering with its proper and orderly growth.

One of the important matters which our plan commission has before it is the location and development of a civic center.

Detroit has many things which make it famous. Among these I would place first its men of vision who first saw the world on wheels and proceeded to make the vision a reality.

I would place second the Detroit River, a magnificent body of clear fresh water which has behaved itself for over two hundred years to our knowledge, its waters rising and falling only slightly with droughts or heavy rainfalls.

We have evolved a master plan of highways and improved them with pavements setting a record for all the world. We have beautiful parks, playgrounds and boulevards.

We are the fourth city in population and the third in the value of our industrial products. We are probably the greatest industrial city of all time; but in my opinion it is the duty of all citizens and particularly of the city plan commission to pay more attention to the industry of making good citizens.

Besides the assets mentioned Detroit has a cultural center in which we erected a magnificent monumental, inspirational structure—our library. Opposite it stands the art museum which compares favorably with the better structures of the country. No citizen of Detroit can stand and gaze at those beautiful buildings without being inspired, without being proud of the fact that he is a part owner, that they belong to him as much as to anyone else. He becomes a much better citizen.

Several years ago the city plan commission recommended the erection of a new city hall at the foot of Woodward Avenue and overlooking the

Detroit River. I do not know if our present commission favors this location or some other, but I believe it has advantages far surpassing all others. One of the leading architects of the world, Eliel Saarinen, was employed by certain civic-minded citizens to make a model of this civic center. Three short blocks from the Detroit River and paralleling it is Jefferson Avenue, 120 feet wide. From Jefferson Avenue to the River there is a drop of thirty feet. This plan called for the erection of a magnificent monumental and inspirational city hall with a large arch over Woodward Avenue 120 feet wide, and with a large plaza with promenade and balustrade overlooking the river and thirty feet above it.

Joined in with this structure was to be a convention and exhibition hall. Because of the elevation above the river and above the two streets paralleling the river, almost unlimited parking space could be provided below the plaza as well as an unobstructed cross-town traffic thoroughfare. While only three short blocks from our present City Hall and almost adjacent to our business and financial section, the district below Jefferson Avenue is not congested at any time and almost abandoned on evenings, Sundays and holidays.

This city hall would be observed for a long distance up Woodward Avenue and would be so located that all of our citizens could reach it easily, either for city business purposes or for the purpose of receiving a spiritual civic stimulant.

This great industrial city must give more attention to its greatest industry, that of making enthusiastic and loyal citizens. Detroit's Aladdin-like growth has brought about many physical problems. Gradually its public officials, commissions and citizens will solve these problems but there can be no doubt that it is the spiritual things that count most and that endure.

A plan commission has a very great responsibility when it is charged with the direction of the city's future. It is forced to be economical and live within its means but it will fail of its purpose if it does not make big plans, plans which inspire and stir men's blood and which will grapple with the souls of future generations. Big plans, once stamped on the map of the city's future, will recur and recur, and subconsciously, if in no other way, will direct its growth. They will be stirring the hearts and thoughts of men and be a civic order and a beacon light which will shine throughout the ages.

Has America a Future?

An Address by David Cushman Coyle

Author of *Brass Tacks.* Board Member, National Economic and Social Planning Assn.

THE American people have the fatal gift of Midas, who turned everything he touched into gold, and who died trying to swallow a hot potato which turned into gold and choked him.

In California there was once a stretch of level, rich agricultural land, worth $200 an acre. It was bought by a dredging company, which turned the land upside down, leaving ridges of sterile gravel. The company got enough gold to pay for the land and the work of destroying it. The gold was buried in Kentucky.

In the South we raise cotton to be shipped abroad; in fact one of the most common criticisms of the AAA is that it reduced our export trade in cotton. We do not like to buy useful things from foreigners. So we take gold. For each bale of cotton shipped abroad we deposit fifty tons of top-soil in the Gulf of Mexico, and get one ounce of gold, which is buried in Kentucky.

Phosphate rock is the backbone of civilization. Animals or savages can live without phosphate rock, because they live on the land, and all the phosphate which they take from the soil they return to the soil. But civilized man sends his sewage into the rivers and his bones to the churchyard, so he must have phosphate rock to keep up the fertility of the soil. Phosphate is the bones of our posterity. Yet we ship phosphate rock abroad.

We turn wealth into gold and bury the gold, while our country grows poorer year by year. Modern technology has vastly increased our power to destroy wealth and to make money. Forest and farm land, coal and oil, copper and lead—they all melt away before the insatiable demands of modern civilization. We speak of the age of plenty. With proper management, we have the makings of an age of plenty. But as we are doing now, we are living faster and faster on our basic capital.

We have forgotten the ancestral virtue of thrift. Our ancestors saved by putting away food for the winter and by clearing rocks from the land to make stone fences. We don't save this way. We save money, which we give to brokers to invest in foreign bonds. We have learned to love money rather than wealth. We have come to the point where we destroy wealth for the sake of money faster than our ancestors could have dreamed we would. Where they destroyed with axes and plows, we destroy with steam-shovels and tractors.

In our desire for wealth based on destruction, we have destroyed the foundations of human security. Our people are eroded by unemployment, by charity, by lack of education, by preventable disease that we fail to prevent. Most of our children are born in families where the means of health, education and training are lacking. We are asking for a

generation of warped and maladjusted people, unfit to govern themselves, proper subjects for a dictator.

Peru is the oldest example I recall at the moment of a nation forced by poverty and circumstance to an ant-like discipline in order to preserve its soil. By necessity she built soil from which to feed her people at a cost of thousands of dollars an acre, as we would reckon it in our labor values. The price of survival was discipline. If we want to preserve a fair amount of freedom, we must keep enough good land so as not to be crowded like the Peruvians.

It has taken us three hundred years to occupy this country. During that time we have not really destroyed very much of our national wealth—only ten billions of land values have been destroyed so far by land-erosion. That is not much in a country with a national income in 1929 of $80,000,000,000.

In our greed for money we have also learned to destroy our people at a disquieting rate. Most of our children in the next generation will be born in backward rural areas. We who live in the city do not have children; we are not replenishing the American population. A general insecurity imposed upon the middle class of our country has forced it to restrict its birth rate. We are putting a heavy disadvantage on the young people who are going to be the majority of our population.

For three hundred years we have never balanced our economic budget. It is more out of balance since the war than it has ever been. We have lived on our capital ever since we arrived here. Of course, there were only three million of us at the time our republic was founded. Our ancestors couldn't destroy our capital very fast—it seemed to be inexhaustible. Since then we have grown to nearly 130,000,0000 people, and we are still living on our capital, high, wide, and handsome. It hasn't occurred to us that it is immoral. The idea of budget-balancing of our national resources has never yet fully dawned on the American people, but it is time it did. At this moment the federal government is undergoing another of those fits of economy whose result will be the restriction of those services that help to preserve our national wealth, but which are always justified as being attempts to balance the treasury budget. We want the money, not the thing. America has come to the time when she must stop living on the spoils of conquest and begin to live on her income. Whether we can sober down and learn to build as fast as we destroy is the question that will decide our future. Either we are a new civilization coming of age, or we are a flash in the pan. If we are going to grow up and begin managing our estate, that means that we are going to give up the carefree extravagance of adolescence and begin making plans for the future. We shall have to learn to behave in sensible ways, and to think less about grabbing everything in sight and more about the welfare of our country. The evidence of the beginning of maturity is our search for methods of national and regional planning. The fear of God is the beginning but not the end of wisdom. We needed the Great Depression, the dust storms, and the floods, to put the fear of

God into us. From there we have to go on to the painful process of thinking, to define our problems and discover their solutions.

Hamilton started our national planning in the first Congress with an economic plan for changing America from a purely agricultural country to a semi-manufacturing country. (I mean his plan for the assumption of state debts and the establishment of a protective tariff to free us from dependence on British manufacturers.) Perhaps even he couldn't foresee that the time would come when America would have to balance its resources budget. We know now that that time has come. It has been precipitated by a growth of technology which has accelerated our destruction to the point where we see the end. We will have iron and coal for a long time to come, and water-power, too—although there is one river in the Southeast with thirteen power dams, eleven of which are now filled level with silt. Water-power disappears unless you take care of it. The Geodetic Survey says that our copper will last us fifty years, lead and zinc, fifteen years; five years ago we passed the time when new oil reserves were being discovered faster than they were being used up; since that time we have been using them faster than we find new ones; the cost of prospecting is increasing too.

Of all the difficulties that face us, the top difficulty of the pile is the extreme complexity of our civilization. We may well envy nations like Denmark and Sweden, where a high native intelligence has met problems of organization, difficult to be sure, but not quite beyond the capacity of the human mind. It will be harder to make a good job of our country, so large and with such diversity of geography and of people.

At the gateway of the problem of planning stands the necessity of obtaining the consent and cooperation of millions of people who have neither time nor inclination to read scientific reports, and who resent being ordered about by government officials. No method of planning that requires elaborate regimentation of the people is practical in a democracy.

We can see by the experience of other nations that if democratic planning should fail, and fail beyond the limit of endurance, the nation would probably try a dictatorship, in a desperate effort to escape from the hopeless tangle of complexity. But experience seems to show that a dictator in order to hold the allegiance of the people is forced to keep them excited with military adventures. And a program of military adventure would be the one way known to history of wasting our substance faster than we are wasting it now. A plan for balancing our economic budget seems to be incompatible with dictatorship. We are either going to solve this problem under a democracy or not at all.

There are two general ways to approach national planning. One is the way of operational plans. Observe the waste and confusion of business, the staggering losses of invested capital, the useless products, the overproduction here and underproduction elsewhere, the unemployment, low wages, rackets, unfair trade practices and so on through all the diseased and shaky fabric of our national life. It is natural enough to attack all these evils at once, to make everyone behave and establish

rules to bring order out of chaos, to plan the system of production and distribution.

But there are so many things the matter with us all at the same time, and they interlock in so many ways, that a planning authority that would try to adjust them all would be lost in the labyrinth of interactions and secondary effects. Long before even one problem could be solved, the people would already have grown restive under discipline, and new and worse problems would be presented. We had that experience with prohibition and again with certain parts of the NRA.

There must be some other way to approach the network of economic and social problems that will get results without losing the consent and cooperation of the people. The other way of approach is through the planned use of social and economic forces. Instead of prescribing the detailed behavior of each individual, and attempting to map and control his relationship with his fellows, let us begin by providing institutions and motivations that will improve the general health of Society.

Education is the first social force that comes to hand, not that we must wait a generation for a well educated people, but that the general nature of our national problems should be explained, without too many scientific reservations, so that the people will get an idea of where they stand and what they want.

Federal policies can be chosen with an eye to their strategic quality. Taxes are probably the most important strategic instrument of national policy. For instance, I was told by a noted tax lawyer that the small tax on inter-corporate dividends is already causing the unscrambling of corporation networks which have resisted other forms of attack.

Tax policies leading to a more reasonable distribution of income, and providing for social security, are powerful agents of economic change. Security and opportunity will be enough to reduce the volume of sweating in industry, poor health, bad housing, personal maladjustment and crime, so that specific measures for combating these evils will be greatly simplified.

These are only examples of the method of approach by policy planning instead of by operational planning. Many problems by their nature require operational plans. Much of our needed conservation of natural and human resources will be done through organized public works and services. But those are not enough, and by themselves they lead only into a snarl of tangled problems. Over all these specific plans should be general national policies.

We must recognize the necessity for looking at our country as a great social organism, which must have a proper distribution of its income and proper planning of the flow of its money. We must conceive a country whose people will be regarded as the ancestors of the future, and who will therefore be conserved, brought to a state of health, properly educated, and given such opportunities that the genius which springs up spontaneously in all classes will not be wasted.

These, then, are the two considerations that appear to be vital in the question of the future of America. First, we have come to the end

of the period in which we can safely live on our basic capital. That, fundamentally, is the nature of the crisis which is forcing us to look for a technique of national planning. Second, in formulating national plans for the use of a democratic people, first emphasis should be on policies that will improve the general health of the social body with a minimum of regimentation. On a lower plane, though still important, are the specific plans to reduce such maladjustments as may then remain.

If we can get the American people to see the necessity of managing their estate with prudence, as a heritage to be handed down to posterity, and if we can develop plans that will do the job without overstraining the human nature of the people, America will have a future that will be worth working for.

The dust storms were sent to us by a beneficent Providence, to put the fear of God into us; but they did not actually destroy a very large percentage of our country. We still have a generation in which to turn the tide of history toward a permanent civilization rather than toward the fate of Babylon or Yucatan. They came, grew, flourished, and were glorious, but failed to conserve their soil, their natural resources, and their people—and passed out of history. Which will be the answer for us depends largely upon the actions of our generation and the generation which is immediately to succeed us. We stand at the crossroads. We ourselves, and our immediate successors, will make or break America.

The fourth session of the Conference on Thursday morning, June 3, was presided over by Charles W. Eliot, executive officer of the National Resources Committee, in the absence of Frederic A. Delano, vice-chairman of the National Resources Committee and chairman of the Board of the American Planning and Civic Association

Methods of Promoting National Production

Jacob Baker
Assistant Administrator, Works Progress Administration

IT IS the purpose of this paper to discuss production in its most extended sense. It is concerned with the total of national productivity—all of the things that can be produced for the use of men and women in the nation. Of course, it is well recognized that production can be planned nationally. Every modern government in time of war assumes the responsibility of controlling to a considerable extent the productive enterprise of the nation. In the emergencies of peace also, centralized governmental planning and control may be far-reaching. And there is an assumption made by many that it is possible to increase production by central planning of a mandatory kind. But it is a little hard to prove that this type of planning will actually provide more things for human consumption and increase the general standard of living.

Historically, national attention has been given to the planning of those facilities of most immediate need in times of war. Lines of communication, roads, bridges, the development of harbors and water ways usually have their first justification in terms of national defense, and historically that has been the beginning area of national planning.

The ends of the State itself are variable. We are seeing a great deal of politico-economic planning in European dictatorships, where it appears to be, in part at least, directed toward the glorification of the State and the exaltation of the heroic leader of the State. The cult of the Hero carries with it a peculiar kind of economic and social planning. It may be highly efficient, or it may reflect the stupidity or whim of the dictator. It may seek by mandate to benefit the people, or merely to improve the nation's position as war-maker. But, even when efficient, its aims are different from those of a democracy, and its methods not applicable in a democratic State.

The basic aim of the democratic State is the promotion of human happiness through the participation of all its citizens in economic, social and political processes and decisions. And, because of this participation of its citizens in its affairs and processes, the democratic State has a continuous responsibility and a continuous urgency to facilitate in every way possible the increase of national income. In a democracy planning must be directed to the final end of providing more things for all people, a continuous improvement of living status, a continuous sharing by all of the gains of technological advance. No planning fully justifies itself in a democracy unless it has a positive relation to continued increase of national productivity, improvement of standards of living, and an increased share to everybody of the things produced. And the progressive increases in our national income must be made in such ways that it flows through the pockets of the whole population and does not get sidetracked or wasted en route.

The democratic process of central promotion or planning is quite different from the mandatory kind of planning. It must reflect popular desire and popular will. It can be vigorous and strong, but not mandatory. It must be intelligent, but not assume super-intelligence. Democratic planning can only gain the acceptance of a democratic citizenry if it carries its own guarantees of intelligence and purpose that are acceptable to popular understanding and desire.

During the past eight years much of the thinking and most of the effort of all the men and women concerned in our economic life has been directed toward holding together the economic structure and restoring it to use. During part of that period simple restoration was an end in itself. Now that task is done and we can look forward to further gains.

During this period of depression the farmer, the worker, the investor and the business man have been struggling desperately to maintain their group existence in our economic world. In that struggle of each for himself, it is not surprising that old group hostilities have continued and in some cases increased. I believe that some of these group hostilities in the industrial and commercial field, the differences between city and country, between worker and business, have a different origin and are more remediable than is generally recognized.

Our economic problem has all too frequently been assumed to be one of deciding how the national income shall be divided. It is to obtain their fair share of the national income that groups are organized, production controls devised, strikes called, fair trade practices established. Labor has wanted a fair wage, business fair profits, investors fair returns, and farmers a fair living. While no group has wanted more than it thought fair for its members, the pressure of each for a fair share has crowded the others by restrictions that have come to be increasingly used by all concerned.

The depression revealed that a good many of our largest industries operated under a system of administration of prices, sometimes upon a basis of concealed understandings, in which lowered general purchasing

power was met by reduction of output rather than of price. Widespread and effective restriction of output exists in American industry.

The various steps taken by the government to bring about a working economic balance between city and country, farmer and industrial worker, agriculture and business, have all directly or indirectly, immediately or remotely, had some restrictive quality.

Certain segments of labor impose considerable restrictions. Labor, however, is organized much less effectively than business, and even less effectively than agriculture. In consequence, labor union restrictions have been applied only in very limited industries, such as some of the building trades.

But restrictions are becoming more exacting and the tendency toward new ones increases. The desire of all economic groups is for balance, and the method of the recent past has been to achieve such a balance through more and more restrictions. It is at least equally logical, and I think much better for many reasons, for us to get the desired balance in another way. The effort of all groups might well be shifted to new ground; instead of concerning ourselves merely with the problem of how to divide what we have, we might well concern ourselves with the problem of how to produce more to divide.

Each group operating separately has found that its instrument of group gain was one type or another of restriction. All groups together might find it possible to agree upon a program of expansion of production through which each group could make greater gains than are possible through restrictive methods.

We cannot remind ourselves too often that as a people we can consume only what we produce. The hope of a higher standard of living for all depends on a steady and sustained increase in the output of goods and services of all kinds. I am convinced that to attain that hope we must answer certain basic questions: Is our national income large enough for all our population? Can we now produce in the United States enough useful and necessary things to supply that third of the people who now lack them? What is the most effective use to be made of all our national resources, so that we may produce what we need—and consume what we produce? Only by finding the answer to these questions can we avert the recurrence of the depressions that have plagued us for a century, and which have recently become more drastic and catastrophic in nature, constituting the largest single source of waste of our physical and human resources.

We must come to see and to name the necessary steps that all of us—agriculturist, laborer, business man, investor, consumer, and the government employe—must take to increase the national income so that our nation may at all times produce all the things needed by all our people—with a fair wage for labor, fair profits for business, fair returns for investors, fair prices to consumers and a fair living for farmers.

How can this be done? We need research, more economic knowledge more widely spread, and a new orientation to the problem. The essential steps toward increased productivity might be brought to the attention of

the public in several ways: by a book, or a study by a foundation, or by a congressional inquiry. Another method used in democratic countries to focus attention upon large problems, a way of bringing new facts and ideas into the consciousness of everybody, is the method of national discussion and conference. Perhaps a national conference on productivity, drawing upon the groups representative of agriculture, labor, business, finance, public works, the consumer, and all of the educational institutions of the country for the statistic and analytical basis to this problem, might be made a bench mark for all our future progress.

If each of the groups of our population now concerned with its own problems will for a while give some attention to the basic problem of increased productivity in this nation, I believe that the problems of each will be brought closer to solution. I remember that about thirty years ago a rural life conference was held which marked the starting point for a new attitude toward the whole problem of rural life. A national conference on productivity might be equally fruitful. The preparation of material for such a conference, and the discussions carried on during it and afterward, might result in a new understanding of our situation, and help us to move forward to a new economic situation in which the income of the nation would be great enough to supply all the needs of all its people, all the time to the fullest extent that our rich resources make possible.

Such a conference would, I think, at once help to create a better understanding among the leaders of different economic groups as to the real needs and aims of other groups. Nobody knows quite why, but in the past fifteen years farm and labor leaders have developed a considerable attitude of antagonism toward each other's groups. The leaders of each group have apparently felt that the other group was hostile. Since each group's method of improving its own situation has frequently been that of an increase of restriction upon production, it was of course possible that group hostilities should develop. Yet I think any disinterested observer would have noted that the rank and file among farmers and industrial workers have no attitude of animosity toward each other. But with each group concerned solely with the problem of its own organization and the restrictions necessary to the maintenance of its economic position, there is an opportunity for group misunderstanding and conflict.

A general discussion on national productivity would furnish new ground upon which agriculture and labor might meet. No question of group pressure one against the other, or restriction of output by which either group might disadvantage the other is here involved. The whole attention can be given to the actual increase of all parts of our national production. Common attention, on the part of everybody concerned, to the basic problem of production itself should lessen the tension between all the groups.

The group pressures built up by farm, labor and business organizations all have validity. These group pressures arise from division of the present national income. The pressures are as great as they are because the national income is so small that many people do not get enough to live

on. If the income is increased so that all people can have enough to live on, these pressures should be lessened.

Discussion of increased production will not hide group conflict or lull any aggrieved group into acceptance of present conditions—it will not settle strikes nor satisfy the tenant farmer's demand for increased and securer income. But such discussions will create a public opinion that will insist upon the solution of wasteful conflicts. Such discussions will make it easier for everybody to see what is a fair settlement, and harder for obstructors to obscure the issues. The new objective does not mean, "Don't fight for your rights." It may well modify, but should not discourage, the effort of every group to secure a satisfactory economic balance.

Assuming that a national conference on productivity were to be called, what would be the steps leading toward it? What formulations of facts, opinions and ideas should be presented to it for consideration?

First, I think we would want to know where economic planning and research and decision as to policy is made in this country. It would be useful if we made an inventory of all the bodies of every kind which are doing such research or planning work—chambers of commerce, trade associations, farm bureaus, labor unions, the policy committees of large corporations, industrial research departments and institutions, educational organizations, foundations, and national research bodies. Many such private bodies and agencies are now working on particular segments of planning and research, and in some cases carrying such plans into action.

The survey should also take account of the valuable work in economic analysis now being done by various federal agencies—such as the Bureau of Agricultural Economics, the proposed Division of Industrial Economics in the Department of Commerce, certain bureaus in the Department of the Interior, the Bureau of Labor Statistics, the Bureau of Home Economics, the Divisions of Research and Statistics in the Department of the Treasury and under the Federal Reserve Board, the Interstate Commerce Commission, the Federal Trade Commission, the Tariff Commission, etc. Similar work is being done in many states, through state governmental agencies or through cooperative arrangements with state educational institutions.

The initial survey should include enumeration, description and appraisal of such work. It would present a great many of the decisive points in our economic structure: the points at which decisions are made, the connecting lines between points, and, in some measure by simple identification, the influence of one decision or point upon another. It might lead to recommendations for filling gaps, in such research and planning. It might suggest the need for expansion of existing services, or the use of new techniques in research and planning.

Once such a survey is completed, it could easily be kept up to date and would be of permanent usefulness as a current inventory of research and planning instrumentalities throughout the country.

This would be one of several steps that might be taken in preparation for the calling of such a national conference on productivity.

Another useful preparatory step would be the establishment of some possible goals for the conference to consider, some charts or maps, not of the Promised Land, but of the land in which we live—but with this difference from any mapping heretofore done: namely, that feasible paths and trails shall be projected leading to higher ground around our familiar valley.

That is, we want to define in some usable way the present use of our resources, and, going on from that, to project the possible or proposed improvements in the use of our resources. We wish to find out how patterns of resource use can be developed which will represent balance in the different phases of our economic activity. For this purpose we should wish to push beyond the work of the Brookings Institution and the report of the National Survey of Potential Product Capacity. We need to examine the basic problems involved in the effective use of resources. We need to see more clearly the economic relationships that underly different uses of our resources. We need to consider possible methods of matching production possibilities and consumption requirements against each other, so as to achieve integrated patterns of resource use.

A study of consumption which should be very useful for this purpose is now going forward in the industrial section of the National Resources Committee. It in turn is based on two recent federal work project studies on consumer purchases made respectively by the Bureau of Home Economics and the Bureau of Labor Statistics. The technique used there is so pertinent to the kind of work under discussion here that I wish there were room in this present paper to describe it in some detail. But I must content myself with the briefest indication of its scope and usefulness. Coupled with this study of consumption is a similar one of the essential factors of production. Here input and output rates, decisive conversion factors and the method and quality of flow through specific industries and from industry to industry is charted.

The National Resources Committee studies are designed to present in simple statistical fashion the whole actual production-consumption pattern of the nation. Perhaps I should say here, for the benefit of anyone who does not understand the mathematical procedures of statisticians, that they are concerned with arriving at broad truths in a field in which the facts are only partly known in detail. They are able to calculate the margin of error and arrive at approximations which can then be tested by further facts. They are able to carry these approximations for some distance into the future, and test their accuracy again year by year, through a comparison of the facts with their previous estimates.

Now the particular interest of the technique worked out in the National Resources Committee's study is twofold. In the first place, it provides a way to trace the flow both of income and of natural resources through all their uses and transmutations in the total national economy. The national production-consumption pattern, as it is called, is made up of subordinate parts which cover the expenditure of income, the conversion of natural resources into consumption goods, the creation of income by this process, the conversion of capital into capital goods, and finally the financial flow

of all income through our economic system. It may sound elaborate, but it has the advantage of presenting truthfully our actual production-consumption pattern.

To tell the true story of such a simple economic transaction as the purchase of a pair of shoes, we must know where the money that was paid for them came from and where that money goes to; we must trace the shoes themselves back to the leather and the cow that wore it first, back to the factory and the machine and the human labor that turned the leather into shoes, back to the management, the capital and the profits, back to the bank and the savings account, the tariff and the taxes—in short back through the whole economic process. And we must identify and define correlative factors that are included in terms such as national income, demand for and consumption of other things than shoes, improvements in methods and machinery of manufacture, and so on.

This complicated but truthful pattern has the advantage of showing at what points waste occurs or a change affecting the ultimate results may be introduced. It shows all this, of course, in simple and massive categories. When this study is completed, a technique will be available by which there can be drawn a truer and more useful picture of our actual processes than has heretofore been at our command. By knowing more about the actualities of the total production and consumption of the nation, we shall be in a better position to formulate views as to what should be done about that situation.

The other special value of the technique is this: it can be used to show not only what we buy with the national income we now have, but what we would be able and likely to buy with a given income of any size. We can make trial balances of future possible income, showing how many more pairs of shoes we could have, how much more food, how many more houses or automobiles and so on, and where the income to provide the purchasing power for the consumption of these goods would come from. We can see what wastes can most easily be eliminated, and how better to make use of our natural resources. We can have before us a definite indication of the changes that would have to be made in our present production-consumption pattern to bring it into line with any that we wished to attain. We can have something definite to go upon in making up our minds about the desirability of various changes.

That is the whole purpose of such provisional patterns, of such economic maps and charts of our possible changes. We all face the future, we all have to make decisions, and all of us—the government and corporate or other private enterprise—need more knowledge to help us in the drafting of policies. The kind of economic maps which should be most valuable for this purpose would not constitute forecasts of future economic activity. They would be, instead, a series of alternative representations of what might or could occur, or could be made to occur. Such economic maps would help to determine the future by affecting views and wishes, within the limits in which different economic results can be effected by changes of policy.

But there is still another useful preliminary step that might be under-

taken in preparation of materials to present to a possible national conference on productivity. Supposing it to be thought desirable to make changes of one sort or another in our present production-consumption pattern, what then? Our present restrictive method would probably call for legislative lobbying, backed up by a newspaper propaganda campaign. But the approach to the productive problems here under consideration appears to require instead something quite different—an examination of industrial-financial structure with a view to discovering what might be called the strategic points at which various influences are and can be brought to bear, with various results in the volume and balance of productivity.

What I have in mind is an objective, impersonal study of this situation—not an attempt to find out how to achieve changes which have been determined in advance, but rather a study of the probable effects of various positive and negative influences, leaving us to take our choice. It would be important to consider the probable effect of the relaxation of existing legislative influences of a restrictive nature. We might wish to know, for example, the probable results upon national productivity and economic balance of the abolition of taxes upon some or all classes of railroad property. We might wish to know the probable effects of an increase of profit-taking, executive bonuses and other items of business emoluments in various segments of the industrial-financial realm, as well as the effects of diminution of them. What would be the probable effect on national production and economic balance of, to take an extreme example, freeing from taxation all income derived from interest? On the other hand should we place an ad valorem tax on evidences of indebtedness as such, or in a scale running from a high rate on debts that are current (like money and bank deposits) to a low rate on debts that are fixed investments. These examples are chosen to suggest the wide variety of points in industry and finance at which a specific influence is now exerted by legislation, and at which a different influence would produce different results. It would then be up to us all to select the points and the influences to be exerted, according to the ends we wish to accomplish. A clarification of economic facts and a clearer view of economic goals may suggest the usefulness of policies that can scarcely be predicted in advance.

There have been other occasions in our history when intensive consideration of a problem by a great many people who were vitally concerned with it has resulted in concerted action. Back in the eighteenth century the Encyclopedists of France accumulated socio-political information and crystallized theory in a way that profoundly affected the institutions of France. Somewhat similarly and in lesser degree, the American Committees of Correspondence of the 1770's formulated a program of independent political action that made possible the union of the colonies into a separate nation. By the same process the contributors to *The Federalist* created a public opinion which made possible the general acceptance of a structure of coordinated government that has shown amazing effectiveness through a century and a half of our history. While

these three examples may seem to be concerned with political rather than economic matters, I believe they indicate the validity of the method of intensive thought and research, of free discussion, and of the resultant final acceptance of the consensus of that discussion and research, either as an ideal or as an instrument of action.

I have presented here, as preliminaries to a possible national conference on productivity, a program of three preparatory steps: first, the establishment of a running inventory of economic research and planning and policy-making groups, and a friendly appraising study of their activities; second, the development of production-consumption patterns representing not only present actualities, but economic possibilities open to us; third, an examination of the structure of industry to determine the points at which influence is and can be exerted, and the various results of various influences on national productivity and economic balance. It is to such a program of research that the industrial section of the National Resources Committee is in considerable degree addressing itself. It might then be advisable, as a fourth in this series of preliminary steps, to have all these materials sifted and discussed in a series of conferences of economists, educators and other technical workers who have a special interest in these problems.

Finally, in some manner, whether through a national conference on productivity or in some other way, the results of this inquiry should be presented to the nation at large for examination and discussion. Those who represent our industrial, labor, agricultural, financial, consumer, governmental and educational interests, and the public in general, should be asked to consider not only our present production-consumption pattern but various alternative possibilities based upon great productivity and involving better economic balance.

Do we wish to rest content with our present national income of $63,000,000,000 and attempt by present restrictive practices to secure a better working distribution of that income among our population? Or would we prefer a national income of $100,000,000,000 or whatever is the maximum that this country could yield, based upon a fuller and less wasteful use of our natural resources, capital and man-power and involving a better distribution of income? That, no doubt depends upon what changes would have to be made in our economic structure. We may find that large results can be achieved with very little change in our basic structure. Capitalism may continue to function in its familiar manner, private ownership of property remain untouched, and finance retain its present importance. The changes that must be made to secure what we all want may be of a kind upon which there will be a more general agreement than seems possible to those who are accustomed to view the situation from the point of view of our present national income.

In any event, the consideration of a fuller use of our resources, and the ways to be adopted to effect it, will help us all to know what we want and to determine our policies in regard to getting it. The outcome of such knowledge and such discussion will inevitably be a more fully

informed public opinion and a more decisive support of whatever policies are carried out by our government in regard to national productivity.

This, I think, represents the kind of national economic coordination or planning that is possible in a democratic country like ours, and the kind to which we may look forward. We have no dictators to say to us, "Now you must instantly proceed to mine nickel." We have no central authority to decide that we shall immediately make sugar out of parsnips. And we don't want any such authority in the United States. We don't want that kind of national planning.

We do need, however, clearer knowledge of our economic situation and its possibilities, and clearer ideas as to what we want to do about it and how we would prefer to do it, before we decide whether to make sugar out of parsnips or whether the little nickel that we have is worth mining. The only reason we have in making such decisions is to have enough sugar or enough steel for all the people in the country who need sugar and steel. Planning has no other purpose. Production policies should have no other end.

Farm Tenancy

Will W. Alexander

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(In the absence of Mr. Alexander, his paper was read by James G. Maddox, Agricultural Economist, Resettlement Administration.)

ONE of the important ideas around which many discussions have been built in recent years is that of change. On every hand, we hear of changed economic conditions, changed social conditions, or a changed civilization. Today, I want to bring to your attention certain changes that have occurred and are occurring in the general nature of our land tenure system. My purpose is to describe some of these changes to you, and mention some of their implications to national planning. My hope is that you will take cognizance of them, and lend your efforts to developing sound public policies to cope with them.

It is an obvious and patent fact that this nation was founded, and continued to exist for many years, as one in which the ordinary farm was a family-sized unit operated by its owner. The farm was both a home and a business enterprise. Its owner, its manager, and its cultivator was the same person. Today, the situation is vastly changed. The family farm is still the most significant size of production unit, but it is on the run in several areas, and a continuing mechanization of agriculture holds questionable promise for its future. Moreover, we have proceeded past the half-way mark in separating the ownership from the operatorship of our farms. In other words, slightly more than half of our farmers do not own the land they operate.

According to the 1935 census of agriculture, there are about 2,865,000 tenant farmers in the United States. These are farmers who rent all of the land they operate. They represent slightly more than 42 per cent

of the total number of farmers in the country. In addition to these tenants, there are approximately 689,000 part-owners—farmers who own part of the land they operate and rent a part of it. This group of part-owners represents about 10 per cent of all our farmers. Hence, approximately 52 per cent of the farm operators in the United States rent all or a part of the land they farm. An additional one per cent of our farmers are hired managers. There is also a large group of farm laborers. Their number is unknown, and only recently have their living conditions or other characteristics attracted serious attention. Since the tenant group—the farmers who rent all of the land they operate—is much greater than the other groups, the center of emphasis throughout this discussion pertains to tenancy.

Distribution of Tenant Farmers

Farm tenancy is not, of course, evenly distributed over the United States. To a great extent it is closely associated with the production of staple cash crops. The recent report of the President's special committee on farm tenancy indicates that 41.4 per cent of all tenant farmers in the United States are in the cotton belt, and that 65 per cent of all the farmers in the cotton belt are tenants. The corn belt of the Middle West includes about 15 per cent of all tenant farmers in the country, and about 45 per cent of all corn belt farmers are tenants. Hence, in these two great cash crop areas, we find about 56 per cent of all the farm tenants in the United States. Other areas of specialized cash crop production such as the tobacco, wheat, rice, and sugar producing areas also have a high percentage of tenancy.

No other large area of the country has as high a proportion of tenancy as the cotton-growing South. In vast areas of the cotton belt more than two-thirds of all farmers are tenants, and in many counties the percentage is more than 80. A large number of both whites and blacks rent their farms. However, it cannot be truthfully said that farm tenancy is purely a southern problem. For instance, 50 per cent of all the farmers in Iowa were tenants in 1935, and the same was true of more than 49 per cent of all farmers in Nebraska. Several of the Middle Western states run well above the national average. There are small areas in Illinois, Iowa, South Dakota, and Minnesota, in which more than 60 per cent of all farmers are tenants. In the West, the proportion of farms operated by tenants is relatively low, averaging only 24 per cent for the eleven Western states. However, the percentage of land operated under lease is high. Thousands of acres of western land are rented for grazing purposes, but since most of the ranch operators own a part of their land they are not classified by the census as tenants. About 43 per cent of all western land in farms was operated under lease in 1935.

The growth of tenancy has been rapid in recent years, but tenant farming is not wholly a new development. We have accounts of tenant farming in this country as early as the colonial period, although we do not have nation-wide census figures previous to 1880. At that time 25 per

cent of our farms were operated by tenants. Since 1880 tenancy has continued to increase until, as I have said, more than 42 per cent of our farmers now rent all of the land they operate. There were especially rapid gains in both the number and proportion of tenant farmers during the period from 1920 to 1930. And today, we have more farm tenants than ever before in the history of the country.

Developments Since Industrial Revolution

To a certain extent, American agriculture has been following the same route traveled by industry during the Industrial Revolution. Two centuries ago, the predominant type of industry was the small shop, in which the capital, the management, and most of the labor were vested in the same person. During the Industrial Revolution, this type of organization broke down. Capital and management came to be vested in one person while labor was vested in another. The process of segregation continued, and was given great impetus by the rise of the corporate, or limited liability, type of business organization. That process has now gone to the point where we have not just two classes (capitalists and laborers) but, in many industries, three classes—the capitalists, the managers, and the laborers.

American agriculture has been, and still is, going through an analogous process. The farm of our forefathers was one in which the functions of owning, managing and laboring were all in the hands of the same individual. As tenancy has grown, these functions have been parcelled out to different individuals. Outside of the South, the development of tenancy has resulted in the owning function's being vested in one person, the landowner, and the two functions of managing and laboring's being vested in another person, the tenant. In the southern plantation areas, and to a lesser extent throughout all areas of the South, both the owning and managing functions are vested in the landlord, and only the laboring function is left to the tenant.

Now, I realize that there are many exceptions to the two general situations which I have just described. It is not always true, even among the large tenant farmers of the Middle West, that the tenant performs both the managing and laboring functions. The management is oftentimes a mutual or joint product in which both tenant and owner share. Similarly, even in the plantation areas of the South, the management is not always an exclusive function of the owner. The tenant sometimes shares in a few elements of management. However, these exceptions do not seriously alter the principal thesis with which I am concerned. Every time a farm passes from the hands of an owner-operator into the hands of a tenant, we have a segregation of the laboring from the owning function. The one is vested in the tenant; the other in the owner. The managing function, outside of the South, goes largely with the laboring function, that is, to the tenant. In the plantation areas, and to only a slightly lesser extent throughout the South, it remains largely with the owner.

The segregation of the owning, managing, and laboring functions of industry into three separate hands, and the consequent development of three distinct classes in society gave us a new type of industrial civilization. Will the same thing be true in agriculture? And, if it will, is the nation ready to face the task of adjusting its policies, ideals, and national attitudes to the new type of agricultural civilization? If not, shall we attempt to direct these changes in our land tenure system toward a goal different from that to which they appear to be leading? These questions pose, in brief form, the tenancy problem with which this country is now faced. At the present time, there is no generally accepted answer. It is a problem which represents one of the many challenges to national planning. In the present embryonic stage of our thought about it, we probably have no basis for its solution. There is crying need for new, fresh, and different thought aimed toward finding a workable plan of action.

There is a fairly deep and widespread feeling that something ought to be done. But there is a lack of understanding as to what the problem is, and a consequent lack of unanimity of opinion as to what should be done. When we are faced with the possibility that the type of rural society which was built on the foundation of the Jeffersonian farm is developing into a society of two or three distinct classes, there is little wonder that we are stumbling and faltering. To forecast the type of rural society which is likely to develop if present changes continue, to decide whether or not we want that type of society, to decide what changes in policies, ideals, and attitudes are necessary if we do want it, or to decide what we should do if we don't want it, are all momentous problems. I have faith in our people's finding their solution. I have hope that you will help.

Three Main Attributes

There are three generalized attributes of our tenancy system which have caught the public eye. Each of these attributes appeals with different force to different people. They serve as three focal points around which pressure for action has gathered. I shall describe them to you.

Most of the tenants in this country hold the farms they operate on a one-year contract. They have no assurance from one year to another that their lease will be renewed when it expires. Hence, they have little opportunity and no incentive to follow a system of soil-building crop rotations, to accumulate livestock, and seed the necessary pasture and hay land, or to exercise the myriad of detailed practices which represent continuous managerial effort toward maximizing the return of the total farm unit. Capital must be kept in a movable form. Crops that can be harvested and sold within a year are desirable, if not necessary. Operating plans must be for short periods and subject to complete abandonment or quick change. As a consequence, the total efficiency of our agricultural plant is greatly reduced, and, at the same time, some of our best land resources are being more rapidly depleted than is necessary or desirable.

Those persons who are deeply impressed by the need for soil conser-

vation, together with those to whom increased efficiency in production is an important goal, make up one group which thinks that something ought to be done about our tenancy situation. They see what I have just said; that soil depletion and inefficiency result from the insecure or transitory manner in which most tenants hold and operate their farms. Hence, they are in favor of increasing the security of the tenant farmer. Obviously, that is a very logical conclusion. If insecurity is the root cause of soil destruction and inefficiency, then let us do away with insecurity and substitute for it security of tenure. This is the remedy proposed by the soil conservers and the farm managers—the efficiency engineers of agriculture.

Decreased aggregate efficiency and depletion of resources are not, however, the only consequences of our system of tenancy. We have a fairly large body of evidence which indicates that tenants do not participate in community activities to the extent that owner-operators do, and that a high percentage of farm tenancy is inimical to the development of churches, schools, libraries, cooperatives, and similar organizations. When we realize: (1) that about one-third of our tenants move at the end of every year; (2) that the tenant's moving period is often about the middle of the school year, with the consequence that many children have to transfer from one school to another; and (3) that most tenants have no assurance that they will be within a given community for more than one year at a time, it is easy to understand why tenancy tends to pauperize the social life of our rural communities.

Among those people who are impressed by these shortcomings of our tenancy system, we find a second group who believe that something should be done about tenancy. The teachers, the preachers, the sociologists, and the laymen who see the necessity for good schools, churches, libraries and a mutual spirit of neighborliness, are quick to grasp the significance of the destructive role played by a highly insecure and unstable group of tenant farmers. And, as for the remedy, they see eye to eye with their more prosaic brethren that I have mentioned above. Insecurity of tenure looms large to them as the root cause of the trouble. Hence, the remedy is to increase the security of tenure.

In the South, where the ownership and management of the farm, and often the tenant's source of short-term credit, are all vested in the landlord, we find certain effects, or apparent effects, of tenancy which are not evident in other areas. Most students and observers agree that the situation in the South affords many opportunities whereby the unscrupulous landlord can take advantage of the tenant.

It has been claimed, though it has never been substantiated by a worthy investigation, that some landlords often make the most of their opportunity. Personally, I do not believe this to be a serious problem. Of more significance is the fact that close supervision does not develop initiative and self-reliance on the part of the individual tenant. As long as the tenant, willingly or unwillingly, relies on his landlord to do his managing for him, he remains a poor manager himself. As long as the landlord will extend credit when the tenant is out of cash, the tenant

remains a poor financier and learns nothing of thrift. Someone has said that the Southern tenant depends on his landlord for so many things that he fails himself to accumulate anything. There is truth in the statement. The training which a tenant receives under close supervision is so lacking in the business responsibilities which it places upon his shoulders, that tenancy is a poor apprenticeship for future farm owners. This is especially true in the plantation areas. A tenant may operate a fifteen-or twenty-acre tract on a large plantation without gaining the least insight into the problems of organizing and operating a small farm of his own.

The general situation in the South with respect to the manner in which landlords supervise their tenants forcefully impresses people who are strong believers in individual freedom and in the necessity for guarding the future of democratic institutions. And here we find a third group which thinks that something ought to be done about tenancy. They are not totally unmindful of the inefficiency, the depletion of soil, and the handicaps to sound community institutions, which are associated with tenancy in practically all areas, but to them such phenomena are of minor importance. They see, or think they see, human oppression, a curtailment of freedom, and a growing threat to democracy, because the masses of southern tenants do not develop initiative, self-reliance, and independence of thought.

Their remedy is different from that of the other two groups which I have mentioned. Instead of allowing tenants to remain as tenants and giving them greater security of tenure, they want to aid them in becoming owners. They agree that security of tenure is the goal, or ultimate objective, but ownership, they say, is merely a means of attaining security; hence, let us talk in terms of security, but let us have ownership. They have seen that the power to manage, to supervise, to control, goes with land-owning in the South. They want to take that power to manage and control from the few, and give it to the many. To promote ownership, they think, is the way to do this. These saviors of democracy are split into two camps with respect to the type of ownership which they want. One camp says that we should promote the individual, owner-operated, family-sized farm. The old American ideal, in other words, is what they want. In the South, it is often described by the phrase, "Forty acres and a mule." The proponents of this view have two fairly common characteristics: their political philosophy is that of the old time Jeffersonian Democrat, and their geographical background is the rolling uplands of the South, where farms are small. The other camp says that we should promote cooperative farm ownership and operation. They argue that advances in technology and mechanization have already made the family-sized farm an inefficient unit, and that it is doomed to pass out of existence. The large-scale cooperative farm, they view as the logical alternative. They also have two fairly common characteristics: their political philosophy leans rather heavily toward socialism, and their geographical background is the Mississippi delta and similar areas of level fertile land, where large plantations are common.

Suggestions for Future Policy

The President's farm tenancy committee recommended a course of action in its recent report, aimed primarily at increasing the security of the tenant operator. However, it also recommended an ownership program, on the grounds that the promotion of ownership is one means for increasing security. The ownership program recommended by the committee would have for its major aim the establishment of family-sized, owner-operated farms. But the committee also suggested that experimentation with cooperative ownership be carried forward on a modest scale. The individual farm ownership program conceived of by the committee was one in which farms would be purchased by the government and resold to selected tenants on a long-term contract of sale. Full title would not be given the tenant-purchaser until at least twenty years had elapsed from date of purchase. This is quite a different procedure from that provided for in the bill that was recently reported on favorably by the House committee on agriculture. The President's tenancy committee discussed, and rejected, the ordinary type of loan procedure which has been proposed by the House agricultural committee.

If we follow the easiest and most expeditious course in providing security of tenure for farm tenants, we will not be concerned primarily with the promotion of farm ownership. Security for tenants can be had by following the general principles of the English system of regulating both landlord and tenant. Much can also be accomplished by education in bringing about the use of better lease contracts. In a society where absentee ownership of farms is fairly stable—that is to say, where the turnover in farm ownership among non-farming owners is not high—we can work out a system of farm leasing by which the tenant operator will be given security of tenure. If we choose to take this general line of attack in this country, our first step should be toward increasing the stability of farm ownership among non-operating owners. It is probable that this can best be done through stabilizing farm income, and by preventing land speculation. Insofar as I know, the methods for stabilizing income and preventing land speculation haven't yet been developed. But they are absolutely essential to the success of any kind of a tenancy program which I can visualize. I commend them for your future consideration.

Once we succeed in getting a fairly stable land ownership base, especially among non-operating owners, we have cleared the way for promoting security of tenure among tenants. For instance, we might then introduce, either by education or by regulation, the use of leases which are automatically renewable from year to year, unless notice is given by either party six to nine months in advance of the date of termination. The tenant would then know when he would have to move several months in advance of moving day. He could make his farming plans for six to eighteen months in the future. It, at the same time, we put into practice a system of regulations forcing the landlord to compensate the tenant for unexhausted improvements which the latter may leave on the farm when he ceases his period of occupancy, we will

have made a great forward step in providing an incentive for building up the farm. If the landlord is forced to compensate the tenant for unused improvements which the latter leaves on the farm, then the tenant should be forced to compensate the landlord for unnecessary deterioration.

If we put into effect these principles of compensation, they will not only encourage the maintenance and improvement of the farm, but they will have a further tendency to lengthen the tenant's period of occupancy of a given farm. If it is necessary, we may have to go the full route which the English have traveled, and force the landlord to compensate the tenant for unreasonable disturbance. In the South, where a large segment of the rural population is inexperienced in managing its own affairs, and where widespread poverty is a source of much insecurity, we will probably have to follow a different policy. The granting of rehabilitation loans which are coupled with technical guidance and a farm management plan is probably the best procedure which has yet been developed for increasing the security of a large number of our southern tenants.

If we follow the general policy of accepting tenancy, and set about making the operator secure in his relationship to the farm, we will be deciding that we want a rural society in which land is owned by one person, cultivated by another, and perhaps managed by a third. It will be a society made up of two or three classes of people, each with different interests to be considered in many matters of public policy. We will be saying that the old ideal of the owner-operated farm, in which owning, managing, and laboring were all vested in one person, can be forgotten and a new type of organization accepted.

If we make individual farm ownership our goal, instead of security of tenant tenure, we will, of course, be going back to the old form of organization in which owning, managing, and laboring are all vested in the same person. This will give us the general type of farm organization which we had in this country before the development of farm tenancy, and which still exists on about half of our farms. Essentially, it would be a policy of re-establishing the old American ideal—the Jeffersonian farm. It would be a costly and slow program, and unless we were able to work out a type of ownership superior to that which we have had in the past, the general effects of the program might be lost within a generation. It, of course, has a strong psychological appeal among our tenant population, most of whom want to become farm owners. Moreover, if properly administered, it could be a more potent tool by which the ability to manage a farm could be developed among our lower class tenants than is possible under the rehabilitation loan program or by regulation and education.

I have attempted: (1) to describe the tenant problem with which this country is now faced; (2) to indicate three main lines of thought from which springs pressure for action; and (3) to mention the principal suggestions for future policy with which I am familiar. The route which we will travel has yet to be determined. Its selection is a problem in which I hope you will play a part.

The Human Wealth of the United States

Frederick Osborn
Population Association of America

THE people of the United States are distinguished by the wide variety of their cultures. On the surface, they appear similar because they share many things. They have the same national news given them by the same national publications. They use the same mass production goods, sold them by national advertising which covers the country with common slogans. They are held together by a common language, by a common belief in democracy, and by a common hope for progress. But, deep down, they differ in their cultural traditions. They have different interests, different forms of hospitality. They give different expressions to their lives in their work, their art, their social and economic ideals. There is still a Puritan tradition in New England, the old South still survives in much of its culture. The spirit of the West still lingers in the mountains and on the Pacific Coast. More locally, there are a variety of local cultures, sprung from old world traditions, which are deeply bred in family stocks and renurtured in the soil of the New World: Swedes in Wisconsin and the Dakotas, free men on their own land; Creoles in New Orleans, with whom life is an art, and so on, in every race and every background, changing, adapting their forms to the essential needs of American life, but each retaining something distinct and colorful, the ultimate value of which none of us living now can judge.

In its biological aspects, the human wealth of the United States is more varied than that of any other geographically united country. Every race is here in varying proportions. Nor can we constitute ourselves judges of racial values. Most of the immigrants to this country came under conditions which called for unusual energy, initiative, and qualities of character. Each race has its superior stocks, as well as those which are inferior. Scientists tell us that the blending of races produces widely variant individuals, and so we may be justified in hoping that out of the American melting-pot may come more than the usual proportion of great leaders and men of genius.

Thus our country is marvelously favored in its human wealth. Each separate state can boast of special qualities in its people which are a proper ground for pride. There may be problems connected with so many cultural traditions and so many racial origins living together side by side, but their very variety gives hope for a rich flowering which would be impossible among a people less diverse in its qualities.

It is with our human wealth that planning is ultimately concerned. We strive to conserve the natural resources of our continent and to provide for their maximum and balanced use, so that out of our great natural resources we may increasingly provide conditions favorable to the life of future generations.

But the preservation and proper use of natural wealth will not of itself preserve our wealth of human resources. Human resources survive only as they renew themselves in each generation. The process of renewal is no longer automatic. The majority of our people have left the farm, where children have an economic value. Most people now live in cities, where the rearing of children is difficult and expensive. Coincident with this change, there has been a change in moral and religious sanctions, so that the idea that it is right and desirable to limit the size of one's family is generally accepted and is spreading rapidly over the whole country. Having a family, and especially having a large family, has become an expression of faith in the essential value of life. Only a strong faith that life is good will cause people to undertake the heavy responsibilities which alone assure the renewal of life in the next generation. It is no longer enough to assure the supply of food, to provide pure water, and to prevent the spread of disease. Under present conditions, city people do not replace their kind. In an urbanized civilization, we can conserve our human wealth only by providing such conditions of life throughout the country that our various cultures and our various biological stocks will voluntarily replace their own number in the next generation. At present, some groups are dying out, some are increasing. The isolated farmer in the South is reproducing at a rate of 160 per cent of that required for his replacement. The people in some of our northern cities are having not much more than half the number of children necessary for their replacement in the next generation. In every state, in every locality, some groups are increasing and some are dying out, without apparent relation to the quality of the persons concerned in the process. In the cities there is some evidence that the more intelligent people in every class of society have fewer children than do their less intelligent neighbors.

These wide differentials have accomplished a general decline in births which is rapidly assuming serious proportions. The major cause for the decline is probably to be found in the change from family farming, where children were an asset at an early age, to industrial work for wages which take no account of the cost of rearing children. We may expect that before long the economic handicaps which now attach to rearing children will be modified by some form of payments for children such as the family wage scale, or other methods now employed in Europe. These changes may check the decline in births, but we have no reason to believe they will result in an equal birth rate throughout the population. People will still choose whether they desire to reproduce their kind. To a large extent their environmnt will determine their choice. Some will be satisfied with poor conditions for themselves and their children, others will limit the number of their children until they can see better conditions in sight for them. Parents will be influenced too by the relative difficulty of rearing children under different conditions. Those parents who care most about the future of their children will hesitate to have children if they have to be reared in improper houses, in districts lacking play facilities,

without opportunity for normal country recreation, or where schooling is inadequate or distant.

The kind of people we will have in the next generation and the generation after that will depend to a very important extent upon the effect of the environment on the size of family of different kinds of persons.

The conservation of the human wealth of the United States, in its variety of cultures, in its richness of superior biological stocks, depends on our ability to provide an optimum environment for the rearing of children, so that the best representatives of every type of culture will tend to have larger families than those they have at present.

Here is a problem to challenge the imagination and ability of those concerned with the future of our country. We who are present at a great national planning conference cannot escape its significance. Can we remake our cities so that they will be places in which responsible parents will desire to have children and will be enabled to rear them properly? Can we remake the life of our marginal farms, so that superior stocks will stay on the farm, where the birth rate is normally high, or will our farms be subject to selective migration, the better stocks moving to the low birth rate areas of the cities, and the poorer stocks remaining behind to replenish the next generation? Can we provide a more equal opportunity for taking part in productive activity, so as to prevent the hopelessness, the constant ill-directed migration which is so destructive to family life?

These questions are fundamental. In the past ten years, students of population have been conducting studies on the trend of births and deaths in this country, using basic material, subject to statistical analysis far more exact than that available in other branches of the social sciences. The conclusions to be drawn from these studies are non-controversial. They point relentlessly to the fact that the present distribution of births is a barrier to educational and social improvement. That under present conditions of life in this country no group of our urban people whose children go through high school are having enough children to replace their own number. And that undirected individual effort, no matter how well intentioned, has not been able to prevent conditions under which the more responsible parents feel it necessary to restrict the size of their families far below the replacement level.

The National Resources Committee has recognized the fundamental nature of population problems as they affect national planning by appointing a committee on population problems. But to many of those engaged in planning, the study of population signifies only the desire to estimate future growth and size of towns and cities.

Within the United States, internal migration plays the preponderant part in determining the size of any particular community. For a long time past infertile cities have been growing in size, and the highly fertile farm population has been decreasing due to migration from the farm to the city. How long this process of migration will continue, and to how great an extent, depends on economic and social factors. Estimates of population growth in local areas are estimates of migration, only slightly

modified by our more exact information on natural increase. Students of population can trace the migratory movements of the past, and those which are going on at present, but they can hardly be counted on to forecast the social and economic changes which will guide the internal migration of the future and determine the size of local communities.

Figures for the nation as a whole can be derived from a study of the actual birth rates of women at different ages, and the actual mortality rates at different ages. There is a considerable lag before these rates find expression so that estimates for the country as a whole, which do not extend beyond a generation, are likely to be fairly accurate, apart from the element of immigration, on which there is at present a restrictive policy. Short term predictions can therefore be made for the whole country with considerable accuracy. The growth of our population is slowing down. Probably by 1970 it will have reached the maximum of approximately 150,000,000 people if there is no heavy increase in migration. Thereafter, if present trends in the birth rate continue, we may expect a considerable decline. By 1980, the age composition of the population will have shown a remarkable change. Only 27 per cent of the total will be young people under twenty, as compared to 39 per cent in 1930; and the percentage of people sixty-five and over will have risen from 5.4 per cent in 1930 to over 12 per cent in 1980. We will have only two-thirds as many children in our schools, but at least twice as many old people.

The estimate of our future national population gives the framework on which to plan a regional distribution of population appropriate to the productive resources of various parts of the country. We will have taken an important step towards obtaining a better balance of births if our people can be located in such a way that each group has a more nearly equal opportunity to do productive work. If we can more nearly equalize economic opportunity, we will at the same time be equalizing many other aspects of life which affect the rearing of children. Nutrition, education, housing, are all dependent on the economic resources of the community. They cannot be provided in any adequate amount unless the community as a whole is engaged in productive occupations.

National planning for the best location of our people with relation to productive resources is fundamental to the development of sound population policies. The work of an enlarged Federal Employment Agency would seem essential to the carrying out of such a task.

Closely related to the need for relocating many of our people, is the need for defining the use to which different areas may be put. This need extends to great areas of marginal land, as well as the counties, towns, and even the small residential or business areas of a village. The subject of zoning has been in the forefront of much of the discussion at this conference. Here it is necessary only to point out its relation to the conservation of our human resources. Blighted areas mean not only blighted people, but also that parents in such areas will have more than the average number of children. These children will in turn not receive

their fair share of health and training. To prevent the recurrence of such areas by rational methods of zoning is a second step in any sound population policy.

These two fundamental aspects of planning, the relocation of the population in relation to productive resources, and the delimitation of areas for the particular use to which they are best adapted, represent attempts to lay foundations on which to build a more stable distribution of births. Progress along these lines will cut down on those uneconomic forms of internal migration which are injurious to marriage and family, and should help create more stable economic conditions, capable of providing local support for the community's efforts to provide proper surroundings for its children.

Other aspects of planning bear an immediate relation to the environment in which children will be brought up. We have already noted that the environmental conditions which affect family life may play an important part in determining what type of parents have the most children. The proper development of suburban communities, the extension of recreation facilities, the provision of adequate housing, are functions of planning which cannot be left to undirected private initiative. They must be provided in a form which will meet the needs of family life and of a reasonable number of large families. Only then may we expect the more responsible parents to make a proportionate contribution to the next generation.

Suburban communities should be planned on a scale which permits the best relationship in size and location between the school, the homes, and the recreational facilities provided for young people. With these needs you are all familiar. We presume that provision should be made for at least the number of children necessary in order to replace the older generation. Few suburban communities have such a large proportion of children at present, but it is an aim to which we should direct our efforts. Transportation should be planned in such a way that the family advantages of suburban life will be available to as many people as possible.

Recreation facilities are exceedingly important to family life. Children, now that they are in the cities, are no longer occupied with family chores. The proper development of their character and physique demands recreational activities. Parents whose children are safely occupied in non-commercial and presumably valuable forms of recreation, find less difficulty in bringing up their children. Even the economic handicaps attaching to a large family are diminished by the provision of adequate recreational facilities. Recreation has thus an important part to play in raising the birth rate in urban communities. In rural districts, there seems to be a serious gap in the recreational activities offered young people between the ages of fifteen and twenty-five. Yet it is at this time in their lives that decisions will be made as to migration. Rural recreation should be developed so that it will play its part in preventing the migration of the better stocks away from the farm. Urban recreation should prepare young people, by building character and physique, for the effort required to rear families of their own.

Housing is an aspect of planning which is usually considered from the sole point of view of providing decent homes for the existing population. Little thought is given to the type of buildings which would be required to house a self-replacing people. It is assumed that the average urban family will consist of parents with one or two children. Actually, an average of three children is required if a group is going to replace itself from one generation to another. This average of three children will not be evenly distributed. Some couples will have no children, some will have only one or two. To make up for those below the average, there will have to be a number of large families. Few groups will be self-replacing, unless 20 per cent of the couples in the group have families of five children or more. The necessity of providing homes adequate for so many large families may seem to add an impossible burden to a housing problem which is already overwhelmingly difficult. But unless a sufficient proportion of large units are provided, the only people who will have large families will be those who do not care about the conditions in which their children are brought up. Housing of that sort will ultimately defeat its own purpose.

The list of activities in which organized planning may be used to effect a better distribution of births can be extended almost indefinitely. We might consider, for instance, the possibilities inherent in marginal mountain lands and in existing state and national parks for private vacation homes at low cost to persons unable to enjoy family vacations under present conditions. The effect of transportation on family life should be considered and of many other aspects of planning which bear on size of family and the rearing of children. But enough has been said to indicate the importance of this great field of work.

Our present vast stock of human wealth is not a fixed and imperishable asset. Its values may be depleted in a few generations. Yet, under conditions proper to its renewal, it may constantly improve in quality, enabling us to reach a higher form of civilization than any we have known before. The need for providing conditions under which the best of our cultures and the best of our stocks will replace themselves from generation to generation is a need which is fundamental to all planning for the future. No other group can see this problem in truly national terms. The planning organizations of the country carry a heavy responsibility for the conservation of our human wealth. The corresponding opportunity for service gives the whole field of planning a dignity it would not enjoy if it were engaged in lesser tasks.

Technological Advance and Transportation Planning

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IT is not necessary to stress the importance of transportation in a modern world, nor, for that matter, in any civilized world ancient or modern. That our own nation could be held together without an efficient transportation system, or that our civilization could even exist without transportation is extremely improbable.

Of course, too, transportation is one of the most important industries in the United States quite apart from its influence on our lives and judged merely by the usual large and tiresome figures as to employment, purchasing power, taxes paid, revenues collected and capital invested.

The federal coordinator of transportation found over $27,000,000,000 invested in railroads, pipe lines and waterway transportation in this country. To this investment you can add about $2,000,000,000 for motor trucks, put your own valuation on 24,000,000 passenger automobiles, make an estimate of the sums which have gone into improvements of inland waterways, rivers and harbors since the federal government started to aid their development in 1789, figure out what our 3,000,000 miles of highways are worth and consider the millions of new capital which are being invested in air transportation.

Our Present Transportation Service

This transportation system of ours produces about 350,000,000,000 ton-miles of freight service annually. Of this freight service about two-thirds is performed by the railroads and the balance is divided fairly evenly between pipe lines, waterways and highways.

We also move about 380,000,000,000 passenger miles in a year. The overwhelming bulk of this service is performed by private automobiles—probably not over 5 or 10 per cent is moved by railways, busses and airways combined.

If you want to visualize these statistics just picture every man, woman and child in the United States as traveling about 2,500 miles a year, each accompanied by at least a ton of freight.

The General Future of Transportation

Looking to the future of transportation over the next twenty years we will find it advantageous to deal first with freight and passenger traffic as such and without regard to the individual agencies performing these services.

Freight: It appears unlikely that freight traffic measured by ton-miles will increase materially beyond the standards which prevailed prior to 1930. At least four important reasons point to this conclusion:

First, the older and more settled and stabilized countries get along with a fraction of the freight service we require. Freight service on German and French railroads, in proportion to the population of those countries, is only about a fourth of our standards. Great Britain and Switzerland use relatively even less. With the undoubted trend of our population toward stabilization it seems improbable that our freight service will grow even farther away from European standards.

A second factor limiting the growth of freight transportation is merely ordinary common sense stimulated by competition. Industries are being relocated with a view to saving freight costs—take the shift of the textile industry from New England to the South, and of the shoe industry from the East to the Middle West. Elimination of waste of materials will also eliminate a good deal of transportation of such materials.

A third factor, of course, is advanced technology including the use of materials at present wasted but particularly affecting traffic through the production of better materials and the manufacture of better designs. The American Iron and Steel Institute, for instance, calculated that the 34,000,000 tons of steel produced in 1935 would last about thirty-two years, which is almost twice as long as the average life of steel produced forty or fifty years ago. Another rather obvious example is the trend toward lighter machinery run at higher speeds.

A fourth factor tending to limit freight transportation is the growth of electric transmission lines and natural gas pipe lines. We have over 200,000 miles of transmission lines and about 70,000 miles of natural gas pipe lines, and plainly such utilities do not add anything to the volume of freight transported.

On the whole, our gradual increase of population seems to be the principal favoring factor in the freight situation. Against this may be set the unfavorable factors mentioned, and probably others.

Passenger: Passenger transportation is markedly in contrast to the freight situation. Our average inhabitant traveled about five hundred miles in 1920, and four or five times that far in 1936. This increase is particularly striking when economic conditions in recent years are considered. It is plain that passenger traffic is still increasing and, while many authorities see rather definite limitations to freight traffic, practically no one has any ideas on where the ceiling of passenger business is located.

Individual Transportation Agencies

Thus far we have considered transportation in general, its importance, its present scope and its probable future volume. An examination of the individual transportation agencies should follow. These agencies are the highways and the vehicles which use them, waterways and the craft which ply on them, railways, pipe lines, air transportation, and urban transportation which, of course, depends on a variety of services.

Highway Transportation

Because about 90 per cent of our passenger service is carried by the highways, and because the highways themselves come to our front doors, most of us have a wider knowledge of roads and automobiles than of any other sort of transportation.

We have about 3,000,000 miles of road in the United States. Half a million miles are in the state highway systems; 2,500,000 miles are designated as "local roads," a phrase which needs no explanation to the ordinary automobile driver. Of the half-million miles in the state systems, about two-thirds are primary roads and one-third secondary.

Our really high-type surfaced roads make up 163,000 miles out of our total road system of 3,034,000 miles, or about 5 per cent.

Primary Roads: We have a well improved system of through roads traversing states, regions and the country as a whole, connecting our principal cities and generally adequate for the traffic.

Main highways are now being designed to allow safe travel at speeds of sixty miles an hour or more. Such speeds require smooth yet skid-

resistant surfaces, careful alignment, reasonable grades, and perferably the separation of opposing lanes of travel. Horizontal and vertical curvature is being reduced to permit clear vision of not less than 800 feet ahead, and where this standard cannot be attained markers should be set up giving speed limits. A two-lane pavement, 22 feet wide, can handle 4,500 vehicles daily, and the present plans of the Bureau of Public Roads contemplate increasing the capacity of a two-lane road by building another two-lane pavement on the same right-of-way but separated by a neutral strip. Each of these two-lane roads will then carry traffic in one direction only. When traffic density exceeds the capacity of a four-lane pavement it is considered advisable to locate a parallel road on a completely new right-of-way.

It will become increasingly desirable to light important highways, both as a means of speeding up operation and in the interest of safety. It costs only about $2,500 a mile to install an adequate lighting system, but annual operating expenses estimated at from $600 to $1,000 a mile far exceed all other maintenance charges and will probably make the adoption of highway lighting a rather gradual process.

Access to high speed roads will, of course, have to be regulated far more than it is today. Abutting property owners cannot be allowed to enter the right-of-way wherever they choose, nor to utilize their frontage indiscriminately for road-side markets and curio stands.

Secondary Roads: Probably, however, we are facing a much larger development of secondary highways than of our primary road system. Secondary highways have been somewhat neglected in the past on account of the obvious necessity of developing through routes.

While we have been building up our high speed through systems of roads, however, an immense amount of experimentation and research has been devoted to secondary road problems, like reactions of sub-grades to moisture, temperature changes and wheel loads, the development of better drainage methods, the study of road surfacing materials, and the perfection of road building and road working machinery. As a result we can now build bituminous macadam roads at about two-thirds of the cost of concrete roads and capable of carrying 2,000 or 2,500 vehicles a day without injury. Similarly, great improvements are being made in the types of treated and untreated macadam, gravel and road bituminous mixtures, all resulting in remarkably cheaper and better roads entirely adequate for modest traffic densities.

Local Roads: A great problem for local authorities still remains in the fact that two-thirds of all the roads in the United States are unsurfaced and in these 2,000,000 miles of unsurfaced roads are probably a good many thousand miles of roads which either should not have been built or should now be abandoned. Whatever were the merits of the old checkerboard system of "section roads," it will undoubtedly in many cases be far cheaper to move farmhouses down to good roads rather than attempt to maintain the alleged roads now theoretically serving them.

Passenger Cars: As to passenger automobiles, we may look for cars of about the same sizes and speeds as we have today. Weights will un-

doubtedly be less. The kind of fuel will depend on the supply of oil in this country and we shall have constant minor improvements in mechanical and electrical features, better materials and greater comfort.

Trucks: The principal problems in highway transportation so far as the vehicles are concerned arise from motor trucks and passenger trailers. We have about 3,500,000 motor trucks in this country with an average capacity of about one and three-fourths tons per truck and a total capacity of about 6,000,000 tons. These 6,000,000 tons compare with about 106,000,000 tons railroad freight-car capacity in the United States.

During the depression, when the falling off in railroad shipments of heavy bulk materials and durable goods generally was so pronounced, the competition of trucks which specialized in handling consumer goods rather than capital goods, acquired undue prominence. With the return of more normal business conditions it is now possible to get a better perspective on the influence of trucks, but, of course, this influence is not to be minimized. About half the live stock in seventeen leading markets was handled by trucks, 98 per cent of the milk moving to nineteen of our principal cities, 56 per cent of the eggs coming into Chicago, large quantities of fruit, vegetables, furniture, automobile tires, short haul coal, bakery goods, automobiles themselves and merchandise in general are all big items of truck traffic.

Truck operators to a large extent are selective as to commodities they handle; they do their best to skim the cream and to hunt for revenue rather than tonnage. They can give a direct, speedy, personalized service in many instances which would be rather out of the question for the average railroad.

Truck operators will encounter, however, public outcry against highway congestion with its attendant delays and accidents to private vehicles, increasing demands for financial responsibility, higher labor costs, higher taxes, limitation of hours of service and definite restrictions as to sizes, axle loadings, etc.

It seems probable that trucks will achieve a virtual monopoly of short haul business where unusual sizes and weights are not involved. How far highway transport may go beyond the short haul zone will be considered a little later in connection with railroad transportation.

Trailers: As to passenger trailers, of which about fifty thousand were built in 1936, the two main problems seem to be safety and sanitation, the latter including not only the inhabitants of the trailers but the possibilities of transporting insect pests, plant diseases and the like. Prompt planning and early action on these decidedly important points are highly desirable.

While it is not necessary to subscribe to the prophecy that half of the population of the United States will be living in trailers within the next fifteen or twenty years, a prophecy which to many of us seems no more reasonable than would the statement that the other half of our population will concurrently be living in tourist camps, the trailer is a rapidly developing industry whether it comes under the head of housing or transport. The commercial use of trailers to sell goods in rural districts and small towns presents large possibilities.

Waterborne Transportation

The settlement and development of the United States before 1840 depended largely on waterways. Before the revolution the Ohio and Mississippi rivers were carrying on an important trade with the eastern seaboard through New Orleans. Canal transportation which reached its highest point of development in the fifties with about 4,500 miles of routes later supplemented coastwise, lake, and river traffic.

The federal government began to aid in river and harbor improvement as early as 1789, and the first river and harbor bill was passed in 1823, well over a hundred years ago.

Under the direction of the United States Board of Engineers for Rivers and Harbors, we have a well developed waterways system. Its principal divisions are the Mississippi river system, which, of course, includes the Missouri and the Ohio, and the tributaries of the latter, the Great Lakes system, and the Panama Canal. We also have an intracoastal waterways system reaching from Cape Cod to Miami and from Apalachicola, Florida, to Corpus Christi in Texas. These various systems have been improved or are in the course of improvement over stretches and to depths commensurate with their commercial importance and with other benefits to be derived from them, notably flood control, irrigation, stabilization of water levels in navigable channels, and so on.

Ninety per cent of the traffic of the Mississippi river system is made up of bulk commodities, while no group meeting in Detroit needs to be told that the Great Lakes traffic is mostly downbound grain, and a balanced traffic made of iron ore downbound and coal upbound.

The Panama Canal carries a much more diversified business—oil, sugar, lumber, copper, canned goods, cotton, phosphates, sulphur, and general merchandise, but even here the largest single item is crude petroleum handled in tank steamers.

The Panama Canal has been responsible for marked reductions in water rates between the east and west coasts of the United States diverting a lot of business from the transcontinental railroads and acting generally to the advantage of seaboard communities and to the detriment of the Middle West. This in turn has naturally reduced the volume of business available for our inland waterways system.

Van Loon contends that in thousands of years of shipbuilding the only vital changes have been from man-power to sails and from sails to machinery. This is perhaps an extreme view, but undoubtedly so old a form of transportation as shipping can hardly look forward to developments as rapid and changes as great as those faced by automobiles or airplanes. Nor are we likely to have immediate and radical changes in a form of transport so largely devoted to handling bulk commodities, with such marvelous efficiency as we see on the Great Lakes.

The use of the Diesel engine on inland waterways and small coastwise vessels is progressing. The tunnel type of propeller boat is supplanting the old type of stern wheel Mississippi steamer. A good deal of attention is being given to the development of inland waterways propellor craft suitable for low bridge clearances.

On the large coastwise boats and in overseas trade both Diesel engines and high pressure steam turbines are becoming increasingly important The director of the United States Shipping Board Bureau says that the principal advance in the design of ships in recent years has been in fuel economy, but, of course, specially designed propellors and rudders, stream lined afterhulls, and welded construction eliminating skin friction are other important developments.

We cannot yet be sure whether marine power plants will generally be Diesel or steam; the former has a higher thermal efficiency and the latter a lower initial cost together with some savings in weight, simplicity, and the price of boiler fuel.

Our waterways system has generally had the benefit of studying and planning on the part of highly trained and competent engineers. You may recall that Robert E. Lee first attracted public attention and made his earliest reputation in the army through his exceptionally able work in river improvement at St. Louis. The magnificent performance of the Mississippi River flood control system in January of this year shows that General Markham and his aides are carrying on a great tradition

Railway Transportation

First among changes in railway transportation come developments in motive power.

Motive Power: In the future, three types of motive power will probably be used—electric, Diesel and steam. An electrified railroad, such as the Pennsylvania from New York to Washington, closely approaches the theoretical ideal of transportation. Rapid acceleration, smooth operation at high speeds, cleanliness, ability to handle anything from a single unit passenger car to a 1,500-ton passenger train or a 7,500-ton freight train, smoke elimination, and efficient operation of terminals are all in the day's work for such a property.

Electrification, however, is really the result of necessity rather than preference, and this necessity arises when the physical limitations of terminals in great cities reach the point where nothing but electricity will permit economical operation and in some cases permit operation at all

Electrification involves a tremendous additional investment, probably creating little additional traffic. While it is true that an electrified road can save about half of its former fuel bill and effect other less impressive economies, a great volume of business will be needed to produce enough savings to justify the increased capital charges.

Exceptional operating conditions, as on steep mountain grades where regenerative braking is possible, may also occasionally justify electrification.

Probably, however, railroad electrification for a good many years to come will be confined to areas of unusually heavy traffic.

The Diesel engine probably has its greatest future in terminal service, particularly when electric transmissions cost less or if some hydraulic or mechanical devices are developed to transmit the Diesel's power to its wheels.

The saving in fuel which such an engine makes would be incredible to one not realizing that the average switch engine spends most of its time doing nothing but burning coal, while a Diesel can be shut off almost as readily as an automobile engine.

Public demands for smoke elimination can be satisfied by Diesel operation. Cold weather, which cuts about a third off the power of steam locomotives, does not affect Diesels. A Diesel switch engine has higher starting power and better acceleration than a corresponding steam engine: it does not have to haul a heavy tender wherever it goes: it can operate for forty-eight hours continuously without taking fuel or water.

The light-weight, high-speed Diesel engines installed on our long distance non-stop trains are also a promising development. The initial cost of such a locomotive is a good deal higher than that of a reciprocating steam engine, but in a service where sustained high speeds are possible, a Diesel has the advantage of carrying its fuel and water, using little of either, and being able to run above eighty miles per hour with relatively small damage to the track.

Some competition for this form of fast passenger power may arise through the use of steam turbine locomotives, one of which is now being built for the Union Pacific. On the high-speed Diesel and on the turbine locomotives maintenance costs are problematical, and the all-important factor of reliability is yet to be established. It is noteworthy, however, that both these forms of power are unusually reliable in stationary service.

On the whole, however, the reciprocating steam locomotive will probably prove adequate to all freight demands of the railroads in the next twenty years and to a large portion of passenger service demands. Considering the years of research and practical experience back of steam engineering, continuing improvements in this type of locomotive are being made and are to be expected.

Freight Cars: With two million freight cars in service, changes can only be made slowly. Something can yet be done in reducing weight through improved designs and lighter materials. The savings of this, however, will be largely confined to the item of fuel and fuel costs are now on such a low unit basis that any car with a high first cost will have difficulty in justifying itself.

Passenger Cars

In passenger cars, however, a reduction of weight is an effective means to decrease train resistance and increase speed. It is important where fast schedules are required with frequent stops or where moderate speeds over relatively heavy grades are necessary. The importance of streamlining is less than is popularly supposed, but after speeds above sixty miles an hour are reached, streamlining becomes increasingly beneficial.

A conventional Pullman car weighs about seventy or eighty tons and the average steel passenger car almost as much. The railroads today, however, are building coaches of fairly conventional types, weighing about fifty tons, while the streamlined cars on the Burlington "Zephyrs" weigh only twenty-five or thirty tons—about a third of the standard Pullman weights.

One great benefit of light passenger equipment which may be cheaply operated is the resultant ability of a railroad to give frequent service. If you have three or four trains a day to choose between, you are less apt to seek other forms of transportation than if you have your pick between a train at three o'clock in the morning and another at three o'clock in the afternoon.

Here it is interesting to note that the air lines have for some years directed their efforts toward getting single units of an economical size and then providing frequent service rather than toward getting extraordinarily large planes with relatively infrequent flights.

Trucks and Railroads

Getting back for a moment to the motor trucks which we left in possession of most short haul traffic, we encounter one of the federal coordinator's conclusions: "I now see little future for long haul motor truck haulage for most commodities, although I expect to see the shorter haul operations expand continually."

To anyone who has driven an automobile from Kansas City to St. Louis or St. Louis to Chicago by night, this statement seems rather sweeping. The automobile traffic handled by truck from Detroit alone might cause one to make a rather liberal definition of short hauls if those are the hauls on which trucks are operating!

Attempts are now being made to coordinate rail and truck service. The idea is for the trucks to handle terminal operations, but for the line haul between one city and another to be handled by railroads, keeping trucks off our intercity highways and turning over to the railroads the strictly haulage or line service as contrasted with the assembly and delivery or terminal services.

We have freight containers, not yet popular in the Middle West, but making a good deal of progress in New York and Pennsylvania. These, of course, are loaded by shippers, hauled to railroad freight stations, placed on flat cars, and further shifted at transfer stations if necessary to provide for solid carloads of containers to particular destinations, where, in turn, the containers are unloaded and trucked to the ultimate receivers.

Or coordination may take the form of assembling freight by trucks, transporting the truck bodies themselves by rail from one city to another, and trucking to the consignees.

Here is a real problem for the Interstate Commerce Commission and other regulatory bodies. If the truck haul is lengthened beyond terminal zones, it is plain that a railroad may thus invade the territory of its competitors and intensify a competition which has already in many cases been carried to unsound lengths.

From a strictly economic standpoint, too, it is a question at just what distances line haul traffic can be more cheaply handled by railroads than by trucks once the latter are loaded for particular destinations.

Here plainly is a field where a good deal of thought is needed, not so much to protect the public from abuses as to keep the trucks and the railroads from cutting each other's throats.

Government regulation in the past has probably saved some roads from attempted suicide, and this particular sort of history may quite easily repeat itself among the trucks.

Pipe Lines

Of all present forms of freight transportation the pipe line, within its limits, is the least conspicuous, the most efficient and the most successful economically. Eighty per cent of our crude oil is produced in California, Oklahoma and Texas, while east of the Mississippi River, where 70 per cent of our population lives and consumes corresponding amounts of gasoline, only 5 per cent of our oil is found. The solution of this has been forcing oil through eight- or ten-inch diameter lines of pipe, and this has been done with such efficiency that even waterways offer small competition, except on such long hauls as from Texas gulf ports to New York or Philadelphia.

Except for the transportation of gasoline, our 115,000 miles of pipe line confine their operations to crude oil, nor does it seem probable that they will handle other commodities in any great quantities within the next fifteen or twenty years.

While they nominally have a common-carrier status, pipe lines are really plant facilities of the oil companies. They do not deal with the general public. The benefits of this kind of transportation accrue directly to the oil producers and refiners, and only indirectly to the common man. This, therefore, appears to be one field of transportation where neither governmental planning nor regulation is of much importance under existing conditions.

Air Transportation

The airways at present handle only a fraction of 1 per cent of the total passenger service in the United States and probably not over 3 or 4 per cent of the passenger service handled by common carriers.

While it is true that transport plane passenger service almost doubled between 1933 and 1935, and will probably double again before 1940, popular interest in aviation is entirely out of proportion to the volume of air traffic.

The average journey by plane today is already in excess of four hundred miles, which is far beyond the average passenger journey in the United States.

Furthermore, as automobile, bus and passenger train speeds increase, the amount of time that can possibly be saved by taking a plane becomes less important. The location of the average airport has something to do with this, and where air terminals can be relocated closer to large cities air transport will profit correspondingly, but aviation is not adapted to short haul business.

Planes in regular service are now flying coast to coast with only three stops and with cruising speeds around two hundred miles an hour and a constant trend to fly at higher levels, the airlines are plainly devoting

their major efforts to the long-distance, high-speed luxury field of passenger transportation in which their advantages are pronounced.

Unlike railroads which have to own and maintain their lines and terminals, the airlines depend to a large degree on federal aids to navigation and, of course, on the aid of cities for terminals. About half the airports in the United States are municipally owned. Over 22,000 miles of our airways are lighted by the Department of Commerce, and this department also operates about two hundred radio broadcast stations or radio range beacon stations.

Looking to the future it seems that technical development of the planes themselves is slowing down, streamlining is pretty well worked out, comfort has reached the stage where it is second only to speed as an attraction, and the ships are tending to standardize particularly as to sizes. In the words of one of the leading aircraft manufacturers: "Efforts will always be made to increase speed consistently with other factors, but the trend of the moment seems more toward safety and comfort than to the greatly increased speeds. Present speeds permit of quite fast schedules, and in my opinion the only pressing need in speed now is to give the airlines the larger margin to maintain their present schedules rather than to allow them to better their present schedules."

One technical development immediately ahead of us, however, is the construction of a limited number of planes to fly at altitudes above 20,000 feet. At this height cruising speeds of 240 miles an hour may be attained without proportionate increases in operating costs—roughly, every 1,000 feet in elevation permits 1 per cent increase in speed. At such levels, also, air conditions for smooth flying are generally advantageous.

The difficulty in constructing such planes arises from the necessity of designing a cabin in which the air may be held at a pressure which will not unpleasantly affect the passengers. At 20,000 feet, air pressures are only half of what they are at sea level and while this variation may be experienced by mountain climbers or the pilots of army and navy planes aided by oxygen tanks, many of us experience discomfort around 10,000 feet. A difference between interior and exterior pressures of only three pounds per square inch, which is the difference between pressures at 10,000 and 20,000 feet, would mean half a ton total pressure on an eighteen-inch window. Translate such figures into the terms of a cabin one hundred feet long. Such sub-stratosphere planes can probably only be used to advantage on a limited number of long distance non-stop flights. The limiting factors are traffic density and the time and distance it will take such planes to climb to high levels and descend from them.

Probably the greatest single deterrent to air travel is the question of safety. The planes themselves experience few mechanical failures and, barring extremely unusual ice conditions, are virtually independent of weather hazards once they get off the ground. The difficulties lie in the terminals themselves, in weather conditions at the terminals, and above all in navigation.

Improvement in the location, design and lighting of the airports them-

selves is progressing rapidly and will be one of the most important things making for increased safety. We cannot do anything about the weather at the terminals, but we are more quickly and accurately forecasting what that weather will be. The increasing speed of the planes gives less margin for error, and larger supplies of gasoline aboard planes have already contributed greatly to the safety of operation by permitting a far wider choice of airports under adverse weather conditions.

Navigation is being constantly improved through wider and more intensive weather studies, through more and better aids, particularly in the field of radio communications, radio compasses, radio direction finders, and, of course, radio markers and beacons. As planes are constantly tending to fly at higher levels and to avoid bad weather rather than bore through it, the pilot is increasingly becoming the counterpart of a ship's navigator rather than a locomotive engineer running from one block signal to another.

Commercial air transportation, although limited by time and space in its field and primarily adapted to much longer distance than average passenger journey, is still capable of large expansion. Undoubtedly larger volumes of mail and far larger volumes of air express traffic will be carried, and in all probability lower airplane fares (say, about on the levels of extra-fare Pullman trains) will become available.

The problems of planning for airway transport are not unlike those involved in highway transport and in railroading.

Urban Transportation

While city transportation of passengers is scarcely a subject for national planning, it is true that nationally-used transportation agencies, such as railroads and motor vehicles of all kinds, enter into the urban situation.

The way traffic is handled in various cities is also an obvious factor in intercity transport. For example, a passenger flying from Chicago to St. Louis will spend quite as much time dragging along through city streets in these two terminals as it takes the plane to cover the entire distance between the two cities. Such terminal delays may throw travel from airlines to the railroads, or, using Mr. Dooley's famous formula for ocean journeys "compute the elapsed time from boarding house to boarding house," the traveler may even decide to drive his car.

In any study of urban transportation, however, whether it be approached from a national, a state, or a purely local angle, the one most important factor is the use of a city's downtown streets. If these streets exist principally as storage facilities for parked automobiles, neither bus nor street car can supply truly rapid and convenient transportation.

Some General Conclusions

Two quite modern and rapidly developing influences in transportation should be noted.

The first is the vastly improved quality of freight and passenger service both as to speed and as to reliability. The effects on inventories, invest-

ment of capital in storage facilities, and the accumulated processes of converting raw material into finished goods are obvious.

The second great development in transportation in recent years has been the increasing ability of the individual to supply his own freight and passenger service. In passenger transportation the common carrier is statistically nowhere as compared with the private automobile. In freight traffic the pipe lines are owned and operated by the oil companies, as are great numbers of tank steamers. Eighty-five per cent of the motor trucks are privately owned and operated and the total volume of freight which they handle is plainly increasing more rapidly than the business handled by common carriers such as the railroads.

This growth of privately owned freight and passenger agencies will be chiefly important for its influence on rates and this influence will be profound.

As to coordination of transportation agencies, the average man will not be inclined to quarrel with the statement that each form of transportation has its peculiar advantages and that all should be used in a way to permit the greatest utility for each. The practical difficulties in achieving this highly desirable end, however, are patent. Even were all our forms of transportation owned and operated by one agency instead of by hundreds of corporations and millions of private individuals, the problems involved are entirely too large and far reaching to encourage one's sense of omniscience, nor do these problems stand still—transportation must constantly adjust itself to the shifts in agriculture, industry, trends of population and hundreds of other factors which go to make up our modern civilization. These difficulties and the magnitude of these problems do not preclude the possibility of beneficial and effective study, coordination and regulation. They are worthy of careful, scientific and sympathetic study by the ablest men we have.

While it is not within the scope of this paper to suggest governmental policies, two points at least seem clear: first, whatever regulation we have should be uniform—if we fix rates for one transportation agency, its competitors should not be turned loose on their own individual war path; second, it seems inevitable that some measure of regulation must apply to private as well as to public carriers.

In the past fifteen years we have seen an almost unbelievable increase in passenger transportation due to the convenience and low cost of private automobiles.

It is notable that transportation, as it becomes more speedy, regular, frequent, economic and efficient, creates, like other public services or utilities, an increased demand. In the past, transportation has grown at a rate higher than the increase in population. While for reasons given it may be doubted whether this condition will continue in freight service, our passenger service may more than compensate for a flattening out of the curve of our freight increases. Our transportation service seems destined to hold its world leadership, to continue to develop and adapt itself to the changes in the American scene and to become increasingly adequate and responsive to whatever demands are placed upon it.

The closing session of the Conference on Thursday afternoon, June 3, was presided over by Baldwin M. Woods, chairman of the Department of Engineering, University of California and chairman of District No. 10 of the National Resources Committee.

Why Regional Planning?

James M. Langley

Chairman, New Hampshire State Planning and Development Commission

IN New England the answer is simple. New England states have always found it natural to compare notes, and on occasion to work concertedly. So it was the natural thing when the six states undertook planning officially that their planners should meet and organize a voluntary regional commission.

This regional organization violates no governmental bounds. It creates no new governmental units. It is suspended somewhere between local and federal arenas. It recognizes the joint sovereignty of the states and the federal establishment. It has no powers whatever. Its duties are whatever it may determine. Its authority is only that of persuasion.

New England has always been considered a natural region, yet when its economy is studied it is found that regional and state bounds are violated by the bounds of watersheds and by the bounds of its agricultural, industrial, mineral, forestry and recreational areas. The arbitrary political bounds are no more confounding than the criss-crossing of the bounds of its economic areas.

Practically there is no likelihood that state bounds will be altered, and despite the pronounced and continued trend towards vestment of all political authority in a central government abandonment of state bounds as limits of some sovereign jurisdiction remains a very remote possibility. So New England reasons that because planning must be made effective by governmental action the states should be recognized as proper planning areas and that interstate planning problems should be met by agreement or compact and through the promotion of better regional and interstate public relations, with federal participation kept at a minimum.

New England has no illusions about discovery in this generation or any other of some profoundly simple solution to all the problems of mankind. It does not consider planning a final answer. It recognizes in the word two characteristics, principally—economy and coordination. The regional planning commission is essentially a means to better coordination. Economy depends upon the extent to which state and local

legislatures and administrative agencies accept recommended plans, and the degree to which these plans can be said to be economical.

There is a saying attributed to Buddha which describes the New England attitude:

God feeds the sparrows,
But he doesn't put it in the nest.

This philosophy of intensive industrialization and the concentration of population in large cities is undermined somewhat as a general New England conviction, but it persists to a surprising extent in the region.

Its acceptance can probably be traced to the fact that New England has no natural resources which it can trade for indolent ways of life. It has no oil, no coal, no natural gas. It has no rich ores. Its stones are luxury products in a competitive market. Its forests and its fisheries have been decimated by time. Its agricultural production was never lush. It does possess a most healthy climate, its setting is scenic, and it has water power. Its people have had to scratch for their living.

The agricultural census of 1935 revealed something of the extent to which this still is true. New England conscientiously studied the possibilities of public-sponsored subsistence homesteads early in the depression. It became convinced that the standards sought were not yet economically attainable. But New England people by the thousands devised their own scheme for subsistence homesteading and went back to the land for partial or complete support, at least until the economic storm should pass.

Many of these people are living in what planning authorities would describe as sub-standard homes or shacks. Sponge baths do instead of tubs, hot water comes from a teakettle instead of a tank, toilet facilities are crude but serviceable, tar paper keeps out the wind without a covering of decorative clapboards and paint, banked sand insulates foundations, water comes from home-made wells, rooms are small and often crowded. Yet these people have preserved their pride and self-respect, they have remained resourceful, they have helped society in general to weather hard times, and they are still convinced that they are entitled only to what they can contrive. All the subsistence homesteads the government might have built would have provided for only a small fraction of them, would have held out probably futile hopes of ultimate ownership to those few, and might have made the others more restless than hard times alone have done.

New England planners are slow to approve socialized experiments. The average Yankee isn't much interested in first impressions. He likes to study new things or new people, to observe them and make up his mind slowly. It is a process of depending upon second thoughts, a process which New England believes is or should be an inherent part of planning. Contrarywise, once sold on an idea the New Englander stays sold pretty well. This follow-through is also a valuable adjunct of planning in the opinion of New Englanders. Waste is prevented at both ends. That is planning economy.

So New England isn't making any sensational plans. It knows it must build freeways, radial traffic arteries which will improve its transportation facilities and reduce traffic hazards and the heavy casualties it has. Studies made by the regional commission have influenced recognition of this fact and already the beginnings of such highways are discoverable. In one instance the commission succeeded in getting local authorities to relocate a through highway to Cape Cod so that it went around the city of Providence instead of through it. A new artery is being built out of the New York metropolitan area. The commission is having some success in convincing highway authorities that new roads properly planned and located outside of settled areas are much more economical to build than is a program of widening existing highways which when finished still will not be freed of many traffic hazards.

New England is convinced that planning must be supported from the bottom rather than suspended from above. It is a slow process, this business of establishing good planning practices in the political subdivisions. But New England isn't impatient. It is convinced that steady plugging along a straight line of action gets one farther faster than hopping back and forth from left to right as the cycles of business activity and politics occur.

The device of compacts is ordinarily considered a bit cumbersome but New England prefers this approach to flood control and four of its states are in process of ratification of Merrimack and Connecticut river watershed compacts. The regional commission has done much towards education of the general New England public to the problems involved. There is great value in sifting such plans through state legislatures, in giving everyone an opportunity to be heard on the subject, no matter how well informed he may be. It is part of a logical process of educating the general public to planning practices.

What New England does not want is the establishment of federal planning authorities within its region, similar to TVA. It doesn't wish to live according to ready-made plans handed down to it by some remote government. It prefers to pursue a policy of self-help in planning.

New England isn't ungrateful for the help which the National Resources Committee and its predecessors have extended. It believes such a committee should be made a permanent federal fixture. But New England does want to make up its own mind as to plans which affect it. New England still likes to feel that its people are a free people, that democracy with all its loose ends is still a better form of government than any other which has been devised.

New England sees in planning a device for eliminating some of democracy's loose ends but it doesn't expect planning to become fully effective overnight.

All this may sound a bit boastful and non-cooperative, insofar as the rest of the country is concerned. It isn't intended to be so, for New England is sincere in these attitudes. It has existed for three hundred years in the face of all sorts of obstacles and through its adaptability has constantly readjusted itself to a changing national and world economy.

It has weathered the recent depression in far better shape than most of the country, but this storm was only one of a long series through which New England has passed.

It accomplished the transition from an agricultural to an industrial economy before much of the nation was settled. It has let more than a third of its once-tilled lands revert to forest growth without federal help. It diversified its industry when the South industrialized and took a good portion of its textiles away. It has accomplished decentralization of industry to a greater extent than perhaps any other region. It has gone further toward liquidation of assets destroyed by economic shifts than much of the United States.

Insofar as planning may contribute to the disintegration of self-reliance among the people whom it is intended to benefit it is not good planning. New England doesn't disparage improved standards, which mean the creation of more wealth. It thinks the fact that even in 1929 this country created only enough wealth to provide each family with an average of $2,800 worth has some significance. That suggests about how much we can afford to have in any one year if we would not eat our seed corn and cripple our opportunities to have as much each year thereafter and possibly more with good management and good luck.

So we look on planning as essentially a means to better management, a conservative way of doing things, and not as a medium for the overnight arrival of the millenium.

The Pacific Northwest

Roy F. Bessey

Consultant, Pacific Northwest Regional Planning Commission

IF I were making my own casual selection of the topic for primary emphasis in a discussion of Pacific Northwest planning, I would not have chosen as that topic the reasons for regional planning. The "why's" quickly become accepted as a matter of course; perhaps after three or four years of effort they are taken too definitely for granted. At present the instinctive desire is not to restate objectives, recount accomplishments, report progress or expound techniques, except insofar as these seem to be closely related to pressing work and needs. I find that I want most strongly to emphasize those things weighing most in my own mind—how much is to be done and what is needed in order to do it. Fortunately, however, these things come very close to explaining the "why" of regional planning.

Moreover, I realize that first principles should not be taken for granted; that the objectives, that is to say, the "why's," obviously should be periodically re-examined. Since the program committee for this conference has thoughtfully brought this up, this is a very good time for such a review of the fundamental reasons for regional planning.

There are patently a number of reasons for regional planning, in fact, a number of groups of reasons.

The first of the groups of reasons coincides with those for national planning. However, it may be stated as axiomatic that some kind of planning is an absolutely essential part of the national administration under the complex economic system of the present day. The nature and effectiveness of national planning will vary with political and governmental philosophy and organization. But under any system or party, organized foresight will greatly reduce the percentage of error and waste and increase the prospects of better utilization of all kinds of resources, and, furthermore, make for a more definite and sustained progress toward high material and cultural standards.

Under the American political system, as contrasted with some foreign systems, national planning will be largely a matter of finding and correcting critical conditions which threaten resources or economic and social development. Obviously, regional planning should do likewise.

One general reason for national planning should be strongly emphasized because of its parallel with a most important reason for regional planning. This, reduced to its simplest terms, is the need for coordination of resource planning. Many federal departments and half a hundred states and territories are involved in conservation and development, but none has more than partial responsibility. Thus, the national or regional planning agency must take the over-all view and fill the essential coordinating role.

The optimum national advancement cannot be accomplished without regional consideration. A national plan can hardly be complete without a foundation of regional plans. While much of national planning may concern problems entirely national and international in scope, much of national policy and plan must be built upon problems and plans of its constituent areas. This is particularly true of those plans affecting national resources.

The solution of many national planning problems requires consideration of regions based more on physical, economic and cultural geography than political subdivisions. These regional requirements, together with administrative considerations which will be touched upon, call for an intermediate, subnational and interstate level in planning activity and organization.

The best attainable national economy requires as essential conditions the greatest practicable efficiency and stability in every region within the nation. Balance and security in the national economy, for example, depend highly on rational balances of population, industry, trade and income among the regions. The regions must not be overspecialized. They should not be allowed to sink into provincial or colonial relationships to the industrial and money capitals of the nation. Such problems call for both national and regional planning of the highest order and along carefully coordinated lines.

These national reasons for regional planning apply to the Pacific Northwest, as elsewhere.

The Pacific Northwest is a particularly logical field for regional planning. It has clear-cut regionality, which, of course, is not perfect, con-

sidering all of the tests. But the Pacific Northwest does constitute an unusually coherent subnational region. This conclusion is inevitable when one considers all the geographic, economic, political and cultural factors. This subject is discussed at greater length in the report on regional planning in the Pacific Northwest, published by the National Resources Committee as *Regional Planning—Part I.*

Regional planning is especially important to the Pacific Northwest because of certain distinct and critical regional problems whose solution depends on study, understanding, plans and programs in many branches of government. Such planning is needed to insure that these problems are considered in their entirety, in responsible and cooperative fashion by the many concerned, and not just academically by a very few.

These regional problems are those involving assets, whose wise use will lead to material improvement of the regional and national economies and those which threaten serious economic dislocation. There are also the immediate problems involved in assuring prompt integration of large public works into the regional economy, with adequate economic and social return from public expenditures.

Generally speaking, we may state as a logical, generalized objective of, or reason for, regional planning in the Pacific Northwest, the attainment, through better conservation and use of physical and human resources, of a broader, more diversified and more secure regional economy. Fulfillment would result not only in raised regional standards of material and cultural life but also, as stated hereinbefore, in broad improvement in the national economy and standards.

Elaborating somewhat, such objectives involve an approach to a more nearly complete regional self-sufficiency. They involve a reduction of the disparity between the values produced in the region and those retained in, or redistributed to it. They involve finding means of equitable redistribution to the region of wealth drained from it by the mining of resources and by the disparity in trade terms—that is, through the relatively low return for materials exported from the region, and the relatively high costs of finished materials imported into it. They involve utilization of regional resources so as better to serve the regional population, and, in view of the great potentialities of some of these, better to serve a larger proportion of the national population.

Within this broad regional problem just outlined, there are several major problems, all requiring immediate planning and action. Some of these should be mentioned as being important reasons for regional planning in the Pacific Northwest.

There is a problem of land settlement, greatly accentuated by the marked influx of settlers during recent years. It has been estimated that approximately ten thousand new farm families settled in Washington, Oregon, Idaho and western Montana during 1936. It is probable that the increase in urban population in recent years is also in excess of normal rates. With adequate development and conservation, the region can support, at relatively high living standards, a considerably larger population than at present. National, as well as regional, population and land

use problems and programs will call for an extensive regional program for the reclamation of suitable land for rural settlement, through irrigation, drainage, diking and clearing. And yet this program must take into account and not conflict with such other economic uses of land and water as forest production, recreation, wild life, and so on.

To absorb new population to regional and national advantage will also require the higher development in this region both of basic and manufacturing industries. The basic industries are not so desirable in themselves because they tend to be absentee-owned and to make a relatively low contribution to local income and business, but are an essential foundation for the development of secondary industries which employ larger numbers and more skilled personnel at higher scales, and which pay dividends within the region. Such an industrial development is, of course, the necessary complement to the rural and agricultural development which is already tending to accelerate. It is also an important means of providing an essential better balance in the regional economy.

The forest resource and its dependent industries are of almost inestimable value to the region. They provide a tenth of all regional payrolls and over half of the manufacturing payrolls. Their indirect effects greatly swell the total of regional dependency upon forests for economic activity and stability. In transportation, for example, more than half of the freight traffic originating in the region is forest products. Yet this resource, constituting about half of the remaining softwood supply of the United States, is currently being depleted at about three times the rate of growth, a condition which constitutes a serious threat to the regional economy. At these rates the marketable timber may be practically exhausted in little more than a human generation. It is obvious that means must be found to save this important source of subsistence and wealth for region and nation.

The water resources furnish another compelling reason for regional planning. The Columbia River drainage, including large parts of all the Pacific Northwest states, as well as British Columbia, involves distinctly regional problems in the use of water for irrigation, navigation, power, communities and industries. The development of the region's ample water power is looked upon hopefully as the key to the broader regional industrial development already touched upon. Use and control of the water resource are also highly important in bringing about the essential land development program. As the region is semi-arid in considerable part, irrigation is the mainstay of agricultural stability and agricultural community prosperity. Finally, trunk waterways will be a factor in providing the lower-cost transportation essential to increased industrial and general development. These various uses of water inevitably involve conflicts, and hence require coordination and planning.

Fisheries support unusually important industries and recreational activities in the Pacific Northwest. It is necessary to plan to sustain these resources in the face of changing conditions, such as new obstacles to migrating fish, increasing stream pollution, increasing demands upon the resource, and so on.

Improved transportation in general is required as a logical corollary of the general development outlined. In addition to water trunk lines, providing primarily for bulk materials, improved and modernized land transportation will be required for services to heavy and light industry, distribution and communities. The maximum practicable coordination of all of the means of transportation, including the air, is a planning problem with important regional aspects.

Recreation also involves important regional planning problems. In addition to its imponderable human values, it has direct economic values of a high order. Its sale must be looked upon as one practical and effective means of bringing wealth back to the region from the larger financial and population centers in which it has tended to become concentrated under the present regional economy.

Public works must be listed importantly among the "why's" of regional planning. Properly planned, they may be motivating forces in economic and social advancement. In fact, they may be considered as one of the few available means, under our system, of bringing about desirable economic changes. From the regional viewpoint, they must not only be looked upon as foundations for economic betterment but as direct and indirect means of essential redistribution of wealth to the region.

It has seemed necessary to skim through these more important regional problems in order to demonstrate the principal reasons, from a regional and national viewpoint, for having regional planning.

There are also impelling reasons from the state viewpoint for maintaining regional planning.

The boundaries of states are not necessarily or even usually economic and social boundaries. Problems relating to resources and their conservation and development are not often closely related to state lines. Many major public works involve, in their execution, legal, financial and other powers beyond the scope of the states. Many such works are definitely of interstate location or nature.

Coordinate action is, then, required between states in the solution of many physical and economic problems: for example, the development of the Columbia River system for navigation, irrigation, power, flood control; pollution of interstate waters; conservation of fisheries in coastal and interstate waters. In such matters as these, close cooperation between the state and the nation and between groups of states is essential. Regional planning provides a means of linking the state and federal governments more closely in continuous consideration of resources and their development.

The organizational and administrative reasons for regional planning might be elaborated. It may suffice, however, to repeat that regional planning work is essential to a responsible over-all consideration of all resources and to the coordination of planning activities of various agencies with respect to the beneficial utilization of these resources. Without the intermediate level, much of the essential work and responsibility may be neglected as a result of falling between the national and state planning organizations.

Some of the things that need to be done in the regional resources field should be mentioned. In general, they will not be done without organized regional planning. The problems heretofore outlined should be studied cooperatively in the region, and ways should be found of conserving resources, overcoming deficiencies, improving conditions and searching out new lines of progress. Reports should be made and public information programs developed. In order to effectuate plans it is necessary that the representatives of the federal government, the states and the public be informed as to conditions and agree as to action.

It is my own impression that the greatest task of regional planning (and also national, state and local planning) is the effectuation of planning cooperation—the coordination and synchronization of plans. This nearly always involves compromise.

As has often been said, planning is not new. Many agencies and individuals have long been looking ahead. Unfortunately, they have been looking forward, very generally, only from a single viewpoint, whereas composite viewpoints are essential in the kind of planning we are considering.

We learn, in our work, that interested parties rarely see the whole picture, and that their objectives for the future vary greatly. Even the ardent conservationists rarely see eye to eye. Generally, they are interested primarily in only one kind of conservation. For example, in the field of wild life conservation, some, interested primarily in fish, would tear out all the dams in our streams, regardless, for instance, of water and energy conservation. Others would build more dams to preserve water fowl and aquatic mammals. Few of the nature conservationists can see the problems of conservation of land for agriculture, or the conservation of energy of falling water. Complex conflicts may arise over the use of certain land; agriculturalists may wish it watered, drained or cleared; others may wish it adapted to forest, recreational or wild life usage.

The task of harmonizing conflicting views may seem hopeless to many, but, really, it is not. Intelligently organized planning can accomplish much through the use of scientific and technical analysis, and, above all, through cooperation. The planning task requires infinite patience, since the fundamental need is the bringing together of divergent interests. However, in bringing these interests together, it is, fortunately, not necessary that each group understand all of the problem, or all of its specialized phases. It is essential that they do understand that a single interest cannot prescribe the solution, if for no other reason than that other interests would not like it, even if it were good. It is necessary to understand that other views may be as honest as one's own. Above all, it is necessary for each to see a good part of the whole and the relationship of his phase of the problem to this whole, as well as the interest of the general public. It would be well were each able to see some of the humor of widely divergent views on the same problem.

Obstacles to the process of harmonizing plans for the future are found not only in group interests, but in characteristics of government itself. Established governmental agencies, naturally enough, have strong feel-

ings of self-sufficiency. The habits of self-sufficiency, as well as the force of direct responsibilities, make it more difficult for such organizations to take on joint, intangible responsibilities relating to conservation and development as a whole and requiring cooperation with other agencies. Similar obstacles to broad regional and national consideration of resource problems may be found in the organization, traditions and habits of state government.

Regional planning must have a strong foundation in all of these diverse interests in both federal and state government and in various civic and business groups. It must also be responsive to fundamental public opinion, so far as the latter can be gauged.

If it is granted that the most important single objective in planning is the creation of a coordinated attack on pressing problems, it may then be assumed that the most important tools of regional planning organization are the means with which to do this job. These may be briefly reviewed:

A regional planning organization of broad, representative, catholic and flexible character. Only an organization with such characteristics in greatest practicable degree will have the breadth of intelligence, knowledge, experience and outlook to consider the diverse problems and plan with authority for a large area or population. I think an adequate regional planning organization will have three essential parts: (1) governing board, (2) advisory technical group, and (3) staff.

The board should be compact and representative of both federal and state planning agencies.

The advisory group should be broadly representative of the important technical and other interests in various resources, and of federal, state, business, educational and general public interest. It should be flexibly organized into appropriate technical divisions or committees.

The staff should have a small, but adequate, professional and disinterested executive, administrative and technical nucleus. It should also include a number of specialists, each primarily concerned with one of about four or five major resource groups [for example, (1) natural resources, (2) other physical resources, (3) welfare, (4) government] who would aid corresponding groups of advisory-technical divisions. The staff set-up should be flexible, with provision for adding, temporarily, by direct employment or loan from other governmental agencies, specialists as required for specific studies.

Another essential feature of regional staff organization is a continuous, resident national and regional planning liaison in each state planning agency. This is in addition to similar liaisons of the national organization within the regional scheme. In the Pacific Northwest the state and regional consultants have formed an informal technical board acting in an advisory relationship to the regional planning commission.

In the Pacific Northwest, although there are some disadvantages as well as advantages in such an arrangement, we have leaned strongly to the view that over-all planning should be the sole responsibility of the regional planning agency—that is, the planning agency should not be

directly connected with or responsible for development, construction or operating activities.

The advantage of keeping the planning organization on an over-all, disinterested plane seems most important. This kind of organization also better fits the present established federal government scheme in which actual development, construction and operations are in the hands of specialized agencies whose work covers the whole country.

Disadvantages of the entirely separate planning organization lie in the fact that planning is rather intangible and hence less likely to be understood, valued and supported by the public and its legislative bodies. Also, the present separate planning set-up does not provide for any coordination of development, construction and operation. Without minimizing the advantages of coordination in these latter fields, coordination in planning is the most important from the standpoint of social and economic well-being and progress.

It should be recognized that the combination planning-developing-operating authority tends to cut across the existing functionally-specialized, vertically-compartmented governmental structure with a horizontally-compartmented regional arrangement. I believe the inherent advantages of each general scheme should be carefully considered in planning organization for regional development. I recognize, however, that in some definitely critical subnational areas the entirely integrated attack on a regional basis undoubtedly will be most advantageous.

In addition to an adequate organizational set-up, regional planning requires, for outstanding accomplishment, recognition, high standing and respect. The attainment of this desired position requires: permanent central national planning organization (with general features similar to those already outlined for regional planning organization); administrative machinery for interdepartmental coordination; indoctrination of administrative departments with principles leading to support of and participation in over-all planning and to greater interdepartmental cooperation, so that activities in these fields will become matters of routine or habitual procedure; participation in regional planning by the states, under legislative and administrative authorization.

For further discussion of the general establishment of organization for planning on a regional basis, attention is invited to the reports of the National Resources Committee on regional factors of national planning and on regional planning in the Pacific Northwest and in New England.

In stating the governmental prerequisites for successful regional planning, it is not my intention to minimize the fact that regional planning must, itself, earn much of the desired recognition and respect. This can be done only through accomplishment. The regional planning agency must produce work other agencies will find complementary and valuable with respect to their own work and its ultimate effectiveness. Of course the regional planning work must also become of estimable value to the community. It should be emphasized again, however, that regional planning needs the full moral, legal and administrative backing of established governmental organization.

The accomplishments of regional planning also seem to justify its existence, but any report of progress must necessarily be generalized and brief. To begin with, it is difficult to estimate progress in a task without definite beginning and end. Without a standard of measurement, evaluation of progress is likely to vary in considerable degree with point of view and even with the state of the viewer's morale and digestion.

Of course, the present planning organization did not begin the task of regional planning, but rather that of bringing some of its ends together. Likewise, it will not complete the job, for, obviously, plans must be revised constantly to meet changing conditions, to meet the inevitable contingencies, and to correct error due to limitations of human foresight.

This planning organization does not propose to create a "blueprint" for the region. But it does hope to help in forming an essentially complete framework of desirable regional objectives, policies and programs for the principal resources and for general development and progress. In this general direction, it has carried out some studies and made some reports. However, it realizes that, in a sense, even these reports were begun in the past by other agencies and that they may not be considered complete until their findings have found wide acceptance and action programs are in effect.

Nevertheless, I think much has been done. I believe that the results of accelerated regional planning, together with national, state and local planning activities of the past few years, have been of considerable social and economic value. And, in this connection, the broad implications, and the ramified indirect effects of planning work should be taken into account rather than only the direct results.

In the Pacific Northwest progress has been made in organization. As a result of the organizational work, carried out for the most part in 1934, it is believed that the region has the framework, at least, of an organization which will serve the purposes of general regional planning.

The regional planning agency has assisted in the organization and work of state planning and is, I believe, one of the factors in the relatively high and uniform progress in state planning in the Pacific Northwest.

Regional planning techniques have been developed and, while susceptible of constant improvement, are of proved workability.

Progress has also been made through the medium of studies which, it is hoped, will be of definite value in solving important regional problems.

In addition to general progress reports, studies and reports made by the regional planning commission include the following:

(1) A report on the future of the Columbia Basin and on types of development organization was prepared in 1935 (and was issued subsequently by the National Resources Committee as *Regional Planning, Part I— Pacific Northwest*). This report reviewed resources, problems, needs and possible future development of the region, the nature of Pacific Northwest regionalism, and organization for planning, construction and operation of public works in the region, and submitted conclu-

sions and recommendations with respect to these problems. (2) A report and recommendations with respect to the conservation of nationally important scenic and recreational values in the Columbia Gorge in Oregon and Washington. (3) A report on the Pacific Northwest forest resources and their economic importance, suggesting a broad program of federal, state, industrial and public action with regard to the country's major source of timber products. (4) A report and recommendations with respect to Pacific Northwest water resources and their future development. Concurrently the regional planning commission and staff participated in the nation-wide drainage basin water resource study of the National Resources Committee.

The regional planning commission has considered, and is continuing to consider, problems growing out of the unusual migration of land settlers to the Pacific Northwest, and is studying reclamation as a means of meeting land requirements.

It has also given some consideration to possible policies for federal power production and wholesale distribution in the Pacific Northwest and has made a number of suggestions from the standpoint of the region as a whole.

The regional planning commission staff has made progress, with aid furnished under CWA, ERA and WPA projects, in the assembly and preparation of data concerning the physical and economic resources of the region.

However, I think that the most important progress has been made along more intangible lines, in the direction of improved official and public cooperation and understanding—that is, along the lines of planning's most important task and need as previously outlined.

In our studies of land, water, forests and so on, we have found an increasing ability, among somewhat divergent interests, to get together and reach substantial agreement on important programs.

It may be particularly significant, also, that in the recent fourth Pacific Northwest regional planning conference a policies committee of fifty or more members agreed, without difficulty, on a common statement of regional needs embodying views on various specialized subjects. With all the unity of general purpose that has characterized each of the regional planning conferences, a unified statement could not have been so prepared at any of the earlier meetings.

My own conclusion is, and I hope that this represents a fairly general consensus, that regional planning has demonstrated considerable present value not only in the Pacific Northwest, but elsewhere, and that the potential values are far greater than any yet realized.

It seems clear to me that regional planning is a vital part of national planning and a very important aid to state planning and even, in some respects, to the planning in smaller areas. Further, and primarily from an organizational standpoint, it is an essential step between the national planning agency on one hand and, on the other, state and territorial planning agencies far too numerous for effective administration.

Finally, without provision for work at the regional level, it will be

very difficult to build up and maintain the interdepartmental cooperation, the federal-state liaison, and the public contacts necessary in effective planning for broad and well-balanced national development and progress.

Can Interstate Plans Be Effective?

Henry W. Toll
Executive Director, Council of State Governments

THE painter hopes that his picture will be hung. The architect hopes that his castle in Spain will become a reality in some more stable vicinage. The author hopes that his manuscript will be published. And the planner hopes that his plan will be followed. For an unfollowed plan has approximately the same social value as an unhung canvas, an unbuilt mansion, or a mouse-eaten manuscript.

When some of us graduated from college, research was all the rage among students of governmental affairs. Governments and foundations financed the accumulation of volumes of information, which in turn accumulated dust on untouched shelves. Then came the God-sakers—who called for immediate action at any cost.

Then came the popularity of planners, who proposed a program which had more relation to the scientific method: (1) the accumulation of factual material; (2) the formulation of a plan; and then, (3) action.

But three steps were still missing. In an orderly system of government, there are six stages:

(1) The collection and tabulation of factual material.

(2) The formulation of a plan.

(3) The effective communication of the plan to those in authority; in other words, the effective transfer of the idea from those who know what ought to be done to those who decide what is to be done.

(4) The transformation of the plan into an official program—in other words, the governmental mandate.

(5) Organization for action including the implementation of the official program with money, men, and facilities.

(6) The ultimate action.

Since the United States government was established a century and a half ago, there have been a few cases in which two or three states have cooperated in the maintenance of pleasure parks. During that century and a half, there has been one instance in which two states have cooperated in the conduct of a long-range constructive program—namely, the New York port authority. But throughout this century and a half, there has not been a single instance of any long-range constructive cooperation concerning any matter that has been undertaken by a group of state governments.

The reason is definite: The states have not had any plan of organization to make possible such cooperation. Unless such a plan of organization can be developed, the work of planners in devising programs for interstate cooperation will be in the same category as the work of the

painter of unhung pictures, the designer of unbuilt mansions, the author of unpublished manuscripts.

Incodel

The Council of State Governments has undertaken the task of developing a plan of organization which will make it possible for a group of state governments to work together in a long-range program of constructive cooperation.

It may be that in the Delaware basin the Council of State Governments has succeeded in devising a pattern of organization which will be for the state governments what the corporation is for individuals. If so, it is a matter of extreme importance to the planners.

As most of you know, two-thirds of the states of the union have now established commissions on interstate cooperation. These commissions are to the state governments what the ministries of foreign affairs are to the national governments. Each commission is composed of five state senators, five members of the state house of representatives and five administrative officials of the state. It thus represents the legislative, executive and administrative divisions of the government.

These cooperation commissions of Pennsylvania, New York, and New Jersey tackled the Delaware basin problem. Of course, the Council of State Governments is a part of the governmental structure of this country, having been created by statutes now in effect in twenty-six states, and having been vested with governmental authority by each of these statutes. I wish that I could take time to tell you the exceedingly interesting story of the evolution of the Interstate Commission on the Delaware Basin—generally known as Incodel. Suffice it to say that such a commission was established.

The Pennsylvania Commission on Interstate Cooperation was authorized to name four members of Incodel: one senator, one representative, one planning official, and one administrative official. Similar authority was given to the cooperation commissions of New York, New Jersey, and Delaware, to name four members apiece. Thus, an interstate commission of sixteen members came into being. A seventeenth member was designated by the National Resources Committee, and an eighteenth member by the Council of State Governments.

To summarize, the essence of this pattern of organization is this: a single interstate body made up of delegates who represent commissions of the individual states, which in turn represent the two legislative branches and the executive and administrative divisions of their respective governments.

The Interstate Commission on the Delaware Basin has its own offices in the Franklin Trust Building in Philadelphia, with a full-time staff of three members—one provided by the participating states, one by the National Resources Committee, and one by the Council of State Governments. Apparently, the participating states will jointly appropriate over $25,000 to the work of the commission for the coming year.

The Delaware basin is as large as Belgium. The Delaware River is a tie of considerable importance to the states of New York, New Jersey, Pennsylvania, and Delaware. The natural resources of the basin are assets which annually provide many tens of millions of dollars to the population of the basin—a population of approximately five million people, spread over an area of twelve thousand square miles. In the past, the conservation and development of these resources has been left to individual communities, with some later participation by their state governments. Only recently have the state officials in this four-state region fully realized the extent to which the uses and abuses of the physical resources of the Delaware Basin in each state affect the localities and the citizens of the other states in the basin.

The problem of developing a new source of water supply for the city of New York brought this fact rapidly to the fore. Two years, and hundreds of thousands of dollars, were spent in settling this issue in the legal battle over the city of New York's plan to obtain additional water from New York State's tributaries of the upper Delaware River.

In the decree of the United States Supreme Court in the Delaware River case, the precedent seems to have been established that the future source of water supply for the Philadelphia metropolitan area, for northeastern New Jersey municipalities, or for other communities which may develop needs in the future, cannot be considered solely as individual projects, but must be thought of in relation to the use of this stream for the basin as a whole.

Even though the water needs of a state may lie in the future, they will be recognized and protected. Each state may claim its fair and equitable share of water from interstate streams, and in the allocation of such water, the first taker may not claim more than its share, thus depriving another state of its quota. In other words, our western system of prior-appropriation, sometimes known as the grab-first doctrine, will not be applied in its entirety.

Continuing emphasis should be placed upon this approach to the problems of land and water use in the Delaware River basin, nor can too much emphasis be given to the inherent difficulties which are involved in developing a comprehensive, unified program of conservation and use for this entire area which involves, as it does, the conflicting demands and requirements, administrative as well as political, of four sovereign states and hundreds of political subdivisions.

The Interstate Commission on the Delaware River Basin, composed of legislators, administrators, and planners from the four state governments is approaching this problem of the conservation and use of the natural resources of the basin in a broad way, working closely with the state planning boards, as they seek a thorough understanding of present conditions, as they project their plans to estimate their future needs, and as they undertake to determine the best uses to which their natural resources can be put.

This approach, from a planning standpoint, must of necessity be along two somewhat different but parallel roads: one, to include those features

known to professional planners as component parts of a long-range, comprehensive planning program; the other, to advance short-term projects of already known merit—clearing the way for long-range accomplishment through the development of an enlightened public opinion, and the adoption of enabling legislation.

Obviously, a comprehensive planning program for the Delaware River basin cannot be undertaken in advance of the progress which is yet to be made in long-range planning for the individual states. But such progress, on the part of the planning boards in New York, New Jersey, and Pennsylvania is being made with remarkable speed.

Pollution and Water Supply

Progress is being made by the Interstate Commission on the Delaware Basin in the direction of viewing two major problems presented by an interstate stream: namely, pollution and water supply.

Working on the theory that the uses of the Delaware River and its tributaries can be improved, and that its abuses can be prevented only through better informed thinking on the part of the representatives of all states involved, the interstate commission has begun to approach these specific problems of quality and quantity on a technically sound basis.

An engineer and a technical advisory committee have been named to assist the Delaware River basin commission in its consideration of water pollution and water supply: the former, Mr. James H. Allen, of Pittsburgh, has been assigned by the National Resources Committee, as further evidence of the desire of this federal planning agency to encourage interstate cooperation; the advisory committee on engineering is composed of Messrs. H. P. Croft, C. A. Holmquist, W. L. Stevenson, and R. C. Beckett, the engineering heads of the state health departments of New Jersey, New York, Pennsylvania, and Delaware, respectively, and Mr. Nathan B. Jacobs, water consultant of the National Resources Committee for district number 2.

This engineering committee met first, as a group, in Trenton, New Jersey, on March 17. It was agreed that the two outstanding tasks in the Delaware River basin, from an engineering viewpoint, are the drafting and ratification of an interstate compact which will settle satisfactorily, on a permanently continuing basis, first, the manner of preventing water pollution in the Delaware River, and second, the means by which an equitable allocation of the waters of this drainage basin may be brought about.

To determine when, how, and where treatment is desirable for sewage, industrial wastes, or other polluting matter—based on the uses to which the river is put—a subcommittee was selected composed of Messrs. Croft, Stevenson, and Holmquist.

In pursuing its task, the members of this subcommittee on quality met again in Trenton, April 22 and 23, after collecting basic factual data from their individual states concerning existing conditions of the water of the Delaware River and of its tributaries, at their points of confluence with the main stream, including location and character of public water

supply intakes and points of discharge of sewage and industrial wastes.

At this meeting, the present conditions and probable future requirements of each area were discussed in detail; agreements were reached where controversies developed; preliminary restrictions were drafted for inclusion in the proposed compact. This committee met again on May 17 and 18, in New York City, to continue this cooperative engineering planning.

The establishment of such standards of cleanliness or purity, with emphasis on the public health aspects, which would—if acceptable in the form of a compact, and properly enforced—abate and prevent water pollution, is essential to this important phase of a unified river development program.

The Problem of Water Allocation

Even more complex than quality, in considering the conflicting demands and requirements, administrative as well as political, of four sovereign states and hundreds of political subdivisions, is the problem of the equitable allocation of the waters of this interstate stream.

The importance of this question of quantity can perhaps best be illustrated by the continually talked-about Philadelphia water-supply problem.

Philadelphia gets its water from nearby points in the Schuylkill and the Delaware rivers. Both sources are in areas of gross pollution, and although the water is made pathologically safe for domestic use by highly specialized treatment works, it is properly subject to much criticism as being largely purified sewage.

These conditions are the cause of a century old urge to abandon present sources in favor of a purer upland supply. Many different schemes have been suggested and studied, but, hampered by continual controversy, an agreeable plan has yet to be developed.

All proposals have one thing in common, however, in that they suggest the taking of a new source of water supply either from the interstate Delaware River, or from the intra-state tributaries of that stream. In either case, such a diversion as would be effected involves serious questions as to the rights of the four basin states, New York, New Jersey, Pennsylvania, and Delaware.

In appearing before a recent public hearing called by the mayor of Philadelphia to consider that city's water problem, an official spokesman of the Interstate Commission on the Delaware River Basin stressed the following fact: "Two years, and hundreds of thousands of dollars, were spent in settling this issue (diversion of water) in the legal battle over the city of New York's plan to obtain additional water supply from the New York State tributaries of the upper Delaware River. To prevent a repetition of this dispute, the engineering committee of the interstate commission is now engaged in studying this problem looking toward an amicable solution. This would seem to be an economy of time and money."

That statement gives a clear picture of the functions and the importance of the subcommittee on quantity, composed of Mr. Charles E. Ryder,

chief engineer of the Pennsylvania Water Power and Resources Board, Mr. Howard T. Critchlow, of the New Jersey State Water Policy Commission, and Mr. Russell Suter, executive engineer of the New York Water Policy and Control Commission.

Water from the Delaware River basin for public water supplies, termed by the United States Supreme Court in the Connecticut River case as the highest use to which water can be put, is a particularly urgent problem. Future use for this purpose, not only for Philadelphia, but again for New York, and possibly for northeastern New Jersey municipalities, will soon have to be determined. By careful, cooperative planning on the part of the health and water-policy engineers of the respective states represented on the engineering committees named above there should develop the sound fundamentals upon which an equitable and practical compact, satisfactory to all of the states involved, may be based.

The progress which is being made upon these two extremely important items of the program of the Interstate Commission on the Delaware River Basin—in its pursuit of a careful, balanced consideration of the resources of the entire watershed—is clear evidence of the soundness and the value of this pattern of organization for interstate cooperation.

Incohio

In order to save time, I will devote only two sentences to the Interstate Commission on the Ohio Basin—known as Incohio. Its pattern is exactly similar to that of the Delaware commission, but with one senator, one representative, and one planning official named by the cooperation committee of each of the nine states in the basin. Other members are named by the Department of Agriculture, and the National Resources Committee. It was one of the most noteworthy cases of quick official organization in American history, since this governmental agency was established by nine states, and functioning with official delegates from all nine, within eighteen days after the decision was reached to develop this commission.

This is the end of my report, but I cannot conclude without quoting what I find to be the finest sentence of the year, the concluding words of the recently published volume, *Political Power*, by Charles E. Merriam, which I consider worthy to be ranked with Burnham's celebrated passage. It reads:

"The future belongs to those who fuse intelligence with faith, and who with courage and determination grope their way forward, from chance to choice, from adaptation to creative evolution."

DISCUSSION

Mr. Wayne D. Heydecker, Albany, New York: It may interest members of the conference to know that the work in connection with the Interstate Commission on the Delaware River Basin is also proceeding in the offices of the various state planning agencies.

As a member of that commission for New York, I am developing a map of all that portion of the drainage basin lying within the state of New York so that when the planning committee of Incodel meets there

may be a basic record from which to start. Mr. Black of New Jersey is contemplating the same kind of base map, funds permitting. Mr. Pitkin of Pennsylvania has also undertaken such a project. So you see that there is close integration between this interstate commission and the planning boards in the affected states.

MR. ALFRED BETTMAN, Cincinnati, Ohio: I do not rise to comment on Senator Toll's paper, the clarity of which is so obvious to all of us. I just thought I would like to do a little thinking out loud on some more general subjects regarding regional planning.

We have just made a preliminary study of whether the Ohio valley, or the Ohio basin, is a valid region for planning. We have an Ohio Valley Regional Planning Commission which has not yet reached a point where it can be said to be justified in its work. We felt that we ought to know whether or not we were on the right track before proceeding to exercise our present budget and asked ourselves: "Is the Ohio basin a legitimate region for planning?"

Several things have come out of that study. One is that the region appropriate for regional planning is perhaps not exclusively a region appropriate for regional planning. Regional planning contemplates that the movement of industry, of work relating to the soil and to humans would be made up on an inter-regional basis. In other words, that the problem of one region might find its solution in that of another. There may be particular functional problems not necessarily co-terminus with the specific regions which may come to be defined from the viewpoint of national planning.

In the case of a river like the Ohio we know that it misbehaves in that it floods and that human beings living on its banks misbehave in that they contribute to the pollution of the stream. The two problems of flood and pollution are urgent; and they appear throughout the basin of the Ohio River, and justify the selection of the basin as the territorial unit for regional planning. However, we do know that the sound, permanent solution of such obvious problems as flood and pollution require recognition of factors outside of the water, such as land use, and forests along the river. The study has led us to feel justified in asking for the continuation of the Ohio Valley Regional Planning Commission with a view to creating a regional plan for the basin which will not only emphasize the two apparent motivations of flood and pollution, but also take into account the necessary factors for something approaching intelligent integration.

Of course the actual solution of all these problems is going to mean the participation of localities, of states wholly or partly within the basin, of the national government, and of all types of organizations within the local, state and national units.

MR. ARTHUR C. COMEY, Cambridge, Massachusetts: Captain Langley referred to the desire to utilize the states for getting things done. It seems to me that that is extremely sound. We have a strong federal government. In New England, at least, we have strong state governments. It doesn't seem to me that any purpose whatever is served in setting up

another governmental unit in between of any degree of strength. A weak intermediate government represented by some sort of regional governmental agency would not be strong enough, to my mind, to cope with the problems involved. Furthermore, we are not likely to get any such thing. We are likely to get what we have got, which is part state and part federal government. In that role I think the regional agency has great opportunities for present and future benefit.

Now, it so happens that New England is set off from the rest of the country by New York State. You can't get anywhere without crossing its borders unless you cut through an alien country, so we have a little more regional consciousness there than do you in most sections of the United States. Even there I am impressed with Mr. Bettman's argument in connection with the Ohio Valley: namely, that what is a region for one purpose is, in no possible way, a region for another purpose. Therefore there can be no one single regional subdivision of the United States. What is useful for the federal government in collecting its facts and having its over-all coverage, is not necessarily useful for the solution of a lot of regional problems. What is important for water problems is very likely just the wrong set-up for other problems. This is perhaps illustrated in a large way most effectively outside of New England.

The water division of the Appalachian region is known as the Appalachian highlands. Roughly half of it is in the Ohio, or, if you please, the Tennessee, watershed. The other half is in a series of watersheds of the Atlantic coastal regions. Therefore, the unit of interest is the highlands. We have the same thing in a small way in New England. In Massachusetts we have a section of the Connecticut Valley which goes from somewhere roughly in the Berkshires through the center of Massachusetts and into Connecticut. The only way we can study effectively the Connecticut Valley is to get the whole picture.

This commission's study is entirely misleading. The center highlands of Massachusetts, and those of New Hampshire and Connecticut, are a unit in themselves and in most aspects have many common problems to be solved. Then, therefore, they include not only the upland region of the Connecticut Valley, but the upland region of the coastal plain. On the other hand, the Connecticut is a lowland region substituting the slimmer lands of the center valley, which have many points in common, with the upland regions on the other side in the Berkshires. This is the only valley which goes through Connecticut and which lines up with these other regions, so any convenient, effective regional relation seems to fill a reasonable number of purposes. This, to me, is the most effective one. The New England region, although it is far from being a perfect place for it or any other type of region has seemed to us to be very effective.

Perhaps that is rather aside from what I started to say. From listening to this report we might not get an adequate idea of what is going on in the New England regional office. If you think New England isn't doing any planning—from the modest way Captain Langley spoke—you have an erroneous impression. We are going to plan in a comprehensive way.

Of course it is a small region; the whole region is not as big as some states; it has a considerably larger population per square mile in the small states than in the sparsely populated larger states. Southern New England is highly industrialized and has many problems as intensified in nature as does northern New England, but the regional commission is able to keep us all interested in our common problems and to present them graphically.

MR. B. M. WOODS, Berkeley, California: I would like to ask Captain Langley a question. I understand that the commercial development work in New England has been due to the activity of what is known as the New England Regional Council or the Greater New England Council. May I ask what relation there is between this Greater New England Council and the Regional Planning Board?

CAPTAIN JAMES M. LANGLEY, Concord, New Hampshire: The Council was organized at the instance of the Governors' Session of 1925, I think, as a result of a report that all our industry had gone south, which wasn't really so. As a matter of fact, we still have a good deal of cotton mill industry in New England.

The Council proved very effective. It is made up of groups of directors from each of the states. It has an annual conference and three quarterly conferences. It is necessarily a business organization. It has cooperated with the regional planning movement, supported it and helped to publicize and sell it to the people of New England. It is an agency which has attracted a great deal of favorable comment from other sections of the country. Since its organization it has been doing very effective work, particularly in the field of industrial development.

MR. P. HETHERTON, Olympia, Washington: As I see the situation in the Northwest, if we did not have a regional planning commission some such organization would have to be set up. We are distinctly a regional adjunct in one particular—the Columbia River and its tributaries. The problems which result from that river cannot be solved by any one state. The regional planning commission gives the various states an opportunity to come together and rather than, shall we say, damn each other at a distance, do it over the table. Our meetings are not always so agreeable as they might be, but we have an opportunity to find a common ground.

As an instance, the states of Montana and Idaho are strongly of the belief that the waters of those states should be retained for their particular purposes. One of the states even goes so far as to say that reservoirs should be built of sufficient capacity to hold the waters of that state for seventy years. It further says that the free use of water for its irrigation and domestic use and the future development of the rivers of the state should start right at the headwaters, whereas at the lower end navigation has been done away with for quite a number of years.

The federal government is building the Bonneville and Grand Coulee dams. Some people worry about the amount of power to be developed. I think the question is what is to be the next development after that power is used, which won't be so very many years hence. Probably in

place of building another power plant, it will be necessary to start at the headwaters and develop reservoirs there. In that case in the Idaho and Montana routes the water will not only be used for power development but also for reclamation.

Mr. Bessey mentioned the matter of international cooperation. While we can't do it fully, we have found it helpful to invite our Canadian friends, both dominion and provincial, to our various meetings.

In closing, our New England friend said he could not see any particular reason for a TVA in that region. We also agree with him to the extent that we don't think it necessary to have such an organization functioning in all the various branches of natural resources, but we do feel, quite a number of us, that there should be some over-all authority to handle the water or at least the power of the Columbia river. I think that is quite essential.

MR. CHARLES W. ELIOT, 2ND, Washington, D. C.: Before this meeting on regional problems adjourns, I should like to say that it is noteworthy that there has been so little discussion of a point delicately referred to by several speakers this afternoon. I think it is clear from Captain Langley's remark that New England isn't particularly interested in federal agencies' assuming any kind of authority in New England. I gather from what Mr. Hetherton said that in his opinion some kind of federal administrative authority is necessary in the Pacific Northwest. It seems to me a little bit odd that a discussion of regional planning should so delicately skirt this very central and immediate issue. Has someone in this group some specific suggestions or comment to make?

MAJOR ROY F. BESSEY, Portland, Oregon: I made a remark that people shouldn't stick their necks out. In my own talk I intended to give the pro's and con's rather than to state a professional conviction as to which form of regional organization should be used for development. The Regional Planning Commission, however, has arrived at a more or less official position on this particular subject. It has recommended that the present regional planning organization be retained in the Pacific Northwest as an independent organization, and that the critical problem which requires authority and integration is the manufacture of power from the Columbia River system and its distribution at wholesale. This, I think, is the general consensus of state planning boards and the Regional Planning Commission with respect to that situation.

MR. CHARLES W. ELIOT, 2ND, Washington, D. C.: The National Resources Committee recommended a regional organization for planning in its report of a year and a half ago entitled *Regional Factors in National Planning and Development.* A clause in it dealt with (1) the use of state committees or commissions on cooperation, (2) the greatest possible extension of the conservation method, (3) the trial, where appropriate, of administrative agencies such as the TVA as demonstration projects, and (4) the federal administration of special problems, such as power in the Pacific Northwest, on a regional basis when conflicting interest was great.

MR. B. M. WOODS, Berkeley, California: In closing I think we should

again reflect upon the importance of what might be called neighborly cooperation. I have been more and more impressed as the program has advanced in this last session, with the importance or influence of competent authority coming from knowledge based on facts. One of the men with whom I worked used to say: "It is important to have the facts on your side; they work for you twenty-four hours a day." This is certainly true in the field of planning.

One of our most difficult tasks, as has been intimated on several occasions during the conference, is to get the significance of the facts before the public. We should devote ourselves more thoroughly to the mission of making people understand that the planning movement is in their favor.

RESOLUTIONS OF THE CONFERENCE

John Nolen

In the recent death of John Nolen the planning profession of the country and abroad has suffered an irreparable loss. John Nolen's high ability in his professional field, his unfailing kindliness and humor were gifts that were appreciated by the many who knew him throughout the country, and particularly by his associates in the work in which he had attained great distinction. He is greatly missed and his memory will be long honored.

Robert Whitten

In the death of Robert Whitten, the cause of planning in this country has suffered a loss that only those who knew him can appreciate. His broad knowledge and sound judgment had earned for him an enviable distinction in his chosen field. His quiet manner inspired confidence wherever he went. His extraordinary, gracious and winning personality endeared him to all who had the privilege of knowing him. In his passing the members of the planning profession have lost not only a great leader but a personal friend whose memory they will long cherish.

Appreciation to Local Committtee

The Conference wishes to express its appreciation here to the local committee and sponsors for their efforts in providing a very enjoyable and very instructive sojourn in the city of Detroit. We wish them to know that their cordiality and hospitality have made us all look forward to another visit in their fine city in the future. We also wish to express our appreciation to the department of street railways of the city of Detroit for the courtesies extended to the Conference.

The conference director, Walter Blucher, who has been in charge of the first conference of the four organizations which are engaged in the field of planning on a national basis, has earned our gratitude for the successful operation of a conference which continues in a worthy manner the long series of planning conferences which has gone before.

Permanent National Planning Board

During the more than three years in which the national, regional, and state planning program has been under way, work of incalculable value in its bearing upon the present and future well being of the American people has been accomplished as measured by projects completed or under way and in the extent to which the states and communities have come to look upon planning as an effective tool for the accomplishment

of desirable ends. It is held that the National Resources Committee has given invaluable leadership and assistance in inaugurating this planning movement and in bringing it to its present degree of effectiveness.

For these reasons, and in view of the fact that the problems attacked by planning for the conservation of physical, social, and human resources are so pressing and the movement in the direction of their solution is so inseparably a part of the broad general program of the federal administration, it is recommended that a permanent National Resources Committee be created by act of Congress.

Continued Support for State Planning

A considerable part of the state and regional planning work is in the stage of development where a partial withdrawal of federal support would destroy or greatly reduce the effectiveness of work already accomplished, and would make extremely difficult any future attempt to arouse local support and enthusiasm for a planning program.

It is, therefore, recommended that federal support to state and regional planning groups and agencies be continued to a degree no less than that which has been extended during the past two years in order to hold ground gained, to bring present planning organization and machinery to a higher state of efficiency, to retain a vast amount of cooperation which is invaluable, and to broaden the base of understanding and cooperation on the part of the people of the United States wherever planning is needed.

Extended Field Service of National Resources Committee

We further believe that the size of the country, the great distances involved, and the complexity of the problems affecting the various states and regions make it highly important that the closest possible contacts be established and maintained between the National Resources Committee as a policy-forming agency and those organizations and persons actually engaged in the operations of planning upon the ground.

To this end we recommend that the services of the National Resources Committee be extended and its staff of field workers be increased to permit of regular and frequent contacts with the agencies and persons engaged in planning, to give a better understanding of problems of the country as a whole, the importance of specific problems in various states and regions, and to make it possible to acquaint the people with the relation of their own local problems to problems elsewhere, and enable them to arrive at a better understanding of the purposes of planning and its effectiveness as an aid in solving not only their own problems but also the problems of a national character.

Philip A. Parsons, Chairman, Committee on Resolutions
Member, Oregon State Planning Board
George H. Herrold
Member, Minnesota State Planning Board
Director of City Planning, St. Paul
Harold S. Buttenheim
Chairman, Zoning Board of Adiustment
Madison, New Jersey

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