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AMERICAN PLANNING AND CIVIC ANNUAL

A RECORD OF RECENT CIVIC ADVANCE AS SHOWN IN THE PROCEEDINGS OF THE NATIONAL CONFERENCE ON PLANNING HELD AT BOSTON, MASSACHUSETTS, MAY 15-17, 1939; THE NATIONAL CONFERENCE ON STATE PARKS HELD AT ITASCA STATE PARK, MINNESOTA, JUNE 4-7, 1939; AND THE THIRD NATIONAL PARK CONFERENCE OF THE AMERICAN PLANNING AND CIVIC ASSOCIATION WITH THE NATIONAL PARK OFFICIALS HELD AT SANTA FE, NEW MEXICO, OCTOBER 8-10, 1939.

EDITED BY

HARLEAN JAMES

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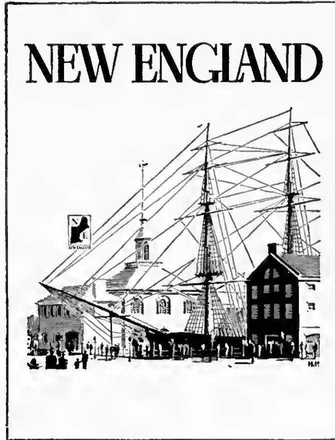

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Editor's Note.—All of the papers presented at the National Conference on Planning, held in Boston May 15–17, 1939, are included here, but the Reports from the Section Meetings to the General Assembly are omitted, as they summarized papers printed here in full.

At the opening session, greetings were extended on behalf of the Commonwealth of Massachusetts and the City of Boston and responses were made by the Presidents of the four participating organizations. Mr. Buttenheim's statement, which recalled the Fourth National Conference on City Planning, which met in Boston in 1912, is presented on page 11, followed by the papers on the Massachusetts Federation of Planning Boards and the New England Town Planning Association. The section of Planning in the ANNUAL, therefore, opens with the Keynote Speech of the Conference, "Why Should We Plan?" by Professor Ekblaw.

Why Should We Plan?

W. ELMER EKBLAW, Professor of Geography, Clark University, Worcester, Mass.

THE outstanding achievement of our modern day has been the reduction of distance by improved means of transportation and communication, to make of the whole world one neighborhood—one neighborhood where the hundreds of millions of its folk must rub shoulders more intimately than ever before, each taking thought for the other in a universal brotherhood that transcends the imagination of most men, and realizes the Dream which the Nazarene Seer and Teacher visualized and laid before His disciples.

Whether or not that brotherhood shall be a fraternity in the best sense of the word, a fraternity in which justice is the sole arbiter of controversy, in which peace is the common aspiration of every man, in which liberty connotes equality of responsibility as well as of privilege, in which every man subordinates his own selfish interests and purposes to the common weal, depends largely upon the choice that we of this generation who have thus brought all men and lands of the world into such intimacy, and of the next generation or two which follow us, are able to make for posterity. That choice we planners know must be made wisely and well, or our children and our children's children even unto the tenth generation and far beyond, must suffer for our failure to measure up to our opportunity. We earnestly seek every bit of knowledge, every crumb of truth, which will help us to that wise choice. We struggle to winnow the wheat from the chaff, to grind exceeding fine the grist we gain from our winnowing, that the flour of fact from which we would be nourished be of the highest quality. The bread that we planners would make must be leavened with the wisdom of the ages as well as of our day, that it may rise to the fullness of the nation's needs, and not mould on the shelves of the centuries.

Our age is one of those periods of transition, of emergence from one stage of culture to another, which try men's souls. We cannot readily discern the route by which we must travel if we would advance. We can distinguish the road by which we have come thus far though much of it is veiled in the fog of the past, but we cannot find the sure trail forward. We are groping for new signposts, new directions by which to continue our trail. We are not sure which way is best, though we are sure that there is one better than the others, and that unless we do choose that way our progeny may have to retrace their steps painfully and resentfully, and correct our error. We recognize the challenge to our knowledge and our judgment, and courageously, I hope, take upon our shoulders the burden of finding and charting the way ahead. That is the reason why we are here today, why we are congregating here to exchange experiences, to present and to evaluate projects, to formulate policies—in short, to make wise plans.

Man has risen very, very slowly, very, very laboriously, very, very painfully up from savagery to civilization. He has made multitudes of mistakes, endured centuries of marking time in finding the trail, toiled unremittingly under the goad of his ideals, his aspirations, his ambitions for better things. Now and again he has opened up new routes, broken new passes through barriers of ignorance and intolerance, built new bridges over chasms of despair, and new causeways over sloughs of despond. Tradition, mythology, archeology and history record the many discoveries which have pointed the way toward progress and higher planes of living and achievement.

Man's mobility, like his wide range of adaptation and adaptability, has ever constituted one of the chief advantages in his progress toward culture. When the first barbarian domesticated the first feral beast to his means of travel, like the donkey, or the horse, or the camel, and thereby extended immeasurably the distances over which he could travel beyond the longest route his sturdy legs would bear him in a day, he gained an incredible advantage over his earlier experience, and won for himself dominion over areas many times larger than he could previously command. New adventures faced him, new fields opened to his conquest, new aspirations flooded into his mind and heart.

In due time the wheel, implementing a vehicle that his domesticated beasts could draw, wrought another remarkable transformation in his means of travel and transportation, extending still farther the limits of his explorations and activities upon land; and upon water the boat and the ship and the art of navigating them similarly expanded his field of endeavor, the horizon of his knowledge. The art of pictographs and hieroglyphics and the invention of the alphabet and writing, in like wise extended his range of communication beyond the sound of his voice, the sign of his hand, or the signal of his watchfire. His neighbors then included folk not only of his own bailiwick, his own clan, but a vast host that came within the province of his caravans.

Then he applied wind power to boats and ships; steam power to locomotives and turbines and propellers; later gasoline to automobiles and airplanes and submarines, electricity to telegraph and telephone and radio; all to the end that he might travel and transport his wares, his ideas, his philosophies faster and farther. Thus virtually he has reduced distance to a fraction of its former effect, for by airplane he can travel a hundred times faster and farther than ever his fleetest feet could carry him, by wire or radio send his messages infinitely faster and farther than he could throw his own resonant voice, or wave his meaningful signal. Each new development brought an increasing number of problems, an increasing complexity of contacts; as distance and time were thus virtually reduced, his range of activity increased in geometric ratio, and his neighborhood expanded similarly until it embraced the whole world.

Today we live in a world so much smaller in time and distance than the world of our primitive ancestors that we may encompass the whole of its manifold and varied regions in less time than our early forebears could have similarly explored the realm walled in by their own horizons. We have become neighbors with the folk of the tropics and the poles, of the deserts and jungles, of the islands of the sea and the fastnesses of the mountain cordilleras. Figuratively speaking, we rub shoulders with the Polar Eskimo of Greenland, with the Bushmen of Australia and the Maoris of New Zealand; with the Navajo of the American desert, the Tuaregs of the Sahara, and the Mongols of the Gobi; with the Communists of Russia, the Fascists of Italy, the Nazis of Germany; with the princes of India, the peasants of France, the potentates of Hadramaut. We trade with the Bantu of the African rain forest. We send missionaries to the head hunters of the Borneo. We usurp the lands of the lesser breeds without the law everywhere. We quarrel with them who take up the white man's burden. From Pole to Pole, from Greenland's icy mountains to India's coral strand, we preach to anyone who will listen, the doctrines of Democracy or Socialism, of Shintoism, Mohammedism, or Methodism, of Free Trade or Totaletarianism or Proletarianism.

So small has our world shrunk, that it has become a matter of moment to us what almost every other man of the world is doing, what kind of food he eats, what kind of weapons he wages war with, what kind of songs he sings, or what kind of tobacco he smokes. What the man in New Zealand does today may determine what the man in Ireland, or Denmark, or Wisconsin may do tomorrow. What our government decides our country is to do with its cotton, may lead to economic revolution among the Uzbeks of Turkestan, to political conquest in Ethiopia, to new industry in Brazil, or to the revival of old handicraft in Egypt.

When the folk of the whole world are thus drawn together into one world neighborhood, planning becomes an international concern, an international problem. International relations represent a fabric of which the lands are the warp, the folk that live upon them the woof; and the pattern must be carefully considered, the design thoughtfully selected, and the craftsmanship honestly and devotedly achieved. Integrity must be wrought into every pattern, into every design, into the craftsmanship, and thus into the whole fabric. Integrity, in a general, but very true sense, cannot be achieved without planning.

Throughout the whole evolution of man's culture, the measure of his progress, just as it has been one of the most important means, has been coöperation. The degree to which men have been willing to coöperate and the extent to which they have coöperated, have not only gauged man's progress, but formed the very foundation for such progress. The willingness and the ability to work together, shoulder to shoulder, day after day, for the common welfare, subordinating personal

prejudices, personal ambitions, personal interest, to the good of the group, have ever constituted the prerequisites to civilization.

When man advanced from pastoral nomadism to sedentary agriculture he was impelled to coöperate in a way and to a degree that he had never before achieved. To occupy the most fertile lands, those soils which yielded him the richest and surest returns for his labor, he had to irrigate the black soils of the semi-arid grasslands not leached of their fertility, or cultivate the alluvial soils of the great river valleys where flood in time of freshet might submerge his acres and drown his crops. To build dams for impounding water and to dig ditches for drawing it out upon the growing crops when drought impended, demanded of the irrigation farmer a high degree of coöperation with his fellows; for such projects required the services of many men, could not be achieved by a farmer working alone. Important as was physical coöperation, it did not entail such refinement of coöperation as did the just and equitable distribution of the impounded water when drought prevailed upon the land and water became the means of food, of life. Fairly and justly to apportion the benefits accruing from the dams and ditches, demanded the finest type of coöperation—and incidentally of planning. Similarly and in like degree the building of dykes and levees along rampant rivers to control their flood waters necessitated coöperation, and the allocation of resulting benefits demanded justice.

Early civilization was thus in large part built upon coöperation, coöperation enforced chiefly by calamity—drought, flood, hurricane, or pestilence—and coöperation implied planning, planning commensurate with the need for coöperation and with the benefits accruing therefrom. Modern civilization has in large part conquered calamity, though man most reluctantly learns his lesson and the possibility of calamity still forms one of the important goods toward coöperation, particularly among the folk of backward stages of culture. Even those folk who have achieved rather superior civilizations have not been wholly freed from the dread of calamity. But necessity, not necessarily calamitous, now forms a much more important goad, though not so immediate or so vital a spur to coöperation. In foreign trade, in widespread manufacturing, mining, financial, economic enterprises, in education, and even in law and religion, coöperation, in part born of necessity, in part born of idealism and altruism, has become a prevalent feature of international and interregional relations and functions.

Widespread coöperation for a higher standard of living, for a richer and better social and economic order, for a freer and broader political administration, is probably best exemplified today in the lands of Scandinavia—Finland, Sweden, Norway, and Denmark. There it would seem that our western European civilization with its heritage of a hundred centuries' experimentation and evolution from the Central Highlands of Asia to the shores of the North Atlantic Basin, has risen

to the pinnacle of its progress thus far. There the fine and applied arts enter into the daily lives of *all* the folk, as they did into the lives of only the few and privileged nobility in the golden age of Greece, of only the few and privileged aristocracy in the grand period of Rome, the gentry of France and Germany in their glorious days. There, within the last half century, which is the period of modern coöperation, have painting and sculpture and architecture, music, and drama, and literature attained perfection and a place in the culture of the entire folk. Anders Zorn and Carl Liljefors in painting; Thorwaldsen and Carl Milles in sculpture; Saarinen and Ostberg in architecture; Grieg and Sibelius in musical composition; Jenny Lind and Christine Nilsson and Kirsten Flagstad and a host of others in song; Bjornson and Ibsen in drama; Knut Hamsun, Johan Bojer, Sigrid Undset, and Selma Lägerlof among a brilliant galaxy of literary stars of the first magnitude; all these are names to conjure with in the world's highest culture of today.

In applied science—chemistry or physics, biology or geology, medicine or law, engineering or navigation—; in social institutions—universal franchise, compulsory education, care of defectives and delinquents, control of liquor and prostitution—; in political organization—the regulation of credit, the system of taxation, the struggle for peace and understanding among the nations—; in religious fervor and tolerance, in jealous preservation of democracy, in zealous search for justice and truth and wisdom—; in all of these manifestations of superior culture the Scandinavian countries have attracted the interest and intrigued the imagination of the whole world. It is in those countries that coöperation has attained its highest development and is motivated by the most unselfish ideals. It is in those countries where planning, like working and playing and singing, is recognized as one of the arts, as a function of life.

And there we find planning, not a theory, but an established principle, a practice that has proved its worth, its effectiveness in gaining for the whole people the reward of unselfishness, of substituting humanity and sympathy for profit and material gain, of seeking peace by understanding rather than false stability by force. I do not mean to imply for a moment, that Scandinavia has achieved perfection, that it has become a Utopia, that coöperation and planning constitute a panacea for all ills, the solution for all problems, the gateway into Paradise; but I would submit that Scandinavian policies and practices point the way, not by propaganda or publicity, but by results achieved and progress made in coöperation and planning, toward a better civilization, toward a richer standard of living. In Scandinavia today we find a more prosperous and more contented and more peaceful folk than elsewhere in the world. We find children happier and healthier and more rationally trained in the arts, the crafts, the sciences, natural and human; we find old folk assured of comfort and safety; we find the

ill, the infirm, the disabled in mind or body safeguarded against want and suffering and despair. All this has been achieved by the elements of planning—education, coöperation, creation; it has not come from accident, or ignorance, or indolence.

Nothing can take the place of education, education in the fullest sense of the word, to draw out the best in every person. Nothing can take the place of education as preparation for coöperation, for planning, for realization of the plan, for creation of a better order. Only as folk are educated can we hope not only for wise planning, and wise coöperation in the plan, but for the benefits that accrue from coöperation and planning. In a democracy, where the individual is the sovereign, the ruler, as well as the subject, the ruled, the fullest measure and the highest type of education attainable is indispensable.

Education for coöperation must be based upon the thesis that the state, that society, can prosper and find strength and peace, only as the individual aspires to a higher plane of living, spiritual as well as material; that only as the citizen finds ever greater freedom and enlightenment can society and government improve. Society and the state are but fancies, concepts formed within our minds; the individual constitutes the reality, the essential entity. Society and the state exist only for the individual; never should the individual exist only for the state. But every individual affects every other individual; it is when all individuals direct their strength and talent and skill toward a common objective, in a planned and coöperative project, with the same purpose in mind and the same end in view, that the individual and consequently the state, progress farthest.

There can be no permanent progress in any state or any society, however well organized and directed or administered, in which the citizens or the individuals relapse into a lower standard of culture, for there coöperation, and thus civilization, slips backward. Man is the only one of God's creatures who possesses the divine ability of transmitting his heritage of experience and knowledge and culture from one generation to the next. If only we could perfect our education so that each generation might not repeat the errors of its forebears, but could go on without retrogression to a higher or more advanced society or state, how fast the millenium would come!

Coöperation that means something, that achieves something, requires strength and nobility of character in the individual, for it represents the integration of all elements, all activities upon a definite, predetermined plan. Force can play no part in such a plan, regimentation has no rôle in such a system. Only by that integrity of character, "that chastity of honor which feels a stain like a wound" can satisfactory planning, effective realization of the plan, be won.

Participation in such coöperation, based upon careful planning, brings its own improvements as it provides its own rewards. The crea-

tive element in planning, the design which shall stand the test of time and beauty and utility, stimulates the development of stronger mind, better coördinated body, keener appreciation of social relationships.

Just as coöperation is as old as civilization itself, so planning, without which there can be no coöperation, reverts to the very dawn of culture for its beginnings. As Bacon states in his essay "On Gardens," God Almighty made the first garden, and that He laid it out upon a definite plan the Scripture bears irrefutable witness—He placed the Tree of Life at its center. From the humble beginnings of our nation to the latest fancies of the New Deal, our activities, our attributes as a people, have been oriented according to plan, vaguely and hesitatingly at first perhaps, because the potentialities of the land and its advantages and resources, and the possibilities of the folk and their character and their purposes, had not been appraised or judged carefully enough for coördination and regulation. Our country has developed and refined its planning from decade to decade as the knowledge of our land has increased, as the education of our people has warranted, as the use of the land and all its resources has been shaped to new inventions, new domestic conditions, new interrelationships between peoples.

The period of the pioneers, the frontiersmen who felled the forest and broke the sod and won the wilderness for man's use, was a period of ruthless exploitation. It could not have been otherwise, for the pioneer could take thought only for how he and his family and dependents might survive. That period of exploitation is fully justified by its results for its means and its methods. It was the period of occupance when man matched his strength against the wilderness and could win his lonely struggle only by ruthlessness and sheer strength. His plan was a plan for survival, little else, until he was assured of safety and security.

As you all know full well, the frontier played a primary rôle in American history until the last unoccupied acre had been taken upon which even an American could maintain his foothold. Then, and not until then, did our nation awaken to the inevitable need for a planned use of our land and its resources, to the necessity for preventing waste and conserving exhaustible supplies of minerals, fertility of soils, growth of forest and grassland, purity of water, permanence of wildlife, beauty and grandeur of scenery, shore and slope and grove for recreation.

Then, and not until then, could a design be considered for our national trestleboard, for not until then could any possible pattern for the whole land be considered. Planning cannot be attempted upon a hit-or-miss shaping of the several regions of our land. Every bit of planning is like a bit of mosaic that must fit into a design that shall represent the best interests of every person involved; of agriculture in all its phases; industry in its multiplicity of responsibilities; transportation and communication and defense; sanitation and recreation and

health; to mention but a few major aspects of our national interests, our international problems.

For in this narrowing world that has become a mere neighborhood, we cannot live without regard for every other people, its problems, its aspirations. Planning has become international, and international factors must ever enter into all our plans. We cannot plan a highway, we cannot shape a program for land use, we can no longer design a bridge, a building, a wharf, or a dock, without taking thought for our interrelations with all other folk.

We should be foolish if we did not fortify ourselves in our field, in our attack upon our modern problems, with the vast experience which history has recorded for our guidance and reference, the repeated plans that men and nations from one age to the next have formulated for power, for prosperity, for peace, for the best use of their advantages and resources. We must consider the designs that they laid upon their trestleboards in the hope of a richer, more abundant life, to the end that we may not repeat their mistakes, and that we may avoid if possible, their failures and defeats, learn from their successes.

Why should we even give ear to the futile and false promises of Communism? Why should we listen to the vain lure of Fascism or Nazism? Why should we tolerate the insidious argument that the totalitarian state is better than our Democracy? Why should we permit even the first step toward such a system of land tenure as the old Roman Colonate gave rise to? We know from experience and from history that only when men are free, when they may guide their own personal destinies, assume full responsibility for their own deeds, do they measure up to the Image in which they were created; only then do they climb upward out of carnality and bestiality.

All our planning is but a means to an end. The better, richer living that we seek for our people is not an end in itself, but a means to an ever better manhood, an ever finer womanhood, an ever better individual who approaches nearer and nearer the likeness to his Maker. We are not concerned with planning merely for material gain, or comfort, or convenience, but for ultimate achievement of a higher intellectuality, a superber spirituality. "For what profiteth it a man if he gain the whole world and loseth his own soul?" It is finally the man and the woman, their family, the very units upon which all society, all culture, our own glorious America are built that we plan for. It is the man, not the state, that we have our vision for.

> "And only the Master shall praise us, and only the Master shall blame,
> And no one shall work for money, and no one shall work for fame,
> But each for the joy of the working, and each in his separate sphere,
> Shall draw the thing as he sees it, for the God of things as they are."

Planning Then and Now

HAROLD S. BUTTENHEIM, Editor The American City, and President
American Society of Planning Officials, New York City

WHEN the Fourth National Conference on City Planning met here in Boston 27 years ago this month, its governing body was an Executive Committee headed by Frederick Law Olmsted. In his address on "The Progress of City Planning," Mr. Olmsted deprecated the lack of a national organization equipped to render continuous service in the planning field. He pointed out that—to quote his exact words:

> The slender and ill-defined organization of Executive Committee, Chairman and Secretary, by which the life of these Conferences is carried over from year to year, exists only for the purpose of arranging these annual markets for the exchange of ideas, and has been quite without any means for systematically collecting or disseminating information during the intervals between them.

One evidence of progress in the more than a quarter century since these words were spoken is the fact that the present conference is a joint meeting of four national organizations in the planning field, all of which are engaged not merely in conducting what Mr. Olmsted called an annual market for the exchange of ideas, but are cultivating their respective sections of the planning field on a continuous service basis.

As President of one of these four organizations—The American Society of Planning Officials—it is a privilege to acknowledge the cordial words of greeting to which we have just listened, and to thank our hosts for their important and indeed essential part in making this Conference possible.

If the meeting just opening shall make contributions to thought and action comparable in importance to those made at the Conference of 27 years ago, you as our hosts and we as your guests will have reason to rejoice; for the proceedings of the 1912 meeting show at least three papers of outstanding importance. Along the lines advocated by one of them a nation-wide advance has since been made. The wise advice in the other two has been so generally ignored as to have added seriously to the financial and social problems of almost every city in the land.

The paper which blazed the trail for a forward march was by B. Antrim Haldeman of Philadelphia. It told how some of the nations of Europe, out of a wealth of unfortunate experiences in the rapid growth of industrial cities and the crowding together of the people in them, had evolved what was known as the "zone system" for controlling the use and occupation of land. Mr. Haldeman urged the adoption of this zoning idea in the United States and warned that:

> Any attempt to engraft the system into our schemes of municipal development would probably meet with great opposition from land owners, real estate operators, and operative builders, and from large interests not directly con-

cerned in the development of land. The objections of the first would doubtless be based upon the abridgment of their right to do as they please with their own property; of the second, upon the cutting off of prospective profits; and of the third, upon the general proposition of the invasion of vested rights.

Although the predicted opposition did develop in many quarters, it was gradually overcome by the force of public opinion and favorable court decisions—and zoning has now become perhaps the most generally accepted tool for progress and protection in the entire planning field.

As against this victory aided by the Boston Conference of 1912 must be recorded the tragic failure both of planners and legislators to act effectively on the papers presented by Nelson P. Lewis and J. Randolph Coolidge, Jr. Mr. Lewis, then Chief Engineer of the Board of Estimate and Apportionment of New York and a subsequent president of the National Conference on City Planning, discussed in a remarkably far-sighted manner the problem of "Paying the Bills for City Planning." His advice so impressed the meeting which heard it that the Conference adopted before adjournment the following resolution:

WHEREAS, It is the sense of the Conference that, however admirable may be the plans prepared for the improvement of cities, progress must depend in large degree upon the equitable distribution of the expense involved in the execution of the plans and in the soundness of the methods employed in financing them;

RESOLVED, That the Conference hereby approves of the five general principles laid down in the paper presented to the Conference upon this subject by Nelson P. Lewis and commends them to the cities here represented, namely

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1. "Where there is local benefit, there should always be local assessment on the land benefited."
2. "The entire city, or the metropolitan district, should bear no part of the expense unless the improvement is in some degree of metropolitan importance and benefit."
3. "Assessments should not be confined to the cost of acquiring and improving streets, but should extend to any improvement which will increase the value of the neighboring property, and should be apportioned as nearly as possible according to the probable benefit."
4. "A workable policy once adopted should be consistently adhered to."
5. "The determination of a policy and its application to each case should be entrusted to a board composed of men especially qualified, whose terms of office should so overlap as to insure continuity of policy and purpose."

Had these ideas been carried out during the last quarter century the present financial plight of American cities would be much less serious, methods of assessment and taxation would be much more equitable and much of our excess subdivision of land would have been forestalled.

Mr. Coolidge's paper had to do with a problem which is attracting such widespread attention today as to seem a recent discovery. Its title was "The Problem of the Blighted District." Not only did Mr. Coolidge direct attention to the public and private costs involved by the spread of urban blight, at this 1912 meeting,—more than a quarter-

century ago, mind you,—but he urged consideration of publicly financed housing as a partial solution of the problem. Here are the concluding sentences of this far-sighted paper:

> This plea may also commend the practice of municipal housing which, however successful in England and Germany, is looked on askance in this country as an unwarranted invasion of the field of private enterprise. There is no criticism of the municipality that establishes schools, hospitals and asylums in competition with private institutions, nor are we averse to municipal water supply and lighting and power plants. As yet, however, we hesitate as to municipal traction systems and denounce municipal housing as paternalism. Nevertheless the one remedy approved by actual experience in dealing with intolerable congestion of population is municipal expropriation and model housing; and this is a remedy that can be advised on economic and social grounds to apply to a district in decline.
>
> No city is well administered unless the whole of it is well administered. Where private capital halts and reads the risk and feels no responsibility for future conditions, public credit must be applied, and declining values, social and economic, must be supported until they can stand alone, for a city, unlike a business enterprise, cannot liquidate, it cannot discard its unprofitable lines, it must grow, it must change, but it must not depreciate.

When these words were spoken and for more than 20 years thereafter, there was not a single state housing enabling act in the United States. Today such legislation is the rule, a National Association of Housing Officials is functioning effectively and public housing authorities exist in not less than 229 American cities.

The Massachusetts Federation of Planning Boards

GORHAM DANA, Chairman, Brookline, Mass.

THE Massachusetts Federation of Planning Boards is rather a unique organization and was, I believe, the only organization of its kind until last year when New York organized a similar federation. The immediate origin came from a vote passed at a conference on planning called by the Massachusetts Homestead Commission in November, 1915. This Commission was created in 1911 to improve housing conditions and it held annual conferences till 1919 when it was dissolved. A committee was then appointed to prepare by-laws and later in the month these by-laws were adopted and officers elected. Twenty-three were present representing 12 of the 65 boards then in existence.

It is a voluntary organization of members of town, city and district planning boards to promote civic foresight throughout the Commonwealth. To quote from the Constitution:

> The purpose of the Federation is to promote city and town planning in Massachusetts; to suggest fields of usefulness and to aid and perfect the work of planning boards; to encourage the organization of planning boards in other localities; to collect and publish facts regarding the economic, industrial and

moral values to be secured by wise planning; and to affiliate organizations and individuals interested in the scientific study and development of city and town planning in its largest aspects.

All members of Massachusetts planning boards shall be members of the Federation. Additional members representing any organization whose principal purpose is similar to that of the Federation may be elected by a majority vote of the executive board. Others, who are not members of any such organization, may be elected by two-thirds vote.

While various agencies, far-sighted and planning-minded, have been at work in this Commonwealth since the arrival of Thomas Graves, a skillful engineer of Kent, in 1629, with instructions from the Massachusetts Company in England to go to the newly discovered country in their interests and "lay out" a town, it was not until 1911 in Salem that the first planning board in Massachusetts was officially organized. The ordinance creating the Board of "City Plans Commission" differed but very little in phraseology from that to which we are accustomed at the present time. No legislative authority or enabling act providing for the creation of such a board was then in existence, but this fact does not appear to have been any barrier to the activities of the group since its early reports stand as an inspiring example of the contribution which a planning board—possessed of energy and initiative—can make toward the presentation of a comprehensive program of civic development.

In 1912 the Norwood Planning Committee was formed. Thus we had two boards to our credit.

In 1912 also the work of the Massachusetts Homestead Commission was continued, but it was not until 1913 that there was presented a comprehensive picture of housing conditions in the State. The Homestead Commission wisely took a broad view of the legislative mandate requiring them to report a bill or bills providing for the acquisition by mechanics, laborers and others of homesteads or small houses and plots of ground in the suburbs of cities and towns and as a result of this survey reported:

The problem is one of proper distribution of population. The principal obstacles to its solution are low wages, the high cost of land, difficulty of obtaining funds, inadequate transportation. Yet it is imperative that this problem be solved, not only on account of obligations to humanity, but because the stability of the State is involved. The physical condition of the home is so vitally related to morals, health, and the well-being of the family and the individual that the welfare of the State depends upon it.

The Homestead Commission recommended:

1. That planning boards be instituted in each city and town of more than 10,000 inhabitants. The work of such boards would show what the actual local conditions are and would disclose the resources at hand to better them. The spread of bad conditions would be stopped and means found gradually to abolish slums now existing.

2. That the Commonwealth and community encourage and promote the formation of associations to plan and construct low-cost suburban homes.

Thus it will be seen that the planning movement in this Commonwealth had its primary inception in a desire to bring healthful suburban homes within the reach of families in the lower income brackets.

The recommendation of the Homestead Commission resulted in the enactment of a law in 1913 which made mandatory the establishment of a planning board in every city and town having a population of more than ten thousand. Thereupon, planning boards began to spring up with mushroom-like rapidity in all sections of the Commonwealth and by the end of that year 45 municipalities had complied with the provisions of the act. The act was amended in 1914 and permission given to towns with a population of less than ten thousand to establish planning boards.

The objects of the Federation are three-fold:

1. To hold conferences at least once a year to discuss problems of interest to members. Annual meetings have been held each fall in different parts of the State and during the last few years regional meetings have been held in certain centers where problems affecting a large area are involved, such as the Connecticut and Merrimack Valleys. Many well-known planners from all parts of the country have addressed these meetings.

2. To publish informational bulletins. There have been 39 of these published to date, many of which covered the proceedings of conferences. Others have covered such subjects as: The A.B.C. of Town Planning, Billboard Restrictions, Protecting the City Plan, Building Lines, Zoning—Its Evolution, Zoning Appeals, Zoning Decisions and Bypass Highways. Some of these were written by Mr. Hartman of the Division of Planning of the Department of Public Welfare, who has long been in close touch with the Federation and was at one time its Secretary. Between 1932 and 1936 monthly news letters were published with the aid of a part time paid field secretary.

3. Legislation. The Federation has taken a keen interest in legislation, especially laws that clarified or extended planning activities. For this purpose legislative committees have been appointed.

The more important measures to be sponsored include the Regulation of Billboards. The Massachusetts Billboard Law Defense Committee, headed for many years by our ex-president Horace B. Gale, was a child of the Federation. For ten years this Committee fought hard against heavy odds for the right of the State to regulate and restrict billboards—and a large amount of money was raised by private subscription for the purpose. This fight culminated in 1935 in a decision of the Massachusetts Supreme Court upholding the law. An effort was made by the billboard interests to carry this to the United States Supreme Court but this was never done.

Two bills were sponsored for revising the Zoning Act and the Town Planning Enabling Act a few years ago and these were both passed.

The bill for organizing the State Planning Board was backed by the Federation and was finally passed four years ago.

A Freeway Bill has been sponsored by the Federation for several years and unfortunately has not yet been passed.

We now have 145 planning boards in the State and all of these receive

copies of the Federation publications. The dues are $15 for the larger boards and $10 for those where the population is less than 10,000. Several boards are inactive and in other cases the boards are unable to get any appropriation from their towns so that the number of paying boards is reduced to about half this number. Individual members of the boards as well as interested citizens may become members with dues of $2 a year.

The Federation has worked in coöperation with the Division of Housing and Planning and since 1936 with the State Planning Board, whose Chairman, Miss Elisabeth Herlihy, has been most helpful.

The Federation may be considered a semi-official state organization and for many years the invitation to the annual conferences were sent out under the auspices of the Governor.

For the first few years the Federation worked in conjunction with the Homestead Commission, which published its last annual report in 1919. The duties of the Commission were transferred to the Department of Public Welfare which, in its turn, established a Division of Housing and Town Planning. With this agency also the Federation worked in close coöperation, sponsoring and supporting planning and zoning legislation before the General Court, helping to mould public opinion and acting as a clearing house for planning information.

The same close coöperation has been maintained with the State Planning Board since its creation in 1935. The State Planning Board with its full-time paid staff and equipment has taken over, through the columns of its official publication, "A Planning Forum," much of the informational service heretofore rendered by the Federation. This has enabled the Federation to devote its attention particularly to the holding of regional meetings which it sponsors about four times a year in different sections of the State.

In conclusion, I would like to say a word in tribute to my predecessors in office. The Federation from the beginning has been able to attract to its executive board men and women of outstanding ability and public spirit. They have had no desire for public office nor for public favor nor for public recognition. Their only ambition has been as set forth in the Constitution "to promote city and town planning, to suggest fields of usefulness and to aid and perfect the work of planning boards." That is the task to which they have dedicated their efforts year after year with a particular singleness of purpose which may well be looked on as the best guarantee of the success of their efforts.

In closing I would like to call your attention to a rather new phase of zoning which should interest all town planners.

About five years ago the National Fire Protection Association, whose headquarters happen to be in this city at 89 Broad Street, appointed a Committee on City Planning and Zoning, believing that there was a close connection between these subjects and fire protection. The Com-

mittee has issued several reports and a forty-page Brochure on the general subject. This year the Chairman of the Committee, Mr. H. C. Klein of New York, refers in his annual report to an article he recently wrote entitled "Flood Plain Zoning and Evacuation," which was published in the April Quarterly of the National Fire Protection Association. This is well worth careful study by all town planners, especially in regions subject to flood. The article calls attention to the usual methods of flood control which are very costly and not always effective. In many cases the problem can be solved at much less expense by zoning the areas subject to floods so as to prohibit the future construction of dwellings and commercial and industrial structures that are subject to water damage and in effect to limit the occupancy to park, playground and similar purposes. This might mean considerable expense in moving present occupancies to a safe location but by zoning this would be extended over many years. If the ultimate cost is found to be less than that of flood control the expense would be justified.

The New England Town Planning Association

WILLIAM ROGER GREELEY, President, Boston, Mass.

THE schools and the home alike have kept in the dark the fact that there are many more local heroes than there are national heroes. They have never heard of the local heroes. The fact that there is honor and glory and usefulness in serving one's own town is not a fact which is generally imparted to the young American. The youth entering the field feels that local politics is a sordid thing and that his father and mother would just as soon he wouldn't enter that field. His school teacher has not suggested it. And so we are crippled and so long as this thing continues our Nation must necessarily drift toward Federal control, not because of any fault in the administration in Washington, but because we ourselves have not grown to be good citizens and have not trained our sons and daughters to be good citizens. The fault is not in Washington but in ourselves here at home.

And so the New England Town Planning Association's work is to persuade the school officials, the parent-teacher associations, the teachers of civics, *not* to put into the school curriculum an extra hour of work, *but* to substitute for a week devoted now to the battles of the Civil War a week devoted to the citizen heroes of our communities who gave their lives to build the fine communities which we have. Hero worship is in almost everyone.

After this hero worship is aroused, we come to the second part of our very simple program. The civics teacher introduces into the school a town planning problem. It may be a solution of the playground question. It may be some highway question interesting all the citizens in the

town. Preferably it will not be a general plan of the town, that being too complex. The New England Town Planning Association, as far as it is able, will judge these competitions. The pupils who enter the competition and the civics teachers have told us that they welcome such projects—that they tend to make their labors lighter. The pupils draw out on paper a plan of the proposed improvement as they see it. They submit with this drawing a typewritten or handwritten report. We hang these on the walls. The best plans are awarded medals which we strike off in our organization. If the plan is of exceptional merit, we give to the planner submitting the plan a trip to Washington and return in order that he may see a city well planned in the beginning, and a city which prizes that beginning, which is continuing to develop along intelligent lines.

The pupil with the coöperation, and may I say the enthusiastic coöperation, as far as our experience has gone, of his civics teacher, learns that there is such a thing as noble service to his own community—that local politics is not necessarily a mess—that he can begin at home to be an American citizen and learn in his own village how to proceed. Of course, we in New England are particularly fortunate because we have the direct democracy in our New England town meeting. After having learned this enthusiasm for local service, his attention is directed chiefly to an actual project in civics. He has his work exhibited on the walls, judged by people to whom he looks up as wise and fair. Perhaps he has one of these rewards, a medal or a trip to Washington. Little by little this is permeating New England. With your cordial support, moral, not financial, we hope to continue this until perhaps New England shall be able again to set an example of citizenship to the nation.

FACTORS IN COMMUNITY RECLAMATION

PRESIDING: EARLE S. DRAPER, Director, Department of Regional Planning Studies, TVA, Knoxville, Tenn.

REPORTER: CARL FEISS, Instructor and Coördinating Officer, School of Architecture, Columbia University, New York City

Housing for All the People

ALBERT MAYER, Chairman, Borough Planning Board of Manhattan, and Chairman, New Housing Committee, Citizens' Housing Council, New York

THE subject of this meeting is "Factors in Community Reclamation" and my part in it is supposed to be "Housing for All the People."

But before I get to my part, I'm going to react strenuously to the whole subject of the meeting. We must define community reclamation. It sounds like recovery. Everybody seems to want to recover the prosperity which has brought us low time after time. What community do we want to reclaim, and why do we want to reclaim it? As far as I know, we haven't, since our country started to crystallize into its present configuration, *i. e.*, since the sudden industrial and commercial growth of cities, had an appreciable number of communities worth reclaiming. Except for the 17th and 18th century New England towns, there is scarcely a sizable city anywhere in the country, whose motive power hasn't been industrial exploitation and its companion, real estate speculation. Close-knit, socially active, coherent and cohesive communities could not and did not result. Real property inventories have popularized the gross physical inadequacies of our houses. Certainly as important are the physical and social inadequacies of the environment which we can scarcely call communities. Therefore, I vote to discard the concept of reclamation as a primary concept, as one that by its very use tends to blunt our grasp of the realities.

Another reason for ridding ourselves of the idea of reclamation is that it has an antiquarian connotation. We don't want to turn back to precedent too much in any case. We want to push forward. There are two profoundly different ways to approach housing and planning. One way is to conceive boldly and to make bold plans quite independent of the muddles of yesterday, based on the essentials of today and tomorrow: industrial, social, physical, psychological—new tools and new objectives. In the first creative stage, ignore the existence of the elaborate illogicalities that are our cities. This gives you a criterion, a backbone, a vision. Then you can take account of what the past has overlaid on these essentials and see which of them you can still use. You can even modify to accommodate them.

The second way, and unfortunately the prevalent way, is never to formulate the bold concept, but to assume just about everything as it is, try to make it work by elaborate expensive schemes called city planning,

and end up with something just as essentially obsolescent or obsolete, but loaded down with so much new capital cost that it still further freezes illogicalities and makes essential change so difficult that a new civilization is required to break loose. It is in this way that civilizations in the past have broken up and will break up again.

I don't say that the bold way will be possible, but I do say that the timid way is impossible, though this may not be recognized until it is too late. I also say that, if we do adopt the bold approach, we may convince the country of the crucial importance of housing and planning, of the fact that it is the underlying and pervasive issue of our time. I also say that, if we pursue the other way, we shall never get our subject adequately into the public mind, any discussion will always look simply like a little scrap among specialists. In short, it's our unfortunate job as technicians to do battle for fundamentals, so much less pleasant than accepting for solution the isolated jobs and assuming that the wrong fundamentals of policy given us by others are satisfactory.

One of the great errors we make in housing is to assume that our slums and blighted areas, our dreary and sprawling suburbs, are heritages of the past, that they are remaining static, and that by reclaiming small areas by way of isolated public, low-rental projects, we shall gradually eat away the undesirable accumulations of the past. But slums, blight, ratty suburbs are not quiescently waiting to be reformed or reclaimed. They increase, they spread to new places, they're dynamic, driven by the dynamo of speculation. The speculation has adapted itself to present conditions, but it hasn't changed in any essential, and its evil results are the same as before. Unless we offer the dynamics of a strong, well-supported public housing and general radical land-use program, we shall never catch up.

The suburban developer is still opening up new subdivisions pretty much where he likes on the justified assumption that the city will follow him out with necessary utilities and facilities. He gets the profit which the city largely pays to make possible. It should be quite possible to direct and coördinate his development with others so that the city might begin a sane and efficient pattern. But everybody's so glad about new jobs and recovery that no such thing happens. The cities sprawl a little more, the suburbs take on the shapelessness of the city, people move from the established to the new area, a new blighted area starts.

In the slums we have a curious new kind of speculation. The individual owner who needs money sells for cash at a fraction of his cost. The bank or other mortgagee-owner daren't show a loss, so it sells at its cost but at a very low rate of interest with very little cash, and makes a loan for alterations. The new owners who have bought cheaply for cash, hope to get out by spending nothing further, letting the house run down further, waiting for a speculative upturn. The other purchaser makes his improvement to attract higher rentals. So that, instead of some uni-

formity of condition which might make possible some solution, we find a growing disparity which makes the future prospect even less hopeful than the past.

This makes everybody's housing costs higher because the method of providing new facilities makes city costs higher and hence taxes. The continuing turnover of neighborhoods, the continuing mortgage risks, keep interest rates up.

I have said that bold plans are necessary to create communities. I don't propose here to go into any actual detailed plan for any hypothetical community, whether it is the cellular community of which our cities should be composed, or of the larger community—the city itself. I do propose to set up a few of the fundamental ideas involved, and to indicate what kind of general actions by government, legislation, and industry, would be necessary to carry them out.

1. *Satellite towns or greenbelt towns.* Instead of permitting the indiscriminate spawning of new suburbs and suburban areas, which, while having some logical cause, now develop in such a way that they do not at all effectuate these causes, are uneconomical in themselves and uneconomical to their mother city. They increase the strain on utilities and on transportation. On the other side, they erode and displace more and more of the countryside. The city and county by concentrating the activities of the numerous developers into one area or two larger areas of land under rigid public control, by thus creating small new towns properly planned with their own quotas of industry and relatively self-contained for shopping and other activities, could be gaining the advantages of the inevitable decentralization without the present disadvantages. By creating graded communities of size restricted by public greenbelts, they will be creating new organisms free of the constant spread, movement and resultant blight of the cities and suburbs of the past.

2. *Communities within the city.* The only regenerative element within the older sections of our cities is at the moment the public housing project on large scale. But used solely by itself, it is not going to regenerate our cities as we hopefully expect. Only if it is the example and nucleus of new inner communities, can it accomplish that. In other words, a large area, much larger than the single project, must be constituted with adequate planning and, above all, land control, with well-placed parks and playgrounds possibly as the periphery of this inner community so that the inner city itself may be efficiently built. How much of the old city is useful and should be so handled is, of course, a problem of the larger planning, of the relative importance of the city's future to its past, of its changing function within the regional and sometimes even national economy.

3. *Rationalization of construction.* If we're going to do a job of housing all the people, we've not only got to do coördinated jobs of land econom-

ics and planning, we've got to contemplate a construction industry so completely overhauled that it will be as good as new. We've got to contemplate the greatly increased use of factory-built and factory-assembled elements. We've got to replace our present irresponsible and wasteful distribution system, which is the small builder, by economical and permanent larger units. We've got to cut labor costs. We've got to throw out antiquated building codes to permit the entrance of the twins of economy and improvement of product. Our building codes produce fortresses, while all we want is houses.

To accomplish such objectives as these, we've got to accomplish major changes in municipal policy, in legislative and legal concepts, and in the industrial (and labor) set-up. It's certainly a whale of a job, but anything else is only tinkering, anything else is only a slightly more up-to-date version of our old friends, the isolated philanthropic model housing, and the city beautiful city planning.

Accompanying this program, we must have a comprehensive land policy, in two parts: (1) Purchase of lands by the municipality or county or housing authority much in excess of the individual project's needs with the eventual idea of ownership of a sizable proportion of all the land—as has been done in English cities and elsewhere. (2) We must have a much broader and more drastic control of land use and intensity of development than any present zoning laws that I know of.

Without these two tools or weapons, no city plan, however good on paper, will ever be carried out in its fundamentals, though it may build its roads and bridges and health centers. Probably land *control* must come before public land acquisition can get very far.

If our new zoning is predicated on uses and use intensities that correspond with realities rather than outmoded hopes of ever-expanding land use by industry and houses—the new realities being that efficient industrial and commercial planning will not require more space per unit product, and the population is approaching stabilization—we shall find that our cities have plenty of land, that intensities must be reduced, that, therefore, land has lower value than its present prices, and public acquisition will be easier.

Control of land use by creative zoning should not mean simply restriction as at present, but should create a vital pattern. It should cover not only the city itself, but by agreement should include rural zoning around the city.

To discourage the runaway suburb and create the satellite town, two things would be necessary: first, a policy of the city not to extend its facilities to areas arbitrarily chosen by speculators, but only to those whose plan and location conform to the satellite town's requirements; second, an agreed policy with the surrounding or adjacent counties on coöperative plans and policies of land use.

About this question of labor. We all blame labor for not accepting the

annual wage idea, and for opposing new materials and methods which would, in effect, put the skilled crafts out of business. But what else can they do? Simply act on faith that if they give up their key position, they will somehow find so much new work that everything will be all right? If we want to make a realistic cost-lowering deal with labor, we've got to offer them a realistic *quid pro quo*. If we want them to accept an annual wage, a specific proposal has got to come from a body of employers large enough and financially strong enough to have the guarantee mean something. If we want to get them to allow stressed plywood or any prefabricated wall and floor construction or prefabricated bathrooms, and throw bricklayers, plasterers, carpenters, plumbers out of work, we've got to offer them some sort of retirement pension as the railroads have. That's the way to clear labor's decks. If industry and government can see some way to do this, we have some point of departure. Not otherwise. If we can't rouse public interest and creative industry as against vested interest, we planners and architects, or our successors will later see urban life break off into trailer camps, outlying cabins and Borsodi hamlets, and then start all over.

DISCUSSION

SERGEI N. GRIMM, Executive Director, Syracuse Housing Authority, Syracuse, N. Y.

Mr. Grimm: The excellent paper of Mr. Mayer has a particular significance to us working in Syracuse because in a good many ways for some years we have been following along the lines suggested by Mr. Mayer. From the experience which we have accumulated I might say that the problem is not only what to do but how to do it.

Dealing with the community we have to face not a few isolated forces to which Mr. Mayer refers as "vested interests," but an endless number of forces, and it is obvious that our progress would be much greater if we could find a way to harness these forces and make them work in the proper direction rather than use our energy in combating the antagonistic forces and groups.

We know so little about the community with which we have to deal that while the bold approach to the solution is desirable, nevertheless it should be with profound sense of humility as to the extent of our knowledge of the community and a deep sense of responsibility for the effects of our actions. We find it very helpful in solving some of the planning problems to resort to providing open spaces, which permit a greater flexibility for future planning as well as minimize the effect of possible errors in our judgment.

It is true that the cost of housing all the people may be reduced somewhat through greater efficiency of construction processes and practices. However, we must keep in mind that the present arrange-

ment of construction industry and business is an integral part of our entire economic system. A nail driven on a construction job is the result of a number of operations in manufacturing, transporting and distributing. A plank that a carpenter may be nailing involves a series of operations and business relations from one cost to another. While attempting to reduce the cost of construction by means of reorganizing the construction industry, we must keep in mind the social implications involved in various changes of the present practices particularly as it relates to employment and general business stability.

By far a greater field for study and action represents the field of housing economics. In developing the low rental housing projects we have learned to appreciate the importance of amortization of the investment. While a good many people are doubting the wisdom of the 60-year amortization period that is used under the Federal program, it is generally known that most of the investment of private housing has not been and is not yet all amortized. A planner may endeavor to protect a neighborhood from deterioration by drawing a proper zoning ordinance and trying to get support for its enforcement. In the meantime in the area which the planner tries to protect, the property values might have gone below the level of outstanding mortgages. What can a planner do with desperate attempts of the owners to maintain the property on a solvent basis if the mortgage structure is not properly adjusted? The people working on low rental housing projects have learned to appreciate the relative importance of real estate taxation. Of recent years the tax delinquency in premature subdivisions has attracted considerable attention of the planners, but few planners have taken a constructive stand in regard to the method of real estate taxation which has been one of the most potent factors in the excessive flow of the population from the urban areas coincident to the areas of concentration of tax load.

It is gratifying to see the growing interest among the planners in social aspects of our urban life and there is no need of further emphasizing the fact that planners in order to do effective work must think simultaneously in three dimensions of physical, social and economical conditions and forces with which they have to deal. In dealing with the community where action of numerous forces makes up the life of the community it is necessary to realize that there should be general public interest and general public will to do the things in which the planners believe. Without the sufficient development of this spiritual force the effort of the planner hardly can be successful.

Transportation as an Element in Urban Rehabilitation

CHARLES GORDON, Managing Director, American Transit Association, New York City

IT SEEMS to me that it is unnecessary, before such a group as this, to emphasize particularly the fact that the transportation facilities of a city are vital to all of its other activities. Lewis Mumford in that interesting, but pessimistic chapter of his work on the "Culture of Cities," in which he paints so gloomy a picture of the rise and fall of Megalopolis, puts water supply ahead of transportation in discussing the relative importance of various necessities in the life of metropolitan areas. With that I have no quarrel, nor is it of any significance in what order of importance we put the God-given resources of water, air and sunlight or the man-made facilities of transportation, communication and electric power. It is sufficient here merely to note, first, that transportation falls in this category of basic necessities.

From the planner's point of view, it is important, however, to stress the fact that the influence of transportation is such that it directly affects the nature and direction of urban growth and development. It is not only an important urban facility to be planned, but is in itself a tool of planning. When recognized and wisely used for this purpose it affords the planner an instrumentality of vital importance to all other phases of his work. That is to say, through the planning of transportation the planner may exercise a direct and potent influence upon the other physical aspects of urban development. Unless transportation is so recognized and so used the planner overlooks the most potent force available to bring into effect the other physical aspects of a city plan. Convenience of access to the maximum number of people is the most important condition which establishes the value of urban property. Accordingly the circulatory system of a city performs a function in its economic life comparable to the functions of the blood stream in the physical life of the human body. By changes in a city's circulatory system, therefore, the planner may actually cause existing property to shrink or increase in usefulness—almost at will.

It is important to keep in mind that cities exist in the first instance because of the need for grouping large masses of population in such a way as to provide easy and ready accessibility for carrying on their vastly complex activities. This grouping of people for ready access in carrying on interrelated economic and social activities constitutes the reason for, and the purpose of the development of these urban areas. When, therefore, urban populations become so entangled in congestion as is evident in all metropolitan areas today, the planner's responsibility is a heavy one, indeed, for the very existence of the structure of which he seeks to improve the design is in jeopardy. The modern metropolitan

area forces upon us as humans what is at best an artificial and unsatisfactory environment and mode of living. Accordingly we seek through planning—through improved housing, better land use, increased recreational facilities and the many other objectives of modern planning effort, to ameliorate, in so far as this is possible, the most obviously disagreeable features of the city environment. But as long as growing congestion continues to stifle the economic functioning of the urban area, it is as though one concentrated upon the architecture, structural design, service facilities and the space arrangement in rehabilitating a tall building, while completely ignoring its dilapidated elevator facilities. Unless planners can devise rational solutions of this major problem of all cities, other phases of planning must inevitably prove futile.

Coming now more directly to the matter of transportation planning as such, my purpose here shall be merely to direct attention to the relative weight of several of the obvious factors involved. The importance of transportation is, of course, generally recognized. Even relatively unplanned urban areas provide by their street systems arteries of transportation after a fashion. In most major cities an effort is being made to overcome the lack of intelligent planning of transportation in the past by providing new highways, which in some instances take the form of spectacular engineering projects. In addition, plans for the construction of comprehensive community-wide, high-speed, grade-separated highway arteries are being advanced and promoted on a scale which inevitably will tax the resources of modern cities to the point where their economic justification becomes a matter of the very gravest concern. Despite their enormous cost many major highway improvements undertaken during recent years are probably justified by the necessity of providing new outlets from urban areas to overcome the lack of initial foresight and planning. But experience to date also indicates that such improvements woefully fail to afford any effective relief from the major difficulty of inadequate and inefficient internal circulatory facilities.

In examining new projects for further construction of this type on an even grander scale than in the past, there seems to be a great lack of understanding of important fundamentals of the problem. In all other phases of city planning attention is directed primarily to the needs of those in the lower brackets of income. This is as it should be, for it is obvious that the greatest sufferers from lack of properly planned housing, unwise land use and inadequate recreational facilities are the masses at the bottom of the economic scale who are forced to live under the conditions which they can afford. In respect to these phases of planning the attention of planners is directed primarily to the needs of the masses and, accordingly, the profession of planning is raised to the level of a vital social activity.

But not so with the planning of transportation. This startling fact,

it seems to me, challenges the consideration of all those who follow the profession of planning in its many aspects. The attention of city and regional planners today is directed almost exclusively to expediting the movement of automobiles. By this I do not mean to infer that much of the work currently under way for expediting the movement of automobiles into and out of major metropolitan areas by the construction of boulevards, bridges, parkways and super highways, is not badly needed. But it is important to bear in mind that such construction, as was indicated above, does not promise a solution of the basic internal transportation problem of cities, and second, that such improvement as it does make, by being limited to automobile riders in large measure, overlooks the needs of the masses who suffer most from the congestion that characterizes city life today.

Artists paint us beautiful pictures of the cities of the future with their skyways suspended between towering pinnacles, on which presumably individual automobiles are to transport teeming millions. Such pictures attract us all, and in our mind's eye we visualize great metropolitan areas in which people may swiftly move about without congestion and in which we may achieve not only the vital need of efficient transportation, but also adequate light, air and recreational space.

There is one major defect in such pictures. That is that they overlook readily available physical and economic data that prove the impracticability of such conceptions of urban development. By no stretch of the imagination, starting from existing available facts, can one justify the assumption that facilities built to accommodate individual automobiles will or can handle the future local transit needs of cities. Accordingly, the tendency by city planners to give exclusive attention to the construction of facilities for automobiles, overlooks the vital need of the masses who will continue to be dependent on public carriers. As a consequence, available economic resources of cities are being expended to benefit automobile riders while the basic problem of urban congestion grows worse rather than better. I believe that once the planning profession is fully familiar with available authoritative physical and economic data bearing on this problem, it will become readily apparent that improvement of mass transit facilities offers the only available way of extricating urban populations from the traffic tangle that now ensnares them. The full significance of this possibility will become apparent to planners when it is recognized also that by the rehabilitation and proper development of mass transit the planner is offered the most effective available means of influencing, and to a considerable extent controlling, the direction and nature of the physical growth of the city as a whole.

DISCUSSION

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L. DEMING TILTON
Administrative Officer, California State Planning Board, Santa Barbara, Calif.

MR. OPPERMANN: May I say at the outset that I am in agreement with Mr. Gordon on much that he has said with respect to the importance of mass transit in finding the solution to traffic congestion problems. There can be no doubt but that street cars and buses are far more efficient carriers than the private automobile. The average passenger load of automobiles traveling to and from business districts is said to be in the neighborhood of 1.70 persons per car. This is in marked contrast to the public carriers with passenger loads of 10 to 50 times that number. Admittedly there is not much comfort in either a crowded bus or a subway coach but riding is cheaper and for the most part more rapid. I wish more attention would be given to the subject of comparative costs of mass transit and private automobile transportation as this, it seems to me, is a fruitful field for the researcher.

Certainly, from the standpoint of available street space as well as carrying capacity, the mass carrier is not anywhere near so great an offender as the private automobile. By placing greater emphasis on mass carriers, providing better equipment, frequent service, reasonable fares, and bringing about a better correlation of routes with places of residence and work-centers, much could be done, I am certain, to increase their use. And traffic congestion in central areas would be reduced.

Although New York City has an elaborate system of rapid transit lines with frequent service at low rates, traffic congestion is serious in that city; it has been estimated to cost the city a million dollars a day, probably a very conservative figure. About 90 percent of New York's passengers use rapid transit; what the consequences would be if a larger number used their cars as in Washington, where 40 percent drive to work, is very unpleasant to contemplate.

When Mr. Gordon says that the planner, through his work in the field of transportation, can influence other aspects of urban physical development in potent ways, and when he says that growing congestion is stifling the economy of our urban areas, the implications of what he says are very clear to planners. Expressing a personal opinion only, I am inclined to doubt the validity of the statement that mass transit is the most effective available means of directing and controlling the physical growth of the city. Street car and bus lines may lead people to new areas on the peripheries of cities and in the suburbs but it may not be a good thing for either the transit companies or the suburbanites. The long haul traffic is not very profitable and the sparsely settled suburb is not very desirable or productive of transit customers.

The transit companies and the planners are closer together in many respects than is generally realized. The planners are placing more and more emphasis on the need for spaciously developed cities, more open area for light and air, for parking off-the-street, for loading and unloading merchandise, and for increased volume of commercial transactions in the trading areas, more convenience in going to and fro between homes and working centers. A better relation between the public open areas, streets for moving traffic, parking lots for standing vehicles, is a desirable objective for both public and private agencies. Through proper city planning we can achieve a more efficient pattern of land use. Rapid transit has an important part in this picture but not as important a one, I think, as Mr. Gordon claims.

The planning approach to transportation as an element in urban rehabilitation is a multiple one. Only a few elements of that approach may be mentioned here. It would be possible of course to reconstruct our towns and cities in such a way that they would be more efficient, more convenient, and better to look at. Instead we are following the "practical" course and solving the immediate problems as well as we can.

Some of these immediate problems and methods of meeting them are discussed in a study entitled "The Parking Problem in Central Business Districts," a joint publication of The American Society of Planning Officials and the International City Managers' Association, which was issued several months ago. It is difficult to see, in the evidence submitted by 150 cities of all sizes throughout the country, any concerted effort, either singly or as a whole, either toward urban rehabilitation, so called, or toward improved transportation as a major element in such a program. Our cities have simply not gotten around to that, but these cities and many like them are doing things to meet the immediate issues in traffic and transportation. Without being consciously considered as such many of these measures are contributing to the process of urban rehabilitation.

Flint, Michigan, has published a plan for gradually acquiring an area completely surrounding the business district to be devoted to off-street parking.

San Diego has a municipal parking lot on the tidelands adjacent to the business district which is 250 feet wide and one mile long.

Los Angeles has over 600 parking lots and parking garages accommodating 56,600 automobiles; in Detroit 280 parking lots provide space for 22,765 cars. Boston established 34 parking lots in the business district during 1937. The National Association of Building Owners and Managers has recently made estimates which show that 25 percent of all privately owned land in the Chicago "loop" district is used for parking lots. These are all privately owned and operated; the municipal lot in Grant Park on the edge of the "loop" was recently enlarged to accommodate 3,500 cars.

Municipal parking lots are a new activity in cities; thirty-three cities in seventeen States have established such facilities, most of them within the last few years, according to the Planning Officials'-City Managers' parking report.

There are certain points in favor of municipal activity in providing parking lots which are worth bringing out here. Such lots may be permanent, may be located on a basis of studies of need in the most congested section, and because most municipal lots are free or charge a low fee they meet the demand for centrally located lots on the part of parkers who cannot or will not pay the higher fees charged elsewhere. Private lots are often used for parking only until utilized for building purposes, at which time available parking space is decreased while the need for it is enlarged.

Michigan has recently amended a "revenue bond" statute to permit any city to own and operate parking facilities. Many cities in various parts of the country are inaugurating municipal parking, using lands long in the possession of the city in many instances and in others are putting tax reverted lands to this use. One of the most interesting and successful municipal parking lot enterprises is that of Garden City, Long Island, where seven municipal lots have been designed, constructed, and attractively landscaped, in the rear of business properties in the central district.

Under the zoning ordinance a number of cities are providing some aids toward reduction of congestion, indirectly contributing to urban improvement and rehabilitation. In Denver off-street loading areas are required in commercial districts; Du Page County, Illinois, requires that all new buildings which cause customers or employees to park cars or trucks for more than an hour provide parking space on the premises; San Marino, California, and Riverside, Illinois, require that theaters provide parking space on or adjacent to the premises for their patrons.

Perhaps these are only straws in the wind and do not provide adequate assurance that we are "trending" in the right direction, or at least not at a sufficiently rapid pace. Certainly very large areas of our cities are in urgent need of bold and immediate measures for rehabilitation. Anything that can be done to contribute to such rehabilitation is important to the program. Transportation planning can do so.

Mr. Tilton: Rehabilitation of urban areas is not one of the major planning problems in California but improvement of public transportation in cities is. The San Francisco transit riddle is still unsolved. Los Angeles is now spending a tremendous sum on another traffic survey, with street cars a major consideration.

The citizens of Los Angeles recently became impatient with the street railway and, without waiting for the results of the current study, voted to require operation of two-man cars. This action, surcharged as it was with emotion and politics, will not contribute to a prompt and

satisfactory solution of the Los Angeles transportation problem. A great mistake is made when the people are encouraged, or allowed, to contribute their answer to a technical question which is best clarified by the process called planning. The transit problem is complex but a more hopeful approach to its solution would appear if we had the right kinds and quantity of facts, and adequate interpretation of these facts in the light of modern social trends.

It is my purpose here largely to emphasize the importance of broader studies of transport facilities. As Mr. Gordon says, they may be used to direct and shape urban growth. Theoretically, at least, we should be able, by carefully planning the means of public transport, to siphon off congestion, distribute population, encourage proper types of centralization and in many other ways use these instrumentalities for the creation of more attractive and habitable metropolitan centers.

Mass transport, however, is one of the least understood, least tractable elements with which the planner has to deal. Being largely privately owned with fixed charges, fixed rights-of-way and franchises and traditional policies regarding types of vehicles and operating methods, the street railway particularly has not been considered readily adaptable to the requirements of a far-reaching city plan. The study of the problems associated with this industry has generally been left to engineers and experts in corporate finance employed by the operating companies. The primary concern has been, not with social values and the relationship of these facilities to the needs and interests of city dwellers, but with problems of corporate survival.

It is clear that the narrower approach is not satisfactory to the industry. It leads frequently to just such misguided popular decisions as was made in Los Angeles. The street railway industry should be the first to endorse and support the idea of comprehensive metropolitan planning. It should demand that its place and function in the expanding, changing urban pattern be fully clarified. There is ample evidence that the people will respond to the logic and inspiration of an orderly diagram, a prospectus of coördinated public improvements.

The planners, too, obviously would be better qualified to create new urban patterns if they were more fully informed on problems of public transportation. This is the first time in several years that the subject has been considered of sufficient importance to be given a place on the conference program. We have sidestepped an issue of tremendous significance to millions of city dwellers. At some early conference I would like to see an entire program given to this one subject, with Mr. Gordon and his colleagues participating in a thorough examination of the effects of mass transport upon urban development and a demonstration of the type of transport planning required for the world of tomorrow.

Recreation and Social Factors as Elements in Community Reclamation

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ANY scheme for community reclamation on a large scale must recognize the fact that the reconstruction or remodeling of dwellings represents only one side of the picture. One of the biggest contributions to better urban living which has been made by the United States Housing Authority and its predecessor, the Housing Division of the PWA, has been the emphasis it has placed on the provision of adequate facilities for recreation and other forms of social activity. It is quite possible—perhaps inevitable—that some of these projects have not been well located in relation to existing recreation areas, schools, and other community facilities, or that inadequate provision has been made for outdoor or indoor space for social activities of various kinds. However, the fact remains that a serious effort has been made to provide families in low-rental housing developments, sponsored by the Federal government, with those facilities which have come to be regarded as of importance second only to shelter itself.

As has been well stated by the Committee on the Hygiene of Housing of the American Public Health Association:

> In order to promote the psychological and social values which result from participation in normal community life, the home should be located in a community which contains or has easy access to the basic institutions of culture and commerce, and from which the major centers of employment can be reached without undue expense or loss of time and energy in travel.

Such a point of view had already come to be recognized by those responsible for the building of new towns. The English garden cities of Letchworth and Welwyn; American communities such as Radburn, New Jersey, and Norris, Tennessee; and more recently the Greenbelt towns built by the Resettlement Administration, all make provision in their plans for various types of social and recreational activity.

It is well known that one of the major influences which has drawn large numbers of families from the central areas of cities to the dormitory suburban towns is the lack of adequate community facilities, particularly open spaces for recreational use. Such facilities, which should be conveniently accessible to the home, include schools, churches, facilities for necessary shopping and entertainment, libraries, and medical service. Even more important than the provision of each of these elements is that their inter-relation with one another and with the individual home be such that a sound basis is provided for spontaneous community organization. This is impossible if the neighborhood pattern is so designed that artificial methods must be used to bring such organization about.

A series of rectangular blocks separated by streets carrying a considerable volume of through traffic may be designated officially as a neighborhood unit and may be provided with the necessary facilities for recreation, culture and commerce, but it will never develop into a socially integrated neighborhood in the true sense of the word. Such a neighborhood must be designed for the purpose of pleasant living, as were the New England towns of the Colonial period, and the problem which faces the large industrial city of today, with its square miles of blighted residential areas, is how to re-plan these areas to satisfy modern living needs.

The cost of revising the street pattern of an urban neighborhood is no inconsiderable item. However, the greatest problem concerns the ability of a community to finance a program which has as its objective the provision of adequate open space for those types of outdoor recreation essential to healthful living. One of the chief characteristics of blighted residential districts in central urban areas is the high percentage of land coverage with its concomitant high land values. The cost of providing new open space in these areas in a proportion anywhere near the standards recommended by recreation experts may often be prohibitive, as land acquisition costs tend to be highest in areas where the greatest need exists. However, some means must be found for opening up new areas for recreational use if urban neighborhoods are to achieve a measure of stability.

What are the standards by which a neighborhood can estimate its needs for recreation space? Standards for outdoor recreation areas in new housing developments have been the object of careful study by a committee appointed last year by the National Recreation Congress. This committee has since published a report, entitled, "Play Space in New Neighborhoods," which makes specific recommendations of the area needed for local playfields and playgrounds (including play lots for children of pre-school age). In addition, residential neighborhoods should be accessible to large parks, reservations and special recreation areas which in some cases may be outside the city limits.

A study of these recommendations indicates that to meet the proposed standards it would be necessary to provide from two to three acres per one thousand persons for local playground and playfield needs alone. The amount would, of course, vary with the character of the population in the neighborhood, particularly with variations in population density and age group classification. In an urban neighborhood with a density of thirty families per gross acre the application of such a standard would require that nearly one-third of the area be devoted to recreational use. It should be noted that one of the obstacles to acquiring land for such use is that the community must pay the full value of the land and at the same time remove such land, with improvements if any, from the tax rolls. Unless the surrounding property benefited

by the park or playground is willing to accept a betterment assessment, the community is virtually forced into paying twice for the land.

It is not within the scope of this paper to offer a program of neighborhood rehabilitation, but it might be pertinent to list the public benefits which would accrue to a scheme with a similar objective such as has been proposed by Clarence Arthur Perry of the Russell Sage Foundation. In an article in the January, 1937, issue of *The Architectural Record*, Mr. Perry enumerated these public benefits as follows:

1. Without expense to the taxpayers, a sizable plot of green earth, affording recreation and amenity, has been inserted in the midst of a residential neighborhood.
2. A school and a collection of retail stores have been suitably and conveniently related to their supporting populations, a collocation that happens rarely in undirected residential improvement.
3. Access to school, shops and parks has been made possible to their patrons without the necessity of crossing traffic-laden highways, thus promoting a lowering of the casualty rate from vehicular accidents.
4. The light, air and sanitary aspects of the district being rebuilt are improved. The method makes it possible to impose higher standards in these respects than are feasible under existing general regulations.
5. A control of density, supplementary to that afforded by zoning, is placed in the hands of government.
6. A district of declining property values, characterized by heavy arrearages in taxes and high service costs in police and correctional departments is replaced by a district of economic stability, and improved moral character.

Of course, any comprehensive program of community reclamation must be based on a sound financial structure and will be dependent for its success on the effective coöperation of property owners, municipal officials, and the general public. The report on "Play Space in New Neighborhoods" previously referred to states that:

In the initial conception of any housing project, public or private, due consideration should be given to the recreation needs of the people who are to be housed. Since housing and recreation areas involve neighborhood and city planning, at the earliest stage practicable the individual or agency developing the project should consult with the city planning, school, park, recreation or other local municipal agencies responsible for the city's recreation service, and together with these agencies work out a plan for permanent dedication of areas necessary to meet these recreation needs.

What is true of recreation is equally true of all other factors in community reclamation. Improved techniques of civic planning are useless if methods are not developed for carrying them out and maintaining their effectiveness. Most important of all is the development of a community morale and an interest in neighborhood affairs on the part of the families living in the district which in turn will be reflected in the calibre of citizenship produced. Some success has been achieved in organizing community activities in privately sponsored projects such as Hillside Homes in New York City and in a number of government

housing projects in various parts of the country. In a statement concerning the importance of making provision for normal community life in large-scale housing developments, the Committee on the Hygiene of Housing expressed itself as follows:

> It should be noted that many recent housing projects not only meet the basic needs cited above but provide important opportunities for economic coöperation and a sense of community responsibility far greater than is ordinarily attained in either urban or rural life. It seems possible that in this regard our housing program is making a substantial contribution to the most vital of all American political needs—the consciousness of and participation in the common tasks of community living.

It is equally important that schemes for community reclamation not involving new housing projects be supplemented by well-directed efforts to develop a community spirit. This can be done by coöperation between private agencies such as civic clubs, churches, Y.M.C.A., Boy Scout and other youth organizations, and public agencies such as planning boards, school committees, adult education centers, and playground commissions. The development of a coördinated program of social and recreational activity by these agencies, preferably in coöperation with a neighborhood association made up of residents of the district, will go far to overcome inadequacies in the physical pattern or building plant.

It is probably true that more attention has been paid to the repair and reconstruction of dwellings and the improvement of vehicular and pedestrian circulation as elements in community reclamation than has been accorded to the provision of adequate social and recreational facilities. The purpose of this paper is to indicate the importance of the latter and to put forward for discussion some of the obstacles that must be overcome if any degree of success is to be achieved.

DISCUSSION

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MR. LEONARD: It's not easy to find a springboard for further discussion in the excellent structure of Mr. Adams' paper. There can be little question of recreational and social amenities, nor on the contribution that the housing projects have made in providing these activities. Certainly he, and we, are at a very fundamental point in city planning here—the use of thoroughfare, housing, recreation, and as we see social planning techniques to bring back the good living of a less complex urban life. More community feeling and pride, and interest in surroundings and development, makes for much more of a "whole man" than the uniform-cog trends of today's big city life.

I do see a point worth some discussion, perhaps, in the question of

whether social and recreational organization programs can do much toward bringing about this community spirit, unless there is quite a lot of physical conformity about the unit or suburb considered as the neighborhood.

In the first place, has the moving away from blighted areas taken place in order to get closer to public or community open spaces, as Mr. Adams says, or has it been to get more *private* yard space, more modern living quarters, better school instruction, as well as facilities, escape from traffic, and in no small degree because it is fashionable to move out, when and if you can afford it? And does not neighborhood feeling and community pride come partly from the fact that usually these suburban neighborhoods are little areas of uniform development surrounded by parks, farms or undeveloped land? It will take not only social and recreational programs to recreate these conditions in present sprawling blighted areas, but a large amount of physical reconstruction as well.

One more point about the use of recreational and social programs strikes one as calculated to bring forth comment. Though some amount of inspiration and supervision in getting community activities going is necessary, is it really an adult tendency or not? Is it a little too artificial? I find that in Norris, Tennessee which is used as an example of provision of public recreation areas, the bulk of social activity is in private yards and houses, rather than in public groups and gatherings. Isn't most social life organized around personal selection of friends and activities, rather than geographical accident? To be sure, this is a small point, and personal, but I seemed to catch faintly the suggestion of more uniformity, rather than more "personality," in the use of social and recreational programs as a substitute for the more difficult physical creation of neighborhood units.

Mr. Wellington: Mr. Adams has well pointed out that the reconstruction or remodeling of dwellings represents but one side of the picture. He also says that the United States Housing Authority has emphasized the importance of adequate recreation facilities and other forms of social security in connection with any scheme for community reclamation.

Now I certainly recognize the importance of providing well-arranged low rental housing and the need for locating such dwelling places so as to insure satisfactory schools, recreation areas, transportation and other community facilities. However, some of us who have of necessity made recreation studies in various communities from time to time, have wondered if we have given sufficient consideration to a careful analysis of the *existing* facilities not fully utilized for recreation purposes. Please do not think that I am not in full accord with you Planners who rightly advocate the need for adequate playgrounds.

We all agree that well-located schools, architecturally correct, to

insure the best results, educationally and socially, are necessary. There must assuredly be adequate sanitation in the home and in the community. All of these are facts beyond dispute. We all agree that in the so called "blighted area," as well as in the suburban or country section, more attention must be given to eliminating past mistakes and correcting ill planned community conditions when such may be practical.

However, I believe Mr. Adams really "has something" when he says, —"Any comprehensive program of community reclamation must be based on a sound financial structure and will be dependent for its success on the effective coöperation of property owners, municipal officials and the general public."

Right here we are recognizing the human equation. It seems to me that all too often planners think almost entirely in terms of the inanimate, the material things. Yes, I know they believe they are utilizing the most modern and most effective data to insure adequate and pleasing living conditions for everyone concerned, but I wonder if we should not consult with neighborhood leaders when we decide to tackle this whole problem of social reclamation. Why not take an inventory of the social, educational and recreational assets already existing in a community—then plan a wider use of these existing facilities but plan with the idea of first creating a community consciousness for better social conditions?

Recreation means more than children's playgrounds. In these days of short periods of work and long periods of leisure, people like to swim, play ball, act in plays, paint pictures, carve wood, study nature, sing in choruses, play in orchestras—all of these are part and parcel of recreational life as we now know it.

Show the neighbors that school buildings containing gymnasiums, auditoriums, work shops may well be utilized for community recreation purposes—that certain vacant or unused areas might well be used for play purposes, with consent of owners—that cities have an ever-growing list of foreclosures of properties for non-payment of taxes and that a community-wide request for the use of well-situated land of the above description might well be developed at small cost for recreation purposes.

Another thing—and I believe this is of major importance—to insure adequate recreation we must insure adequate recreation leadership. We would never consent to develop new buildings or to remodel old ones, to design new schools, libraries, factories, bridges or sewage systems without competent engineers or architects. We would insist on trained managers to operate our mills or our business enterprises. We employ competent school teachers, fire, police and health specialists, but how much consideration have we as planners given to the selection of trained leaders to develop and to operate our systems of public recreation?

INDUSTRIAL MIGRATION

PRESIDING: C. F. WEED, President, New England Council, Boston, Mass.
REPORTER: EDWIN S. BURDELL, Director, The Cooper Union for the Advancement of Science and Art, New York City.

From the Standpoint of Industry

NORMAN MacDONALD
Executive Director, Massachusetts Federation of Taxpayers Association, Newton, Mass.

I SUPPOSE it may appear remarkable to you as planners that I should have been invited to come to a meeting of this kind because it has never occurred to either of us that we have any immediate point of view. I should probably not be here today were it not for the fact that we have become very greatly concerned, not alone with the migration of industry, but with the failure of industry. While we have lost a good deal of industry, very little has been lost by migration.

As a matter of fact, I have chosen to come to talk about some of the responsibility which I can see the planning agencies of the country must have, and it seems to me that the first one of those is that within the next decade we have got to change the public approach to planning. When one of our statesmen gets up and says something happened because we planned it that way, it seems to me we have got to see that more things happen because we planned them.

Planning in New England and planning in all the rest of the country has concerned itself very largely with the physical aspects of our problem. We have had to find recreational area, sewerage, population, playgrounds —we have had to know whether our communities were going to grow or decline. Planning in the United States has got to take another attack. There are some problems in this country of ours for which we have no existing agencies unless the planning agencies will turn their efforts in that direction. Everybody in the United States has heard about the plight of real estate. Here in Massachusetts we think it serious, and because we haven't done any planning. The result is that our capacity has been overjudged in some directions and underjudged in others. It is almost a truism that everybody admits we are going to pay more taxes than we pay now. We should know something about the capacity of every source. We must recognize the relationship of that problem to the relationship of industry. We must realize that industry has always had to do a great deal of planning and research.

I am not able to understand how planning policies can be conceived and carried into effect without very serious consideration. There may not be too much integration of the thing that planning attempts to do, of the problem of our cities and States. Here we are planning, with some broad revisions, to make it possible and desirable for new industry to come to this section. I hope you will not feel I am saying generalities for they

reach more deeply into the lives of most of us than we think. Here in New England we have got to help industry to remain in New England. I feel also that many, many times in our planning operations we concern ourselves too much with the physical end. We in Massachusetts, who have banded ourselves together for better and more efficient government, have long recognized the desirability for more and better planning, and we are constantly appalled by our recognition of the fact that in fixing our administrative practices and policies, the process of planning is ignored. For our part here, we are going to work more and more in the direction of the consolidation of which I have been speaking. We have got to start at the bottom by making it possible for an economic structure to endure here.

DISCUSSION

THOMAS H. ELIOT, Regional Director, Wage and Hour Division
United States Department of Labor, Cambridge, Mass.

GEORGE E. DALRYMPLE, Chairman, Massachusetts Emergency Finance Board, Haverhill, Mass.

P. HETHERTON, National Resources Committee Consultant to the Washington State Planning Council, Olympia, Wash.

Mr. Eliot: There are a few comments I might make leading from what Mr. MacDonald has said. I wonder first whether industry's difficulties in New England are any greater than they are in the rest of the country as a whole. I wonder, too, whether there has not been a little more migration from New England in past years. The figures show the amount of migration from here to the south is comparatively small, but isn't it frequently the case that a company does fold up, and then under the same management another company opens up doing the same business in another State?

We in the Wage and Hour Division have two fairly close relationships with the whole problem. First, of course, one of the basic reasons why the wage and hour law was supported was that it was thought to be an aid against migration from New England. How much effect that has had I do not know. Possibly somebody here has made a study of it.

I read with great interest the other day an item indicating that in the woolen industry in the State of Rhode Island, payrolls had increased by 43 percent over last year. If that is accurate, isn't it possible that some of the increase was due to industry's starting up again upon assurance that they would not be undercut by southern competition? Of course, a good deal depends upon how well the Wage and Hour Division enforces the law. Failure to enforce will mean that the law is so much paper.

Mr. MacDonald says that in this State we must have more efficient and effective government. He means that we must have less expensive government, and that is not always the same thing. Take the effort made through the enactment of Federal legislation to bring up labor standards

and to remove the advantage of the sweatshop States. That can only be effective, our government can only be efficient, if we have an adequate force of employees to enforce the law. As a result of the present economy move, the Wage and Hour Division has been forced to operate on practically nothing. We have, for the New England States, 10 inspectors—and we receive 20 complaints a day. (We have hopes of having more inspectors the next fiscal year.) Economy does not result in efficient government. It will not help us to prevent the undesirable migration of industry to low-standard States.

All of us, I suppose, who live in urban communities, are anxious to see industry flourish in those communities. I live in Cambridge. As you come into Cambridge there is a sign "Here Industry Grows." Practically every community is looking for more industry to absorb.

But there are some towns that fall a little over themselves in seeking to promote industry within their borders. You know how, in its enthusiasm, its endeavor to get employment for all its population, a local group goes out of its way to try to attract a particular business. How does it attract that business?—sometimes by a promise of police protection in case of strikes; in other places similar protection is tactfully indicated. Take, for instance, migration of the shoe industry to Maine. But there are other methods of attracting a company to a town. "We'll give you a factory rent free for five years; tax exemption for a certain number of years; we'll provide heat and light if you'll start a business in our town. We've got a lot of people on WPA and they are making $13.85. You come in and start a factory." They come in and they take those people off the WPA and pay them $5.00 a week and claim that that improves the morale of the people in the town!

Last week a very extraordinary resolution was adopted by the United States Chamber of Commerce calling for repeal of the wage and hour law. I am interested in seeing improvements, more flexibility in the wage and hour law, but the drastic resolution that was adopted took the delegates by surprise. There had been no discussion indicating any likelihood that the Chamber would recommend repeal.

Four days earlier, we had learned the following facts. One of these towns, which had a Chamber of Commerce, brought in a company which was rather an unusual company. They did not try to fool us. They did not falsify their records. Instead they reported accurately how long they worked and how much they paid. They were paying far less than 25 cents an hour.

Well, this was a company which was operating rent free, tax free. The Chamber of Commerce was providing heat. We found that no watchman appeared on the company's payroll. That surprised us, and when we saw lights in the factory at night, we investigated. Sure enough there was a watchman. He had worked every single night for the nine months they had been there, 84 hours a week for $10.00 a week. The employer had

violated both the overtime and minimum wage, as well as failing to keep wage records, and the employer of that watchman was not the company. The employer was the local Chamber of Commerce itself.

That was a curious exaggerated instance of a Chamber of Commerce bringing a concern to a locality which was guilty of inexcusable violations of law. I don't think it was necessarily typical of many such organizations, but there are towns that don't care what kind of private industry they have. A city may be industrially dead. If it is to be revived, isn't it worth considering whether you revive something that can have a decent existence?

I have thrown out possible considerations affecting one aspect of the migration of industry. I have mentioned certain methods which are not the best methods to cause it to migrate to places that are industrially stagnant at the present time. Perhaps the Wage and Hour Law will put a stop to such migration, and instead encourage industry in States and communities where human decency is the guiding rule.

Mr. Dalrymple: It is with no hesitation that I make the assertion that there is no more important subject which could be brought before us for consideration at this time than the one assigned for our immediate discussion. For a period of many years a very definite migrating movement has been all too noticeable in some of our industrial cities. It is perhaps true that the effect of such movement has been more easily discernible than the underlying causes of any such movement. Nevertheless it has gone on, year after year, and in many of our communities has left in its wake industrial desolation and unemployment.

From the very beginning of the establishment of our communities they have been built upon and around industry. It may be a small town built around one industry. It may be a full-grown city with its many industries much diversified in character. Whichever it may be is of little concern here. The fact is that to a great extent the very existence of our communities depends upon their industries. It is with emphasis, therefore, that I say that you and I could not have before us for our thought and attention anything more important than a study of our industrial problems.

When we think of the migration of industry, it is natural that we think in the terms of the negative, the detrimental aspect. Here, as elsewhere, the familiar proverb holds true that "It is an ill wind that blows no good." Doubtless in a migrating movement of industry there is an accompanying good to some community, but what good there may be created never compensates for the injury done to that community which has suffered the loss.

Why should industry migrate? Natural business expansion may necessitate change of location and be wholly justifiable. Closer proximity to raw markets and necessity of lower costs may induce change. But what we are principally concerned with, I believe, at this time is the

distinct movement of industry which does not of itself manifest justification. It is with respect to this phase that I hope we can from our discussion diagnose these not all too discernible causes and from them arrive at some constructive thoughts toward a general alleviation of this problem.

I live in an industrial city, a city from its earliest days as a town, built and made prosperous around industry. During the past two decades this migrating movement, this exodus of industry has been most noticeable. Many manufacturing concerns employing many persons have moved away to relocate elsewhere. Just why do they find it necessary to go? There are many contributing causes.

In the main, we find that the causes which have effect upon industry and may influence industrial migration can be classed in two groups. One group is rather local in character and more amenable to any changes or corrections. The other is more remote and not so easily handled. It is in the former where there exists, I believe, the greater opportunity for us, as planners, (and I class myself advisedly as a planner) to direct our keen attention toward a thorough understanding of these problems that a stabilization of any migrating movement in industry may be secured.

It is a recognized fact that today industry must have the best of transportation facilities. The day when shoes were made in the little country shoe shop on the farm and shipped by tote wagon, or when those tall felt hats of olden days were transported on horseback to their destination, are just interesting bits of our early history. Today it is essential that every advantage be taken of all navigable waters, that rail systems be adequate, and that our highways be not only practical for modern freight transportation but that they be direct and easily accessible.

We know well that during recent years new business methods have been introduced, that strides have been made in efficiency and savings, and that great improvements have taken place in technological conditions. As a result, this has brought about changed conditions so that the factory space of yesterday is not suited for economical and profitable business of today. This has left in our communities many buildings which today are wholly inadequate and unsuited to present-day requirements.

The question frequently arises, especially in the mind of a public official, just what the future may be for such property. Should the buildings be permitted to stand and if so what is the proper course of valuation assessment? Or, should they be demolished and replaced by modern factory space, when the return of business prosperity demands? This problem of building obsolescence is an important one and from personal observation it would appear that sentiment, rather than good sound business sense, rules. There is little prospect that a going business of the present day will consider the utilization of the obsolete space of yesterday.

For years good factory management has recognized the cost of labor turnover as a major factor in sound production. We only have to think of the many nationally known industrial units who recognize this fact and do not hesitate to expend large sums to make a healthy, happy, and contented employee family. Indoors, we find attractive smoking and lounging rooms as well as reading rooms. Out-of-doors we find the last word in athletic and general recreational developments. The man who works at the bench is human. He enjoys healthy and pleasant surroundings in his work as well as in his home. How often we observe a definite laxity on the part of civic authorities in recognizing this fact. What opportunities are at our doors to provide those very features that tend to induce industry to our communities, but we fail to take advantage of them. There is talk of spending money to obtain industry but how awkward we are. Before a product can be sold it must fill the need and be attractive.

There is one other factor which has had a decided effect upon industrial migration. I refer to the misunderstandings of employer and employee, otherwise referred to as labor disputes. I do not suppose we can expect to see the time when the industrial world will be free from labor disagreements. But I have lost more than one night's sleep acting as a go-between, attempting to bring about restoration of amicable working conditions. I have seen strikes and the friction of one union with another. I am convinced that much of the suffering of the employee families as well as loss of industrial production could be eliminated if a more sympathetic understanding were adopted by both employer and employee.

These are matters which perhaps do not come directly under the program planners. However, I do believe that any effective program would not eliminate entirely attention to such an important phase of our economic structure. Here lies, I am quite sure, an opportunity, an avenue of educational approach.

So far we have discussed some of the principal factors affecting industrial location which can be treated from the local standpoint. Some other factors are not so readily handled.

Legislation, either of state origin or national in scope, enacted with all good intentions, can very easily affect the industrial welfare. State legislation for the benefit of class employees can work adversely if it affords an advantage to a neighboring State. Taxation laws can readily induce industrial movement to other States. It would seem extremely pertinent for planners to take into consideration all phases of such laws that place any handicap on one community against another, or one section against some other section.

In the time allotted to me it has been my endeavor to touch upon some of those factors which, it seems to me, do tend to induce a migration in industry. With our country emerging from a period of industrial

stagnation and with a general cleaning-out process having taken place, I believe the opportunity is at hand for full duty by all planners. The track is clear with green lights ahead. Planners have a job to do and by and through your thinking and your efforts, we will see the restoration of our communities. Instead of industrial migration, it will be industrial stabilization. Prosperous American industry with contented American families, all making for the typical American community, that is the goal I leave for American planners.

Mr. Hetherton: The statements of the previous speakers have astonished me. I had no idea that competition within a State or region was so keen that individuals and organizations would go to such extreme lengths to cause the movement of an industry from one community to another. We in the Pacific Northwest, so I understand, have been accused of serious misunderstandings between employer and employee. While misunderstandings do exist between certain sections of labor and industry leaving relations, however, no worse than in other parts of the country, I feel that we are still fairly civilized when it comes to competition between communities for industries.

On being asked to discuss this subject I had some difficulty in visualizing migration of industry. On the whole, industry does not migrate as do human beings. We in the Northwest are faced at the present time by an influx of people from the dust bowl areas. These people come with little capital and add to our already existing problem of unemployment among our own citizens. Unfortunately, industry does not migrate with them. We need more industries; particularly do we need more secondary manufacturing. Our economy depends altogether too much on the exporting of raw materials or semi-manufactured products. For these reasons the subject is of great interest to the Northwest.

Such migration as does occur in industry is brought about at present by economic forces—a desire to make greater profit, to get closer to raw material supplies, to get closer to markets. At a later date, when the country as a whole or when specific regions give greater consideration to the social effects of industrial development on the immediate economy, a second reason may take equal place with the desire for profit.

From the New England States we have heard of the migration of the textile and shoe industries to other parts of the country, the textile industries to the South to be closer to raw material supply and cheaper labor, although how much longer this latter advantage will last is questionable. Whether or not entire going concerns picked up bodily and moved I am not prepared to say. An outstanding instance of westward migration of industry has been that of the manufacture of lumber. Starting on the Atlantic Coast, it gradually moved westward, leaving in its trail denuded land in Michigan, Wisconsin and Minnesota, finally finding its last frontier in the Pacific Northwest. This has been a real

migration. And by that I mean the principals, and to a large extent the workers, have followed the supply of raw material. To a lesser extent this is true of the pulp industry. New companies have been formed in some cases, partly financed by the old established concerns in eastern and central United States; but the movement until recent years has been to the Northwest, again the lure being abundant and low-cost raw materials plus excellent transportation facilities.

A more recent example of migration of industry has been that of the canning and preserving of vegetables. Due partly to the failure for several years of the pea crops in the Midwestern States, branches or entire new companies have built canning plants in the State of Washington, causing a very material increase in output even through the depths of the depression.

According to a survey made by the Metropolitan Life Insurance Company, covering the years 1926 and 1927 and entitled "Industrial Development in the United States and Canada," the communities hoping for industrial development through the actual migration of industry are likely to be disappointed. This survey found that:

> The most important type of development was the new industries started within the individual communities. These represented 81.8 percent of the plants and 56.3 percent of the employees gained. Branch plants were responsible for the remainder of the gains and represented 8.8 percent of the total plants and 25 percent of the total employees gained. . . . Relocations accounted for only 9.4 percent of the plants and 18.7 percent of the employees gained by the various communities.

It is also possible that the communities that offer great inducements—free sites, freedom from taxation, low labor costs,—are also doomed to disappointment. The recent report issued by the National Emergency Council entitled "Economic Conditions in the South" says:

> The hope that industries would bring with them better living conditions and consequent higher tax revenues often has been defeated by the competitive tactics of the communities themselves. Many southern towns have found that industries which are not willing to pay their fair share of the cost of public services likewise are not willing to pay fair wages, and so add little to the community's wealth.

I have said that the economy of the Northwest depends largely on the exportation of raw materials and of semi-manufactured products. The advance sheets of the 1937 United States Census of Manufactures have just been published, and comparing this information with the 1927 Census, it is found that the total value of product and the total number of classifications are practically the same. It is found, however, that the value of lumber products has decreased very materially while the value of pulp and paper products and of canned goods has grown sufficiently to maintain the grand total. But the unfortunate thing is that many of our secondary industries, such as the manufacture of men's and

women's clothing, of shoes, of hats, and of candies, have either decreased or just about held their own which is equivalent to a decrease in view of the greater population.

We are faced with still another problem, that of widely varying seasonal demands for labor, not only in agriculture but in industry. If, then, our existing industries could be expanded, particularly those of a secondary nature, if a greater variety could be brought in, and if these in turn could bring our seasonal demands for labor into greater balance, the economy of the Northwest would be materially improved.

In extensive supplies of low-cost dependable hydro-electric energy we have in the immediate offing an inducement to those industries where cost of power is an important factor in manufacturing and sales costs. (When all installations are completed, existing plants and those now under construction will have a total installed capacity of 5,183,000 HP, slightly less than the State of New York which, in 1932, had 6,276,029 HP.) Through the Bonneville Project a network of high tension transmission lines (call it a grid, a superpower system, or what have you) is being built into which power from the Federal projects of Bonneville and Grand Coulee will be pumped and ultimately, it is believed, the power generated by the publicly and privately owned hydro-electric plants as well. (It should be noted that contrary to conditions in the New England States, where steam generation of power predominates, the Northwest obtains practically all of its supplies from hydro sources.)

The magazine *Fortune* in a recent issue, criticized the Administration for not making what *Fortune* called dynamic and strategic investments. It pointed out that the building of highways was a dynamic or strategic investment because immediately private initiative entered the field of automobile manufacturing, thereby creating great wealth. It cited as dynamic investments the assistance given by the Government to the early railroads through land grants and other subsidies and of the giving of public lands to settlers since these caused extensive railroad building and in turn created active markets for the steel industry. Can it not truthfully be said that the making available of large blocks of low-cost electric energy is equally a strategic or dynamic investment on the part of the Government? It has already been demonstrated that a reduction of the cost of energy to the householder means a material increase in his use and therefore in his purchase of miscellaneous electrical equipment. His pleasure in living has been enhanced and new markets found for the output of various factories. Low-cost electric energy has created great industrial centers. We have next door to us the example of Buffalo. In a lesser degree in the early days of the Republic we had the congregating of industry around the water power project. Great Britain's coal supplies built an industrial empire.

Now, we in the Northwest do not expect that this reservoir of power will mean the migration of companies now established in the East and

South. Rather, we expect that new industries, not competitive with existing ones, will find it much to their advantage to locate where not only raw materials are available but where electric energy may be obtained either close to raw material supplies or immediately on tide water where ready access to world markets is available. As an example we have in mind the manufacture of magnesium metal. If the demand for this very light structural material increases, as may well be expected, the present sources will not meet the requirements. In northeastern Washington very extensive deposits of magnesite and dolomite are found from which, under laboratory methods, magnesium metal of high purity and resistance to corrosion has been made. To the north of us, at Trail, British Columbia, a pilot plant for the manufacture of this metal will shortly, we are told, go into operation.

The varied demands of industry require alloys to meet varying conditions. Here again electric energy is one of the principal costs of manufacture. The Northwest has supplies of manganese and chromite from which, by laboratory methods, practically pure metal has been extracted, such purity being necessary for alloying with aluminum, magnesium and certain steels. In the manufacture of fertilizer from phosphate rock, of which the greatest deposits in North America are found in the Northwest, large blocks of energy are consumed. It is through industries like these, combined with the dynamic investments made by the Federal Government and by private and public utilities, that the Northwest expects to build up a balanced economy. At the same time we cannot overlook the secondary industries whose prosperity depends upon immediate markets, nor can we long overlook the anti-social effects of too great centralization of industry.

The present hearings before the Temporary National Economic Committee are bringing to light much interesting information on control of industry through patent rights and financial policies. The findings of this committee may lead to a more rational and socially effective distribution of industry.

From the Standpoint of Sociology

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ONE type of industrial migration arises when natural resources are exhausted. Then the industry disappears or moves elsewhere. Another arises when factories move in order to be nearer to the natural resources, such as the concentration of the heavy steel refining industry near the places of iron and steel production. This type of migration is also found in some light industries, such as the partial shift of the cotton and leather goods industries out of Massachusetts after 1919. A third type of importance is the migration of industry from community to community within a region. This applies chiefly to light industries as illustrated by textiles, leather, and rubber goods.

The migration of heavy industry from New England has never been important, because this region has never had much heavy industry. Since 1910, however, Massachusetts has suffered a great deal from the partial migration to other regions of a number of light industries. Between 1910 and 1920 this may be measured by the fact that some of these industries increased relatively more rapidly in other sections of the country than they did in Massachusetts. Since 1919 and particularly since the depression, changes in these industries (migration elsewhere) to the relative detriment of New England have been more rapid than before. Furthermore, New England has suffered a great deal since the depression on account of the industrial movements from one community to another within this region. Since 1930 numerous industries have been leaving former towns and appearing in others. Sometimes the towns lose rubber or shoe plants, and in the same year other New England towns gain the same kinds of industries. A textile plant closes in one town and opens up in another. Sometimes the new town is in another New England State, and at other times the changes take place within the same State.

Briefly, New England's migratory industrial problem then is marked by the migration of some light industries to other regions, by the development of new industries in New England, and by the migration of industries from one community to another within the region. The sociological problems of migratory industry here in the northeast are concentrated mainly about these movements.

Now what conclusions may we reach concerning these movements? Here are some statements which appear to be valid:—

1. About 90 percent of all present industrial migration around in New England and between New England and other regions is merely a waste of national energy.

2. To avoid this waste, and the concurrent social demoralization both here and elsewhere, New England or the United States as a whole should take the necessary measures to prevent a good deal of this migration.

3. Right now we are paying the price of a managed economy and not getting any of the theoretical benefits of such a plan. We must either give up "social planning" in so far as it can ever be given up or we must make it work for some fundamental social good.

The wastefulness and demoralization caused by New England's industrial migration may be illustrated by a number of cases. In one New England town a mill purchased property in two States. About 1904, when the taxes and other penalties became very high in one State, it moved over into the other. The community which lost the industry has been in a severe financial condition since. The fact that the other end of the town then had the one remaining mill led to quarrels and a movement to split up the town. In 1916 this was accomplished, and the remaining people in the original town were further impoverished. In 1930 the end of the town which split off also lost its mill. This was due to nothing other than a period of exploitative taxation by the new town when the mill, a branch industry, was in difficulties anyway. Now both ends of the former town are in severe financial difficulties. However, there is more hope for the original town because the industry which moved to another State in 1904 is so hampered in the other State that it wishes to come back. All of these movements should and could have been avoided by the use of common good judgment by all concerned.

The rubber industry left the split-off end of the town in 1930. Since that time a number of new branches and independent rubber plants have been established in this and other New England States. It would have been far better if one of those industries had gone into or stayed in the original rubber town and rubber plant. The other towns which received rubber plants were, of course, glad to have another industry, but the only difference it made to them was the question of *more* or *less* industry rather than the absolute bankruptcy as in the original rubber town.

One cannot find many industrial towns in New England which have not had repeated experiences of this kind. Yet, so far, few have learned anything from these experiences. Not only does the New England worker face a precarious situation on account of the fact that he is a producer in a quality industry which is one of the first to suffer during a depression, but also great additional hazards from at least two other important sources. One of these is unwise irresponsibility in industrial management brought about by the attempts of borderline industrialists to get the last dollar from a particular location. One illustration of this is the industrialist who rents nearby vacant mills to keep "competition" from moving in; another is the industrialist who purchases old property or wrecks the machinery to handicap future competition. This irresponsibility can only be met by a strong development of industrial self-government through some form of industrial cartels or councils

or by an autocratic interference of the state or Federal governmental agencies.

Another great hazard is that of unwise community government. If the average New England community would act just exactly opposite in many of its relations with industry, the community would be better off. The general tendency in the New England community is to raise taxes so high in good periods that any raise in a depression becomes so burdensome that many industries must fold up. In Sweden the government puts aside a surplus during good periods to spend during depressions. In America we expand expenditures unreasonably during good times and bankrupt our industries during depression. Unwise public expenditure policies are 50 percent of the difficulty in industrial New England today. This applies first to the town governments and second to the States. It is time the New England governmental units were growing up and abandoning these childish faults.

Just how this expenditure policy can be remedied is another problem. One should think that New England's communities with 150 years' experience in industry would show more judgment than they have in the last twenty years. Here again the chief solution will have to be found by hard-boiled volunteer leadership, or we shall drift into some kind of governmental autocracy.

The chief difficulty with governmental autocracy is that we have no guarantee that it would do even as well as *laissez-faire.* The experience of the American governments in business so far has not been hopeful in the least.

More recently our so-called social planning has, if anything, made the situation worse. What we need is more realism in our everyday public and industrial affairs.

Right now New England has more promise than any other region in America. This is because New England has already made its mistakes. New England by use of realistic good judgment can start building up, whereas most of the other regions in America still have their great mistakes to make.

DISCUSSION

ASA S. KNOWLES
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GEORGE F. YANTIS
District Chairman, Pacific Northwest Regional Planning Commission, Olympia, Wash.

Mr. Knowles: The time allowed necessarily limits the discussion from the sociological standpoint to two factors in Dr. Zimmerman's paper: (1) the need for definite action and planning to prevent industrial migration in both New England and the United States in order to avoid its concurrent social demoralization; (2) the advisability of more intelligent action in making communities more attractive for both existing industries and those seeking new locations.

With few exceptions, the major portion of the present-day industrial tax burdens which both discourage and destroy industrial activity result from the necessity of providing work for the unemployed, relief for the needy, pensions for the aged, etc. At the very root of these evils are factories that are wholly or partially empty, and businesses that have had to curtail their operations. The manufacturers and business men have either found business unprofitable and ceased operations altogether, or have moved to locations where they can carry on with less risk and more gain.

In the towns and cities where the people are entirely dependent upon industry for support, the situation is one which is difficult to remedy. The temporary alleviation afforded by the relief and work projects only serves to aggravate the ultimate cure or chaos. Just when the manufacturer or business man needs to reduce costs because of decreased business, he must add an increased tax burden to his business expenses and even though it may be possible to struggle along bravely for a time, ultimately there must be a curtailment of operations or a complete shut-down, thus bringing more unemployment, relief, and probable chaos—the first steps in the journey to community loss of pride, poverty, and crime.

It is readily apparent, therefore, that the greatest social maladjustment of industrial migration takes place in the community where industry is on the move. Unfortunately, too, the complexities of the social aspects of the problem increase as additional units move away. Ultimately, the only solution is found in building a "back-fire"—industrial development. This means not only seeking new industries, but also taking definite steps to encourage existing ones. Praiseworthy and significant beginnings along these lines have already taken place through the creation of several agencies. These include regional development agencies, state development committees and commissions and planning boards, local chambers of commerce, and industrial committees. All of these agencies perform a valuable service in this connection. For

example, they publicize an area and point out to individual communities their place in the whole picture. They lend an occasional hand and are of assistance when their prestige or influence is required, and they coördinate the work of the various local development agencies.

However, more cannot be expected of them for not only are their funds limited, but many are hamstrung with other assignments and political influence. Moreover, the regional and state agencies, in particular, cannot be expected to carry out specific research and development programs as related to individual communities. They must treat all alike, and where the specific communities have local agencies, seldom do these consist of paid individuals; too often is their true value hampered by the fact that their members are not paid and, therefore, they in turn pay only lip service to the work of getting new industries.

If the task of industrial development is to be accomplished well, it should be placed in the hands of those who have a vital interest in its success and stand to derive some personal gain from it. Certainly, no single group can be more vitally interested in community welfare than those who make a livelihood from dealing in what it has to offer, *i. e.*, property, resources, materials, transportation, warehouse facilities, etc. In short, those who deal in its real estate. It is the real estate broker who will gain first through the sale of vacant industrial property or an industrial site. It is he who should be most interested in bringing employment to the community to maintain the demand for existing real property and enhance its market value. It is he, also, who should be interested in bringing added business to local merchants through the medium of payrolls, because a good shopping center attracts those who are interested in home ownership. And, above all, he should be interested in maintaining both present industries and getting new ones so as to alleviate the tax burden on existing real estate.

The problems of seeking industries in communities where none exist are somewhat different than those involved where industries are sought either to complement or serve those already existing. In any case, however, there should be a community survey and then the steps should be taken to indicate the types of industry which are needed and which can be obtained for the particular needs of the community.

The survey should be directed to determine just what the community has to offer by way of each of the following: (a) available buildings; (b) the local labor supply and its skills; (c) effectiveness of local government and its attitude toward industry; (d) local tax rates and assessments; (e) available transportation services, power sources, services, and rates; (f) local markets and the proximity of distant markets. (For further information, see "Getting the Industry Best Suited to the Community," by Asa S. Knowles, *The American City*, January, 1939.)

When these are known, those charged with the development program should determine specifically the type and size of industries the

community can hope to attract and hold. This means careful planning, based on a community survey and followed by an expenditure of funds and energy in those channels which are likely to be most productive, *i. e.*, going after the industries which are the most likely prospects, as compared to conducting a general publicity campaign. This cannot be done by a superficial committee or local board; it is a job requiring the attention of those willing to work because they stand to gain from it—and in most communities these must be the real estate brokers.

Mr. Yantis: I think probably before I have finished my brief remarks, you will decide that it is dangerous to bring a maverick off the range. I may seem unfair in the things I say but my remarks really reflect only my intense interest in our problem. I hope that we are all grown up and able to talk of things as they are and to say what we actually think. Certainly, we cannot be profitable to one another in any other way.

Now, frankly, the whole turn of the discussion this afternoon has surprised me. We have talked more like a delegation from a chamber of commerce than a group of planners. We have completely avoided talking about the causes for the fix in which we find ourselves. We have taken an occasional kick at government for trying to do something about our plight; then a kick at labor; and kicks at one another—but I do not think we have even discussed the matter of industrial migration from the standpoint of causes, probable duration and extent; nor the effects produced, either on the migrants or the communities to which they migrate.

Before I left for this conference, a friend said: "Remember you are going to Boston; try not to do much talking. Those people will know more than you." Probably you do, but I reiterate: Very little has been said that has anything other than local interest and application. No one has really discussed migration, nor the industrial displacement and the agricultural maladjustment which is causing it. The things that are making it tough for you people in the East, in that concerns are folding up, applies, also, to us in the Pacific Northwest who happen to be on the receiving end, since people are poured in on us when our industry and agriculture are also operating way below par. We simply do not have places to put these people in which they can get satisfactory livings for themselves. We are getting migrants at the very time when we are least able to find places for them and for the very same reason that industries are quitting and people are moving out of other sections.

Do not think I am speaking as one whose living depends on government and must, therefore, speak for government. I happen to be merely a small town attorney. But I do see enough of what goes on about me to know that the cause of our troubles is not government and the answers will not be found by scolding government; nor is the cause found in labor, nor will the answer be found by scolding labor; nor is the cause merely

the chiseling between communities, which has been talked about so much here, nor will the answer be found in preventing so much chiseling.

In the Northwest I see the lumber industry and agriculture, both in distress. Yesterday, I rode through an important industrial section of our country outside of New England and from what I saw it appeared that industry is in distress. Many factories are closed and falling into decay. You, in New England, may be suffering from "chiseling" and migration of industry, but at least you present a much better general appearance to the casual observer. The problem, then, is not how to keep industry from moving out of New England. Frankly, the concern for the country as a whole is not whether this or that section retains its industry, or just who makes the commodities we want—but that industry, as a whole, operate at the proper levels to give adequate employment to the people as a whole.

I think that you know and I know that the real trouble American industry faces is not government or labor, or inter-city or inter-regional chiseling, but is the old and ever-increasing problem of markets. The present acute problem results from diminishing volume. In 1929, we reached a high tide of industrial development. We built a plant to accommodate an immense volume of business—and now we do not have the market to keep the plant in full operation. We did have a reasonably satisfactory labor demand so long as we were not only making the consumer goods but building the production plant and the transportation plant, and, also, largely feeding Europe; but the plant is built—enough and to spare—and we are not feeding Europe any more, and we are not going to; some of the old outlets for labor are gone and some of the markets by which industry lived have disappeared.

We are not going to jump into a huge period of expansion. There is no underproduction of consumer goods, even on the present half-time basis; and with the present production plant operating half time, or a little better, there is no place for investment in more plant. The thing we have to do is face these truths and not spend so much time messing around with symptoms and effects rather than causes; making excuses by accusations against government, labor or one another.

There are just as many mills and factories in operation as consumer demand will keep in operation. Do you find any shortage of hosiery, shoes or lumber? We all wish there were.

Our real problems lie, not in the "this" and "that" which we have been talking about, but in the fact that we have reached the end, for the present at least, of the period of huge capital investment and expansion and have not the usual place, for the moment, to employ the millions who are idle. We have built a huge production plant but have failed to maintain a market commensurate with our production capacity. The truth is, there would be a market if the millions who have unsatisfied wants could get the wherewithal to satisfy them—and still, wealth-

producing power is here. We like to dream about the good old days when payrolls more or less cared for the millions that are now idle; but those were the days of a hugely expanding population, with a raw country yet to be developed and a production machine in process of building.

I am not blaming anyone for this condition. In truth, the very fact that we spend so much time blaming one another rather than analyzing the cause is one of our basic troubles. It is time for us to take account of the truths which are so apparent about us and to look for answers. I hope that we will demonstrate that we have the character, the intelligence and the courage really to deal with the basic truths. Of course, we planners cannot legislate, or even administer. We do have the function of collecting available information and I hope we have the ability to deal realistically with it, not spending so much time in shadow-boxing; and I hope, when we have dealt with it, we will be reasonably good salesmen in distributing true, sound analysis and sound policies to the people on the street. These things have to be done. Progress must be based on knowledge and acceptance of truth. We are caught in changing circumstances.

The American people are not fading out, or going into a decline, and are not going to. Business is necessarily engulfed in ills of all sorts when markets decline, and markets decline because so many people with needs cannot go into the market and buy the commodities with which to satisfy their needs.

Let me commend to you the line quoted by one of the speakers this morning:

> The fault, dear Brutus, lies not in our stars,
> but within ourselves, if we are underlings.

We will be underlings in America just so long as we deal with effects, not causes—so long as we fail really to study our plight and the causes which brought it about and to seek honestly and courageously for remedies.

To this knowledge we must add vision of a better day and the determination to build an America nearer to the heart's desire.

Truly, "Where there is no vision, the people perish!"

MAN-MADE OBSTACLES TO PLANNING

PRESIDING: GEORGE SOULE, Chairman, National Economic and Social Planning Association, Washington, D. C.

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Obstacles to Water Resources Planning

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IN PLANNING, impediments to progress appear everywhere. We often hear that unless this fact is available, no plans are possible; unless this policy is settled, we cannot turn a hand; unless we know all the answers, our plans are meaningless. Yet despite such rocks in the road to progress we can move. One of the first moves we must make is to recognize that there are these obstacles to clear sailing, we must know where they exist, and something of them. Then as we chart our course, they can be better dodged, ignored, or removed. The purpose of this discussion is merely to outline some of these obstacles that we can better understand the situation and our progress.

Obstacles to water resources planning fall into five classes: (1) ignorance, (2) institutional, (3) economics, (4) political, and (5) social. Only as these obstacles are recognized can steps to remove them be taken. When not adequately recognized, planning is hampered.

IGNORANCE

Knowledge is fundamental to planning. Information as to our water resource is meagre as to its amount, its location, its usefulness. The great American public does not realize the paucity of our water data. And few, save technical experts, realize that without rather simple precipitation and stream data, water resource planning is highly speculative and even hazardous. We build bridges, only to find their capacity too small to carry the freshet; we build dams, only to find supplies inadequate to fill them; wells are dug, only to find the water unfit for use; a civilization is built, only to discover its life threatened by watershed abuses.

We can see the rain falling, we can note the surface flow, we can record facts about years of drought and years of flood. But what of our unseen water resource, the underground water? How can man plan his activities based on such waters when their extent, source, and reliability are unknown? Can these be replenished? How fast can they stand depletion?

Through bitter experience we are also learning that water quality may be as important as quantity. Water fit for one use may not be suitable for another without treatment and when treated may become unfit for other uses. Sediment has greatly reduced reservoir capacities, has

rendered drainage impracticable and has made channel usage inoperative. Mistakes have been made in water planning because the quality of the water resource has been neglected.

It is not enough to know where are the supplies and what is their condition. We must know also the relation between them so that water uses may be coördinated with land occupancy and human needs. We must know the relation between precipitation and run-off, between ground cover and water quality, between streamflow and land use. Unless such information is obtainable, planning for a stream—and its watershed—cannot be successful. Without such basic data planning can only be fragmentary at best.

INSTITUTIONAL OBSTACLES

Institutional obstacles are those that have become established through custom or practice, have been recognized by law, or have developed through ownership. They are material and persistent elements in our culture.

Among the more important of these, the simplest, yet among the most complex, is the water right. In the more arid portions of the country, early settlers learned the value of water. They also learned that to insure adequate water supplies in dry seasons they had to prevent their neighbors in the watershed above them from diverting or impounding the water they themselves needed. Gradually society recognized claimants in accordance with their needs and use of water and under the principle of first come, first served. As western States were admitted into the Union, they reserved to themselves their water resource and enacted legislation concerning it. Water rights are now recognized and respected. Because they are so recognized they can now block desirable water developments, force undesirable developments, and prevent planning.

Other water rights involve underground resources. Who owns them? The man who owns the land or the first to pump? How are the claimants to be allocated the proper amount of water so that there is no over-draft?

The problem of water rights is also tied up with land management. He who controls the water controls the land. Thus range land may be controlled by the ownership of a spring or a water hole. Farming practices that conserve run-off and reduce erosion may reduce the storm flow upon which downstream residents depend. Who owns the water: the man who appropriates the storm flow, the product of land misuse, or the man who stores the rain in the soil at the point where the rain falls?

Like water rights, prior developments on a stream can and do prevent logical and systematic planning, because the original construction may not have been properly designed to meet a changing situation, or properly located to permit best use of the site.

Another similar obstacle is the ownership of valuable dam or reservoir sites by various speculative or developmental interests. Such ownership can, and has, prevented worthwhile construction and blocked desirable or integrated stream development. The threat of litigation and the possibility of property damage have forced changes in plans despite the fact that the substitute plan is not as economic.

A further institutional obstacle is the right to pollute either by design or indifference. Deep rooted is the belief that waters may be polluted without let or hindrance. Custom has created a situation against which the cleansing of the Augean stables was but child's play. Rivers and sea coasts alike have all but been ruined and have been turned from a resource of great value into a noisome disgrace.

Reservoirs are filled, drainage ditches choked, rivers and harbors silted, and irrigation works buried by the products of erosion due to the mismanagement of land. Apparently it is the God-given right of industry and land ownership alike so to operate mines and mills, and so to cultivate, graze, and burn fields, pastures and woods as to make a real program for a river all but impossible. Can such "rights" to pollute, whether by industrial, human or soil wastes, be adequately removed so that planning for recreation, wildlife, public health, flood control, navigation, irrigation, and the like can go forward on a rational basis?

ECONOMICS

Economic obstacles are huge ones. The economy of few regions is settled. Drought in the plains has accelerated mass migration to the Far West, requiring great adjustments in land and water use, and new aspects in planning. Such migrations, and new industries and developments, together with new policies have changed, almost over night, the water outlook in some of our drainage basins.

New demands for water or for power have rendered uneconomic projects profitable, and perhaps also, some profitable projects uneconomic.

Some of these changes man himself should be able to foresee. Localities, barring the unusual, follow a growth curve the path of which can be drawn with a fair degree of certainty. The growth curve of long established communities can, however, be used to make some rather sound forecasts of the growth of the newer ones. Planning in these newer areas can therefore use the pattern of the older communities as a guide.

But here the unpredicatable steps in. New uses and demands for water may suddenly step up the whole program and dislocate orderly development. Such upsets have not been infrequent in the past, and may be expected in the future. They lend zest to planning activities, but give the planner a hurdle of first magnitude.

POLITICAL OBSTACLES

Most political obstacles have developed from local public selfishness. A local idea for some development originates with the local populace. A bigger but not necessarily better project is presumed to advertise the acumen of the locality, bring business, and speed regional development. With sublime faith in the merits of the proposal, a community launches a project, which may have local merit but may not be economic or desirable regionally when the stream is the unit. Pressure groups then appeal for general interest and the local interest takes precedence over the broader public welfare. Such selfish considerations and local blindness lead to the support of uneconomic proposals and objection to any plan which does not include them.

In the political arena one finds also one regional group bitterly opposing other programs because of possible water programs which may conflict with proposed local developments. Municipalities fight over sources, districts over quality, States over supplies, water planning is hampered by the lack of adequate machinery for initiating, establishing, and enforcing agreements and compacts between public bodies. Indifference and bewilderment are serious obstacles to getting action. Whether a procedure for compacts can be so developed as to remove some of the obstacles to real planning remains to be seen.

The possibility of public regulation in the field of water control is remote. Adequate public control involves national and state policies which will remain many years for clarification. Compacts, agreements, and subsidies attempt to provide a measure of control through painless methods, but a question arises as to whether such methods are not more costly in the end.

National water policies, no less than state and local ones, need clarification. Some, as in the field of flood control, tend to place all the financial burden on the nation, while in the field of reclamation they tend to place the load on the local water user. How much farther should the nation go in developing navigation projects largely benefiting one local interested industry or company while it considers pollution abatement on interstate streams as a local problem? What should be desirable cost-benefit ratios? Until we can define, correlate and integrate our policies, water planning must be piecemeal instead of unified.

SOCIAL

Social obstacles even more than economic ones cause trouble in planning the disposition of the water resource. We as a people fail adequately to look ahead, to adopt clear-cut objectives, or to recognize our responsibilities. We locate our populace in the wrong place, permit use of flood plains without restriction, follow routes of travel long outgrown, become sentimental over past history, and otherwise stand in

our own light. Our historical background maintains communities and political entities long out-moded, and provides added arguments for a social order that resists change.

Anxious to get things done, to see dirt move, to construct an engineering monstrosity, to advertise our progress, we launch into developments hastily. Insufficient time and study are given to programs, to policies and to planning. Economic considerations are not thought through. Under such circumstances, haste becomes one of the greatest obstacles to sound planning. It prevents a study of the interrelations of problems, of the effects of various uses on the resource, of physical conditions in the drainage basin, of trends in use or abuse, and of opportunities for development. Anything which prevents careful and thorough planning must therefore be classed as perhaps the greatest obstacle of all.

FINIS

Suggestions for the removal of these obstacles to planning is not the function of this paper. However, it seems worthwhile to add that if we are to do a decent job of water planning, we must have certain basic data, thorough knowledge of the behavior and physical relations of water, specific information not only as to the flow of the stream but also to the occupancy and use of the watershed, time for a thorough and complete study of the economic and social developments and trends in the watershed and in adjacent areas, frank recognition of institutional problems and bureaucratic tendencies, and a willingness to face the facts and abide by them. If all this can be done, then real planning is possible.

DISCUSSION

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CAPT. LANGLEY: Mr. Munns restricts himself to generalization as to obstacles to water resources planning. Possibly that was what he was asked to do. However, criticism is made more difficult.

I wonder if what are described as obstacles are really such anyway. Were there no obstacles would there be any need for planning? Is so-called planning cause or effect? I incline to the conviction that it is effect, and that the obstacles which Mr. Munns discusses are the same.

In a simple society the needs of the family produced family planning. In a complex society such as we have today interdependence has compelled attempts at organized collective planning. The more confusing a complex society becomes the greater the need and the actual demand for organized planning.

It required a great economic depression to introduce formal planning as a separate organized function nationally and in the separate States. If the problems with which the planning function must deal are con-

sidered merely as obstacles, rather than as a challenge to planning efforts, it seems to me there is danger of putting planning upon a defensive basis rather than upon the offense, where it should be. There is a defeatist angle to admitting there are obstacles to planning, especially when they aren't really obstacles at all but merely the realities of ignorance, institutionalism, and economies, political and social habits which must be recognized if planning is to be at all practical.

Planning, if effective, may in time help alter some of these realities and in doing so make part of its contribution to an improved human society. At the same time the popular demand for public planning is apt to vary in inverse ratio to social progress. When the so-called obstacles seem greatest, public planning has its greatest appeal. At the moment demand for public planning seems assured for some time to come. Social progress is apparently too badly confused soon to untangle itself.

Institutional Obstacles to Land-Use Planning

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THE assignment to discuss the institutional obstacles which prevent a planning design from being executed involves two words which have many meanings to many men—"institutional" and "planning." The former will be defined broadly to include not only laws, forms of government and customs, but also prejudices, beliefs, and such things as ignorance, especially ignorance of the simplest elements of the legal nature of land-use controls. I shall separate planning into two steps: (1) the making of a blueprint or design setting forth the patterns of land use, the means of transportation and other elements of a plan; (2) the instruments, legal and otherwise, necessary to transplant the plan from the paper to the land. Among these are the police power, zoning, public purchase, grants-in-aid, exemption from taxation or changes in the system of taxation, and similar inducements or subsidies.

In order to illustrate the institutional obstacles, a specific county has been selected from the cut-over area of Wisconsin. Langlade County enacted its zoning ordinance in 1934 and since then has carried out a commendable land-use program. It offers one of the best examples of planning in the farm-forest fringe. It is on the southern edge of the Highland Lake region, a well-developed recreational area with many fine lakes, a high elevation and cool climate. Recreational land is therefore, a part of the pattern of land uses. The southeastern portion is part of the central Wisconsin agricultural area. An Indian reservation borders the county on the southeast and the Federal forest has already taken a part of the eastern townships. In fact, all land not in the agricultural or recreational zones has been placed in the forest district.

One map is a "paper plan" showing the projected highways. Farm-to-market roads and special recreational roads are not shown or are given only as samples. The plan shows a compact agricultural area around Antigo as it might ultimately become. It represents an expansion of the present farm area onto some of the better soils, a contraction in other places, and the elimination of all isolated settlers now scattered throughout the county. Three small agricultural subcenters are provided for as auxiliary to recreation, wood working, or industrial and commercial activities. Several recreational areas have been set aside from which agriculture, business and lumbering are to be excluded. Business uses will be permitted only in the cities, villages, and certain specified areas appropriately located. In all other areas, stores, taverns, filling stations, billboards, and junk yards, will be excluded. Highways will have set-back lines. Finally, a conservancy district is provided for to control floods and pollution and to serve for local recreation for the people of Antigo. A plan of this type is not to be considered as fixed for all time. It represents a goal conceived from the standpoint of our present knowledge of trends and tendencies. For instance, should agricultural conditions change, it might be desirable to enlarge the agricultural district to adjacent "B grade" land.

The making of the paper plan involves no institutional obstacles. However, to get the people of Langlade County to understand and accept the plan, to get officials to act, to get the county board of supervisors to enact ordinances and enforce them, meets with difficulties and obstacles. Furthermore, people are not immediately ready to accept such a "comprehensive plan" as suggested here, yet to many planners this plan would appear too simple and far from being "comprehensive." How far the people of this county have progressed in the direction of this complete plan is shown by their present zoning ordinance and use-district maps.

One of the serious obstacles to planning is the fact that counties on the farm-forest fringe are poor counties. Many of them are practically bankrupt and any task involving expenses often remains undone. Making the necessary studies, holding meetings and enacting and enforcing the zoning ordinances all involve some outlays. Guidance and assistance usually must come from some outside agency, such as the extension service of the college of agriculture or a state planning board. More critical still is the enforcement of ordinances which rests with local units of government because zoning is a delegated power. Whether the ordinance is enforced depends upon the intelligence, willingness to use the police power on neighbors, and to some extent on the financial resources of the county.

Planning meets its greatest institutional obstacle in the rights of the private property owner to do with his land as he pleases; yet the very essence of planning is the determination of land uses and insisting that

land be used in harmony with plans. While the control of land uses has grown and courts have upheld this exercise of the police power in cities, it is only recently that the power to determine the permitted and prohibited land uses has been extended to non-urban land, and still later to the restriction of the land used for agriculture, forestry or recreation. It is remarkable also that the regulations should have been placed on land in the farm-forest fringe where the spirit of rugged individualism is still rampant. Langlade County has prohibited the use of land for agriculture and year-long residence on 252,000 acres, and in the 24 northern and central Wisconsin counties almost five million acres have been so restricted. However, trends in settlement and land use have been favorable to regulating the use of land and as yet no great strain has been placed upon the enforcing machinery. Informal evidence indicates many cases of intelligent enforcement, but also cases of ignorance of the ordinances, indifference and neglect to enforce the provisions of the acts. In this respect the experience in the cut-over counties is neither better nor worse than that of our cities.

However, several meetings held recently in the zoned counties involving the rights of non-conforming land users in one case and the set-back lines along highways in another, brought vividly before the officials holding the hearings how quickly the spirit of the rights of property can be invoked. Other personal experiences could be cited to emphasize this point. Land-use regulations cannot proceed any faster than the understanding and willingness of people to be regulated will permit. Some planners feel that this process is too slow and believe that the only way to get results is to have the land in full public ownership.

Another phase of planning Langlade County involved the relocation of the non-conforming land users, *i.e.*, farmers who had started operations before the ordinance was passed and who were permitted to remain and enjoy all the privileges of ownership and public services just as before. The very settlers who had inspired the zoning movement were thus perpetuated because zoning could not be made retroactive. The orderly, gradual removal of the isolated settlers was started, partly by the federal resettlement program and in a few cases by local action. Resettlement meets the stumbling block of rights in landed property but also many subtle factors such as personal attachment to the farm or community. Fortunately in the cut-over area much of the settlement is so recent that these attachments are not very important, though the mere thought of moving is a deterring factor, especially for older people.

The plan for Langlade County includes a forest zone. However, merely to prohibit agriculture in a given area and permit forestry will not cause trees to grow. Some person or agency must find it profitable or desirable to grow a forest where the paper plan indicates a forest district. So far the Lake States have had indifferent success in having the cut-over areas replenished and rehabilitated by private land owners.

One reason for this was the general feeling that forests were not wanted. In 1910 a movement to establish a state forest in one of the northern counties was stigmatized as "rejunglizing" this particular county. The demand was for more farms and not for more trees. The people of the region were not even concerned with fire protection for the forests, since burned-over land was easier to clear than land full of brush and logs. Not until the farm depression of 1920 were the institutional obstacles of prejudice against forests removed.

The planning for forests now includes public purchase by the National Forest Service and to a limited extent by the State for state forests. It includes a forest crop law designed to assist the private land owner to practice forestry by reducing his taxes to 10 cents an acre on the land and a severance tax at the end of the rotation period. In spite of this inducement only about 154,000 acres have been entered under the Wisconsin Forest Crop Act.

The bulk of the publicly owned forests of Wisconsin consists of the county forests, derived from the "new public domain" of tax reverted land. It was not "planned" to get forests in this manner, but after thousands of acres had become the property of the counties via tax delinquency, the Forest Crop Law was modified to permit the counties to enter land under this act. By paying 10 cents an acre out of the state treasury to the local units of government, and another 10 cents per acre to the counties for the improvement and administration of forests, acres of coöperative forests have been established. This is an excellent example of using public money to induce instead of coerce action of individuals or lower levels of government to carry out a plan.

Tax delinquency is a serious obstruction in land-use planning. The laws of every State give the private owner every opportunity to retain possession of his land and these legal restrictions stand in the way of public acquisition even if the owner has no intention to redeem his property. As a result the land is "frozen" in suspended ownership and not subject to coercive or directional measures. This fact is as important in the rural-urban fringe as in the farm-forest twilight zone.

Furthermore, public bodies have been reluctant to take title to reverted land because of a fear or distrust of publicly owned land. Wisconsin counties for many years refused to take title to tax delinquent land after the three years of delinquency had expired. The hope that some private individual would buy it or the owner redeem it kept public officials from taking the drastic step, and even when they did, they usually sold the land to the first bidder or "homesteaded it." "Get it back on the tax roll" was the slogan. Too often the purchaser stripped off the remaining timber and let the land revert to the county or State in a worse condition than before. The inducements of the Forest Crop Law have done much to overcome this obstacle.

The distaste for public land has its roots partly in the fact that

"government" land is not on the tax roll. Hence, the demand that federal forests and other public lands pay certain sums in lieu of taxes. Local people are often swayed in their choice of the public agency they favor by the amount of aid they can get. Thus county forests insure 10 cents an acre, the federal forests 25 percent of an income realizable some time in the future, whereas the Wisconsin state forests are entirely tax exempt. Naturally the county forests are looked upon with favor compared to state or federal forests.

Rural local government was established in the cut-over areas in anticipation of an agricultural economy. Based upon the rapid growth of population and heavy immigration of 1900 to 1910, it was expected that shortly the entire north would be a "second dairy empire." Counties, towns, school districts, villages and cities were laid out to suit the needs of the expected "empire." One of these counties has literally 101 units of government of various levels. With the collapse of the boom in 1920 a decrease in population took place, tax delinquency sapped the revenues, and the remaining farms and tax-paying properties were not in a position to support the large number of units of government or the functions expected of modern local government. If it were not for state aids, a breakdown of education, transportation, law and order would take place. Furthermore, it is a serious question whether the present arrangement of rural government is suited to a farm-forest recreational economy.

The plan for the utilization of land as suggested for Langlade County if carried out to include the relocation of all settlers outside of the agricultural zones would depopulate some of the towns and many of the school districts. The planner cannot stop with rearranging land uses, but must consider changing the boundaries of units of government and the readjustment of forms and functions of these units. For instance, the planner may decide that unorganized territory such as is found in Maine is desirable for the forest and recreation areas. School districts and towns could be eliminated entirely and a new form of school administration and of the county legislature be set up. Roads could be eliminated as a town function and be made the function of the county. Special policing to protect recreational property during the winter season when structures are not occupied might call for additional protection of property at county or state expense.

However, as soon as the planner suggests governmental changes he meets with opposition. In the first place, town government, the town meeting and the county supervisor system are so ingrained in the political thinking of the rural people of the State that one official has characterized Wisconsin, not a commonwealth, but a collection of towns. Even the consolidation of towns and school districts is opposed on the grounds of being "a menace to democracy."

Local patriotism must also be reckoned with. People hate to see a

county or town wiped out. In fact, many students of local government have given up hope of county consolidation altogether. Part of this, however, can be traced to selfish interests; the fear of losing the court house, or of losing their jobs by officials are all factors which the planner must keep in mind.

Lastly, the operation of state aids, consciously or otherwise, is often a stumbling block. For instance, school "equalization aids" tend to induce districts to maintain separate existence instead of consolidating. Towns will not favor the relocation of a settler if the relocation should close up nine miles of road on which the State has been paying $50 a mile per year. Even the forest crop law by providing eight cents an acre to schools and the town may perpetuate these two units of government as long as there are enough people left to fill the town offices and to elect a school board. In some cases it is not even necessary to have children to maintain a school. Similar conditions are to be found in States other than the Lake States and in even more exaggerated form.

Planning and regulation of land uses resulting in adjustments of local government are so new that these governments have not always been aware of the fact that to plan means to commit suicide. Resistance to the very idea of planning, zoning and land-use adjustments is to be expected from this quarter. Zoning in the cut-over areas is far from perfect because it represents compromises with local interests, private and governmental. This is not unique in planning whether in the city or the rural areas. It is a price we have to pay for democracy.

DISCUSSION

LEONARD A. SALTER, JR., Bureau of Agricultural Economics, Washington, D. C.

Mr. Salter: We are all indeed indebted to Professor Wehrwein for his paper on certain institutional obstacles to land-use planning. Since we have become rather accustomed to look to Wisconsin for pioneering efforts in land planning, we can profit by such an opportunity to be brought up to date on the progress which is being made in that State. And I think it is fortunate for both Professor Wehrwein and ourselves that on this occasion he was asked to stress the troubles that the Wisconsin land planners have had. When a man becomes widely associated with an idea he has nurtured, less informed people are apt, rather unfairly, to think that he is unconscious of the difficulties which beset his program. I remember a remark Professor Wehrwein made to me over a year ago, when he said in effect, "I wonder why people assume that those who are actually sitting on a powder keg must be unaware of dangers." Today Professor Wehrwein has made excellent use of his opportunity to show that those most fully informed as to the possibilities of land planning are also familiar with its difficulties.

I am inclined to agree with the previous paper in all its essentials

and to turn to mere elaboration of certain points. Since, from the audience point of view, a discusser is expected to be critical if at all possible, I find that Dr. Wehrwein has made one remark which allows me to satisfy both my inclinations merely to add to what he has said and my obligation to be critical.

For the purpose of this discussion, planning has been separated into two phases—making the plan, and putting it into effect. The man-made obstacles to putting a plan into effect which have been dealt with are local government poverty, the rights of private property in land, personal attachment to the home, local patriotism and local pride, the distrust of public ownership, local government greed and state-aid systems.

Professor Wehrwein makes short reference to man-made obstacles to the first phase of planning, the making of the plan. In fact, he states that, "The making of the paper plan involves no institutional obstacles." It is in getting people "to understand and accept the plan, to get officials to act . . . (that) . . . meets with difficulties and obstacles." I believe that Professor Wehrwein thus directs his attention to the action phase of planning inadvertently. Else it may be because of the liberal intellectual environment for which Wisconsin is famous that he thinks there are no institutional obstacles to the making of plans. For from my brief experience, it would appear that one could point out serious institutional obstacles even to making plans, and without an elaborate academic definition of what an institutional obstacle might be.

It is indeed unfortunate, but I think very true, that there are a host of institutional obstacles even to the making of land-use plans, and particularly if we accept, as we should, Professor Wehrwein's definition of institutions as including prejudices and ignorance. Even though in a democracy we want and must rely upon action by laymen, and even though we try to secure the making of plans by laymen, still we must admit that some degree of initiative and more certainly some degree of guidance must come from technicians. Among these technicians it is easy to find man-made obstacles to land planning. Some of our greatest obstacles to getting any planning done are the walls of prejudices and traditions which have been built up to separate our various fields of professional endeavor. Across these boundaries there is apt to be no common language, no trade intercourse, not even any peace treaties. And within any of these professional countries there are local provincialisms and there may be no accepted public policy with respect to the proper lines of activity for the technically minded citizenry.

Time does not allow, and your professional experiences probably do not require, any laboring of this point. In general, I would guess that each of the obstacles to planning action which has been outlined could be paralleled with an obstacle to plan making. There are obstacles to allowing paper plans to be made both within the technical professional fields which should be contributing to plan making and among admin-

istrative officials who fear that some loss in prestige and/or budget may be involved if they are not allowed to administer their own program independent of any over-all planning efforts.

There is no object in arguing which set of obstacles, those to designing plans or those to carrying out plans, is greater. The only point to be stressed is that in numerous situations there is much to be done before we can make progress in preparing plans and that technical planners themselves can probably do more directly to overcome these man-made obstacles than they can to eliminate some of the obstacles to planning action. As Professor Wehrwein has indicated, it may be possible to adjust some plans to make allowance for some of these institutional obstacles rather than to try now to eliminate them. In plan making, it is less easy to skirt institutional hindrances. It is more often necessary to meet and overcome them.

The obstacles to effectuating a land-use plan have been so well outlined there is little need for adding to the list. And just as the previous speaker has used Langlade County as an example of the problems found in planning cut-over areas of Wisconsin, so can we accept it as an example of the type of problems found in land planning in this part of the country. The importance of the local units of government smaller than the county causes a host of difficulties in Wisconsin, and in New England the importance of these units and the ensuing planning problems is only more accentuated. Here in New England tax collection and the administration of schools and roads are all town functions, and in at least one State no public purchase of land can be undertaken without the specific approval of town meetings where the purchase is proposed. Besides these legalistic jurisdictional hurdles, there is the romantic historical backdrop of determined community independence, which is always good material for any opposition, however selfishly motivated, and for any writer who is looking for an interesting story, however far from the facts. In this connection it is interesting to note that two of the obstacles which have been listed are obviously contradictory. Of course the contradiction is not Professor Wehrwein's, for both arguments are often sharply advocated in the same breath. On the one hand, the independence of the small local government units is insisted upon and any lessening of that independence is termed a "menace to democracy." On the other hand, as has been pointed out, readjustments in local units are also opposed because useless but profitable town government jobs might be eliminated, and land-use readjustments are sometimes opposed because the resulting efficiency would decrease the amount of funds the state or federal governments are pouring into the town.

Study after study has indicated the seriousness of the state-aid system which has been built up and which is steadily becoming worse. Recent figures, for instance, show that fifty-one towns in Connecticut secure more revenue from state-aids than they raise themselves from

taxes. The difficulties involved in these situations are not alone in the amounts of money involved but rather that many state-aid systems are so set up that they act as a reward for inefficiency and, as Professor Wehrwein has pointed out, as an obstacle to planning a more efficient land pattern for our rural areas.

We can all take a good cue from Professor Wehrwein's parting remark that many of these obstacles and the resulting lag in making needed adjustments are a part of the price for democracy. The truth of this statement is too evident to require elaboration. Our job is to learn what we have to work with so that we can help citizens in a democracy to help that system work better.

Institutional Obstacles to Planning in Government

CHARLES S. ASCHER
Secretary, Committee on Public Administration, Social Science Research Council, New York City

A FEW years ago visiting the headquarters of one of our best established planning boards, I found myself listening to a staff conference which was being addressed by the chief exponent of a school of scientific planning then capturing the imagination of this nation of Yankees at King Arthur's Court: technocracy. At the close of his talk, I was asked to comment on his speech. Seeking safety, I told the planning staff a fable instead. First I gained their sympathy and concurrence by picturing the dreamworld, the heaven, the Utopia of the planner—a society in which no vested interests or private property rights obstructed the free execution of the rounded and well-conceived programs of the planner; where science ruled, and the facts adduced by the expert received respectful attention. It was possible then to suggest that the Russian revolution, wiping out the institutions of private property, and giving rise to the Gosplan, might be thought to have inaugurated this new day for the planner.

So I told them of an experience I had recently had, of spending an afternoon with two maps. One was that prepared by the Gosplan, proposing an administrative districting of the U. S. S. R., based upon the dictates of economic geography, scientific production and distribution. The great wheat plain was to be one unit; the peninsula stretching from Leningrad to the Arctic, another; the mining area of the Urals a third. Altogether, as I recall it, about twenty-one natural regions. Upon that map I had attempted to superimpose the actual administrative map of Russia, with its jig-saw of oblasts, krais, autonomous areas, and republics: about fifty of them. In only one area did the Gosplan's scheme coincide with the administrative reality: the Far Eastern Krai

—the one part of the U. S. S. R. where nobody lived! There is not time to explain the other deviations: the economic unity of the wheat belt was apparently cut across by barriers of language and culture—an enclave of nearly three centuries' standing of Germans wishing to preserve their own ways on the banks of the Volga; the Finnish group in the peninsula north of Leningrad to whom the leaders of the Soviets were eager to cater by giving them an autonomous Karelian republic, even if it split the economic unity of the peninsula. In short, there seemed to be elements involved other than those dictated by economic geography.

As I finished my fable, the chief technocrat rose to his full height, which is even greater than mine, and undertook to demolish my position with a sentence: "We don't consider that there's been any real planning yet in Russia: purely political planning, purely political."

So now I have to tell another fable. About a year ago I sat around a table with the leading American authorities on the Soviets and some official spokesmen for the U. S. S. R. for a discussion of governmental administration. To my surprise, it turned out to be a seminar in constitutional interpretation; and not the least vexing discussion involved the clauses in the Constitution of 1936 relating to land and buildings, and public and private rights thereto. At that table I met what I believe is the first American lawyer to return from Russia with a Soviet law degree. He told me recently that he had almost completed a treatise on Soviet land law: it is, he tells me, one of the most complicated parts of Soviet law, embodied in over 14,000 decrees, and with a scale of intensity of rights as bedeviling as our leases, mortgages, and fee ownership.

I tell these fables to suggest the limitations within which I deem it fruitful to discuss "institutional obstacles to planning in government." I do not believe that it is useful to propose the elimination of the population of the United States; and so long as that population persists—or indeed as any other survives in its place—we are apparently going to have institutions which will need, shall we say, reconciling with the planning point of view.

Sir Henry Bunbury, in his invaluable report on "Governmental Planning Machinery" (doubly invaluable because unusually brief) describes the planning process as involving a "knowledge and understanding of all the relevant facts, in relation to some definite objective deliberately chosen, as a necessary foundation for coördination and continuity of action." Let us accept this as a working definition. What, first of all, are the institutional obstacles to a knowledge of the relevant facts? One is our lack of institutional arrangements for collecting them. Read, in their recent report, the difficulties of the California State Planning Board in finding out the extent of tax delinquency, the number and location of parcels which have fallen in for non-payment of taxes.

Talk with any official of the United States Housing Authority about the quality of information furnished them as a basis for deciding what the needs and effective demand are for low-cost housing in most of the cities with which the Authority has to deal. It was just four years ago at the Cincinnati meeting of this Conference that Mr. John Willmott made an urgent plea for an urban bureau in the Federal Government that would help fill this gap. Since then a few steps have been taken; but the obstacle can hardly be said to have been overcome.

Often, even where the data have been collected, there is no adequate arrangement to facilitate an understanding use of them. Let me give a small example that recently came to my attention. One of our great cities, the mayor of which has no limited view of his duty to the citizens, was confronted by a threatened strike of elevator operators. The mayor was eager to find out whether such a strike would precipitate a real crisis, serious enough to warrant his intervention on behalf of the public. Said he to his assistant, "Find out for me—quick—how many elevator buildings there are in this city over ten stories high." Would you believe that with all the records of the building department, the inspection services, a real property inventory, and what have you, nobody could tell him?

I cannot resist mention of one more institutional obstacle to an intelligent understanding of the relevant facts. It isn't exactly a governmental obstacle, but I don't see that it fits any better into the categories assigned to the other three speakers. It is the comparative lack of institutions to provide men with the broad background which qualifies them to understand "all the relevant facts," to train the generalizing mind, which understands relationships, and which without being itself specialized knows how to use specialized minds. May I be excused, in this brief summary, if I point out the lack of an institution, without having to say what kind of institution should be designed to fill the gap. Let no one here misunderstand me. I have worked with members of the planning fraternity for thirteen years; from the beginning I have seen brilliantly generalizing and synthesizing minds among them. It has excited me to see even those whose earlier experience had been weighted on the side of engineering rise to meet the challenge of the broader problems which they have been forced to face as wider planning tasks have confronted them. But I venture to say, for example, that many of them, looking back on a strenuous mental readjustment in mature years, would agree with the eighty percent of the Washington correspondents who told Leo Rosten that some systematic knowledge of economics would have been of help to them in their work.

As a group, I imagine that the planners would say that I had not yet posed any insuperable obstacles; given the resources, we should be able readily enough to modify our institutions so as to bring about knowledge and understanding of all the relevant facts. What then of

the next element of Sir Henry's definition—the deliberate choice of a definite objective: are our governmental institutions well adjusted to achieve this end?

Here I think of a remark made to me a few years ago by an attractive young man from the research arm of the Royal Hungarian Ministry of Agriculture. He came to my office after having visited the great centers of agricultural research and extension work at Madison and Minneapolis, and he had not yet recovered from his wonder. "Never have I seen such facilities for educating the farmers," he told me. "It would be useless for us to think of such an undertaking in Hungary. But what I do not see is how you bring it about in this country that all the farmers act together, say in spraying their trees against some blight, where the inaction of one endangers the trees of all. Now in Hungary, that is simple: we just post a notice in each village that any one who does not spray his trees goes to jail—and the trees are sprayed."

You will thank me, I am sure, if I spare you a homily on the difference between our institutions and those of the dictatorships, where definite objectives are deliberately chosen with an efficiency which we cannot hope to equal. But we may fairly ask whether within the framework of our own institutions the process may not be improved. Must it be increasingly the resultant of forces exerted through pressure politics and organized minority groups, acting not only on the legislature, but as Pendleton Herring has shown us, on the administrator? I accept gladly the importance of the enlightened politician as a broker in ideas, so well exemplified by my friend T. V. Smith, and so engagingly painted by him in "The Promise of American Politics" and his newly published dialog with Leonard D. White, "Politics and Public Service." Cannot the political leader be more genuinely a broker in ideas, and less preëminently an impresario of personalities? In short, if we are to continue with the two-party system, can we ask our parties to aid in the deliberate choice of definite objectives by presenting well formulated issues, producing platforms based upon party study and counsel, instead of catch-alls designed to say something to as many different kinds of people as possible? Or can we in some way institutionalize the new device for obtaining an expression of public opinion upon specific issues that will help us choose definite objectives deliberately?

But it is upon the third element in Sir Henry Bunbury's definition that I wish to dwell for a final moment. Planning, you will recall, involves the knowledge and understanding of all the relevant facts, in relation to some definite objective deliberately chosen, "as a necessary foundation for coördination and continuity of action." It is in the lack of coördination and continuity of action that I feel an institutional obstacle to planning which can certainly be overcome without doing violence to what we cherish in our scheme of government.

In too many places, the planner who has knowledge and understand-

ing of all the relevant facts is all dressed up with no place to go. The agencies that determine policy have no institutional arrangements for receiving the planner's recommendations. We can begin with the city council which engages in the practice of spot zoning; which makes such inadequate appropriations for planning that a well-meaning group of citizens on the board cannot have the technical assistance of a trained planner. We can move on to the state legislature, and we can agree with the precept of the report of the National Resources Committee on the "Future of State Planning" that the planning board should be ready to furnish technical information to the legislature on specific request. But what if the legislature prefers to receive its information from the pressure group and lobbyist? I am not urging for a moment that the planner be empowered to tell the council or the legislature what to do: I ask for a wider recognition of the idea embodied in the model planning enabling acts, that there be compulsory reference to a planning board for advice and recommendation; and that the reference be implemented by enough funds to make possible soundly based recommendations.

What the planner really asks, I suppose, is not a specially favored position vis-a-vis the legislature: he asks a revision of legislative procedures such as the American Legislators' Association has long urged upon its members. If, for example, more legislatures will set up legislative councils and pre-session conferences and standing commissions on interstate coöperation and improve their committee system, the planner will find a way to introduce his findings into the legislative process.

But those in this audience are certainly too sophisticated to believe that policy is formulated exclusively by the legislature. They believe that the chief executive helps formulate policy for the same reason that the farmer said that he believed in baptism: "Believe in it? Why, I've seen it done." Indeed, the planner knows what some political scientists are coming to understand: that even the department head and bureau chief help formulate policy, because they have the day-to-day contact with the problems of the citizen. And clearly the responsibility for coördination and continuity of action lies with the executive. It is he with whom the planner should have the closest institutional connections; it is he who should naturally turn to the planner for staff help—and I mean "staff" in its ultimate and indisputable sense.

Can we say that the institutions of our government facilitate this close relationship between the planner and the agencies responsible for coördination and continuity of action? Can we even say that our governmental institutions provide for that coördination and continuity of action which can make fruitful use of planning, without which, indeed, it is doubtful whether we can make those institutions work? Certainly, there can be no more bitter irony than that the effort to improve that coördination in our national government should be assailed

as an assault on democracy. At least the planner can look forward hopefully when he sees that the President's reorganization plan No. 1 puts the national planning agency in its appropriate place in the structure of national administration. All we have to do now is to pray that there may be a permanent planning agency to fill the niche, since you will recall that the reorganization act gives the President the power to regroup agencies, but not to extend their lives. In state and local government there has not everywhere been such clear recognition of the importance of coördination and continuity and the proper relation of planning to them.

If the previous speakers have not brought out one other institutional obstacle in government, it must be that it is so obvious that it is unnecessary for me to stress it: the complexity of our governmental structure —what Harold Laski has just called "The Obsolescence of Federalism"; and the inadequacy of our administrative areas to deal with vital planning problems.

I take it that the purpose of this symposium has been to appraise soberly, not to view with alarm, or to preach despair. I can therefore close without exhortation, saying only that when the obstacles are understood clearly and faced boldly, they can be conquered, I am sure.

DISCUSSION

MORTON L. WALLERSTEIN, Virginia State Planning Board, Richmond, Va.

Mr. Wallerstein: Stripped of its anecdotal illustrations as well as its subtleties, many of which, not being a member of the intelligentsia, I undoubtedly muffed, Mr. Ascher's thought-provoking address may be summarized by dividing the "obstacles" into three parts which I will discuss seriatim:

First, those obstacles pertaining to relevant facts such as lack of facilities both for their collection and arrangement.

After nearly two score years of trying desperately and not too successfully to promote planning, my conclusion is that we as planners have utterly failed to bring home to the public two facts: first, that collection and analysis of relevant data are fundamental to planning; and second, that planning is essentially a money-saving device. Until you altruists begin to talk money-saving instead of esthetics, you can't hope to secure what makes the planning mare go.

Second, those obstacles defeating definite objectives, such as the political party system which uses catch-alls instead of definite issues. I am not as sanguine as Mr. Ascher as to changing our "Of Thee I Sing" outlook on politics and parties. I am not even sure it would be advisable. Perhaps that very frivolous attitude accounts for our not yet being a totalitarian state. For that reason, our "generalizing minds," to use Mr. Ascher's own phrase, in preserving our democracy

must perforce do much meditating to assure planning its proper integrated place in the administrative structure while we continue to watch the torchlight parades go by.

Third, those obstacles defeating coördination and continuity of action. To his views as to the need of better vehicles of administration and that sound administration leads to sound policy, none of us can take exception. However, concerning his suggestion as to the requirement of compulsory reference to a planning board prior to action I have some question. We as Americans just simply can't adopt the Hungarian attitude referred to by Mr. Ascher and jail those who won't spray their trees or even those who won't plan. So, too, we should not, at least at this embryonic stage, make reference to a planning board compulsory, first, because it may be offensive to governmental executives as infringing on their prerogatives, and, second, because it tends to lessen the necessity for continuing educational processes so essential to effective planning. The fact that the highway commissions turned to the state planning boards to direct the nation-wide road surveys in some States and not in others is illustrative. Perhaps compulsory reference might have resulted in better planning; more likely would it have led to devices to circumvent the planning boards in all cases.

Although the scope of the subject may not have permitted, it seems to me that Mr. Ascher, although he dropped a gentle hint, omitted one of the main obstacles to governmental planning—the planner. We are inoculating planning with the same pseudo-mysticism and assumed complexity as exists in the medical and legal professions. If continued, the planners may find themselves suffering from the same public skepticism as these two professions. Planning is a simple commonsense operation. At some future conference we should have a clinic on the planners—including you and me, and plenty of chloroform. The recent remarks of Dr. Charles E. Merriam, of the National Resources Committee, have much more than local application when he says: "In Chicago the trouble with the planners was that they got to thinking so much about their original idea, so much about their mechanism they forgot to grow, and the machinery and the prestige and the Bible, so to speak, of planning took place of hard-headed, modern, forward-looking thinking."

A Memorandum on Obstacles to Planning in Industry*

J. K. GALBRAITH, Harvard University, Cambridge, Mass.

IN DISCUSSING "Obstacles to Planning in Industry" Dr. Galbraith defined the objectives of industrial planning: first, obtaining a national income which experience has shown to be possible, and secondly, achieving the composition of that income which leaves no excesses or shortages of products or services, and, in particular, no gaps in vital areas such, for example, as housing. Galbraith argued that it was unnecessary to set up a more even distribution of income as an independent objective, since the existing distribution of income is a critical factor in determining the level of national income.

Suggesting that objectives of industrial planning as defined were as broad as the problem of the economic system itself, Galbraith pointed out that the obstacles were as numerous and complex as the economic difficulties of the nation as a whole. However, if economists approach agreement on one thing it is that the central problems are those of bringing the current level of investment up to the communities' propensity to save. The obstacles here are first of all historic. The great investment tasks of the 19th century are in some sense completed. It is simply a fact of history that we have no new lands to open up, no new cities to build, and no railroad system to create. Since the problem of investment took care of itself in the 19th century, there is a further obstacle that in the 20th century we have not come to recognize the enormous public interest in maintaining the level of investment. Specifically, we have not investigated the devices by which the Government can stimulate and even subsidize private investment; we have been perhaps unduly frightened and cautious about supplementing private investment with public investment; and we have not yet faced the problem of how the taxing power can be used to direct income away from savings. The latter otherwise phrased is the problem of the distribution or maldistribution of personal incomes. In concluding, Galbraith drew attention to the advantageous position of the speaker who was responsible for citing obstacles rather than overcoming them.

*Résumé of extemporaneous remarks.

RURAL PROBLEMS, PROGRAMS AND POLICIES

PRESIDING: M. L. WILSON, Under Secretary of Agriculture, Washington, D. C.
REPORTER: JOSEPH T. ELVOVE, Land Use Planning Specialist for Massachusetts, U. S. Dept. of Agriculture, Amherst, Mass.

The Soil and the Sidewalk

JOHN D. BLACK, Harvard University, Cambridge, Mass.

THE general subject of this morning's session, we have been told, is rural planning; and the particular topic of this first number on the program is problems common to both rural and urban planning. By "rural" in this connection I assume is meant the open country outside of cities—the country of farm and forest, range, mountain and desert, and of non-urban lake and stream. By "planning" I assume that we mean the ordering of human activities as well as the human occupation of the land. (It should not be necessary to explain this, but some planners have been known to specify the use of land without regard to any other human activities; and some so-called land economists have been accused of being more concerned with the land than with its human inhabitants.)

Between the city and the open country is a twilight zone where urban and rural activities interweave, the city's "fringe," where it may be assumed that the specialists in urban and in rural planning may both employ their peculiar techniques. The special problems of planning for this zone are reserved for the third division of the morning's program. Since this zone is a mixture of rural and urban, it must also have the problems common to the open country and the congested city. It has them often in acute form.

Time permits nothing more than a mere cataloguing of a few types or examples of the common problems in question:

1. First of all is the problem of employment and relief. The unemployed in the city and village and the surplus population of the open country constitute one common pool of labor, with constant movement between the parts of it—not commonly movement enough to keep the level of income the same in the two places, but still a very considerable movement. Any planning program for either open country or city must design ways and means of getting jobs for this large mass of labor. Obviously it is more than a local problem; but its local aspects must not be neglected. And while the jobs are being made, relief must take its place.

2. It follows from the foregoing that the industries of any city or village are a vital part of the plans for the rural areas round about it. In normal times, they: (a) should be vigorous enough to absorb the surplus farm population and give jobs to the part-time families in the

twilight zone, (b) provide processing facilities for the farm and forest products of the area, (c) carry a proper share of the tax burden of the county and State in which they are located—in much of New England, of the town in which they are located. The decline of industry in a few score of New England towns has heaped tax burdens upon the rural real estate that have now become a strong influence for further farm abandonment. A related development has contributed to the vast amount of tax delinquency in the northern counties of the Great Lakes States.

In the rural planning study now being made by Harvard University in collaboration with Massachusetts State College, the State Planning Board, and several other agencies, the industrial situation is being explored town by town, not in this case, however, with a view to planning the urban industries, but rather with a view to adapting the rural plans to the industrial situation as we find it. Ours is strictly a rural planning study.

3. The counterpart of the foregoing point is that city plans need to be related to the agriculture and forestry of the surrounding area. For this, one needs a basic understanding of the economy of its agriculture and forestry. Such questions as the following become significant: Will the dairy farming of New England be able to stand the competition of Midwestern cream and milk? Of Midwestern eggs and broilers? What part of New England's timber needs will be supplied by New England forests 25 years hence? 50 years hence? a century hence? What supply of wheat can the Minneapolis flour mills count upon a few decades hence? The American Telephone and Telegraph Company has been making such planning studies for 15 years or more. Needless to state, the answers to questions like these cannot be the same for all parts of a region like New England. The city of Fitchburg may obtain all its milk or timber supply nearby; but Springfield may not. Experiences of the last 20 years should also have told us that local farm production plans must be geared in with national plans.

4. Next, a plan for either a rural or an urban area, or for both combined, needs to explore the marketing problem and plan a marketing set-up which will assemble and distribute effectively and economically the product of farms and forests on the one hand, and of the city industries on the other. Virtually no market planning has thus far been done. An exception is the recently prepared unified plan for assembling and distributing milk in the city of Milwaukee, which purports to provide for a saving of two cents per quart of milk. The most obvious examples of such planning are those that relate to city produce markets. They are just a beginning.

5. Again, recreation planning is a common need for both the open country and the city—partly because such opportunities are enjoyed mutually by the two population groups, partly because the servicing of such recreation is a source of rural income, and partly because of the

conflicts of interest, overlappings and interweavings of recreational, forest and farm uses of rural land.

6. A somewhat similar statement can be made for the planning of highways in rural areas, and several other facilities, such as light and power, telephones, water supply, etc.

7. No mention has been made of the population aspects of the foregoing. These are reserved for the next section of the morning's program.

I shall conclude my remarks by saying that in the county program planning section now set up in the Bureau of Agricultural Economics in coöperation with the various state agencies concerned with rural life, we have the foundation laid for a full-fledged well-rounded rural planning achievement. But this consummation will not result unless specialists on problems of industrial location and organization, on marketing organization, on recreational planning, highway planning and the like are brought into the work. This calls for close collaboration with state planning boards and related agencies.

DISCUSSION

BUSHROD ALLIN, United States Department of Agriculture, Washington, D. C.
CHARLES C. COLBY, University of Chicago, Chicago, Ill.

DR. ALLIN spoke briefly, pointing out that common problems of rural and urban areas are legion, and as broad as the whole field of political economy. Soil conservation, for instance, is also a matter of concern to urban areas because of its influence on rural people and the land, he stated. Another point of urban concern in rural problems, he said, is the problem of schooling for rural children, because so many of them move to cities in their adult lives. Two things should be kept in mind in rural and urban planning, it was shown; first, that each group should deal with the problems of primary interest to it, and, second, that a broader approach than a pure agricultural viewpoint is needed in agricultural planning, and a broader one than purely urban is needed in urban planning.

MR. COLBY: Town and country are so intimately related in modern times that rural and urban planning have much in common. The farmer's living is made from the soil but his standard of living is derived from the sidewalk. Throughout the nation, city ways and city facilities have become the standard of comparison for country people but, conversely, the prosperity of city people is affected profoundly by the degree of prosperity prevailing in our rural districts.

Varying Spheres of Urban Influence. The influence of the modern city penetrates into all parts of the region or regions tributary to it. The sphere of influence of one urban activity, however, may vary greatly in size as compared with other activities. The extent of rural mail routes

from a town or city is fixed according to a Federal plan. Likewise the sales territory of automobile agencies and the areas served by depositories of petroleum products commonly are governed by edicts from the head office. In contrast with these sharply delineated service areas stand the sales areas of groceries, dry goods and many other commodities, and a great variety of professional and social services. The areas covered by such services are the result of competition more or less modified by customer habits and the like. Recent studies of urban service areas show that some urban services are sharply localized within a small section of a city, others only cover the city itself, others extend to the vicinity of the city and still others reach out into tributary areas of varying dimensions according to the nature of the service. A city, therefore, does not have a single tributary area as some have assumed in the past, but instead has a large number of service areas of varying dimensions. It becomes evident, therefore, that rural-urban planning problems expand and contract in their zone of action, depending upon the nature of the activities involved. It long has been recognized that planning problems vary in time, that is, with trends. It has not been as well understood that they also are dynamic in terms of space, that is, with ever-expanding and contracting spheres of influence.

Commercial Aspects of the Farm Problem. The farm problem as it exists today has engineering, agricultural and commercial aspects. The first two are of the farm and lie squarely within the province of rural planning. The commercial aspects of farming, however, appear in both country and city and thus call for urban as well as rural planning. In this connection it should be recalled that commerce is perhaps the most urban of human activities and that rapid growth of cities has featured all the great commercial eras. That the administration of mining, lumbering, and manufacturing enterprises commonly is carried on in the commercial and financial centers of our great cities is well understood. The importance of the urban-commercial function to agriculture, however, commonly is not emphasized. The matter can be illustrated by three examples of contrasted character.

The apple industry of Nova Scotia illustrates the gravitation of the commercial aspect of farming to the major city of the region and also of the value of planning. The apples are produced mainly in the Annapolis-Cornwallis Valley on the Bay of Fundy side of the peninsula and exported to Great Britain through Halifax on the Atlantic side. Until 1907 the apples were sold through middlemen whose headquarters were in Halifax and who assumed the marketing risk, at times with great profit and at other times with great loss. The farmers were dissatisfied with the situation but could find no way of remedying it. At this point, via the mind of a professor of horticulture from the provincial agricultural college, the planning process entered the picture. This man was also a farm owner and operator. He devised a plan under which he and seven

of his neighbors, all prominent orchardists, pooled their output. They purchased a village warehouse, standardized their output, and shipped a high grade and uniform pack to the British market. So great was their success that by the third year English merchants were buying their fruit by cable, an unheard-of practice up to this time. The success of the organization led to the formation of some 65 other coöperatives spaced at intervals along the valley. This, to some extent, moved the commercial function out of Halifax. It soon became apparent, however, that high standards would not be maintained by such a large number of small organizations, each operating independently. This led to another plan, namely, to the establishment of a central organization—The United Fruit Company of Nova Scotia—to regulate shipments abroad. The headquarters of the new governing organization were established in Halifax and thus the administration function gravitated back to the focal urban point of the area.

On the southern border of Salt Lake City a huge lead refining plant stands alongside of a warehouse handling eggs. The two establishments are separated only by the railway which serves them both. They appear to be strange bedfellows but commercially they are not. The output of each is shipped to New York and other eastern markets and they both find a location near the shipping center of Salt Lake City advantageous. The local headquarters of each concern is in the central business section of the city looking down on the railway yards and terminals which feature this inter-mountain commercial center. Their raw materials come from outside the city and are rural in their origin. The egg business has little or no relation to the local Salt Lake City market. It is coöperative in its organization, but I am told that the commercial initiative which led to the growth of the business was of urban origin. In any case, the plan has been profitable to the farmers in part because it recognized the essential urban quality of the commercial phase of the industry.

Other illustrations of the urban aspects of farming are known to all of you. A striking case comes from metropolitan Chicago. On the southern fringe of the city sizable areas are engaged in raising onions. The crop, however, is not consumed in Chicago. These are seed onions grown in a northern climate for southern growers. They are shipped through large warehouses in the midst of the fields. Their position in the metropolitan area gives them ready access to all the railroads leading south from this greatest of railroad centers.

The foregoing are only random illustrations of rural-urban relations. They represent a beginning in a broad field of investigation. Let us briefly consider another phase of the matter. In the past, rural planning has been concerned largely with improving crop or livestock production. In the future, however, it will need to give attention to farm villages as well as to the farms served by the villages. There is a common belief that good roads and the automobile have sounded the doom of farm villages.

A recent study of 50 villages in the cash grain section of the Corn Belt shows that in this area the farm villages are still of importance. The automobile has changed the function of the village rather than decreased its significance. The village is still the center for many services needed by the farms. Men's clothing stores and millinery shops, for example, are gone, but gas stations and service garages have taken their place in the life of these farming areas.

The Diagnosis. In making a diagnosis of urban-rural planning problems, it should be remembered that the problems, like the areas which they affect, are partly rural and partly urban. A clinic rather than a single specialist is needed. Probably this calls for a new type of planning organization. Certainly it calls for new types of examination and survey.

Let us assume that in selected sample areas the essential surveys have been made and the facts of distress and opportunity are in hand. Almost certainly these facts will reveal that planners are as far from understanding the causes of the difficulties as is the medical profession from knowing the causes of cancer or influenza. If this proves to be true, what is to be done about it?

The Search for Cause. The causes of the phenomena presented by urban-rural relations are unknown, or, at best, only partially understood. These causes, however, have a bearing on the prescription. In fact, it may be argued that the planner cannot prescribe for the area unless and until he, or someone else, discovers the underlying forces which have brought our urban-rural relations into their present condition.

In search for the forces at work in areas of interlacing rural-urban relations, the planners may need to stimulate research. At the Chicago Zoning Conference on the urban-rural fringe areas in the autumn of 1937, the interested individuals appeared to be in two groups; namely, those professionally interested in planning for zoning and those mainly interested in the underlying conditions affecting the areas to be zoned. The two groups were interested in common problems, but from different viewpoints. Their relation was much like that of applied science and pure science. To get these two groups into active coöperation is, in my opinion, one of the problems of leaders in the planning movement.

The Design. Assuming that surveys are completed and that causes are understood, the urban-rural planning clinic of our thought is ready to formulate the "design for living," which lies in the center of the planner's interest. It goes without saying that the design will be unlike a city plan or a rural plan. It certainly will be much more than a combination of the two. It may be a hybrid, but it must be more than a freak. It will aim to tie city and county together in a new effectiveness.

Rural-Urban Migration in an Industrialized Nation

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ALTHOUGH the population of the Nation is expected to become stationary and even to decline slightly within the lifetime of many persons present in this room, there are today serious problems of distribution and redistribution of population. The cessation of expanding industrial opportunities was accompanied by a continuously rapid increase in the number of persons available for employment. Channels of migration that had come to be looked upon as normal ceased to function in the accustomed way. Increasing productivity in agriculture has made it possible to produce the Nation's supply of food and fibre with only a part of the people currently living on farms. Impending technological changes in agriculture may increase still further the numbers of farm workers available for urban employment if opportunities arise. Whatever the course of future developments, there is today a large group of persons living on farms who have little chance of employment either in commercial agriculture or in cities. Some of them may be absorbed in new rural industries or permanent public services at their present locations; the others will attempt to improve their condition by moving to other locations. The problems of this group are essentially inter-regional and call for federal action. In addition to efforts to restore a high level of employment and to balance potential consumption and production, there is required a more effective utilization of existing resources, assistance in developing educational and other social services, and a migration policy which will guide and possibly stimulate migration. Such efforts will serve not only to raise the levels of living in problem areas, but also to prepare potential migrants to move intelligently when opportunity arises and to make them more desirable additions to the communities to which they will go.

The rapid growth of our large cities prior to 1930 was made possible in large measure by the fact that on farms and in rural areas generally there were being reared many more boys and girls than were needed to replace the farm population. The quick tempo of technological change made it possible to secure the agricultural products for a growing Nation with a decreasing proportion of the population engaged in agriculture and even with a decreasing farm population. (Between 1910 and 1930 the number of people living on farms declined by nearly 2,000,000, though the number living elsewhere than on farms increased by nearly 33,000,000. The farms had contributed by migration about 12,000,000 persons, net, to this increase.) Between 1920 and 1930, 40 percent of the new workers in cities came from farms.

If, in this country, city growth is to continue as in the recent past, it will need to be increasingly dependent upon migration from farms.

The rates of natural increase of most cities are too small to assure any sustained growth and already, in 1935–36, 5 of the 93 cities with 100,000 or more persons foreshadowed the coming trend by ending the year with a population deficit—an excess of deaths over births. But on the farms of the Nation there continues to be an excess of youth above replacement needs. The farm population which today includes only about one-fourth of the total Nation's population, annually reports one-third of the Nation's births, and in 1930 it included nearly one-third of the children 5–14 years old. Because of high birth rates in the past, the number of rural and urban young people reaching maturity has been especially large in the recent years when employment opportunities were severely limited.

It is estimated that during the 20 years ending in 1955 the total population of working age (18–65) will increase by approximately 14,500,000 persons. If there were to be no migration during this period, 3,000,000 of these would be in cities, 4,000,000 in rural non-farm areas, and nearly 7,500,000, or fully half of the total, on farms.[1] Prospective needs for agricultural production could be filled without drawing upon any of the 7,500,000 and, in that sense, all of them would be available for migration to towns and cities. Already in 1929 the less productive half of all farms were producing only 15 percent of the value of all agricultural products. The same group contributed only 11 percent of the value of marketed crops, less than the value of exports. In view of the trend of the export markets and increased productivity in some crops, it seems entirely possible that the more productive half of our farms could, with proper encouragement, have produced all of the agricultural products consumed by the Nation.

Estimates in this field are extremely hazardous, but it seems likely that, had there been sufficient demand, farms could have given up at least 10,000,000 persons between 1920 and 1930, instead of the 6,000,000 which they did, without endangering the volume of agricultural production. Here, then, was and is a population reservoir which might be tapped if superior opportunities were offered at locations other than those where these people now are. From this source alone cities might continue to grow for some time to come, if they offer sufficient inducements. Apparently the large-scale rural-urban migrations of the twenties could have been continued with beneficial effects, were it not for the characteristic instability of American industry and commerce and the present ineffectiveness of demands for the products required for customary standards of living or for those ordinarily regarded as adequate.

During the 1920's, some 19,000,000 persons moved to towns and cities, but 13,000,000 moved from towns and cities to farms, with the result that farms gave up about 6,000,000 migrants, net. Nearly 2 out

[1]From unpublished material supplied by T. J. Woofter, Jr.

of every 5 of the young people who reached their 20th birthday during the decade had moved off to cities by 1930.

The migrants came from all sections of the country. Except for parts of the Great Plains and of the Pacific Coast States there was hardly a rural area which did not give up more migrants than it received. Three-fifths of the net rural migrants come from the Southern States—Texas, Georgia, South Carolina and Kentucky contributing the largest numbers. In general, between 1920 and 1930 the rate of rural migration from the better land areas was almost as great as from the poorer land areas. The migration to cities amounted to 20 percent or more of the rural population present at the beginning of the period in parts of the Cotton Belt and throughout much of the Southern Appalachian and Ozark Mountain Areas, in the Lake States Cut-over and in scattered counties throughout the country.

Migrants from farms to cities generally went from areas of lesser to areas of greater opportunity. The manufacturing centers offered numerous opportunities. One hundred and sixty-seven counties in which manufacturing is predominant received almost three-fourths of the total. Three large cities, New York, Chicago, and Detroit and immediately surrounding territory, accounted for one-fourth. The metropolitan area of Los Angeles, with more than 1,000,000 migrants from other parts of the country, alone received one-sixth.

That was before 1930, during a period characterized largely by farm depression and urban prosperity. But late in the twenties there was a slowing down of migration to cities, and after 1929 there were further sharp reductions in this movement. Since 1930 the attractiveness of cities for rural migrants has been sharply curtailed. Present indications are that during the current decade the net migration from farms to towns and cities will be less than 2,500,000, or less than half as great as during the twenties. Not only has migration to many cities been sharply curtailed, but some cities experienced a net out-migration after 1930. Special Censuses taken in 1934 and 1935 showed decreases in the population of some of our largest cities, including Chicago and Detroit, which had previously been among the leaders in attracting migrants. So long as large numbers of urban workers are unemployed, cities as a whole have not proved very hospitable to the absorption of rural migrants.

The result is that potential migrants remained in rural areas, where they knew conditions and where their skills could be at least partially utilized. This tendency to remain on farms has been especially marked in the areas where opportunities in commercial agriculture are most limited, areas which before 1930 were generally giving up migrants to cities. The failure to migrate out of rural problem areas in pre-depression volume was a major factor in the increase in farm population in problem areas during recent years. Migration from farms has continued from those areas where commercial agriculture is most developed and these

same areas received very little of the back-to-the-land movement. However, the areas where commercial agriculture is less developed, where agricultural incomes are low, not only received migrants from cities, but also retained a larger proportion of their natural increase. In the Appalachian Mountains, the Lake States Cut-over, New England, and some other areas, there was also a movement to farms. These two factors, combined, made for an increase in farm population—an increase which was unevenly distributed. It was greatest in the non-commercial farming areas where soils generally are best. Areas where non-commercial farming is predominant appear to be more elastic for population growth; more able to absorb additional persons without disorganization of their economic organization. Where standards of income and consumption are already low, the addition of a considerable number of persons or families may not have as serious effects as in areas where standards are high. It may be that rural problem areas thus serve as zones of absorption during depressions—a necessary function in our present order. However, if the absorption of population continues over a long period of years, those persons who found temporary refuge there may become stranded. There is evidence that that has happened.

The present situation thus includes on the one hand a slowing down of the rate of growth of the population of cities with the resulting diminished demand for migrants from farms, and on the other hand a continued growth of the population on farms, although there is no immediate prospect that commercial agricultural production would require any increase in the number of available workers. Some migration from rural to urban areas continues to take place, but the volume of the movement is considerably below that which occurred during more prosperous times. It can hardly be expected that rural-urban migration will soon resume those levels, for that probably awaits the absorption of the urban employed. Nevertheless, there undoubtedly will continue to be some migration from rural to urban areas, as well as from urban to rural areas, and if employment opportunities develop this migration will probably be on a large scale. It may be objected that the pattern of location of industry which has been developed is not necessarily the one which will continue. The industrialization of the South where rates of population growth are rapid may decrease inter-regional migration, but it would still require a large volume of migration from farms, much of which would be across state lines.

So long as that is the case, cities take an interest in the creation of such conditions that the migration from rural to urban areas shall be a migration through which the individual increases his own productivity and thus benefits himself and the community to which he goes. With the present concentration of industry and the present distribution of population growth, the problems transcend state and regional lines and call for national planning. Both Detroit and Atlanta, for example, are interested

in the standards of health, housing, education, and coöperation being maintained in rural Alabama, for both may again receive migrants from that State. Isolated rural communities in Alabama are interested in developments in Detroit and Atlanta for these mean opportunity or lack of it. The continuation of such mutual inter-relationships indicates that programs to deal with these movements must be on a national scale.

The persistence of a large volume of industrial unemployment is a major issue for the development of rural-urban migration. The effects of a solution of this problem upon trends in migration would be far-reaching. But along with efforts to solve this problem it is important that attention be directed toward action specifically related to rural-urban migration. Three such lines of action are recommended for consideration: (1) raising the level of living in areas from which migrants will be recruited, (2) raising educational levels in rural areas, and (3) developing an effective policy for the guidance of migration.

Raising the level of living in areas from which migrants will be recruited is a matter of primary interest both to them and to the areas where migrants will ultimately go. The influx to any city of a large group of persons with standards of living widely different from those of the city creates problems similar to those created in the past by the arrival of large numbers of foreign immigrants. Reports from some cities have already indicated that, socially, the migrants from poorer agricultural areas have filled the low position previously held by foreign immigrants and have created similar serious problems of assimilation. In many cases previous training, standards of living, and the health of rural migrants have given them only a poor preparation for the life of the cities to which they went.

Raising the level of living in these areas cannot be done through an expansion of commercial agricultural production, but must come, if at all, through a more efficient utilization of available resources for the benefit of the residents there. This would require a new emphasis on a subsistence program of production for home consumption on the largest possible scale consistent with conservational use of the land. This implies an extensive educational program in techniques, supplemented by loans; community facilities for curing, canning, and storing of products for home use; coöperative provisions for improvement of livestock, soils, drainage, etc.; a more thorough canvass of the possibilities of stimulating rural industries; and the development of an extended program of public works and public services in rural areas to supplement farming activities there. The development of such a program would stimulate morale and health among the people of the areas involved and would tend to develop an intelligent approach to local problems of utilization of available resources. In part it would mean the restoration of some of the techniques and skills which were available to the older generations, but it is essentially not a return to the past as much as the development of a

system which is possible in the present. It would mean the possibility of maintaining a large part of the present population growth in rural areas at levels higher than those now prevailing and would also mean a greater ease of assimilation in cities should migration to cities occur.

A closely related line of activity is that of increasing educational opportunities. Educational facilities and adjustments in rural areas are a national concern, since many of the children now being reared in rural areas will ultimately live elsewhere. In 1930, 4,000,000 of the 30,000,000 persons who had been born in the South were no longer living there and many of them had gone to northern cities. These States in 1930 had one-third of all children then 5–14 years old, the group which has been passing through the elementary grades since 1930. That educational levels in the rural parts of these States, as well as in many other rural areas, are considerably below the average for the Nation, despite more than average effort to raise funds, is well known. The shortage of educational opportunity, which is most marked in those areas where rates of population growth are highest, means a failure to equip the prospective migrants with the knowledge and skills needed for most effective adjustment in either city or country. Poverty fosters lack of educational opportunity, incentives are destroyed, and further poverty results. Lacking adequate training, these migrants press in upon the skilled labor market with the result that not only are they at a disadvantage in so far as types of employment and income are concerned, but in many cities they are forced to live under slum conditions. The development of adequate educational opportunities, realistically adapted to the situation in these rural areas, would serve not only better to equip prospective migrants to take their place at the new residence, but they would also better equip the non-migrants for life in their communities.

More effective guidance of migrants to areas of greater opportunity is needed to eliminate much of the social cost of the present system. Few areas offer so little opportunity that people will not move to them, and in all parts of the country there is constantly a movement of people to areas from which many others are moving at the same time. Migration is nearly always in response to a felt or observed differential in opportunities—opportunities in regard to economic activities, health, education, recreation, the desire for new experience, or any other human want. The individual's decision to move or not to move is based upon such information as is available, but rarely does the prospective migrant have the opportunity of assuring himself that the information which he has is representative, reliable or adequate. Tips, hunches, rumors, and indefinite promises are often the basis upon which migration is started, and when they prove incorrect there may be a return migration or further movement to another place concerning which the information is no more definite. The energy which thousands of workers put forth in securing jobs—as in traveling hundreds of miles to secure jobs that could not

possibly last more than three months—might be used more effectively if we had the means of providing more adequate information and guidance to prospective migrants. The development of an adequate system of disseminating necessary information about employment opportunities among potential migrants would eliminate many of the difficulties now encountered by individuals who go to areas where opportunities are much more limited than they appear to be, or where opportunities have entirely ceased to exist.

Not only is it necessary that migrants be assisted in going to locations which offer maximum opportunities, but in some areas it will become necessary to stimulate out-migration and to assist present settlers in finding adequate new locations. Resettlement, rural zoning, and land purchase programs are steps in the indicated direction, but these and related efforts have not always been effectively coördinated. In some quarters it is advocated that a large part of the rural problem could be solved by moving the population involved to cities. So long as urban employment opportunities are lacking, this remains wishful thinking.

Those areas which ultimately become the recipients of rural-urban migrants have a stake not only in the education and training of potential migrants, but also in taking steps which will enable the migrants to make their fullest contribution at a minimum social cost.

DISCUSSION

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H. C. WOODWORTH, New Hampshire Agricultural College, Durham, N. H.

It was shown here that the view once in vogue was that population could be picked up and removed wholesale from uneconomic areas. This view has been put in its place, Mr. Hoover stated, by demonstration that this procedure is too costly, and areas are lacking to re-settle the people in.

This speaker concludes that a subsidy to people remaining in these areas may be justified as an aid to migration out of the area, or, possibly, these areas may be needed to maintain population of urban areas, due to low birth rate in cities.

Is efficiency really the thing that people want? This is the question asked by Mr. Woodworth. When people take the view that farms should be eliminated, simply because the products of half of our farms do not appear to be needed, they are assuming too much, he implies. This is true, Mr. Woodworth says, because we are not all in the prime of life, or subject to the same personal conditions. He questions if the cities themselves are on an efficiency basis, stating that not more than 60 percent of the cities' people might be needed for efficient production and distribution work.

Rurban Land-Use Planning

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THE two preceding papers have dealt with the common problems of urban and rural planners and urban-rural migration. The question now before the house appears to be the place of land-use planning as a method of meeting these problems. If we are to discuss rurban land-use planning as a field of endeavor which may set some outposts in this no-man's-land of common city and country problems, it becomes important to clarify the meaning of the phrase.

Off-hand, the term "rurban" might be considered as the part of the topic which is in most need of elaboration, and undoubtedly some persons would object to any use of the term at all. But let us regard "rurban" as merely a convenient way to refer to problems in which things rural and things urban are joined; and center our attention first on the phrase "land-use planning." While we all very likely use this phrase much more often than we use the term "rurban," probably the rurban concept can be tacked down more specifically than the phrase "land-use planning," particularly when persons with different professional backgrounds are discussing it.

For the purposes of this report "land use" is taken in its economic sense, that is, in terms of the pattern of whole economic operating units. In this interpretation, land use has an institutional connotation rather than the physical connotation of soil use or the entrepreneurial one of land management. "Planning" refers to those activities associated with the preparation of a realizable program of social action to direct or to adjust to change. We may say, then, that rurban land-use planning means the preparation of social action programs involving changes in the rural land-use pattern which are the result of forces or demands generated by urban influences.

It is obvious that planning involves a wide range of activities and to discuss it as an outpost in otherwise unchartered territory calls for a more specific delimitation of its component elements. It is clear that the crux of land-use planning is the dedication of various land areas to their best economic use. This procedure is primarily, and almost by definition, one of judgment. But from a broader point of view, the making of judgments as to what ought to be done with specific delineated areas is but one of several parts of the whole planning process. In this light, there are four types of operations involved which may conveniently be referred to as action, judgment, information, and understanding.

Without action, plans are sterile: having decided what ought to be done, we need education, legislation, regulations, changes in the objectives and application of public programs, and the establishment of new group relationships. Without information, plans are impossible; in

order to make any kind of judgment we need to know what we are judging. And then underlying all three of these steps, we need to have some understanding of what causes problems, what we may expect if the problems are allowed to continue, and what accomplishments may result from certain lines of action.

Different people are inclined to attach varying degrees of importance to these four parts of the planning process. Some would delay judgment and consequently any effective action until complete understanding has been attained, which is a subtle way of saying "never." Some would merely amass quantities of data while neither developing working principles nor making decisions. Over-emphasis on making decisions may result in plans which have no possibility of being effected, while concentration on action alone may mean chaos.

Most of you here would probably agree that the primary need generally is for the making of judgments, that is, the dedication of land areas to their best use, the specific outlining of programs. And with this is the important job to get some action. This is an easily justified priority of tasks, as it is all too evident that we must begin to make use of what knowledge we have to forge programs of action and to get something done about pressing problems.

In the field of agriculture it is not hopelessly difficult to find helpful generalizations and available data which can be carried into specific land-use recommendations. By and large experience has been sufficient so that emphasis can be put upon methods of making judgments as to future land uses, and useful recommendations can be anticipated from laymen leadership in rural planning. City planning problems, while admittedly complex and far from being completely understood, have been worked upon enough so that a long list of specific accomplishments in making programs and in securing effective action could be easily cited.

It is much more difficult to point to progress in the field of rurban land-use planning in terms of accomplishment in preparing programs and in fulfilling them, although, to be sure, there are now a few scattered instances to indicate that rurban land-use planning activities are moving ahead even in these advanced spheres. But generally, the agriculturalists have kept so far from the city limits and the city planners have stayed so completely within them, that the least progress and some of the most perplexing problems are found where urban influences form an important part of the picture of a shifting land pattern in rural areas. The information and understanding aspects of the rurban planning process are as yet so undeveloped that it is too early to hope for many specific examples of refined accomplishment in the other spheres of judgment and action. At least I think this statement to be a simple fact rather than an expression of alibi or job insurance, as similar statements are often classified.

All of the foregoing means that you may expect any check on the progress of land-use planning in attacking rurban problems to reveal only a few specific examples of developed area plans and even fewer examples of accomplished social action. Furthermore, the territory is so unchartered that we must expect the greatest progress in the attack, now and for some while to come, not in these particular phases of the activity but rather in the development of our knowledge and especially in the establishment of some guiding principles concerning these problems.

To secure some basic understanding of problems in order to be prepared to render judgments and secure action, we need to know about the effects of various new types of land uses as they are introduced into a rural area, and we need to know what the probable future demands will be for these uses. Such uses would include suburban residences, rural residences, part-time farms, summer homes, public recreational grounds, roadside commercial enterprises, and municipal water supply and protection areas. Of these, the largest amount of work has been or is being done with respect to suburban residences, part-time farms, and public recreational grounds.

Probably the most advanced work is that relating to the introduction of suburban residential units fairly close to the cities. The most pressing problems in this connection are those associated with premature developments for such uses. With Mr. Cornick here, it is unnecessary for me to elaborate upon the progress of these studies except to say that the extent of the practice of cutting up rural lands for prospective home sites which may never be used for that purpose is appalling, as is the series of complicated public problems which follow excessive subdivision. The work of Mr. Cornick with the Institute of Public Administration and the New York State Planning Board, the surveys of the New Jersey State Planning Board, and the studies of Dr. Lee of the U. S. Bureau of Agricultural Economics in the same State, to mention a few, are going far in paving the way to a better understanding of these problems. And there are indications that the National Resources Committee may give added impetus to these investigations. None of the studies with which I am familiar in this line is being carried on in an air of academic isolation. The problems are serious enough and the interest is keen enough so that we may expect this knowledge to be put to early use in making planning decisions and in securing corrective and preventive action.

During the past six years, studies of part-time farming have been reported in at least fifteen States and recently one larger study was completed for the Southeastern region. In this field, the need appears to be greatest for some development of guiding principles based on the available studies no one of which in itself is broad enough to justify the formulation of generalizations. Further work is also needed to analyze the effect of the part-time farming movement on the broader but yet

local problems of land-use policy. Also, studies of the probable future trend in part-time farming need to be pushed back to their roots in the cities from which the demand for this kind of rural land-use unit springs. I would, in passing, remark that to a certain extent some have been fooled by part-time farming, for because a surge in the movement was felt during the depression it was regarded in some quarters as purely a depression phenomenon. Everyone now is beginning to realize that the trend to part-time farming is apt to be much more steady than was expected. Consequently, we find a need for some reorientation of our views respecting part-time farming. We need to regard it as a normal and increasingly important rural land use, not necessarily associated with passing fancies of emergency depression remedies.

Private and public recreational land uses, such as summer homes and camps and recreational parks and forests, are receiving greater attention from planners. Rural planners, however, are apt to regard public recreational land use as an easy alternative for lands not adapted to commercial agriculture while city planners are prone to stop with a generalization that recreational areas outside the city are needed. Each group is making considerable progress along these lines. The coming need is for them to get together to determine where and how such lands should be held. Summer home uses are found in locations so remote from the cities that we may forget that they result from direct urban demands. A few studies are being undertaken to determine the demands for and effects upon the rural pattern of these recreational land uses. Without referring to specific tasks, we may make the generalization that as yet we have made but slight progress on these problems. In view of the importance which these land uses have or will assume in a well-conceived rural land economy and in view of the tremendous pressure which is growing in the cities for outdoor recreation, our understanding of the land-use implications of recreation cannot be improved upon too speedily.

I have referred to developing studies in terms of some of the many land uses which affect the rural land-use pattern as a result of urban demands. These have only been referred to briefly and others not at all. Time does not permit reference to other studies which are being initiated in terms of resultant problems or planning techniques, such as special analyses of overlapping local government units, urban uses of rural highways, educational problems, and studies of flood plain zoning problems, roadside control and highway planning. It is hoped that during the discussion period some of these phases will be elaborated upon by some of you who are more familiar with them.

All of these foregoing references apply to the first two steps in the land-use planning process: the development of information and understanding regarding the particular land-use problem situations we are concerned with. And to repeat, if the crux of the planning process—the

making of judgments with respect to the dedication of specific land areas to alternative uses and the carrying out of these decisions—if this part of the planning process is to establish outposts in the no-man's-land of rural-urban problems, it is evident that these pre-planning studies come close to real pioneering.

It would not do to leave this cursory discussion without commenting upon at least one instance where judgment and action steps have been taken in an area where rurban problems predominate. Once again, to watch planning progress we can turn to California or Wisconsin. The zoning ordinances in Northern Wisconsin, noted because of their regulations for agricultural and forest lands, you will recall, also made provision for recreational use areas. And now in Southeastern Wisconsin, county planning work has proceeded to the point where some ordinances are in effect in areas characterized primarily by the development of summer homes, rural residence subdivisions, and recreational parks. In Jefferson County, three use districts are recognized by ordinance, but the regulations give even more sharply defined control over land use. Set-back regulations for roadside control, permit control of buildings, stream bank control for flood control and for the protection of recreational values, and minimum lot areas for subdivision control are among the features in the zoning acts and ordinances for this area. As might be expected from Wisconsin where they know their planning, these ordinances and regulations are being introduced cautiously and only in reference to the most generally recognized problems, and care is being exercised to develop the work through thoroughly democratic procedures.

In a general way it may be said that the land is an excellent common denominator for meeting a wide range of social and economic problems. While we should guard against drawing too thin a connection between all sorts of problems and the land, nevertheless a number of questions become more susceptible to handling when attacked on the basis of their land-use implications. As common urban and rural problems are analyzed and stated from the viewpoint of their land-use relationships, we will be in a position to show further progress in the making of judgments on the proper uses of different land areas, and since such judgments are stated in definite and easily recognized terms we may then expect remedial and preventive action. Recent planning history indicates a definitely increasing interest in land use on the part of all planners, rural and urban, professional and amateur, and this trend bids well for the future. When we have found a common ground to stand on and a common language to speak in, we have won half the battle, and since land-use planning can supply those requirements, it can establish the needed guide-posts in this wide no-man's-land of common city and country problems.

DISCUSSION

PHILIP H. CORNICK, Institute of Public Administration, New York City
DOROTHY M. STRAUS, Member, New York State Planning Council, New York City

Lack of proper land-use planning information and statistics makes it difficult to picture land-use conditions and underlying factors responsible for misuse of land, said Mr. Cornick. He pointed out that there is much farm land that is intermediate, or part-time farm land; there are large and small country estates; some large vacant tracts of land that are in the hands of speculators. Thousands of acres also have been cut up into subdivisions on the urban fringe of rural areas, land that is now vacant and that is in tax arrears to an extensive degree. Some of these, he said, may be due to the tax burden on improved property and farms. On much of the vacant property, it is shown, there is no clear title possible. Mr. Cornick suggested, as a measure to restrain subdivision of rural-urban land, that new subdivisions be required to guarantee potable water supplies, waste disposal, and the services of the health department.

Attention was called by Miss Straus to the difficulties caused by overlapping governmental units, such as conflicts between county and town, and between town and village. Many of these units might better be abolished, to make operations simpler and more efficient, but, she stated, people are reluctant to do away with these forms because they are symbols of group existence. One of the major requirements in planning, Miss Straus believes, is the understanding that ideal uses cannot always be set up. An appeal is sounded here for constructive thinking on governmental reorganization problems.

THE NATIONAL INCOME: SOURCES AND EXPENDITURES

PRESIDING: WILLIAM TRUFANT FOSTER, Director, Pollak Foundation for Economic Research, Newton, Mass.

REPORTER: HERMAN C. LOEFFLER, Secretary, Boston Municipal Research Bureau, Boston, Mass.

Government's Part

ROBERT R. NATHAN
Chief, Income Section, Department of Commerce, Washington, D. C.

IN OPENING this discussion we must first answer the question "Do the various federal, state, and local government agencies contribute to the national income?" To many of you it will be apparent that no answer is needed to this question—that the answer is obvious. However, it may be interesting to note that in many countries the value of government's services was not taken into account for a long period of time in measuring the national income. I believe that I am right in stating there are still some countries in the world which follow this practice in preparing estimates of their national income.

Of course, there are some people in this country too who do not believe that government makes any contribution to the national income, but who believe that taxes represent a pure burden on the national income and nothing is produced or created for this payment. They say that all taxes should be deducted from the national income figures to arrive at what they call the "true" national income. This is tantamount to placing no value whatsoever upon government activities.

There can be no doubt in the mind of anyone who gives thought and attention to the matter, that government does contribute to the national income and makes contributions which are substantial and considerable in their magnitude. National income is a measure of the net value of all goods and services produced in the economy. Certainly upon reflection we realize that the government does produce goods and services, primarily services, which are of real value to all of us. Let us consider some of the great variety of functions performed by governmental units and we can more fully appreciate the fact that government does make a contribution to our economic well-being.

Government activities may be divided into two broad categories. The first relates to purely governmental functions such as the activities of the judicial, legislative and executive branches of the federal, state and local governments. The second comprises those activities which are somewhat economic in nature or which if not performed by the Government would and must be performed within the sphere of private economic endeavor. Of those purely governmental functions, I think we will

all agree that there is a great deal of value in activities of this nature. We might not think offhand of the services of the judge on the bench as being of value in the same manner as that of the contractor who builds the house, or the automobile mechanic who repairs the car, or the doctor who takes care of our ailments. Actually, however, the judge is contributing to our welfare, to our enjoyment, and to our ability to live and and get along together, which is of great value to individuals in particular and to society in general. Similarly, the legislators and the workers in our executive branches of government are providing individuals with ways and means of getting along jointly, collectively, coöperatively, and peacefully in a single society through a democratic process. The performance of these functions adds greatly to the enjoyment of our life and to our continued national existence. Perhaps it is difficult to determine the precise value of the services performed by the judge on the bench, or the President in the White House, or the Member of the Cabinet, but certainly there is a service rendered which accrues to the benefit of society. The difficulty of measurement does not render the service valueless.

Let us now move to those functions of government which are more economic in nature and which we can more easily appreciate and understand as making significant contributions to our economic welfare. Let us take our school systems, for instance. Is there anyone who doubts that the training and facilities offered to our children and to adults in this country are of great economic value and add considerably to the growth of intangible wealth and productivity of this country? Do not the million and a quarter persons employed in public education activities contribute to the flow of services produced in each year and therefore to our national income? If we did not have public school systems, it would be necessary to send children to private schools in order to secure an education. Those people who now send their children to private schools realize full well that there is considerable value attached to the educational service, in that they are willing to pay a substantial price for this service. Certainly, if all children were sent to private schools the amount paid for these services would be tremendous and would certainly make us more readily appreciate and reflect upon the value of the services so rendered by government at the present time.

We might consider other activities of government, such as police, fire, and military protection. Certainly if there were no police, it would be necessary for individuals, business enterprises, and other organizations to hire individuals for protective purposes, and possibly with a great deal less efficiency than we have at the present time. Certainly the cost would be substantial. The same is certainly true of fire protection and national defense as well. We might further illustrate with the Post Office. Certainly the services rendered and performed by the Post Office are of considerable value to society. Also there is a great amount

of research performed by federal, state and local government departments. The Bureau of Standards might be used as one illustration. Then there is the field of economic research and research in the physical sciences, which provide valuable and worthwhile results.

To make the point even more convincing I should like to point out that we all recognize today that railroads and public utilities contribute substantially to our national income. I might ask you, "Do you believe that if railroads and public utilities were transferred to government, for government operation, their service would become valueless and they would cease to contribute to the national income?" Those who believe that government makes no contribution must say that the mere transfer of these functions to government takes them out of the area of contributing to our economic and social welfare. This is obviously not the case.

If we grant that government does contribute to the national income, whether these contributions are of an economic nature or purely governmental functions, then we must decide how we can measure government's contribution to the national income. First of all, the government's services are paid for through various revenues, primarily in the form of taxes. Of course you buy postage stamps and there are other payments of that nature which are more direct, but generally we pay for government services through taxes. Taxes are, however, somewhat different from the ordinary prices paid for goods and services. Most prices are determined in a competitive market. Taxes, however, are not determined in a competitive market but the rates are established by legislative bodies and total collections will depend upon the rates and changes in the magnitude of the base to which the rates apply. Government revenues may or may not be equal to the value of the services which the government renders. Also the taxes may not be assessed in amount from person to person or from one area to another in accordance with the differences of the value of the services flowing to those different persons or to those different areas.

Therefore, if we cannot look upon taxes as prices paid for the services which the government renders, we are faced with the very serious problem of just how to measure the value of government services. In the studies of the national income at the Department of Commerce and those of most other agencies, it has been assumed that the value of government's services is equal to the cost to the government of those services. In other words, when a judge is paid $10,000 for his work, the value of his services to the community is accepted as being worth $10,000, or similarly, the government clerk who gets $1,260 per year is looked upon as contributing services valued at that amount to the community.

We all realize that this assumption that the value of government services is equal to their cost is somewhat different from the treatment accorded the competitive part of our economic system. We know that

some people both in and out of government service work harder and produce more than they are actually paid for. On the other hand, some people earn less or rather are paid more than they actually create. Presumably in the private area of our economic system, those individuals who are paid more than they produce will soon lose their jobs or have cuts in pay and those who are receiving less than what they are worth will receive increases or find new jobs which will pay them more in accordance with their contribution. In the Government this is not always the case. It is quite probable in the Government the higher income groups receive less than the value of the services in many instances if evaluated as in private industry and those in the lower income group may receive more than the value of their services. However, this assumption of the value equaling the cost or vice versa is fairly reasonable and provides at least a working basis for the inclusion of government's contribution in the national income.

It is further important to note that in private industry the nature or character of what is produced is determined in the marketplace, while in the field of government service, these determinations are made by the legislative and executive branches. It is the aggregate of competitive forces in the system which brings about a shift in production from one commodity to another, or in an industry from one geographic area to another, or in the replacement of one plant by another. In government, all decisions as to what to produce, how to produce, where to produce, what factors of production to use, and related matters are not determined competitively. Presumably the wishes of the people as reflected at the polls give directivity to these elements.

It is important for us to observe what has happened in recent years in government's contribution to the national income. Generally it might be stated that the trend of government's contribution is substantially upward. Also it might be pointed out that the government's contribution varies indirectly with the movement of the total national income. By this I mean when the national income declines, as it did in 1929 to 1932, the government's contribution increases proportionately, and as the national income increased from 1932 to 1937, the relative importance of government's contribution declined. This results because government's contribution is much more stable than the contribution of private industry. A third general tendency which we observe is the declining relative importance of state and local government's contribution relative to the contribution of the Federal Government.

Let us look at a few figures. In the years 1919 and 1920, total government, including federal, state and local, contributed 7.2 percent of the national income. By 1928 and 1929, this proportion had increased to 7.6 percent. During the depression government's contribution jumped tremendously, increasing to nearly one-sixth in 1932. Thereafter, there was a decline to 12.7 percent in 1937 but a rise to 15.4 percent in 1938.

For the period 1929 to date, we have a breakdown of the government figures, as between the federal, state and local agencies. In the years 1929 to 1932, inclusive, we find that the federal contribution was substantially smaller than the state and local contribution. For instance, in 1929, the Federal Government contributed 2.6 percent of the national income whereas state and local governments contributed 5.0 percent. In 1938, the Federal Government contributed 8.2 percent, and state and local governments contributed 7.2 percent. We have evidence of an increasing importance of the Federal Government and declining importance of the state and local government.

Before completing my remarks, I should like to point out that government is an employer of individuals of substantial magnitude. During the past ten years, the Government, excluding work relief activities, employed from 7 percent to 9 percent of the total number of people working in this country. A substantial portion of these are employed in education, others in state and local government functions of a regular nature, the balance in the Federal Government.

In addition to these contributions which I have discussed, the Federal Government also adds to the purchasing power through transfers of income. We do not include direct relief as part of the national income, because direct relief in essence is really a transfer of income. It is very similar to an individual who, let us say, gets a $10,000 salary and gives $1,000 to the poor relatives. The national income is not enlarged by this transaction, but the $1,000 gift represents a transfer of income from the one who has produced and received money for his production to one who has not made such a contribution. Direct relief is somewhat similar to this and represents a transfer from one group of society to another. To the total amount of income flowing to individuals, including these transfers, government's contribution has been even greater than its contribution to the national income. In the years 1936 and in 1938 again, government's contribution to the total flow of income to individuals was 18 percent or more, compared with 8 percent to 9 percent in the years 1929 and 1930.

There is one further thought I should like to leave with you today and that is the fact that government taxes or government revenues do not represent a pure drain on the national income. Part of taxes is paid by individuals; the balance is paid by business enterprises and represents a payment for the services rendered by government to these enterprises, which to them is the same as a raw material purchased from a mine or a factory or from a transportation company or a communication company. The revenues by Government are immediately fed back into the income stream in the form of wages, salaries and other types of disbursement, as well as the purchase of raw materials from industry. This is not often recognized by individuals who view taxes as a pure drain on the national income for which services are not rendered or out of which payments are

not made and so again become purchasing power in the hands of individuals. Certainly the Government spends its receipts. It does not take funds out of the income stream without directing them back within a very short period of time and certainly it does not take funds out of the income stream without contributing to our entire national social and economic welfare in a substantial and important measure.

The government does contribute a great deal of our national income and its contribution has been growing. What this contribution will be in the future we do not know. It will depend very largely on private industry's absorbing the unemployed and using our resources effectively. Most people would prefer that as large a segment of our economic system as possible be carried on under private initiative and as small a portion as possible under public ownership and operation, consistent with full employment and economic development. If the trend continues toward an ever-increasing relative importance of the service industries and a correlative decreasing importance of the commodity-producing industries, the rôle of government might of necessity increase since it is such an important producer of services which have been accepted as falling completely within the realm of governmental functions.

The Construction Industry in National Economy

FREDERIC H. FAY, Member, Massachusetts State Planning Board, Boston, Mass.

THE importance of the construction industry in our national economy is not widely understood. Few realize that the great slump in construction activity shortly after the 1929 crash was a highly important factor contributing to the *severity* of the depression of the past ten years. In prosperous times, such as the five years ending in 1929, total construction expenditures averaged well over 13 billion dollars annually or more than one-sixth of the entire national income. The effect of this huge outlay was far-reaching. It filled the pay envelopes of the several million workers directly employed. These in turn spent their earnings not only for necessities but freely for so-called luxuries, thus stimulating to a marked degree the production of consumer goods. The construction dollar traveled far. It was spent over and over again in ever-widening fields. It contributed greatly to the country's prosperity.

By 1933, the worst depression year, construction activity had dropped 70 percent to a mere four billion dollars, or little more than one-twelfth of the shrunken national income of that year. In other words, in three years' time, expenditures in the construction field had fallen twice as rapidly as national income as a whole, bad as was the drop in the latter. This drastic curtailment in the purchasing power of workers in the construction field had a far-reaching effect in lessening the demand for consumer goods and in slowing down business activity generally.

In what way did the depression affect the construction program? It was chiefly in the curtailment of private building which up to 1929 had accounted for roughly three-fifths of the total expenditure, averaging about eight billion dollars annually. By 1933 this had fallen to one and one-third billion or a mere sixth of the pre-depression figure. Public utilities and public works, each of which had formerly accounted for about one-fifth of the total, dropped at lesser rates.

The depression has witnessed a radical departure by the Federal Government from principles to which it had adhered for a century and a half. This is the adoption of the new policy of lending its credit, and of giving grants outright, to aid the construction of projects which it does not own. Extension of federal credit was inaugurated by the act of July 1932 authorizing R.F.C. loans to States and their political subdivisions for "self-liquidating" construction projects. Although this was the first time that federal credit had been used in this country for the construction of other than federal public works, the idea was not new. For forty-five years this policy had been followed advantageously in England where most of the funds for housing and similar projects undertaken by the smaller municipalities had been borrowed from the national treasury. In 1933 our Federal Government began its vigorous "pump priming" policy with an initial appropriation of over three billion dollars for public works, including both loans and grants to stimulate construction by States and their subdivisions of non-federal projects.

Notwithstanding the huge increase in federal contribution toward construction activity in the past six years we have by no means caught up with our needs. Private construction has made some recovery since 1933 but has reached only about half its former figure. Public utilities are far behind their normal growth. Public works are still one or two years behind schedule. Federal public works expenditures, normally about 250 millions annually and which had risen to ten times that figure by 1936, have been far from sufficient to offset the drop in state, county, and municipal spending. According to the United States Department of Commerce, total construction activity had reached only two-thirds its normal figure by 1937.

A hopeful outlook for the near future is the awakening of the country to the needs of national defense with the impending expansion of public utilities, notably power, adequate to meet them. Another is the endeavor to stimulate modernization and expansion in private industry. Private as well as public housing is needed. It must be remembered that rise or fall in construction activity has a powerful influence on consumer goods industries and that the benefits of increased construction are widespread.

A Public Investment Program

PAUL M. SWEEZY, Harvard University, Cambridge, Mass.

THE title of this paper might form the subject of a lifetime work of painstaking investigation; a good-sized book could easily be written without even touching upon many aspects of the problem. Unfortunately for me, however—though I'm sure fortunately for you—I must have my say today in some ten or fifteen minutes. Under the circumstances I hope you will forgive me if I omit much and simplify my argument to a degree which the complexity of the problem would otherwise scarcely warrant.

The question which I should particularly like to raise in connection with a public investment program is why we want one at all. The answer, it seems to me, is twofold. In the first place there exists a clear and urgent social need for the things which governments can provide through the expenditure of investment funds on durable public projects. In the second place, as Professor Alvin Hansen said in his recent presidential address to the American Economic Association, "it is an indisputable fact that the prevailing economic system has never been able to reach reasonably full employment or the attainment of its currently realizable real income without making large investment expenditures." When private parties in search of profit fail to make these expenditures in adequate volume over a long period of time, as has been the case during the last ten years, there inevitably arises a demand that society should, through its elected representatives, directly assume the task in the general welfare. The only alternative, it appears, would be to scrap the prevailing economic system in favor of one which allows a greatly increased consumption by the mass of the people. Since America seems hardly prepared to adopt so drastic a measure, just yet at any rate, it is difficult to avoid the conclusion that a program of public investment in one form or another will occupy our attention for some time to come.

On the first count, that is the need for public investment, there is little room for disagreement. Very few people, and least of all those present here today, would be disposed to argue that America stands in no need of such things as better roads, schools, hospitals, low-cost housing, parks and recreation centers, forestation projects, soil conservation operations, etc., etc. Consequently I shall pass over this aspect of the problem without further ado.

On the second count, however, that is the necessity of public investment to preserve the prevailing economic system, there is less agreement. Those who deny the necessity of public investment for this purpose generally contend that private investment expenditures can recover to a point where unemployment and economic stagnation have ceased to be the challenge to our social structure which they un-

doubtedly constitute today. Manufacturers' associations and chambers of commerce hold this view, and it is in nearly every instance associated with the belief that "government interference" which "disturbs business confidence" is at the root of our difficulties. Let the government do what businessmen want, the proponents of this view contend, and private investment will immediately revive.

An examination of the facts, however, indicates pretty clearly that this contention is based on wishful dreaming. Private investment in the past has shown a very close dependence upon three fundamental factors, namely, population growth, the opening up of new territory, and the discovery of basic new industries. There is, furthermore, no reason to assume that the same relation of dependence does not exist today. In the case of all three of these factors the outlook today is definitely discouraging. Population growth during the thirties has been no more than half what it was during the twenties, and it is expected to cease altogether in a few short decades. No significant new territorial areas remain to be exploited. Finally technological change today seems to be increasingly taking the form of getting more results with less investment. Certainly no great industries such as the railroad or the automobile are in sight.

There are, of course, those who say that this view is unduly pessimistic, that new industries are certain to be forthcoming in the future as they have been in the past. Even if this be granted, however, the conclusion is substantially unaffected. If the inducement to private investment is to be as strong in the future as it has been in the past, new industries must be forthcoming in much larger volume than has heretofore been the case. This follows from the proposition, indicated above and generally concurred in by economists, that population growth and territorial expansion have been major factors in the demand for investment throughout most of our history, but that they are unlikely to play more than a very minor rôle in the future.

It seems to me clear that an examination of historical trends leads to the conclusion that those who look for more than a purely temporary revival of private investment as a result of this or that change in governmental policy are living in a fool's paradise. Such causal connection as exists between private investment and government policy seems in fact to run in a direction opposite to that envisaged by the theory which we have just mentioned. Many of the policies of government which businessmen most complain of were entered upon only because private investment had slumped to an intolerably low level and gave every indication of remaining there. Why it should be supposed that the abandonment of these policies would now revive private investment is an unexplained mystery to me.

The fact remains that there are many people who now believe that the blame for the present low level of private investment lies with the

government. For the most part they have been taught to believe this by those who are perfectly willing to support public investment if they can dictate its forms and control its execution, but who realize the political advantages to be derived from turning the people against those who are now in power, that is, against the New Deal. From the point of view of the future well-being of the country one can only say that the dupes need enlightenment and the dupers need to be exposed for what they are.

This leads me to my last point. If my argument is sound, the real issue is not whether we shall or shall not have a large-scale public investment program; in the nature of the case no other escape, short of changing our whole economic system, from our present difficulties can be found. The really significant questions are rather of a different sort. The most important in my judgment are two in number: (1) who is to plan and direct the program? and (2) for whose benefit? Here one can do little more than express one's personal preferences.

The two questions are obviously closely related to one another. My basic prejudice is that the program should be planned and directed for the benefit of the people at large, with special attention, however, to that sector of the population, that one-third of the nation, which has never had a share in the conveniences and luxuries of life. And from this I naturally proceed to the further proposition that those in control should share my prejudices to this extent. There are such people in America; some of them hold high office today. The future of the country, I think, depends in no small degree on whether they remain in office and are joined next year by many more who feel and think in fundamentally the same way.

I have said little about the difficulties involved in successfully planning and carrying out a large-scale program of public investment. Partly this is because I feel sure that subsequent discussion will focus the spotlight on such problems with all necessary emphasis. But I should not like you to gain the impression that I think there are no difficulties. I know there are many, and very serious ones, too. But I have faith that there are in the ranks of the American people thousands upon thousands of men and women, like you who are attending this conference, who have the imagination, the ability and the courage to provide the leadership which will enable us to overcome all these difficulties and emerge from our present trials a wiser and a stronger nation. Certainly we cannot hope to save ourselves and the things we value if we are afraid to try.

PLANNING AS AN INSTRUMENT IN BUSINESS AND SOCIAL ACTIVITIES

PRESIDING: COLONEL SAMUEL P. WETHERILL, First Vice-President, American Planning and Civic Association, Philadelphia, Pa.

REPORTER: FREDERICK P. CLARK, Planning Director, New Hampshire State Planning and Development Commission, Concord, N. H.

Banking

FREDERICK H. ALLEN, Bowery Savings Bank, New York City

WHEN I arrived at your conference, I came prepared to read a paper on the relationship of banks to city planning. However, having heard a number of talks during the last day or so of your meetings, I decided to tear my paper up.

I was both surprised and a bit shocked to hear from different quarters a general criticism of the fundamentals and methods involved in banking, industry, and business as a whole. It seems to me that your position in the community is one of specific responsibility—to seek for and find the most direct road to *coöperative* community planning.

The savings banks' part in your communities is a vital one. Perhaps, in as much as they supply a large proportion of the community investment, they might almost be the most vital factor in any future planning which you may tackle. The proportion of depositors in Massachusetts and other New England States pays testimony to the widespread faith that is shown by the people at large in your community banks. The fact that your state laws restrict savings bank mortgage investments to a region in close proximity to the location of the banks is another sign of the banks' importance to you as specialists interested in municipal and town problems.

Whether the bankers in charge show a voluntary interest or not does not seem to me a valid excuse for your disregarding their importance to you. Any hostility on their part to your planning boards and to your house committees may quite conceivably come from lack of understanding and knowledge of what you are attempting to do. It would seem constructive, therefore, for you to make the first move at getting acquainted and for you to try to sell "the community bankers" not on how they individually might profit from intelligent planning, but how they, as trustees, might be able to better the service which they render to their depositors.

In the Bowery Savings Bank in New York, we have about 425,000 depositors, most of them New York people, and, as representatives of this group, we feel not only a keen interest in community affairs but a duty which we endeavor to perform. We are acutely aware of city planning in relation to mortgage and real estate problems. We

have reached, as many of you have, a point in our community where the problem no longer is expansion but rather the reconstruction of old and deteriorated and blighted areas.

We have observed a general inertia on the part of owners and investors in such areas. This inertia seems to come from a lack of vision and, more specifically, a lack of understanding of what may become of their community in the future. The job of planning the course and leading the way belongs to the professional city planners.

We, in New York, coöperate with the city planners, do everything we can to provide them with information which they may need, and follow with great interest the beginnings of an active and aggressive planning study which our planning commission is carrying out at this time. I might add that Henry Bruère, the president of my bank, is also a member of a committee of three laymen who act as an advisory board to our Municipal City Planning Commission.

We have gone farther than simply showing an interest in the planning of the community—we have, in many cases, followed the recommendations of the Commission in regard to trends of communities, recommendations concerning future zoning, indications of discontinuance or enlargement of present state highways and transportation facilities. So aware are we of the importance of these problems as they relate to our present and future solution of our mortgage problems that we even check and double check the Federal Housing Administration despite government guarantee and despite an excellent research staff, because we do not want to take any chances in a scheme which has not been conceived to fit the pattern of community life.

Some aspersions have been cast at these meetings reflecting on the financing methods and practices of the institutions. We would be obviously foolish not to admit the many errors of the past. We would be foolish to overlook the haphazard and confusing growth of our towns and cities. We are aware of the weakness of the past in the complete concentration shown by institutions in the individual loan and the individual problem without related study of the community pattern surrounding that individual case. We realize these errors and many more, and are trying to bring to our new loaning practice the kind of planning which you professional people have studied in relation to the organizing and layout of towns and cities and suburbs.

The visionary and technical part of the problem is considerable and I am sure that if you make the effort to include in your plans the vital and all-important link of your local banking groups, you will have gone a long way toward reaching the ultimate goal of progress.

Business

VICTOR M. CUTTER
Chairman, National Resources Committee, Region One, Boston, Mass.

IT HAS been axiomatic for years that each business must plan for itself and govern both its operating and capital expenditures by close budgetary control. Under stable governmental conditions which existed some ten years ago, planning at all levels of government was not so necessary to business as it has since become.

Today, with present economic conditions, with government absorbing at least 20 percent of national income, and with taxation one of the main items of expense to all classes of business, planning at all levels of government is not only wise and practical but a necessity.

In the first place, all public works and expenditures of every nature must be carefully planned in order to secure the best roads, buildings, etc., at the least cost. In the second place, physical planning today is not enough, but all public expenditures for towns, cities, States and the nation should and must be planned for some years ahead and the plans coördinated with the budget so that a business concern in any locality will be able to figure its probable taxes. At the same time, such a program will enable any business to determine whether it will have the proper facilities for transportation, power, etc., in order to enable it to function most economically in competition with other localities.

Obviously planning is the one great instrumentality which has not yet been used as an aid to business but has now become essential.

Civic Organizations

HARLEAN JAMES
Executive Secretary, American Planning and Civic Association, Washington, D. C.

THE term planning once so glamorous has in many quarters come into disrepute. Those who criticize it most still continue to profit by it in personal and community affairs. Probably the reasons that so many people are shying away from this term which some of us have worked a good many years to explain and popularize lie first in the expanded application of planning principles to bring under its circus tent all the animals in the menagerie, and, second, the fear that it will be one of the really effective instruments of a coming totalitarian government.

Looking back over the years since planning, in its modern sense, first made its debut at the turn of the century in these United States we can recall that the maiden was beautiful—indeed beauty was the watchword of those early plans of Chicago, St. Louis (believe it or not), Rochester and others. Indeed in many places, planning had come into

use by the park and parkway method, as in Boston. We thought of planning in terms of civic centers and parks.

But it soon became apparent that to achieve beauty the maiden must be kept in good health; that sewers, drains, pavements which could be kept clean were necessary for the beauty of the city as well as the health of the inhabitants.

Probably during these early years, largely through civic endeavor, but sometimes by governmental support, there were more city planning reports made in the United States than in all the world up to that time and perhaps since. But most of them were honored in the breach more than in the observance. This was partly because the projects were ambitious and the capital expense large. The voters and taxpayers were not enthusiastic about heavy expenditures. That was before we had discovered the method of using federal taxpayers' money for local public works! It was before we had counted the money we spent anyway, whether wisely or well.

Then we entered the period of street widenings and cutting through our misbuilt cities at great expense and covering years of destruction and construction only to find that the uses we permitted on the land filled our enlarged and new streets to overflowing and the last state was worse than the first.

In the meantime the New York Heights of Buildings Commission, copying similar but different practices in Europe, devised this new and peculiar process called zoning. For years we have sat, if not literally at least figuratively, at the feet of Mr. Bassett at the Zoning Round Tables to penetrate the mystic mazes of the law of zoning and the prospects of making progress or losing ground through the decisions of the judges.

Zoning was the first device of city planning which brought the advantages and disadvantages of the various districts home to the citizens and taxpayers. Most of the ordinances provided for public hearings before the adoption of the use, height, and bulk maps. Moreover changes were made after public hearings.

It is only in recent years that we have come to realize that we have been tinkering with unplanned and misplanned cities, and that there really is a whole technique by which entirely new environments may be provided. We have yet to find a way to base these highly desirable plans on a sound economy.

You all know that we have city planning commissions all over the map; that we have zoning ordinances in most so-called progressive cities and towns. But what has happened to them during the recent depression and recession? Many commissions went out of business. More lost their appropriations in whole or in part. During the years when there were interesting projects being carried out and the local papers were carrying much city planning news, when many com-

missions employed public relations men, the civic organizations which often had originally sponsored the planning or zoning laws, either became inert or abandoned activities in this line. Without this active, organized and informed citizen interest it was easy for a new city council to reduce or omit appropriations or for a new mayor to avoid making appointments or to put in political friends as a hollow honor.

The moral is this: that while it seems unnecessary to bother with citizen groups in good times when there is an active commission and many appealing projects are under way, without the citizen groups in times of depression and over changes in administration the planning agencies languish and die.

There are of course notable exceptions. Cincinnati has weathered all storms; and yet I wonder if the time may not come when a revival of that very efficient Citizens Committee which brought about the new Charter and supported the official commission may not be required to bridge some emergency!

It is quite as difficult to define what we mean by civic organizations as *exactly* what we mean by planning. In some communities the citizen interest has been carried on by committees of some of the general-purpose organizations, such as chambers of commerce or women's clubs. But whether bearing the title committee or council or what not, every town needs a special group of citizens who will keep in touch with official action, help broadcast plans—whether they deserve commendation or modification or rejection. Without this continuous and detailed understanding and support on the part of at least one citizen group which commands the respect of the community, crises are sure to arise in official circles which government alone cannot meet.

This seems a thankless task. It seems much more important to *be* the Chairman or a member of an official planning commission than to *be* the Chairman or a member of a self-appointed committee or organization to keep track of the official commission. And yet for lack of just such unselfish public-spirited citizen groups, many a plan commission has fallen into the doldrums or been totally shipwrecked.

The situation in regard to State Planning is in even a more parlous state. State Planning Boards have fallen on evil times in some parts of the country, and there has been no statewide non-partisan or bipartisan group to keep the work going over changes in administration. In a small way the American Planning and Civic Association has experimented with State Chapters. In some places they have saved State Planning agencies and appropriations.

But if State Planning Boards are to live they must be accepted in the States by the voters as necessary to governors as Budget Bureaus or Public Roads agencies. Planning is neither Republican nor Democratic nor even New Deal, although the New Deal has aided planning. Our citizen groups must see to it that the much-needed aid given plan-

ning by the New Deal does not hold in it the seeds of disaster when inevitable changes in administration occur.

Through civic organizations we can, if we will, provide for the continuity of planning as an official instrument needed by any State and any set of state officials, whatever political party they represent.

All that I have said applies to national planning, though here, of course, the difficulties of effective action increase as the square of the distance to be covered. With all the complications existing at present, the Reorganization Order No. 1 which transferred to the President the National Resources Committee and the functions of the Federal Employment Stabilization Office is promising; but as the President said, we still need an Act of Congress to give the National Resources Board statutory standing and continuity. I believe that if a simple good bill is introduced into Congress the citizen organizations of this country *do* have the sincere conviction which would impress the voting members of Congress with the need for a permanent resources board.

If the officials can give us the bill, the civic organizations can most surely register opinion behind members of Congress.

One last word to planning officials: in good times cultivate closer relations with civic groups—local, state and national—and in bad times they will come to the rescue when planning is threatened.

Education

HUGH P. BAKER, President, Massachusetts State College, Amherst, Mass.

A RECENT work on the colonial period of American history by Professor Charles M. Andrews of Yale University emphasizes the fact that the colonists as they settled in different sections up and down the Atlantic Coast got together almost before their homes were completed to plan for the development of the church and the school. Planning for an educational program was considered as fundamental to the development of new communities and new life in America. And this early planning was not confined alone to the working out of a program of instruction, as simple as it was at the beginning, but there was a definite feeling that the schools should be made an integral part of the whole community; that they should be fundamental to preparation for life.

From these early beginnings in planning for education, both of a primary-secondary character and for higher education as well, there have been continuing developments which have brought us to a system of education in America covering the period from the kindergarten to the university which has been unexcelled elsewhere in the world and, beyond a question of doubt, has been the bulwark which has undergirded and fortified our form of government. The schools which the colonists had known in the countries from which they came were de-

signed almost entirely for the privileged classes. The idea of democracy in education was unknown in the older countries so that the colonists in planning for schooling for all of the children of the time were adventuring in a new field, though there was never the idea that it was an experiment. In other words, there was never a question but that the schools should be made available to all of the children of a community. Soon after the beginning of the common or primary schools, there came discussion and planning for schools that would carry the young people forward, but in the idea of work beyond the common school, the economic situation brought about the development of academies and colleges to be supported in part from public funds and in part by those families who could afford to support them. The general idea of education in this country as it was planned out and introduced in colonial days has been continued with ever greater public support for the primary-secondary schools and colleges. As one looks at the high schools of the land today there is perhaps a feeling that these schools came into existence easily and that the people had always been ready to accord them public support. The truth is, of course, that it took long and careful planning and an aggressive educational campaign to bring about public support of our high school system.

The idea of public support of secondary and higher education came a little more easily as the Middle and Far West were opened up and settled. There seems to have been little question as territories were formed and eventually admitted as States of the Union that these new States should support all forms of education from public funds. The northeastern States have come slowly to the idea that the State has an obligation for support of education beyond the high school, and yet the idea is being accepted and forward steps are being made on the basis of long and careful planning.

So much for the results of general planning for education in the field of primary-secondary and higher education. Within each school, college and university, those responsible for the program of work and for the management of the institution are faced constantly with the necessity for planning, not only for the present but for the future. It has been said, and well said, that every college and university of importance involves careful business organization as well as organization for educational accomplishment. In such a college as I represent, it seems to me that much of each year is given up to planning for efficient business operation and for more effective educational programs. Just now the college is making a thorough study of its whole business set-up and drafting plans for more efficient business operation. It isn't to be expected that the governing board of the institution, or the Legislature of the Commonwealth, which provides funds for operation, will accept all of the plans which seem desirable to the administration group of the college. In other words, an educational institution faces the same

difficult problem of educating the groups concerned with the value and the importance of planning.

The procedure followed in Massachusetts State College, and I am confident that it is true with all of the other colleges and universities of the country as far as the educational program is concerned, could be indicated as a constant effort in planning. Most of the new work which a state-supported college or university takes up comes as result of pressure from the outside. A group in the State is interested in having a certain type of instruction given. They approach the college and this approach is followed by careful studies of the desired educational work and these studies result in plans which, if carried out, will coördinate the program with the main program of the institution and will provide for instruction and financing.

Increasingly as the college plans its work from year to year, it finds it essential to coördinate its planning with other departments of the state government. First and foremost, of course, is the necessity for coördinating its work with the other efforts of the Commonwealth in the direction of higher education. Then comes what is often pressure to coördinate the educational and research program with the other departments of the State interested in planning, in public health, conservation, in safety, in taxation and financial control. It is my strong belief that the colleges and universities of the land are faced with an unusual opportunity for not only coöperation but coördination of activities with all of the activities of other state departments. Reference to just one field will emphasize this particular point and that is the field of public health. The college, by careful planning, has provided means by which young men and women are being trained to enter public health service. In this effort it is meeting the support of the Federal Government. Through its research activities, particularly in the fields of bacteriology, food technology and veterinary medicine, it is in a position to make its research laboratories available for all phases of public health work in the State. No planning for social activities of the Commonwealth or a Nation is complete without the inclusion of planning in the field of education.

Home Economics

EVA WHITING WHITE
President, Women's Educational and Industrial Union, Boston, Mass.

I AM very glad to speak on the subject of planning as it relates to home-making because I think we all will agree that our efforts are important only as they raise the standards of the American home and of citizenship.

The progress which the planning movement has made during these past years must be a source of great satisfaction to those who have

worked loyally in its behalf. Its present phase is that of focusing definitely upon making life more successful than it has been for great numbers of people. At last the effects of environmental conditions are acknowledged. We are determined to do away with the thousands of dark rooms that exist and to make cities and towns truly habitable.

Home economics experts during the last ten or fifteen years have been implanting seeds of understanding that should be significant in the future. Students are discussing the whys and wherefores of renting or buying homes and the kinds of accommodations they should demand. They are being made conscious of their consumers' power in the real estate field by being told that manufacturers and builders will make the product that consumers want. They are also being trained in questions of personal finance, as well as how to use their votes as related to city and town management.

Speaking from the point-of-view of finance, girls and women need certainly to be taught how to get a hundred cents of value for each dollar. Many women have come to me during the depression who were in financial straits because they had made unwise investments following the advice of Tom, Dick and Harry, so that I feel strongly that courses in budgeting and business methods need emphasis.

I have been endeavoring to make my students aware of the vision which the federal housing projects present. I stand foursquare back of that vision. There may be certain errors of construction, but planning of home areas is being applied as never before—the results of which will be evident in the next few years.

Now it is one thing to supply the right kind of living quarters and another thing to live up to the advantages which are given. Therefore we are trying to drive home the personal responsibility for orderliness and thought of one's neighbors which will maintain the original attractiveness; by thought of one's neighbors I mean such things as not playing radios at full force at all hours of the night and day.

I am glad that elements of beauty are to be found in our national housing efforts. It so happens that I am a trustee of a so-called model tenement block which was built some years ago. It never was quite "model," because the architect pared it down to the limit. The walls were a dull gray. It was sanitary to the last degree. It had plenty of light and air but no color on the walls to make it cheerful and almost no woodwork. Now no one wants to go to heaven on a sanitary basis. The result was that for a time the block was practically boycotted. When cabinets were added and the apartments were painted, tenants applied immediately. Even the poor appreciate elements of beauty. The upkeep, combined with good management, has kept tenants from moving in and out. If people are satisfied, tenants will tend to stay.

As to home ownership, most people want to own a home, but one has to be conservative about advocating home ownership because so

much money has been lost in real estate. I know two brothers who married within six months of each other. One bought a house in Roxbury; the other, a home in Newton. When the first brother came to sell his property he did not get back much more than the cost of the foundations, while the second brother's house increased in value. One area was not protected. The other was. This shows zoning is important.

I want to assure this group that home economics people are alert to all the values inherent in the founding and maintaining of homes and in town and city planning. All the school systems in Massachusetts have household arts courses. Moreover, there is not a state-aided vocational school in this State that is not emphasizing those particular factors which rest on a home basis and by which citizenship will come to fruition.

Manufacturing

HENRY S. DENNISON, President, Dennison Manufacturing Co., Framingham, Mass.

I HAVE taken my topic with reference to planning within the factory. It is rather interesting in manufacturing that the word planning is probably used in less than one tenth of one percent of the corporations of the United States. In some of the early stages all planning was resisted over and over again. The people who had come into prominence in the business world were the lads who could jump from their toes the quickest. They were the ones who took a great pride in making a quick decision. You would hear more about some decision they made in some emergency than about any provision to prevent an emergency arising. About the only *plans* we knew were blue-prints for construction and they meant something set which you couldn't change. What we really mean by planning is a course or a route laid out, a course of action constantly being remade. In industry we make a plan and revise it every week, every month, or year; our scheme for inventory control is an example. It is a course and not a status.

The word is little used in American factories. And little of the considerable amount of planning which is done is done consciously as planning. Planning for improvement has grown naturally out of trouble-shooting when machines or materials go wrong; to prevent their going wrong leads to planned betterments and then to orderly research and invention. Planning for operation after much the same history has become the "central planning" for the systematic dispatch of production orders, time and motion studies for progress in method and for rate setting, instruction cards, serial flows of production processes and the like. And planning for investment, probably the oldest form of planning in factories, is the exercise of careful detailed forethought well in advance of immediate need.

The nearest approach to overall or master planning in industry is usually the budget. Since MacKinzie wrote in 1922 business budgeting has grown fast. In so far as it is carefully drawn and vigorously criticized, a working budget is a true master-plan.

Public Utilities

GEORGE K. MANSON
Chief Engineer, New England Telephone and Telegraph Co., Brookline, Mass.

YOUR invitation to participate in this conference is greatly appreciated because it once more gives me a reminder of the far-reaching value to the telephone industry of sound national, regional, and municipal planning. If my remarks about planning in our business, and its relation to your programs, adds some assurance to your convictions, I shall be pleased.

Perhaps there are some individuals and organizations which drift along without planning, but I often wonder if sooner or later they don't receive such a jolt that they are awakened to the benefits which are being lost. Certainly those groups which have vision, and translate their confidence in the future to definite objectives, receive a generous return for their effort.

Although the program for this meeting classifies my remarks under the broad heading of public utilities, they are more specifically related to the telephone business.

Starting in the early days of the telephone business, planning became a vital part of its administration and I believe the present communications system in this country is a vivid example of the application of continuous planning effort.

The word planning covers a broad field, but I place that basic element of long-range planning in a position of particular importance. Here our work in the telephone business is influenced greatly by the many fine objectives of your associations. How can we help being benefited by the results of concerted effort toward safer, more healthful, beautiful and comfortable environment? City streets and intercity arteries which permit freer and safer movement of traffic tend toward more efficient business operation with resulting economic gain to all.

In that field of planning, namely, telephone engineering, which has occupied my interest for many years there are several factors which closely parallel those concerned in community and regional planning. From the picture which I shall try to develop for you I think you will recognize many points of similarity between planning for telephone needs and planning for the community as a whole.

In the early days of the business, our plant was relatively simple in comparison with the complex communication structure of today. However, it was foreseen that haphazard expansion could result in large losses to the business and hence to its customers.

To meet this need, a system of fundamental plans, so-called, was developed, to serve as a guide to the future construction and maintenance of the telephone plant over a long period such as twenty years. Many questions arose as to the conditions which might be expected at the end of such a period. Underlying all this future planning is the question of what will be the total population in the area under consideration? What will be the distribution of this population over not only the area of the community at the time the plan is made but over the outlying areas into which the community will necessarily extend? What will be the nature of this population and its activities in the future? What will be the nature of the community of interest between the different sections of the area under study? To arrive at answers to these and similar questions, studies were made in the field of the nature of the development of the city or cities for which the plans were being prepared. Forecasts were made of the probable extension of business districts, substitution of modern buildings for old buildings of lesser capacity, extension of residential areas, the character of the various residential and business areas as affecting the kind of service the customer would need. Information was obtained from all available sources—past trends, chambers of commerce, banks, city officials, etc.

It must be clear that city planning and the adoption of zoning ordinances are of real importance to the telephone companies. These zoning ordinances, by establishing definite areas for industrial, business and different gradations of residential construction, give us a tangible basis for forecasting the telephone facilities which will be required.

Population estimates and their interpretation into telephone requirements are established not only for the end of the study period, but for intermediate points which may serve as guide posts along the way against which actual results may be checked. With the information plotted by blocks on maps, these estimates became the basis for determining the type, location, and capacity of the principal items of more permanent plant. These data gave a basis for selecting what was the most economical location and number of central office buildings. Central offices should be located at what might be called the center of gravity of distribution, the location to which cables and wires can be routed from customers' premises and other central offices at a minimum cost. The location and capacity of principal back-bone routes for conduit were determined.

You will of course notice how long-range civic planning, of highways, parks, and parkways, town or state forests, community zoning, and your other objectives, will help in planning a more satisfactory and economical telephone plant and reduce the wastes of premature replacement or relocation.

The absence of such a plan to use as a guide to the construction of such enormous quantities of plant as have been necessary to care for

the growth in the business would have been serious. I do not pretend to claim that we can look far into the future and establish a precise solution, where the forces determining growth are so obscure and uncertain in their operation. Our experience, however, has been that these forces and tendencies are capable of determination within limits and a long-range plan, flexible enough to be modified to meet new and unexpected conditions, can be of inestimable value.

An example of the practical application of such long-range planning may be of interest to you. Many years ago, there were five central office buildings serving separate sections of downtown Boston and the Back Bay. These offices were well located at the time they were built and for many years thereafter. In 1917 an extensive review of this area was made to determine how growth, beyond the capacity of these older offices, could be handled. New fundamental plans were developed to decide whether the existing offices should be replaced at substantially the same location, relieved by establishing additional offices at other points, or by concentrating in a smaller number. The development of the art had made available cables containing a larger number of pairs of wire. New instruments and equipment had made it possible to talk to greater distances over wire of a given gauge than formerly. Forecasts of telephones and their distribution within the area were made in the manner which I have described. It was found that three operating centers would provide the most economical operating plan for the coming years, rather than the existing five offices. About 1920 a start was made in the transition by construction of a large building on Harrison Avenue, adjoining one of the older offices. In 1932 this transition to three centers was completed with the construction of a large building at Bowdoin Square. During this twelve-year period all major construction within this area was directed toward the ultimate three-office plan.

Checks were made from time to time, which confirmed the soundness of the plan and present indications point to the probability that this office arrangement will be desirable and economical for a long time. Our real estate holdings and structural design of the buildings are such that additional space can be provided in a normal way at these locations when required for growth, without unnecessary waste or rearrangement of existing buildings, equipment and outside plant.

Similar fundamental plans of other sections of our territory are carried on continuously. These, with modifications from time to time as necessary, will govern future additions of plant.

Another phase of advance planning, which must parallel the needs within each community, is the planning of long-distance facilities to give adequate communication channels between each individual city and the rest of the world. Obviously, it is impractical to provide separate circuits between the thousands of individual central offices in the

United States, and every other city or town. Here again a broad planning approach groups several central offices about a single so-called toll center; several toll centers about a primary outlet of which there are 140; and the primary outlets in turn are connected to one or more of the eight regional centers in the Bell System. Groups of circuits from the individual offices to toll centers, to primary outlets, then to regional centers provide a network of long-distance facilities which furnish the means for fast and dependable service, with good quality of transmission. Planning for transmission which will provide for both adequate volume and a quality which makes for ease in conversation, must of course be assured. The design of all apparatus and circuits must be based on a proper distribution of transmission losses between the various parts of the circuit and apparatus connecting any two subscribers. Without such planning, either poor transmission, unduly expensive plant, or both, would result.

How many paths should be provided over each of these many routes? This must be based on the number of simultaneous conversations expected at the end of that period for which it is economical to build plant. Early in the business, open wire lines, consisting of poles and crossarms carrying bare wire, were the only satisfactory means for long-distance telephony. Developments in the art, however, have made it practical to talk long distances over small copper wires enclosed in lead sheath. On those routes where many paths are required this is a more economical form of construction and less liable to interruption by such disasters as floods, sleet storms, hurricanes, etc. Consequently, the pole lines, with large numbers of crossarms, carrying open wire are gradually being reduced in number.

We must provide large quantities of plant for a short summer peak load.

With a well-developed plan of future requirements on the many routes, it is not necessary to carry out all features at one time. One additional toll cable running north and south may be used to relieve other major routes, thus postponing additional investment and getting a longer life out of existing plant.

In addition to this planning relating to construction activities, there is a similar approach in all branches of the business: future objectives for even better service; an ever greater confidence and feeling of satisfaction on the part of our customers; continued high employee spirit; pension and disability provisions; the maintenance of a sound financial structure as influenced by adequate depreciation reserves, and so on.

Everything which you can accomplish toward national, regional, and city planning will make our planning all the more effective, and each will result in the public interest.

PUBLIC WORKS: THE FUTURE SHARES OF FEDERAL AND NON-FEDERAL AGENCIES

PRESIDING: COLONEL HENRY M. WAITE, Chairman Public Works Committee, National Resources Committee, Chicago, Ill.

REPORTER: ROBERT HARTLEY, Secretary, Public Works Committee, National Resources Committee, Washington, D. C.

Rx to Prevent Depressions

WILLIAM STANLEY PARKER, F. A. I. A.
Former Member, Massachusetts State Planning Board, Boston, Mass.

HOW far is it appropriate for a National Planning Conference to wander from the field of physical planning and trespass on the domain of economics? Would it be really a case of trespass? Is there a definite boundary line between the two fields? Can one undertake a program of physical planning and disregard its economic implications?

There was a time not long since, I believe, when any attempt to discuss economic planning in a conference such as this would have been considered out of order by a large majority of the audience, even if courtesy prevented the Chair from ruling it to be so. But times have changed. Economic limitations have become a dominating factor in the carrying out of a public improvement program. The ability to pay cannot, as in boom times, be assumed. It must be carefully analyzed and will control all decisions as to what improvements can be carried out.

If all this is true it must be held proper for us to analyze the conditions that lie back of this "ability to pay." We must be permitted to study the relationship between public spending and private spending. It will be inevitably appropriate to study what happened in the field of public spending during the depression and to try to relate that to the development of the depression.

It is not within my ability to treat such a study exhaustively but it is the purpose of this paper to point out certain facts and raise some questions which need to be answered with some reasonable degree of positiveness. I will venture to submit some conclusions for your consideration and a declaration of policy regarding local public expenditures which it seems to me it is important for planning agencies to adopt as a basis for their plans and for local public authorities to adopt as a basis for their financial program.

Let us first compare public and private enterprise and how they act in booms and depressions.

Private enterprise, acting on the common basis of self interest, rushes ahead in a boom and holds back during a depression, thus tending to develop and to accentuate the characteristic conditions of such periods. This is inevitable. There seems to be no reason to believe that private enterprise can mitigate or prevent booms or depressions.

There is another large factor in our economy that is fundamentally different from private enterprise and that is public enterprise, those activities that we have decided to carry out through our federal, state and local governments and for which we pay through taxes. These activities constitute our public business and should be administered in the public interest. Have they been so administered? Did they help during the depression to minimize its seriousness or to aggravate it?

Of course, they took care of many unemployed through enlarged local welfare expenses, but, in order to have these funds without increasing taxes, they made substantial cuts in public works. This helped to balance the municipal budget but wrecked the budgets of many families who normally have earned a decent livelihood in the construction industry. Many of those who formerly received wages through the Public Works Department now received relief through the Welfare Department—a change without significant difference so far as the municipal budget is concerned.

The Federal Government came into the picture with large increases in its expenditures for the purpose of providing employment of many different kinds, because the unemployed were of many different kinds. These expenditures did bring about a rise in the national income but have not yet re-established prosperity, and some blame the program for this failure.

The increase in federal expenditures was required, in large part, to offset the unemployment in the field of construction caused by municipalities. These had reduced their expenditures on public works by about two billion dollars a year. This meant about two million unemployed. The Federal Government sought to put them back to work at federal expense. The burden was shifted from local to federal funds. Normal local expenditures became abnormal or emergency federal expenditures.

As the depression developed, municipalities caused increasing unemployment in construction, thus adding fuel to the fire that was started by private enterprise. Is this necessary? Must public enterprise act the same way private enterprise does? If so, how can any cure or even softening of depressions be hoped for?

The public interest demands that the employment required for our various public services and for the production of our new public facilities must be kept reasonably steady, and especially so when private enterprise gets jittery and cuts its payrolls. This clearly was not accomplished during the past depression. Can it be in the future, and by what means?

Consider first public works. The Federal Government can expand its operations substantially in a time of need through its borrowing power. Cities and towns can't do this. Their indebtedness is limited by law to a fixed and quite small percentage of their assessed values. Also during the boom years they collected all the taxes the traffic would

bear and spent them. They were not permitted to set aside reserves for a rainy day, as a conservative private corporation would do. Fearing misuse of such reserves by political office holders it was the accepted rule that municipalities should work on a hand-to-mouth basis, raising taxes each year for current requirements only.

When the slump came in 1929 and continued year after year to drop lower and lower, it became increasingly difficult to collect taxes. Assessed values stopped rising and in most of the larger cities actually declined in their total amount. The total taxes required tended to increase rather than to diminish as welfare relief demands increased more rapidly than savings could be made in other branches of government activity. And these savings that were made by government in public works and school teachers and other forms of normal public employment added to the unemployment created in private enterprise and made the situation doubly bad.

Municipalities are the key to the situation, accounting normally for half of all public works. If they can keep their employment steady, then the ability of the Federal Government to increase its activities can provide an offset to the decline of employment in private business and thus substantially reduce the depth of a depression. How can municipalities keep their expenditures steady in bad times?

The Massachusetts State Planning Board has submitted a proposal to the Legislature (House No. 106) which seeks to provide the answer to this important question. It suggests that there should be established in all municipalities a credit reserve built up out of increased taxation in good times (an annual deposit equal to 2 percent of the budget is suggested), and made available in bad times to permit maintenance of normal activities without the need of an increase in the tax rate.

The protection of any such reserve is the vital point. It must be free from the danger of misappropriation by the powers that be. It must be invested in some way that will permit it to be liquidated in bad times without serious loss and without adverse effect on securities generally.

It is suggested that each municipality invest its reserves in new bond issues of its own if they are available, not to buy up bonds already sold but to take up new issues. Smaller communities do not issue bonds regularly and will often be unable to invest their reserves in this way. It is suggested, therefore, that there be created a State Credit Reserve Fund administered by the State Treasurer. He could give state certificates or bonds bearing stated interest, in exchange for the local reserve funds, investing them in diversified bond issues of municipalities of the State, in state bonds and in federal bonds. For purposes of liquidity there is required to be not less than 10 percent nor more than 30 percent of the state fund held in federal issues. Assuming State Credit Reserve Funds in all the States, it probably would be wise to have a Federal

Discount Bank that could buy the holdings of the State Funds when they needed to be turned into cash in bad times.

The protection of the reserves is accomplished by including in the statute that creates them the definite conditions that prescribe how, when and in what amounts the local reserve can be drawn upon in bad times. This is accomplished by a formula based upon three indices of local financial conditions as follows:—

(a) The trend in total assessed values,
(b) The trend in percentage of taxes collected, and
(c) The trend of welfare expenditures.

Any procedure that depends upon the operation of a fixed formula may appropriately be a subject of suspicion. This formula must be based upon indices that are not only definite matters of public record but that are local and not general in their nature. The formula must be simple enough to be generally understood, and it must be quickly responsive to depression conditions so as to provide financial relief with reasonable promptness in time of trouble. It is desirable therefore to make the proposed formula and its operation clearly understood.

In the proposed legislation (House No. 106) the formula is expressed, as follows:—

(*a*) *Assessed Values* Assessed Value last year, *less* average assessed values two preceding years, *times* last year's tax rate	+ –	$ ________
(*b*) *Percent Taxes Collected* Percent of taxes collected last year *less* average percent collected two preceding years *times* last year's assessed taxes	+ –	$ ________
(*c*) *Welfare Expenditures* Welfare average of two preceding years *less* welfare last year	+ –	$ ________
Total	+ –	$ ________

Administrative Rule: The City or Town Treasurer shall each year work out the above formula according to the fiscal records of the community. If the result of the formula is a *plus amount,* there shall be no withdrawal from the Credit Reserve account. If the result is a *minus amount,* then that amount may be drawn from the Credit Reserve Account, and credited to current income, reducing the amount to be assessed in taxes by that amount.

This formula of itself will not bring the results desired. It is only a means to the desired end. The adoption of a policy of stabilized local expenditures as a national need is the matter of basic importance. I call it a national need because I believe the essential weakness of state and local finances that was discovered when the depression struck us constitutes a critical national weakness.

When the need of emergency financing was accepted in 1933 the States and municipalities were found to be unable to carry any additional load, and the entire burden was laid upon the Federal Government. Local debts could not be expanded, as normal surplus borrowing power was largely wiped out by a shrinkage of the inflated assessed values that formed the local tax base. It is somewhat startling to realize that instead of helping the Federal Government to carry the emergency employment financed in various ways since 1933, States and municipalities actually had reduced their net debt by about 2½ billion dollars in 1937, thus carrying on a deflationary process during the period when they were taking grants in aid from the Federal Government.

And now let me close by tying in this proposed policy to the physical planning procedures in which you are more directly interested. A policy of stabilized local expenditures cannot possibly be put into effect without long-term financial planning supplemented by long-term physical planning. The Federal Government has adopted six years as a basis for programming public works. If a city or town will adopt a six-year programming basis, and budget for the immediate year as nearly as possible one-sixth of the total six-year requirements, repeating this process each year, a stabilized program will inevitably result.

Of course, exact stabilization is out of the question and not of great importance. The important result to be accomplished is to develop a program that will tend to improve the soundness of municipal finances, provide an automatic prevention of overspending in boom years, and provide reserves that will permit carrying on normal expenditures in poor years. If this is done, the employment provided by municipalities instead of following the lead of private enterprise as heretofore, will tend to carry on through temporary depressions, thus reducing the extent of the depression and encouraging private enterprise to resume activity.

This is a declaration of a new policy in municipal finance. If sound, it is of importance to all. The details of the proposed financial procedure may well be subject to improvement. A first need is a clear understanding of the new policy and what it means. The state planning boards may well take the lead in this first program of education as well as in the constructive efforts looking to its adoption that should follow.

DISCUSSION

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MR. BLACK: Discussion of Mr. Parker's paper is, for me, a discouraging business. Good discussion thrives on sharp disagreement. I find myself generally in accord with the things Mr. Parker has said, the situation and the problems as he describes them, and his proposal for partial remedy. Such comments as I have to offer are more in the nature of expansion of Mr. Parker's ideas than of criticism of them.

I have one small reservation. It seems to me that Mr. Parker may be a little over-optimistic as to the net power of his credit reserve toward the stabilization of local public works construction. A two percent annual instalment toward a credit reserve, added to normal budget requirements, may seem quite large enough to the public administrator who is interested at all times in maintaining a minimum tax rate. But it strikes me that an accumulation of that reserve at the low annual rate of two percent isn't going to build much of a back-log against frequently recurring depressions of several years' duration. My mathematics may be all wrong. I admit to not having all the necessary basic figures at hand. But even so, it seems obvious that, at that low speed, only an unprecedented reign of prosperity would enable the building of a sufficient credit reserve to maintain a steady flow of public works expenditures through several years of subnormal tax revenue.

I should think, therefore, that to accomplish its full purpose, Mr. Parker's finance plan may require either an increase in the rate of reserve accumulation, or supplementation by additional means to the same end. I am thinking of such things as the voluntary or enforced adoption, by municipalities, of a "pay-as-you-go" policy during good times, with borrowing power reserved for depression years.

Mr. Parker assumes a local indebtedness approaching legal limits as a normal condition aggravated by liability to exceed the legal limit whenever assessed valuations are forced down by depressed conditions. Voluntary or state-imposed prohibitions upon or regulation of public borrowing, administered under a formula similar to that proposed by Mr. Parker for his credit reserve, would produce, in effect, the same kind of reserve credit at a much faster rate. I should think that some such tool might be employed either in lieu of Mr. Parker's method, or as supplementary thereto.

In my opinion, Mr. Parker quite properly emphasizes long-term planning as a prerequisite to intelligent and effective long-term programming and stabilization of public works. If during this passing depression, government-stimulated and government-financed public works have failed to pull their full share of the load of relieving un-

employment, that failure is due in no small part to the general lack of ready plans whereby a large volume of projects of assured merit might have been quickly thrown into the breach. Not only did this lack of pre-prepared plans retard the operation of the public works stabilizing machinery but it lost to thousands of municipalities, and is still losing to them, the opportunity to get their full quota of most-needed improvements.

The formulation and effective application of any long-term public works program and budget presupposes a considerable variety and quantity of planned projects. And beyond the mere quantity of plans necessary to feed the program mill is the question of quality of projects—of their inherent and relative needfulness and timeliness. Here indeed, as Mr. Parker says, so-called "physical planning" comes into play. In the absence of a comprehensive city plan showing every needed improvement in physical and service relationship to all others, no municipality can program its public works even for one year, much less five or six, with any assurance that first things are placed first, or with any certainty that some vitally needed projects are not being crowded out by others of less immediacy.

I would suggest, therefore, that, to Mr. Parker's preventive medicine, there be added an ingredient designed to stimulate the advance and comprehensive planning of public improvements. It is well enough to strengthen the municipal body-corporate better to endure the ordeal of economic stringency, but strength and vitality to do things, without some directing force to determine what things had best be done, may prove both gainless and costly.

Mr. Kingery: Mr. Parker's "Prescription to Prevent Depressions" is a fine statement of a new policy to guide local public works programs. Its theory appears to be sound. If I understand it correctly, non-federal public works averaged a little under three billion dollars annually from 1922 to 1931 inclusive. Beginning in 1932 those expenditures dropped sharply and have averaged less than one and one-half billion annually since that date, and not nearly all the difference has been carried by federal public works.

Should Mr. Parker's plan for the accumulation of cash reserves through "good" years in anticipation of "bad" years be instituted, the "good" years would probably not reach so high a peak nor would the "bad" years reach so deep a valley.

Practical exercise of this power to accumulate reserves may need stronger safeguards than the Parker formula. Slight errors in mathematics, clever manipulating of accounting, or other bookkeeping atrocities might bring the most surprising results. And whether it will perform so well as an intelligent accumulation of credit or public bonding power is yet to be seen.

I have tried my arithmetic on a typical Illinois town with a population of 15,000, assessed value of $13,000,000, and an annual budget for all purposes of $700,000. Under the Parker formula an additional levy would be made in good times and produce an additional 2 percent of the budget or $14,000 annually for the public works reserve. In eight years this would total $112,000; in twelve years (say 1919 to 1930 inclusive) it would total $168,000 in principal. While this is not a great fund, that amount in addition to normal expenditures might just mark the difference between a level line and a depression in the line of public works.

As opposed to that plan another Illinois community of 15,000 conserved for years its bonding power in anticipation of a program of railroad track depression. For a time it was a losing race, the assessed value dropped more rapidly than the outstanding bonds. However, in mid-1938 it still was sufficient to permit the village to undertake the work with aid from the Federal Administration of Public Works, and by an agreed special assessment levied upon the railroad companies. Not every community will stick so tenaciously to a purpose as did this one. However, a very much greater sum of money became available, $950,000 from the village itself, than would have been the case under the Parker formula. On the other hand the work has not cured the depression even in that one community.

Many of us would like to see this fine thinking, this constructive program given a trial, and it is our hope that the Massachusetts legislators will enact the Parker bills into law and thus make a start on some "depression preventive" measure.

Local and State Programming

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IN ADDRESSING myself to the topic "Local and State Programming" in its relation to the general question before us, "Public Works: The Future Share of Federal and Non-Federal Agencies," I should like to make plain the sense in which I shall use the term "programming." Programming to me means much more than the presentation of a list of the public works needs of a community and a statement of the probable costs that will be involved. In my use of the term, programming will mean an actual scheduling of construction projects, a scheduling which will bring together in proper relation those community needs which will be taken care of by the provision of new public facilities and the actual financial resources of the community in question.

A pre-determination of needs and a pre-determination of financial resources are the two vital elements involved in preparing any long-term program. Clearly, the extent of financial participation by the

Federal Government in local public works undertakings during the period of the program is of very real significance. This has been particularly true during the last six years, during which federal grants-in-aid have in large measure dominated the local public works picture. No one can tell at this moment whether or not this situation is to continue, but I should like to have you consider with me the general principles that should be invoked in this connection.

In the United States we have a well-developed pattern of assignment of public functions to the various levels of government—federal, state and local. Outside of some minor modifications, such as the transfer of jurisdiction of county roads to state highway departments in a few States during recent years, there is little tendency to indulge in any general reshuffling. The existing distribution of functions does have considerable logic as well as the great weight of custom and tradition behind it, but there is nothing particularly sacred about it.

A great many of the functions assigned to local governments for administration and financial support have purely local significance. I refer to such governmental activities as street cleaning, playground activity, and so on. Many others, however, while principally local in their provision of benefits are also charged with national significance, in varying proportion. Here I refer to such things as the provision of transportation facilities, health facilities, education, and so on. Over the course of the years there has been an increasing tendency toward the provision of some measure of Federal Government support for a few of these activities, but it seems reasonable to set up as a first principle that the national interest must be rather substantial before a national grant-in-aid can be properly justified. For it could be demonstrated that there is a certain element of national interest in practically every governmental function, regardless of the governmental level to which the function has been assigned. It could be argued, for example, that the paving of even a purely residential street adds a certain increment to the highway facilities of the nation at large. It should be clear, however, that infinitesimal national benefits do not justify Federal Government support and that for a grant-in-aid to be considered proper the national interest in the activity must be quite apparent. This does not necessarily mean it must be subject to quantitative determination, but only that the benefits derived from the activity are in reasonably large measure diffused throughout an area considerably larger than the jurisdiction of the governmental unit having responsibility for administration.

Has this principle been applied during recent years? At first glance the answer appears to be that it has not, for federal funds have been used in considerable amounts to build local governmental buildings, local streets, and many other civic improvements which yield but negligible benefits to the national community as such. Closer scrutiny

of this grant-in-aid experience, however, makes it plain that an entirely different sort of national interest has been served; there have been important national benefits derived from the construction process itself. Federal financial support has been geared primarily to the employment-creating effects of construction itself, rather than to the intrinsic values of public improvements constructed. We can conclude, therefore, that the principle of substantial national interest has not been departed from after all, although the type of interest involved has been quite different from the type of interest with which we had had experience in the past.

As long as subnormal conditions of employment and business activity prevail, this newly recognized national interest will probably continue to be served in much the same way, short, of course, of a rather drastic change in national policy. But it should be recognized that with the national interest primarily the creation of employment, it is inevitable that the administration of the public works field should be directed primarily toward serving that interest. A great deal of the unhappiness of most public works engineers today is due to their failure to realize that in a national effort to cope with unemployment which uses public works construction as a means toward that end, the traditional criteria of public works values are not applicable. The newer criteria, in fact, are in large measure in conflict with the older criteria of direct public works values. For example, in the selection of projects to be undertaken the amount of site labor that will be required in construction becomes of primary importance, while the measure of the community's need for the improvement takes second place in the determination. Construction methods will be used that will make greatest use of unskilled labor and least use of labor-saving machinery, rather than those that will yield the greatest economy of construction effort. Labor itself will be selected according to its need for employment, rather than its competence to engage in heavy construction. Projects will be undertaken when there is greatest need for the creation of this kind of employment, instead of at the time called for by a careful study of the community's need for public improvements. Programming, in the sense I am using the term, obviously becomes futile, for an unpredictable factor, the state of general employment, becomes the principal determinant of when construction is to be undertaken.

These newer criteria have proved distressing to many public works officials, but they derive logically from the national interest that is being served by the federal grants-in-aid. Criteria consistent with intrinsic public works values, rather than construction process values, can be derived only from a shift in grant-in-aid policy to one that recognizes the national interest in those intrinsic public works values. In other words, federal grants-in-aid would have to have as their primary purpose the provision of community improvements rather

than the provision of construction-site jobs. Could such a shift in policy be justified?

Substantial national interests are to be found in only a few of the public works functions traditionally assigned to local governments. The national interest in a well-developed highway system has long been recognized and federal grants for highway construction have been made for a number of years. The national interest in the public health benefits flowing from several types of local government activity have still to be recognized, however, as have those that come from local educational effort. But the list of local activities charged with substantial national interest is not extensive. Our principle of substantial interest will require that federal financial aid will have to be selective as to fields of local government activity to be given assistance.

One of the important results of federal aid for local public works as practiced during most recent years has been a shift of the financial burden from local taxpayers to federal taxpayers. The desire of many local officials to continue the present situation springs in greatest measure from a desire, and, not unlikely, a legitimate need, to bring about that shift. It is an undoubted fact that most local governments have been in bad financial shape for some time, and the shifting of a share of the burden of cost to the Federal Government may be the only feasible remedy. For such a drastic readjustment to be made soundly, however, clearly demands that it be preceded by some rather careful analysis of the pertinent facts. At the very least, the shift should be accomplished by deliberate action and not by inadvertence. To bring it about as a by-product of unemployment relief through public works construction destroys the morale and even the integrity of local government, and makes a farce of efforts to program local public works.

DISCUSSION

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Mr. Lewis: The smaller the political unit, the less apt it is to have a long-time program for its public works, as the more such projects are liable to be thought of as monuments to the elected officials, who feel that they cannot afford to look beyond their present term of office. There are, of course, communities which will be exceptions to any such rule. When a department is large and well organized it is generally quite free from interruptions due to political changes, and is in a better position to carry on the studies necessary to formulate a program of public works that looks several years into the future. Thus a large city is apt to have an advantage over a village and a State over a city. A federal department would have a still greater advantage.

Many of our municipalities do not have public works programs, in the form of capital budgets, for even one year in advance. Gradually a few are adopting five-year or six-year programs but much educational work is needed, and probably some compulsion through state legislation, before such a practice becomes general.

The national inventories of public works conducted in 1935 and 1936 emphasized the lack of such programs. The former forced many local officials to try and dig up some kind of a project list so that they might be in a position to benefit from some of the Federal grants which were promised for public works to relieve unemployment. When in the following year they were asked to make a more orderly program, based on what they might normally expect to carry out and specifying what proportion of each project would be carried out in each of the six succeeding calendar years, returns were far less numerous and those sent in shrank considerably in size. Many municipalities frankly admitted they had no normal program to which they cared to commit themselves. On the other hand, from a few States where county planning boards were numerous or regional planning agencies were functioning and helped in compiling the inventories, fairly complete ones were again submitted.

I believe the most effective agency to promote local public works programs may be a regional planning commission, but that the National Resources Committee can be invaluable in general educational work along these lines and in the supply of ammunition to the regional agencies. The proposed development of demonstration programs in a few municipalities should be very helpful. I doubt the justification of continued attempts to compile nation-wide inventories of local public works programs.

State departments have, in many cases, quite complete plans for future programs. But both here and in the large cities programs are apt to be out of balance in that certain departments are better organized than the others and will have more complete plans. A capital budget should be a well-coördinated program in which the most money would be spent for those things most needed. This requires the establishment of quite complete standards of adequacy for various types of facilities and a check of existing facilities against those standards. It also involves careful analysis of probable increases, or possible decreases, of requirements due to future changes in population or other factors which may influence the demand.

Here the state or municipal planning commission can perform a great and direct service. I think such planning agencies should, therefore, consider how they may prepare themselves for service in such studies and should try to guide their programs in that direction. I realize that in some cases state and city departments may now be antagonistic toward such activity by a state or local planning com-

mission, but, if the latter shows a little tact and really endeavors to be of service, I am convinced that it will be generally recognized that it is a legitimate and useful field for a planning agency.

MR. McCROSKY: One of the difficult problems of cities, in preparing their capital budget programs, is the fact that it is not now possible to know in advance what funds may be available from the state and Federal Governments in the form of loans and grants.

Municipalities have need for capital funds to carry out, first, a normal construction program; and secondly, new types of construction that form part of the great new program of social improvements that has been set in motion by the Federal Government.

This program includes such items as public housing and PWA projects that would not otherwise be undertaken. One of its purposes is to create work, but it must also be looked upon as a long-range approach to improvement of living conditions and municipal efficiency.

Capital programs require money to carry them out. If we get back to fundamentals, we have to face the fact that there is only one source of funds, namely, the people. Whether public moneys are borrowed or obtained by taxes, it is the people who provide the money. This leads to the suggestion that long-term funds should be obtained by the cheapest available method, which, in general, means that the Federal Government would borrow the money and then lend it to the municipal governments. Mr. Herring has ably pointed out that federal participation in local improvements should be limited to projects that have "national significance." It is my feeling that the people should be served by the cheapest method possible, and that the provision of money, at low interest rates, by the Federal Government is in itself a matter of national significance and interest.

Looking back at past experience, it may be recalled that the Federal Government reduced its national debt by more than ten billion dollars in the 1920's, despite reductions in the income tax rates. I do not believe that anyone would claim that these tax reductions were the cause of the unprecedented prosperity of those years. If the income tax rates had not been reduced, the national debt could have been paid off to an even greater extent.

In the future, it is my conviction that the federal, state, and local governments should create capital reserves out of tax funds, accumulated in fat years, with a view to their expenditure in the inevitable lean years that follow. These reserves could either be invested in special issues of bonds, as Mr. Parker suggests, or could be used for the retirement of existing bond issues to a greater extent than would otherwise be possible.

With the setting up of such reserves there should be definitely established long-term programs of public works, in which the parts

to be played by the federal, state and local levels of government would be carefully coördinated.

At the present time, at each session of Congress, the Federal Government either makes or fails to make appropriations for specific capital improvement programs; and the local governments have no way of foretelling what the Federal Government may do over a term of five, ten, or twenty years. It is true that no Congress can commit a future Congress to enact a prearranged program. However, the Federal Government *does* have power to enter into contracts that are carried out over a long term of years. An example in point is the system of annual contributions contracted by the U. S. Housing Authority to be paid to local housing authorities for 60 years.

Perhaps it would be possible to work out a procedure under which the Federal Government might contract with a municipal government to finance a stated value of local construction over a long period of years; with the understanding that the annual instalments made available would not be equal, but would be determined by economic conditions and needs. For this purpose a formula such as the one suggested by Mr. Parker could be applied. Federal financing under contract should, of course, be premised upon an adequate local master plan and approved long-term capital program. By applying the formula each year, when the annual capital budget has to be made up, the local government could determine precisely how much federal money it would be entitled to receive in the succeeding fiscal year.

In the City of New York the Charter provides that the City Planning Commission shall each year prepare a capital budget for the ensuing year and a capital program for the five succeeding years. Without going into detail, the procedure involves determination by the Mayor, after he has received reports from the Comptroller and Budget Director, of the total amount that the capital budget may not exceed. The Commission calls for capital budget requests from all departments charged with the execution of capital improvements. It then holds departmental hearings, prepares its tentative capital budget and holds one or more public hearings. The capital budget and capital program are then forwarded to the Board of Estimate, the Council, the Director of the Budget, and the Comptroller. After the capital budget has been finally adopted by the Board of Estimate and the Council, and certified by the Mayor, it may not thereafter be amended, except by a recommendation of the City Planning Commission, approved by the affirmative vote of two-thirds of its members. The procedure thus gives the Planning Commission a definite measure of control over the expenditure of capital funds, to the end that improvements may be coördinated with a comprehensive master plan.

Some Problems of Federal Works Programming

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FROM the standpoint of programming, federal construction presents a theme of peculiar interest. Though its volume normally is less than one-sixth that of local public-works construction, yet its influence on our economic well-being is disproportionately great because federal construction is by far the largest single-centered construction operation known and has unusually wide distribution. Its orderly, well-planned conduct is therefore to be sought in the general public interest.

Federal construction also claims attention as an emergency resource to assist in damping out the swings of industrial activity. How valuable it is for the purpose depends on the method of use. Its direct effect on employment is small, but properly used it can exert large indirect effects by revitalizing industry if primary obstacles to recovery are first removed. Undervaluing or ignoring these indirect effects appears to have had much to do with the indifferent success of our early attempts to use public works for recovery.

During the past six or seven years we have witnessed the most intensive works-recovery campaign ever attempted. At the peak of this effort the normal volume of federal construction was more than doubled, rising to an annual total of nearly a billion dollars. The results indicate that the emergency value of federal construction by itself is not great, because no practicable increase of the federal works budget can compensate appreciably for the curtailment of private construction characteristic of times of great economic stress. For this reason it seems important to plan emergency public works with a view to assuring maximum stimulative reaction on industry and least possible interfering or restrictive effect. This desideratum appears to have had little consideration up to now.

Emergency works offer little opportunity for advance programming. A program by its very nature is the response to a definite set of conditions—those of today, or those that can readily be foreseen. Emergencies present conditions not readily foreseen, and it has been found in practice that a program suited to an emergency can be drawn up only after the emergency has arrived.

This very fact, however, emphasizes the value of those processes that programming calls forth—advance study of needs, development of working plans, determination of priorities and time schedules, and estimation of costs and benefits. While wide differences of opinion appear to exist among federal works agencies concerning the feasibility of advance preparation of working plans, I want to express my conviction that such preparatory work, while difficult, is entirely practicable for a substantial part of the federal advance program.

Federal works programming was begun eight years ago as an aid in stabilizing employment. It did not prove effective for this purpose, but it produced other results of value. It developed advance planning and crystallized the purposes of many of the numerous federal agencies that build works. It furthered sound consideration of priorities, and awakened a sense of values and timing. It is now coming to be utilized as a budgeting aid. Long ago it gave timely help to the preparation of emergency programs.

A works program is by no means a simple thing. It is related to public plans and policies, financial and budget conditions, the accounting of expenditures, costs and public investment, the equitable treatment of various regions, populations and interests, and the balance between resource exploitation and conservation. Principles that would permit of taking these relations into full account still await development, and therefore the available programming procedures fall short of the ideal.

Federal public works as well as other public works are something more than structures to serve public use. They are items of national investment which embody and preserve a large part of our savings. If the plan of the works is inefficient or the construction is unduly costly, some of the savings which should have been kept for our children are thrown away instead of being laid by in safe keeping. This fact points to a direct responsibility resting on planners, engineers and construction agencies to see that all public works are created in the most efficient manner—that projects are properly chosen, plans fully worked out, programs efficiently timed, and the actual building carried on without waste and lost motion.

The methods of federal programming will, I hope, be discussed by others better equipped for the purpose. I would like to turn to some of the unsolved difficulties of federal works programming and also remark on the principal theme of this session—the division of public-works construction among our several governments and certain problems related to such division.

DIFFICULTIES OF FEDERAL PROGRAMMING

Priorities. One major programming problem is fixing priorities—deciding which project of a series should be carried out first. In some instances the priority is clear, as where a certain work creates conditions essential to the construction or use of another. In other instances satisfactory tests are available; thus, in comparing two navigation improvements in the same region, one may be more immediately productive than the other. It is less easy to decide between a sewage-treatment plant and a navigation improvement, as there is no common measure of value.

In many fields, usable tests do not exist. Several land reclamation projects, let us say, compete for priority; which has the best claim? Economic evaluation involves elements difficult to compare, and so there is risk that political demand may control. But even where tests can be applied they are not always used. Common report has it that new post offices are decided on by geographic distribution—so many per Congressional district—and that quantitative tests like rent savings or other economic appraisal play no part in the decision. When scores of $100,000 post offices are built for villages of eight or nine hundred population it is probably not done on the basis of economics.

We need to develop better tests for priority determination, and then put those tests to use.

Balance. Second is the problem of balance between different fields of service, which is much more difficult. The relative claims of forest trails and fish hatcheries, flood-control reservoirs and food-testing laboratories, greenbelt villages and drydocks, are difficult to measure, and the end of the matter is apt to be that each type of activity receives about the same allotment of funds for next year as for the year before.

We ought to find more reliable means of determining what funds each service should have.

Conflict of Objectives. The difficulty of choice is particularly aggravated where objectives are in conflict. When the mosquito-control people want to drain a swamp and bird and muskrat men want to dam it up, the question often becomes acute. In this particular field it may be hoped that the efficient Water Resources Committee at Washington will soon work out a fair solution.

It goes without saying that underlying all program tests is the fundamental question of value and soundness of the individual project. In particular every federal works project ought to satisfy three requirements, among others: that the improvement is of public character, that it involves a substantial national interest, and that it is economically and otherwise sound.

Time will not permit enlarging on these tests beyond pointing out what economic soundness implies. It implies a net total of returns, when all damages and benefits are taken into account, sufficient to carry and in due time extinguish the cost. Included in the computation should be the reaction of the work on other works or values, which may be positive or negative and may be of large amount. But in addition, the economic analysis should show that the improvement is of general public value and not of sole or principal service to limited interests. And finally it should show that costs are allocated in fair correspondence to benefits.

A social value must attach to every public works undertaking, of course, or it lacks one essential element of public character. This social value in turn may play a part in the economic valuation, as in the

case of flood control, though in many cases the appraisal of social value is largely affected by individual opinion.

Misjudgments of serious consequence may result if economic foresight is faulty, or the calculations are incomplete, or if soundness is not shown beyond question; public losses and significant dislocations are likely to follow, as in many cases in our waterway improvement history. But thoroughness and integrity of the balance-sheet calculations and proof of economic soundness are important above all in respect to works that lie on the boundary line between federal and local or between public and private jurisdiction.

SERVICE PLANS AND SCHEDULES

A partial answer to programming difficulties may be found in the method used by contractors in large construction operations and by corporations in their plant development, namely, working to functional development plans and schedules. Let us suppose that in each field of federal construction the directing authority of that field prepares a works plan, substantially complete on present facts and outlook, together with a construction schedule based on an assumed period of completion. Bringing together all such schedules and fitting them to the available works budget, with such adjustment of completion times as may be necessary, would yield an efficient works program.

Needless to say, each functional plan and schedule would be in continuous restudy and revision to accord with new facts, needs and policies. Yet at all times there would be a plan, something affording a basis for determination of annual allocations. In one sense the sum of the functional plans would form a national works plan. But a true national works plan is obviously impossible. It would be a dream concept rather than something springing out of the needs of the people.

FUTURE DIVISION OF PUBLIC WORKS

In respect to the division of works between our several governments, the question first presents itself whether public-works construction is likely to decrease, particularly in view of the stimulated activity of recent years. The answer is no.

Public works are necessary works. They are a response to the needs and wants of the people, and as such are bound to keep pace with physical requirements, changes in living habits, and advance in the tools and methods of industry. An efficient highway transportation system, for example, has come to be as vital to industry and business as to social existence. Thus, while the emergency programs of the depression years included some undertakings of the Fort Peck Dam type, by and large all public works that have been built were urgent necessities.

Has public works construction been overdone? By no means. It is well known that no community is able to say that its streets, sewers, fire and police facilities and schools are complete, modern and in full repair; and there are many other essential public facilities. In a nearby State extensive sewage treatment to reduce stream pollution is a rather pressing need. In all States refuse disposal and local flood control present important claims. The antiquated condition of thousands of small highway bridges is likewise giving concern everywhere, and the backwardness of the grade-crossing situation is notorious. The national works picture is no better. The truth is that development of public needs goes on faster than the provision of works to supply these needs.

With this condition before us, and with growth and obsolescence constantly calling for new facilities, it is safe to say that public works construction will not decrease. On the contrary, substantial increase is inevitable. An annual budget of 3½ billion dollars for the entire country may be taken as the minimum to meet current wants.

As to the division of these works among the several governments, we face the fact that depression finance has temporarily distorted governmental relations, particularly in respect to public works. The question really is: Will federal construction remain a significant factor in the field of state and local works? In my belief it will not. Our fundamental principle of self-government, under which the people themselves decide what they need, and provide for it through the government closest to them and to the matter in hand, is certain to remain in control and will determine future public works responsibilities in the same way as those of the past.

JOINT-INTEREST PROBLEMS

Some significant recent changes affect public works relations. Growth and new needs have expanded the scope of federal works; new national responsibilities have been recognized; expedients devised to meet depression conditions have disturbed normal public-works procedure; and many matters of joint concern to several governments have arisen.

Examples of the actual or prospective entrance of federal activity into new fields are found in flood control, stream purification, resettlement of stranded populations, airport construction, soil and water conservation, power development, and shore protection. Of these, flood control as contemplated in the 1936 and 1938 acts of Congress illustrates the recognition of a new responsibility. An even more prominent example is the federal emergency housing work, which deals with a matter previously thought of as beyond the federal sphere. These new activities may at times appear to imply a trend toward direct control of local affairs by Washington. As an actual fact, all of them are cases in which there is a substantial partnership of interest between federal and other governments.

Emergency financing has complicated this intergovernmental situation. To recall some of its items, we have emergency works aid to communities, at first by loan, later by subsidy; extension of the federal-aid system from highways to housing and prospectively to stream purification; and the work-relief system of the WPA, which contrary to original purpose has entered deeply into the field of local public works construction. These several expedients have disturbed public works conditions and rendered many of the normal controls inoperative.

Federal emergency aid has allowed a feeling to grow up that improved public facilities are and should be obtained at no cost to those benefited —the first step on the downward path of irresponsible profligacy. This trend has been accelerated by the exercise of more or less extensive federal control as a concomitant of financial aid. Such control has tended to warp the sense of prescribed and definitely bounded function of the individual governments, and public works relations have been correspondingly distorted.

Particularly has the WPA system exerted a disturbing effect. It has disorganized works planning, selection and budgeting on a country-wide scale. Permanently sound relations in the public works field can hardly be reëstablished until the system is eliminated.

A further important factor in the public works situation of today is the rapid increase in number and importance of interstate problems or of joint state-federal problems. Satisfactory methods for dealing with these problems are still only in germ, and the result is confusion and in some instances stagnation. Thus, New England flood control marked time for over a year because methods and habits of coöperation between the States and the Federal Government had not been worked out.

The scope of works problems and projects in the state-federal sphere promises to become larger. Some of the projects affect only a few States and involve only a quite subsidiary federal interest, and these could be dealt with by joint action of the States if readier means were provided for bringing about such action. Others are not amenable to interstate action alone or else involve a federal interest large enough to require federal coöperation. At present projects of both kinds are delayed or stalemated in progress. Federal as well as state and local works are affected, and the difficulty is the greater because it includes many matters on which the Federal Government comes into direct contact with cities and other subdivisions of the State.

More adequate means for state-federal coöperation thus are one of the greatest needs in the field of public works. The principles on which it must rest include little beyond fair dealing, mutual respect, and consideration of the obligations and powers of all the parties, which should be easily capable of being embodied in legislation and practice. In view of the importance of state-federal relations respecting public works, it is to be hoped that this task can soon be accomplished.

DISCUSSION

FRED E. SCHNEPFE, Director of Federal Projects Division, Federal Emergency Administration of Public Works, Washington, D. C.

THORNDIKE SAVILLE, Dean, College of Engineering, New York University; Member Water Resources Committee, National Resources Committee, New York City

MR. SCHNEPFE: Mr. Schmitt has presented an excellent paper, in his usual clear and convincing manner, on a subject to which he has no doubt devoted much careful thought. However, there are statements in his paper which require further consideration and discussion.

His statement that emergency works offer little opportunity for advance programming gives an erroneous impression. While it is true that an emergency program should not be prepared until the emergency has arrived, the preparation of a suitable program cannot be accomplished expeditiously, unless so-called "normal programs" are available from which to build up the emergency program. This was illustrated by the experience of the Public Works Administration in the selection of federal projects for inclusion in its emergency program in 1933.

Reference to "emergency" works, as if they differ materially from "normal" works, also requires clarification. An emergency program of Federal Public Works should be, for the greater part, made up of projects that would be, in due course, constructed under normal conditions. The process of building up an emergency program is largely one of advancing the program to include work which would be constructed, under normal conditions, at a later date. Generally speaking, it consists of extending the normal program by including projects which would ordinarily receive regular appropriations several years later, thereby providing needed projects at an earlier date and relieving the Treasury of the necessity of making appropriations for these projects in the future.

Mr. Schmitt appears unduly concerned about the difficulties connected with the programming process. His reference to the difficulties encountered in fixing priorities and the determination of balance as between the different fields of service, would indicate his disappointment at not being able to find a mathematical formula, the application of which would produce the required answer. There is no such easy road leading to the solution of advance programming problems, and needless to say, there never will be. In referring to these difficulties, he is referring to the real problem of programming. By comparison, most of the other factors connected with the procedure are simple details.

The principles involved in the advance programming of expenditures for construction projects are not new. They have, of course, been applied for many years in industry. The principal difference between planning expenditures for a commercial enterprise as compared to planning governmental expenditures lies in the fact that in commercial

projects the measure of the return to be expected from the investment may be expressed in terms of dollars alone. While this is also true in some instances as applied to governmental projects, the returns, while they may be of great value, for the greater part cannot be measured from a purely monetary standpoint. For example, it is obviously impossible to place a dollar value on expenditures that the government might make for the construction of military facilities for national defense, for improvements in the national parks to provide healthful recreation and pleasure, or for lighthouses for the protection of shipping. While certain projects are revenue producing or provide economies or services, others produce social benefits only.

It should be remembered that there is nothing final about an advance program of public works. The program, if it is to be of value, must be revised annually so that projects which have been placed under construction can be eliminated, additional projects can be included; projects can be eliminated if the need for them no longer exists; revisions can be made in amounts and timing; and priority ratings can be changed.

One of the major beneficial results of the federal works programming begun eight years ago is its educational aspect. Not until 1931 were the various agencies of the Federal Government called upon to think in terms of visualizing their construction requirements for several years in advance, and to prepare lists of projects to be considered for inclusion in a correlated program for the entire Federal Government. Some of the agencies questioned the policy of disclosing these plans so far in advance, fearing that it might cause embarrassment with Members of Congress if certain projects were not included in the program. Others objected to listing their projects on the ground that they did not think it possible to forecast their construction needs six years ahead. A campaign of education and demonstration gradually broke down this resistance with the result that complete coöperation is now obtained from all the agencies.

Mr. Schmitt comments on the need for more adequate means for state-federal coöperation in the field of public works, and expresses the belief that this can be attained through legislation and in practice based on principles of mutual respect and consideration of the obligations and powers of all parties concerned. To that I would like to add the thought that planning on a state-federal basis, through the activities of the NRC, PWA and other agencies, should prove to be a vital factor in attaining such coöperation.

Dean Saville: Mr. Schmitt has presented an admirable contribution with his usual lucidity, and has followed precisely his title which deals with "Some Problems of Federal Works Programming." He has pointed out clearly numerous problems which exist, but has unfortunately not attempted to present any solutions as to how these problems

may be solved. Most of us I take it are concerned as to whether present programming procedures are good, bad, or indifferent, and whether new procedures can be developed which would be more effective than those which we are now trying to use.

My own remarks will be confined largely to the programming of public works which relate to the development or control of water resources, since that is the field with which I am most familiar. Up to the present the general procedure seems to have developed about as follows:

1. The collection of necessary factual data. While this is an essential element in all programming efforts, there is frequently a tendency continually to postpone the commitment to a definite plan or project until just a little more information is collected. While probably many more projects have been constructed on occasions where vital basic data have been lacking than have projects been deferred for the collection of such data, nevertheless I believe there is a growing tendency to hedge on commitments to specific projects alleging the necessity of collecting more data as a basis, whereas the real difficulty is often simply a lack of courage to meet various controversial problems connected with the project or plan.

2. A decision with respect to the character and location of the public works needed. This step is usually taken without much reference to priority of consideration, and that seems to be a sound basis.

3. An estimate of the cost of the proposed public works. These cost estimates have all too frequently been based on inadequate basic data or on too hastily prepared plans or both. This is particularly true of certain of the larger public works constructed by federal agencies during the past five or six years. I think it is fair to say that in rather few instances have the initial estimates been adequate to provide for complete construction, particularly as new difficulties have arisen in the course of construction.

4. A listing of priority with respect to different projects. This initial priority listing is generally based upon immediate consideration of needs, and without much reference to the necessity of projects of another character which may be in competition.

5. A justification for the project and the economical considerations surrounding it. Here again reliance is usually placed upon the project by itself, without much reference to where it fits into an over-all picture in relation to other projects of like character.

6. A study of the relationships of several projects to one another and to projects of a different kind.

7. A revised priority listing, in the light of results obtained from investigation of the items previously mentioned.

The procedure which I have indicated is that which I should say was more or less in effect with respect to state and federal programming efforts. The theory seems reasonably logical, but Items 5 to 7 inclusive

have caused a great deal of difficulty and are frequently not adequately explored. It is of course difficult to get all relevant factors with relation to a given project and its effect on other projects. It is also difficult to get group agreement on any priority listing and on the relative importance of a single project in a group of projects. A good deal of all this must continue to be settled in our somewhat stumbling democratic way, influenced by bureau jealousies, political expediency, and plain prejudice. However, some of us are rather fond of the democratic principles, and are willing to lose something in efficiency by maintaining them. We have to remember that this whole planning movement is young, that it will be definitely improved with experience, and that confidence in its results is bound to grow if it is given a chance to justify itself through reasonable experience and by trial and error.

The greatest present difficulties which seem to me to exist in attempting to apply programming in the water field are necessarily those which are inherent in human nature and which are reflected in our political practices. Some of the outstanding of these are:

1. Bureaucratic and local interest pressures and prerogative. I may give a few examples of what I mean.

(a.) Recently a large new navigation project has been recommended involving the expenditure of a good many millions of dollars. Justification for this project, as is the case of most similar strictly navigation projects, is in the reduction in the cost of rail transportation which will ensue after the navigation improvement is completed through forcing the railroads to reduce freight rates. The actual amount of new traffic to be stimulated by the proposed waterway is of relatively small proportions. The question at once arises as to whether it is necessary to invoke such an expensive method of obtaining a reduction in rail rates, assuming that that will be effected upon completion of the waterway. To construct and maintain an expensive waterway which exists largely as a threat to the railway carriers forcing them to maintain lower rates while such a waterway exists, does not seem a very economical procedure. It would appear as if a survey of the entire transportation needs of the region should be made, involving coördination of rail, highway, and waterway transportation. If the factors justified a reduction in rail rates, then it would appear that the Interstate Commerce Commission might bring about such a reduction without having to spend many millions of dollars in building a waterway merely as a threat. Adequate over-all planning would presumably resolve a question of this sort. Navigation improvements are ordinarily stimulated by chambers of commerce, shipping interests, port authorities, and so forth. These are local pressure groups. Furthermore, the state or federal agency concerned with constructing the proposed waterway is naturally interested in maintaining its activities. These are bureaucratic influences. Good planning might conceivably reconcile all of

these interests and maintain the public works program as a whole on a reasonably even level.

(b.) Another example is the flood control situation which has developed in New England. Here local interests had reconciled most of their difficulties on a regional basis, and an appropriate federal agency had produced plans which were generally acceptable. Suddenly another federal agency injected itself into the picture and in effect prevents the execution of an interstate compact on the ground that the proposed procedures are not in accordance with a certain federal policy. This is a question of bureaucratic prejudice, which may well have been justified, but which ought to have been reconciled long before the program had reached the compact stage. Really adequate planning, which certainly must include the coördination of proper interests of all local, state, and federal interests, would have prevented this situation from developing. This is a clear indication of the imperfection of our present planning technique, but it is by unfortunate instances of this sort that we learn to improve our technique in a new and developing field.

(c.) A final example of the type of difficulty I have been describing is in the promotion and acceptability by a governmental agency of one type of project as contrasted to another. For instance, a member of the City Council, or a Congressman, will certainly get vastly more credit from his constituents if he is responsible for the appropriation for constructing a series of playgrounds or swimming pools than if he had promoted a sewage treatment plant. The public generally want things that they can see and enjoy rather than something which is unseen and of a purely utilitarian character providing them with no individual personal enjoyment which they can recognize. Sewage treatment plants may be eloquently argued and conclusively justified by facts, but it is extremely difficult to present these in such a dramatic way as one can readily do for recreational facilities. Therefore, the planning agency is at once up against public and political opinion which may frequently over-ride its recommendations. This problem will always be with us so long as we maintain our present form of government, and it is only by education that its influence may be reduced.

2. The relation of multiple purpose projects to an individual project priority. Mr. Schmitt has stated that "In some instances the priority is clear, as where a certain work created conditions essential to the construction or use of another." Even in such instances the priority of a given project is not always clear. For instance, we may have a multiple use reservoir which may materially increase the low water flow of a polluted stream. The dilution afforded during low water times might well reduce the character and cost of a needed sewage treatment plant. One might say that therefore the reservoir should be built first. Theoretically this is so, but the reservoir on the other hand may be complicated by a number of factors, including great cost. The capital

sum might not be available for the reservoir, but may be for the sewage treatment plant. Furthermore, the reservoir may not be justified economically until a certain power demand has been created, or until certain other relevant factors have been achieved. In such case priority may often be given to the sewage treatment plant, but its design must contemplate the ultimate construction of the reservoir. Complicating factors of this sort often require time to resolve, and for this purpose it may well be that the sewage treatment plant should be postponed until plans for its design and operation can be thoroughly coördinated with the probable future construction of the reservoir.

3. The economics of public works structures. In the case of most public works structures, at least in the water field, some effort is given to justifying them upon the basis of economic considerations. If a structure or project is revenue-producing, it certainly should have in general higher priority than if it is not. Many projects are justified by certain indirect and estimated financial returns, such as many navigation projects. Such cases involve not only the over-all transportation picture which has been referred to previously, but also whether it is sound public policy to give in effect a federal or state subsidy to one or two commercial interests which would be the chief users of the waterway in question. It is usually difficult if not impossible to discover whether or not even such individual commercial users will pass on any savings to the general public which must support the improvements. Then there are various projects justified on intangible benefits, usually associated with the public welfare. Projects primarily for recreational purposes fall into this class, as do many of the elements of certain flood control projects. Little by little we should hope to put the evaluation of these intangible benefits upon a more precise basis, and there is certainly a developing technique for doing this.

Too often we are prone to forget, in our impatience with concrete results from recent planning and program activities, that the whole planning effort in this country is relatively recent. Of course there have been city planning efforts for a good many years, but I think that prior to 1930 these were largely of a pictorial character. Even regional planning on such a basis as the New York Regional Plan is only about ten years old. Public works planning such as we have been considering at this meeting can be considered hardly five years old.

Therefore, we must remember that our public works program procedures, on any basis of government, have been evolving rapidly over a rather short period of time. There has been a great impetus to this activity through the procedures of the National Resources Committee and its predecessor in the past five years. There have been changing concepts during this period. It is regarded as fundamental that we should begin on the lowest level of government in our planning efforts, and work upward. The city plan and program, the state plan and

program, the regional plan and program (and in the water field the drainage basin plan and program), should all lead up to a national policy. I distinguish clearly between plan, program, and policy with respect to federal activities. It would appear that the individual government agencies ought to have a planning program, and that this should be made to fit into a national policy.

The matter of coördination of efforts is fully as important as the effectiveness of a plan and programming procedure. It has seemed to me that planning boards or agencies on all levels of government should be a mixture of representative citizens and the governmental officials. Through joint effort of this sort I believe we may continue to develop in the future as we have in the past few years our concepts and our techniques of adequate programming.

As Mr. Schmitt has clearly pointed out, planning and programming should not be related fundamentally to emergency considerations, even though our present activities have been largely the outgrowth of such considerations. It is certainly poor economy to save a million dollars by the elimination of a planning agency, and then some year in the future to spend twenty million dollars on a single project which is subsequently found to be ill adapted to its purpose and uneconomical in its operation. This has happened more than once from lack of adequate planning and programming. It is far better to defer some project which may seem quite desirable until we can determine if it will produce the expected results and if it fits into a sound plan and program. All of this provides a good check on the bureaucratic influences and upon political expediency which I have discussed previously. Ultimately planning and programming, if maintained on sound basis by reasonably well supported agencies set up for this particular purpose, will be effective instrumentalities for the orderly and economical construction of public works.

STATE PARKS

SELECTED PAPERS PRESENTED AT THE NATIONAL CONFERENCE ON STATE PARKS, ITASCA STATE PARK MINNESOTA, JUNE 4-7, 1939

Headwaters of the Mississippi River—Outlet of Lake Itasca
Itasca State Park
Minnesota Division of State Parks

EDITOR'S NOTE.—The 1939 National Conference on State Parks was held at Douglas Lodge in Itasca State Park, amid Minnesota's ten thousand lakes. Most of the delegates spent at least four days at this fine forest-and-lake park in order that they might participate in the fishing, boating, riding and hiking which comprise the principal activities for park visitors. Thus they practiced what they preached.

The papers presented at the Conference follow. Because of the nature of the report, one important contribution is omitted. The results of a careful Study on Annual State Park System Records were presented by Charles DeTurk. The importance of uniform methods of reporting has long been recognized. The recommendations for forms and information were adopted by the Conference, to be transmitted to the various States. An article on "State Park Records and Financing" by Mr. DeTurk will be presented in the "1940 Yearbook—Park and Recreation Progress," published by the National Park Service and sold by The Superintendent of Documents, Washington, D. C.

The presiding officers at the sessions of the Conference were: William E. Carson, Herbert Maier, Paul V. Brown, Thomas J. Allen, Jr., Mrs. Henry Frankel, and Howard B. Bloomer.

State Parks – an Appraisal

RICHARD LIEBER
Chairman of the Board of Directors, National Conference on State Parks, Indianapolis, Ind.

FOR the nineteenth time we have come together in the interest of state parks. We have learned a great deal about state parks and continue learning every day. These meetings offer the much needed opportunity of exchange of opinions. Success or failure will depend on the manner in which we come to agreements or even arrive at wholesome compromise.

There are many minds and naturally many opinions on matters of detail, questions of policy and procedure. The great tie which unites us is our interest in state parks. We have met in the cultivation of this interest and no matter what our particular specialty may be, we can find a common ground in the furtherance of that great ideal—the preservation of original American scenery through the medium of state parks.

Since our last meeting, in Tennessee, thanks to the untiring effort of Roberts Mann, a great step in advance has been taken and the extraordinarily successful first institute for state park workers at Syracuse University last February and March is a testimonial to the energy, capacity and perseverance of Mr. Mann and those who assisted him in his efforts. We are, therefore, greatly indebted to Captain Sauers, and particularly to Professor Laurie Cox, an inspirational leader of the first order, who deserves the major credit for his superb ordering of the schedule and the teaching. During our deliberations we shall hear more of the details of the work. For the ensuing year we look forward to the further unfolding of this immensely important work and trust that we may have the assistance of the National Park Service, Branch of Recreation and Land Planning, as well as that of Mr. Fechner's Civilian Conservation Corps.

Not only those who attended the institute benefited but also some of us who appeared as lecturers. It became obvious that in the prosecution of our state park work we must hold fast to the original conception of its primary purposes. We should be reminded that the secret of all success is constancy of purpose. Generalization will no longer do, and declaring a given area a state park will not make it one. Nor does it augur well for a sound structure of future park usefulness and stability if we fail to call diverse undertakings by their proper name. All things in their proper place and therein properly labeled.

It should be clear to us by this time, having watched the extraordinary extension of state areas during the last six years, that state parks, state historic memorials, state forests, regional or local recreational areas and wayside camps serve a purpose all their own. All of these are important parts of the social fabric but to be effective must remain distinguishable

parts. All are intimately related to human welfare but in order to render the intended service they must be kept apart so that their functions may fully be realized and not become confused with that of another facility, let alone impose themselves upon some other's primary function.

Today there is an ill-starred tendency to scramble all recreational eggs and call the result a state park. Conrad Wirth called attention to that hazard in 1935 at Skyland. He said, "While there is a tendency for park conservation areas and the park recreational areas to grow together, we must always bear in mind the distinction between them, and forever seek a means of separating these two types. I say this because if the bars were let down and no consideration given to park conservation areas (and that is an easy thing to do, for park recreational areas are very popular with the masses), we should soon find that they would encroach so far on our conservation areas that the latter would cease to be such and would automatically become recreational areas. There is a great need for both types, and perhaps one of the most important reasons why park recreation areas are more popular than the park conservation areas is that we, as a nation, take to a vigorous type of recreation due, almost entirely, to our past history, which has been one of enterprise, hardships, and progressive endeavor. However, we are on the threshold of maturity, as a nation, and we must give careful consideration to our finer senses which will desire an atmosphere for our leisure time such as can be provided only by park conservation areas."

The result of that observance in the breach is general confusion. We of the National Conference are primarily interested in state parks. We have made ourselves clear what we mean by state parks. Not long ago Secretary Ickes gave expression to one important desideratum of state parks. "When state parks are more removed from crowded centers," he said, "if I had my way, I would foster and cherish the wilderness aspect of these parks. I hope as the States develop their own park systems, they will have in mind that citizens in time to come would like to know what the country in each State looked like before we civilized people came in and began to work our will on it." That is the essence of state parks. I remember well the initial steps which led to our first conference at Des Moines.

The organization was based on Stephen T. Mather's thought that the creation of state parks should not only relieve pressure on the National Park Service by taking over small, yet distinctive, areas, but also that much of that superior scenic beauty still available in the States but perhaps not of national significance could be preserved if the various States undertook the work.

Sometime ago Harry E. Curtis, Richard E. Bishop and I had a two-day session considering the Park, Parkway and Recreational Area Study. The upshot of it was a statement which reads somewhat as follows:

State park selections as originally considered by the country's leading

state park builders were based upon scenic considerations, sites being selected upon their intrinsic, scientific and historic value of significant quality in the State. The sites were selected for this quality alone. Preservation of these examples for cultural reasons is the primary cause for their being.

The quality of scenery naturally differs one State from the other. Comparisons would be odious, and of course senseless. Of whatever is available in a given State the best should be selected. It is impossible to lay down ironclad rules for still another reason. Some States are long and narrow. Their economic and even social life has grown into regions. Again there are smaller highly industrialized States on the Atlantic seaboard up into New England, where these industrial centers naturally fall into well-defined regions. In all of these cases state recreational areas then might fill in the gaps in the state pattern in sections of the State where there are no true state-park possibilities. They would be selected upon their qualifications as the best existing or potential natural area in the section under consideration.

The qualification would be positive rather than relative; positive meaning of highest value not in the State at large but in the particular locality; that is, best lake, highest relief, best timber, rather than relative based upon some wholly arbitrary minimum standard of scenic pulchritude. In state recreational areas, the desirability of creation of an artificial lake, the restoration of the introducing of ground cover, timber, would not rule out an area and to a limited extent would be advisable.

But we should proceed with great caution for the responsibility of supplying outdoor recreation in natural as possible surroundings can never rest entirely with the State; certainly not with a branch thereof, viz., the State Park System. The industrial centers with their abnormal concentration of population owe a duty to their populace to finance as an offset recreational areas within bounds of accessibility of area and mobility of their people. County parks, metropolitan areas and city parks are pointedly referred to. National parks, national forests, national recreational areas, state parks, state forests, state recreational areas and other conservation areas (bird sanctuaries, hatcheries, historic national monuments, etc.) fill a cultural as well as a social function, other than pure recreation. These areas do not and cannot ever completely or even adequately fill the desires or needs of our people for more recreation. It is, however, fortunate and eminently suited that they fulfill social recreational functions in so far as they may do so and still carry out their primary function. It is not believed, however, that the provision of all facilities needed or required by our people should be provided in these areas, not even in the state recreational areas. Only those functions which are compatible with the primary purpose of selection, development, and maintenance of the areas should be considered.

The ultimate national recreation plan should be arrived at by a re-

view and an analysis of existing conditions and trends for the future, which may disclose the recreation needs and desires of the people.

This, then, would be considered a social plan in which without interference with their primary functions, forestry, fish and game, and other agencies would play a part and in which county, metropolitan and city systems would provide for purely local needs. In this fashion it would be a system wherein each agency would fill its primary function; the various conservation agencies taking care of such recreation phases as opportunity presents and which are compatible with their original objective.

It was the opinion of Mr. Curtis in which I did not concur that the state park agency might coöperate financially with local park agencies and promote proper local provision of recreational facilities. My reason for this dissent is the certain belief that, in consequence, these local park agencies would fail to exert themselves while demanding that the general taxpayer should carry the load. I pointed out that the State might, upon request, provide consultant service but should never financially participate with lesser units. At the same time I hold that the State should have sufficient authority to obtain coöperation of the local units in providing indicated local recreational requirements—the example of White Pine in Illinois and the necessity of areas to reduce its overload were mentioned.

It was finally agreed that if the State would undertake the provision of local recreational facilities it had but one of two alternatives: one, either by providing it for one community, set the policy and, in consequence be compelled to provide it equally for all citizens (manifestly a labor of Sisyphus) or second, wisely restrict itself by providing local communities in need of such areas with competent, professional and technical advice.

Messrs. Curtis and Bishop restated their belief in the value of state recreation plans completed to date, in the recommendation of a land plan in attempting to solve the important problems of the State, in attempting to "sell" to the people as well as to their authorities the worthwhileness of state parks and state recreation areas. It was felt that these reports should aid in the legislatures and that particularly comparative information from other States might be helpful.

The National Plan then can, on the basis of completed state reports and with advice of recognized park authorities, set forth the general principles to which the States and other park and recreational units subscribe and might further set minimum standards of state operations and maintenance as a yardstick of Federal participation in state developments.

The plan further would set forth the recreational requirements of the people and describe the coöperative or separate responsibilities of the various agencies in the field in order to fulfill these needs of Federal, state, and local, public and even private, park and recreational systems. The National Plan, then, is not to be a new survey but solely a clarification of previously accumulated information. It is to be a specific enumeration

of all the comparable facts and a setting forth of all trends—an agreement on recommendations from previous experience, facts and plans.

While state recreation plans have stirred up considerable public support and probably have been helpful in getting such funds as are appropriated, it has become evident that the trend of budget committees of state assemblies is not to appropriate sufficient amounts to continue desirable development. I have a feeling, borne out by the action in some States, that the over-emphasis and over-extension of purely recreational features of mere local importance through its high cost item has operated against the granting of funds asked for and needed for state parks. There was a time when I thought that the States would resent our suggesting differentiation between scenic parks, recreational parks and other units as we broadly classified them. But, to my surprise, it is now the States which point out their continued, albeit often academic, interest in state-owned properties of state-wide significance but insist that hereafter recreational sites serving only local needs should be locally maintained.

The National Conference stresses the primary purpose of state parks and insists upon proper separation and classification. The preliminary plans submitted by the various States were largely recreational in scope and character considering inclusively all agencies providing recreational opportunities. Our interest is in state parks and while we readily concur and even strenuously insist that state parks have recreational uses, having ourselves introduced those long years ago in the various units, the park's proper recreational use should only be such as is compatible with its primary objective. Beyond that, city, metropolitan, county park and recreational systems should be responsible for meeting the short time, short distance, out-of-doors demand through organized recreation in their immediate vicinity.

In order to be of continued service to our State and Country we must be careful not to scatter our shot. We must realize that our greatest strength consists in self-limitation. Only if we can keep and maintain our interest in the high standards, remembering at all times the primary object of our organization, can we serve best. Only he who keeps his own affairs in perfect order can be depended on to help others.

State parks are meant to be the show windows of a State but more than that state parks are a dedication to the soul of the land. When we speak of "Our Country" or the "Land of the Free," as practical people, we mean just that. It is the land on which we all depend in the last essence. It is the land and the very soil, the trees and waters, the dales and glens which we love. Without vision a land will die. Without inspiration we remain disconnected from the immortal order of all things. Our state parks; let us preserve the sources of our inspiration.

First Landscape Management Institute at Syracuse

LAURIE D. COX
Professor of Landscape Engineering, New York State College of Forestry, Landscape Architect, Central N. Y. State Park Commission, Syracuse, N. Y.

WHEN Roberts Mann and other members of your Committee first took up with me, a year and a half ago, the question of a month's short course for experienced park men, the idea seemed to me a very doubtful one. I was, of course, familiar with short courses and their possibility, but the idea of a course as serious as a month's duration seemed to me to present a difficult problem. This in spite of some knowledge of intensive training, since our college has conducted for over 20 years an 11-month comprehensive forestry program at our Ranger School in the Adirondacks. It seemed to me that a month's course must be either too long or too short—too long for the topical form of a normal short course and too short for a definite and comprehensive consideration, such as we attempt to give in college courses.

However, realizing the need of such training in the present period of state park work and being thoroughly in sympathy with any efforts along this line, I began a serious study of a possible technique to be used in such a short course, and set up a tentative outline which, if you remember, Mr. Mann referred to in his report at last year's meeting.

Now, as you probably all know, we did actually hold a month's short course known as an Institute of Landscape Management. It was held at the New York State College of Forestry at Syracuse, where, as most of you also probably know, we have been building up over the past 25 years, in our program of Landscape and Recreational Management, the only college course in the land aimed primarily at training park men. We completed this first institute with reasonable satisfaction and we had about as many students as we could handle.

I will attempt to give a brief account of this institute, and for convenience I will arrange my observations under three heads.

I–*Type of men attending.* We had in attendance at our course some thirty-odd men coming from 12 different States, extending from Colorado in the west to Vermont in the east, and from Minnesota in the north to Mississippi in the south.

All these men were experienced park workers and, as was to be expected, there was great variation in their educational background, their technical training, and their park and recreational experience. The majority were college men and a considerable number had technical training in some phase of the park and recreation field, such as landscape architecture, engineering, forestry, horticulture. We had one man who was a graduate landscape architect. We had two men who were graduate civil engineers, and there were three men who had graduated from my

own department, trained in park design and administration but who had been out in active park work for a considerable number of years and who wished to renew their park ideas. On the other hand, we had some men who had only a high school education.

We had men representing all the important phases of modern park and recreation work, with experience in national, state and county forests, and in national, state, county, metropolitan and municipal parks.

In age classes the men varied from comparatively young men, 25 years or younger, to comparatively mature men in the 50-year group. We had men whose experience had been in quite different climates and whose knowledge of scenery and vegetation was, therefore, various. We had men from widely differing types of recreation areas, from wilderness forest areas on the one hand to woodland areas in highly developed urban regions on the other, and from park areas with very simple facilities to those of quite elaborate development.

This great range in age, training, park background and experience is, I think, rather striking evidence that there is a seriously felt need in the park and recreation field for the aid and development which a course of this type might give. It will also, I think, indicate the extremely difficult problem which faces those who conduct such a course if they are to find a program which will interest as well as be of value to men of such differing types.

II–*The Program or Course of Study.* It is of course difficult in a short time and without wearying you to say much about the program covered. Briefly, we gave work covering the following fields or phases of work: landscape and park design, landscape engineering and construction details, park administration and management, park and recreation program, park publicity and public relations, forestry—including dendrology, forest reproduction, fire control, forest entomology, forest pathology, and wildlife management.

In addition, we offered some consideration of those basic sciences such as botany, zoölogy, ecology and geology, upon which an understanding of the natural landscape depends.

The program for the work of the course was definitely set up for the entire four weeks. All lectures and lecturers, outside as well as those from our own faculty, together with the exact subject for each period, were assigned. This in itself, as you can realize, was a rather big job and involved much correspondence. As the course progressed, it was found that certain phases of the work, due either to the subject or the instructor, were less well received, and certain other subjects better received than we had expected. As I personally attended all lectures, field trips and laboratory exercise, I was able to sense this condition quite quickly and repeatedly made shifts and changes.

The work was set up on the following basis. One-hour lectures were given continuously every day from nine until noon. The afternoon was

divided into two, 2-hour sessions, from one to three and from three to five, thus giving a seven-hour day. The afternoon sessions were divided between lectures (usually supplemented with exhibit or demonstration material), laboratory exercises and demonstrations, and short field trips. One full day each week, Saturday in all cases save one, was devoted to an extensive field trip, 200 miles or more. These trips were to park and forest areas and were a most important part of the course in that they were arranged in progressive fashion, so as to bring home certain general truths and principles, which had been discussed during the preceding week. The Syracuse Region is very well adapted for that form of field trip, since it is possible to find a large number of recreation areas with a great range in type and form of development, including areas of state, county and municipal ownership and of both forest and park character. There are in the region particularly interesting examples of the two principal types of area, which today form our major state parks, that is, those in which the park problem has been approached, primarily from the viewpoint of scenic protection and those in which the approach has been primarily from the viewpoint of supplying intensive recreation under scenic conditions. We likewise have in the region areas showing very inexpensive development and those of quite elaborate development.

In setting up the program originally, evenings were generally left free, and only a few evening sessions, mostly of a social nature, had been scheduled. I had supposed that the Institute students, the majority of whom would be active outdoor men, would, after seven hours of concentrated mental work, be rather fed up and need the evening for rest, recreation, making whoopee or what have you. However, almost from the start, the men expressed a desire for more evening meetings. As a result, several discussion meetings were organized and several professional lectures were moved forward into evening sessions, to make room for expanded work of the daytime sessions.

In conducting the routine teaching work of the course, we were fortunate to have the services of some of the finest teachers and scholars of the college and university, some 18 different faculty members conducting work. We also had a very high quality of outside speakers. Fourteen such visiting speakers conducted work during the course, and some five or six others whom we had expected to have, were only prevented from attending by unforeseen emergencies. These outside speakers were all of wide experience in varied forms of park and recreation work and many were of national reputation.

While it is of course impossible to give a complete list of such speakers without wearying you, I might mention a few to give some idea of the excellent quality of the speakers we had available. Among them were included your past and your present President, Colonel Lieber and Mr. Wagner. Others were "Bob" Marshall, head of the Recreation Division of the U. S. Forest Service, "Connie" Wirth of the National Park Ser-

vice, A. D. Taylor, President of the American Society of Landscape Architects and Recreation Consultant for the Forest Service, the inimitable Roberts Mann, "Jim" Evans, Director of Parks for New York State, Herman Boettjer, General Superintendent of the Long Island State Park Commission, and specially loaned to us by Mr. Robert Moses, William A. Frank, probably the greatest expert in moving large trees to be found in this country, and many others. Among those scheduled but unable to come because of unforeseen emergencies were Major Welch and Miss James, your Executive Secretary. These outside speakers represented almost every important phase of park and recreation work.

However, in spite of the large number of outside speakers, discussing important phases of park work, and the large number of faculty teachers coöperating, the amount of work evolving upon the staff of my own department was very great. I, myself, prepared and delivered something over 20 lectures, and in no case was it possible to use old or existing lectures, as everything had to be worked over, condensed, revised, supplemented and in certain cases new material secured.

The instruction work was set up on the same basis as that of regular college work. We divided our program of study into some 14 different and distinct courses, each with a name and number. Regular weekly schedules, showing lectures, laboratory exercise, field trips, by course and number were prepared and given to students at the beginning of each week. Because of changes, such as have already been explained, these had to be frequently revised and made over. All faculty instructors, as well as outside speakers, thus spoke on a definite subject, at a definite hour as a part of a definite course. This system, I believe, had great value in keeping clearly before the students that the course had a serious purpose and it also enabled the students to keep run of the instruction and see the relation of the different individual talks, trips and demonstrations as an organized whole. Without this, I believe the great mass of information, both theory and fact, presented to the students, might very easily have formed in the student's mind a hopeless and confused mass.

Recognizing the varied interests of the men attending, and wishing to get their first-hand reaction, we prepared a short questionnaire of some 11 questions, which was given out and answered by the men on the final day. Some interesting results were obtained from this questionnaire with respect to the program as given.

The first question asked what subject interested the student most. In first place was park and landscape design—listed by 18. In second place was park management and operation listed by 12 others, and the numbers choosing each were as follows: pathology was listed by 5; silviculture and forest control by 4; identification of trees and shrubs by 3; construction by 3; recreation facilities and program by 3; wildlife by 2; and entomology by 1.

The strong preference for work along lines of park design and management, which the four-week program tried to emphasize, was especially notable. Evidently the general conception of the program suited the tastes of the men. The thing which surprised me most was that such a small number stated their preference for the subjects of construction and plant identification, which were two subjects I had expected to be particularly popular.

Another question asked which subjects had interested the students least. There was no particular trend indicated here, and apparently no one or two subjects stood out particularly in the students' minds as being unacceptable. The most significant fact indicated by the answers to this question is that only 10 men, or approximately 33 percent of the group, even mentioned one subject. So apparently no subject or subjects were generally unacceptable.

One question asked was whether they felt they received full value for their time and money. Twenty men, or approximately 66 percent, expressed themselves as having had full value for the time and money spent, and of the remainder no one expressed opinion to the contrary. Apparently all students were either well satisfied or fairly well satisfied.

On the question whether the course should be held again there was a very decided opinion, represented by 66 percent of the men, that the course should be held again. On the question: Should the course be held every year, only two-thirds of the men replied and the opinion was equally divided as to whether the course should be held every year or every two years. On the question as to time of year to hold the course, there was a difference of opinion as was to be expected. Of the 17 men expressing an opinion, 12 showed a preference for the late winter or early spring, about the time of year when the course was held this year.

III–*My Reactions and Suggestions.* My reactions and general impressions as a result of this course are as follows:

1. Such a course as this, to be effective, could not possibly be given by a small group of teachers or faculty personnel. In my opinion, there should be not less than a dozen forestry and landscape teachers available as an absolute minimum.

2. Such course, to be effective, could not, in my opinion, possibly be limited to the normal scholastic content of a single college program, be it landscape architecture, civil engineering or forestry.

3. The faculty members, carrying the detailed direction of the program, should have some considerable practical experience in park and recreation work, covering the three phases of design, development and administration. I believe this is vitally necessary if they are intelligently to meet the students on a common ground and hold their continuing interest. The man who is a theorist only will be in constant hot water with men of a group like this. I found this out with one or two of our instructors.

4. Only the very best teachers are effective. It is probably the most difficult form of teaching that could possibly be imagined. Dull lecturers, even if brilliant scholars in their field, who can get by all right with normal college students, are practically certain to be total failures in a short course of this kind. If the students' interest is not closely held the whole program sags.

5. Outside speakers are absolutely necessary for the success of the course. I think the absolute minimum would be eight, or two a week. The problem of scheduling outside speakers is very difficult. We repeatedly had to change our schedules, because visiting speakers were compelled to change dates. It has been suggested that such speakers be scheduled only in evenings to overcome this difficulty. I do not think this would be a wise change. One of the great values of outside speakers is to prevent the routine lecturers, who must carry the burden of the work, from becoming monotonous to the students and further, the outside speaker should handle a definite subject at approximately the proper place in the course, so that sometimes morning lectures and sometimes afternoon lectures are quite essential.

6. I am not certain that a month is the proper length of time for such course. I believe that a course, perhaps fully as effective, could be given in three weeks, with less strain on both faculty and students. The strain on the directing faculty is terrific, since there is no slowing up or rest period from the time it opens until it ends. I gave approximately from 12 to 14 hours of work a day continuously, including Sundays, and this strain is much harder than ordinary work since one is compelled to be on his mental toes constantly.

On the basis of a three weeks' course, the tuition could be reduced if a minimum of 25 students was available. There would also be a week's saving in board and lodging costs and for those coming from a considerable distance, the whole course, including traveling to and from, could be contained in a single month's vacation or leave.

7. I doubt if such a course should be given every year. I believe every other year would be often enough. It will take any school or department about one year to get over such a course and another year to build up their enthusiasm for a new one. Such a course as this cannot be given in a plodding fashion, and to avoid that, there is nothing like a rest period sufficiently long to reawaken enthusiasm on the part of those conducting it. I think it would be much better to give fewer courses of a high grade than a large number of mediocre grade.

8. I believe there is a great value in having such institutes attract students from widely different sections of the country, rather than have the students all come from a single region. The exchange of ideas and viewpoints adds tremendously to the effectiveness of the interest and morale of the students as well as to the interest and morale of the faculty.

9. I do not believe such a course could be effectively given with more

than 50 students and that a smaller number would probably be better. The number which we had was almost ideal, especially in the matter of field trips and laboratory exercises.

Personally, I enjoyed having a part in this first Institute very much. However, it was the most difficult educational problem which I have encountered in some 25 years of teaching. I think I got fully as much out of it as any of the students did. Whether I am anxious to repeat the experience, I am far from sure. It meant the complete disorganization of my regular college work for four weeks, and it required six weeks of double lectures, double labs, criticisms and conferences to catch up with my schedule afterwards. If I had not given almost my entire time and effort to the work and if my principal assistant had not done likewise, the course would have been much less effective than it was.

In retrospect, I feel very much like the man who was shipwrecked for a year on a desert island, who stated he would not have missed the experience for a million dollars but would not give two cents to repeat it.

In closing, I would like to note for your interest and possible questions the general state park philosophy on which I attempted to build the course and perhaps I can do that best by repeating a portion of my concluding ten-minute lecture, which I gave to the men attending the Institute. This is as follows:

> The real value which any of you will get from such a course as we are completing today will not be wholly apparent at once. If it is really valuable to you, you will find that it will be more valuable to you a year or two years from today than it is today. I hope that we here at the college have had enough vision in laying out this course to have started you all, even the most experienced and most able of you, thinking along new lines: thinking in a way which will in future years, give you something more than an opinion, but rather a certain basis of judgment for park and recreational problems, of some of which you may not even be aware today. I hope after all the shouting dies away and you have gone back to your various regions, you will carry permanently in your minds, as a souvenir of the course, a certain definite park theory.
>
> I would like to suggest to you seven points, which it seems to me form a basic philosophy for this whole park and recreation picture as it pertains to scenic areas, such as the state park or the recreation forest in which we are all so interested. This is a sort of state park "credo." These seven points are as follows:
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> First, Naturalistic recreational areas such as parks or forests or whatever we may call them are not luxuries but are vital and essential factors in our life and time if our modern mechanized civilization and our American individualistic culture is to endure.
>
> Second, There are two forms of recreational use or recreational values for such areas—we may call them active and passive recreation, as Mr. Wirth named them; or intensive and extensive recreation, as Mr. Mann prefers; or as I have named them to you, play recreation (thinking in terms of the body) and rest recreation (thinking in terms of the spirit); or just recreation and scenic appreciation. Of these two definite forms, whatever we call them, although the great mass of the general public prefers and emphasizes the active or intensive form much more keenly, it is the scenic appreciation or rest recreation which is, in the last analysis, by far the more vital and important.
>
> Third, While the "public" must be served, if it is to be served best and in the

long run, the use of such recreation areas must be such that it does not use them up, and the determining factor of use is wise use—a use which leaves no slightest question but that the area will supply indefinitely this vital factor of rest recreation. Perhaps the best catchword to express this wise use is 'scenic saturation'—a phrase I coined some years ago and which is now in quite general use. If it is within our power to do so, we must always try to keep our use of natural areas safely within the limit of such "scenic saturation."

Fourth, To accomplish these aims we must have good design; and the great fundamental questions of publicneed, recreation possibilities and sound economics are the chief considerations on which a design must depend. Personal whim, old precedent or standardized detail have no place in good design. The best method of arriving at good design is probably the master plan method, but always remember that even with such a master plan no design—no park plan—is ever static. If the design is not good, satisfactory use and administration are hopelessly handicapped, and likewise bad administration permitting unwise use will eventually destroy even the finest design.

Fifth, No one park executive, however able, can know everything or successfully function without the aid of the various sciences, arts and techniques. The successful park and the successful design need the aid of all, such as the landscape architect, the engineer, the forester, the architect, the science technician, etc.

Sixth, While nature is generally a rather safe guide to follow, we must always realize that there are very few (practically none) examples of scenery with which we have to do in state parks and forests today that really are natural scenery. They are practically always the result, to a greater or less degree, of man's long-continued abuse, and it is very clear that what man has abused he can also restore or possibly in time improve. I sometimes think there are fully as many evil results in park and recreational planning and administration which emanate from the false premise that all natural-appearing landscapes are natural, and therefore that in handling them we should adopt a hands-off policy, as there is destruction of "scenic values" by unnecessary man-made improvements; and there is an awful lot of both.

Seventh, and finally, There is one and only one complete test of any park or recreation area, both as regards its design and its administration. Submit it to these three criteria:

One. Does it perform its major function of supplying rest recreation service with reasonable assurance of permanence?

Two. Do the people like to go to it over and over again?

Three. Is it beautiful?

If it fails in any one of these three respects, it fails in toto.

Future Plans for Park Training Courses

ROBERTS MANN
Superintendent of Maintenance, Forest Preserve District of Cook County, Illinois

THE 1939 Institute of Landscape Management, had it accomplished nothing more, justified its attempt by pulling the cork on a lot of opinions that had been silently fermenting in their own juice. Some of the corks hit the ceiling. Many of the ostensible differences resolved themselves into differences of definition.

"There is a treacherous chasm between language and the reality of which it speaks."

"Sobald man spricht beginnt man schon zu irren."

The principal objectors gave guarded support when we explained our program to be one of education for administrators and operators *at various levels*, rather than technicians, with the express purpose of developing an appreciation of the functions of the several technicians and their relationship to the art of landscape management.

We are asked to declare, further, whether we are primarily interested in *land* management or in *landscape* management. To my mind the distinction is academic and unimportant, and yet upon it depends the coöperation to be given us by some die-hards in the profession of landscape architecture and the ability of at least one great university to conduct such an institute in the way your committee insists that it shall be given. We accept the challenge. We mean *land* management: The management of native landscape areas for mass recreational use and for the preservation, consistent with that use, of its trees, its waters, its wildlife, its wildflowers, its grasses, and the biotic balance so vital to their continued existence. We are seeking administrators who are not technicians but fanatics—fanatical in their love of the land unspoilt.

The question is: how to get 'em? You say they are born, not made. Right. But they have to be uncovered and trained. They don't spring forth like Pallas Athene, full panoplied. When the schools of landscape architecture relegate to proper emphasis the design of Italian gardens for wealthy widows and recognize the practical limitations in the design of recreational areas for actual operation and public use, then we can safely entrust the training of our successors to them. We are willing to concede that the basic technique of the landscape architect is an indispensable element in the background of a successful landscape manager. Also that the basic training of the forester and that of the engineer tend to be so technical as to neglect the esthetic, cultural and social values inherent in the landscape. But we hold their training to be broader, more administrative and equally indispensable. Therefore we propose to "meld" the three—as they say in pinochle—with training in business administration, public relations, some of wildlife management, and a little of architecture. We've left recreational planning out of it because

we believe organized recreation has no place in the state park and forest picture.

We can make no concession to the skeptical gentlemen who view with disfavor our proposal to create what they call "jacks of all trades." What else are we operators? The more varied our talents, the more catholic our experience, and the more encyclopedic our minds the better we meet the unpredictable demands of our jobs. In our profession we have an inclusive term which we bestow as an accolade on such a man: "He's an *operator*." And we are trying to educate operators.

We did it at Syracuse. I spent a week there attending all classes, a field trip, an evening of free-for-all debate, and a social gathering with no "lid" on it. I talked informally with every man I could segregate. We submitted a questionnaire probing into the individual reactions to the course. We've had two unsolicited letters since: one keenly analytical yet praiseful, the other openly critical of certain phases. Both were helpful. The institute was disappointing to the extent that the majority of the attendance was composed of superintendents and foremen from CCC camps, largely National Park Service men, with too few employees of state park and forest systems. There were several metropolitan and county park men but none from the state systems of any but New York.

Some of the subjects were a little too technical for some of the older men with limited education. In such a group there occur men whose minds are closed, or partially so. Accepting this probability which cannot be permitted to curtail the curriculum, there remains the inadvisability of including subjects too technical for ready absorption by the park and forest operators and the outstanding CCC enrollees we are aiming for. Dr. Cox realizes this. As a matter of fact the course was so fluid and so constantly subject to revision that the final schedule as given was far different from the original. We can make one flat-footed statement: There is probably no other educator at any other institution in the country who would plan and give such an institute—certainly for the first time—as successfully as it was given at the New York State College of Forestry by Laurie D. Cox.

However there is evident need for at least two additional institutes—one in the South and one in the Far West—and a possible fourth in the Middle West. Travel expense and time will deter many men from attending at Syracuse. Because their problems are generally different and because of sectional pride, several organizations will send men to an institute in the South or one in the Far West when they would not or could not send them to Syracuse. Our investigations show that the University of Georgia and the University of California offer the most suitable locations for these additional institutes for men in the lower brackets. The Conference having approved, the problem now is to bring about their establishment, which can be effected only with the active aid of our leading members in those regions.

The institute at the University of Michigan was abandoned this year at the last moment because it did not appear there would be sufficient attendance for economical operation at two schools. The decision was influenced by a question of policy which established jurisdiction over the institute at Ann Arbor wholly within the Department of Landscape Design and would have placed over-emphasis on certain phases of education. Since then the picture has changed. The Forest Service has indicated great interest in this program and an intent to send a number of its men engaged in their recreational program, as part of their in-service training. In that event, Michigan would present an excellent location for another institute, having had the valuable experience of a successful short course in Public Administration as applied to Forestry, for Forest Service men during the past winter, under the auspices of the school of Forestry and Conservation.

Conferences with Robert Fechner and his assistants indicate a possibility that the CCC will send upwards of thirty outstanding enrollees to these institutes, as scholarship awards to be financed out of certain educational funds, if available.

It is incumbent upon us at this time to insure recognition of each man who attends these winter institutes. He should be ear-marked for better or more permanent jobs and his progress recorded. Otherwise the whole program loses point. It is neither consistent nor fair to hand him a certificate and pontifically intone, "Goodbye and God bless you." We have incurred an obligation upon ourselves.

The question of undergraduate and graduate training still is and will be open to debate. The leading educators hold the optimum solution to be a four-year cultural course with enough technical subjects to point the boy toward a career in landscape management, followed by three years of graduate work along specific lines. Preferably there should be a break somewhere, during which the young man would spend at least a year in the employment of some good park organization. Two years would be better. But this does not work out in practice. They get married. They somehow fail to lay by the necessary funds to return to the university. Or they are reluctant to abandon the job in hand. They begin to doubt the importance of additional training and the master's degree. The practical alternative is summer employment but after two years of campaigning in the Chicago area we find it impossible to get summer jobs—even at laborer's wages—for more than 4 or 5 recommended men.

Many students interested in park work get summer jobs, through influence or chance, but too many do not. The members of the Conference owe it to their profession and to the future of their own properties to encourage these students by making available for them as many jobs as the budget can be stretched to provide.

It now seems propitious to advance for consideration the second phase of our educational program in the form of regional conferences or "con-

gresses" for men in the higher brackets. I am prompted by a letter written by an ECW man in Region One of the National Park Service, which poignantly voiced the need for the inspiration and knowledge to be gained from regional meetings conducted to bring abreast of their profession these men who have made this work their career and who cannot or would not turn back. Those of us in the larger, outstanding recreational areas have a multitude of contacts, particularly if located along the transcontinental routes of travel. We have complex use-problems; we have the men, money and resources to do big things well; we operate proving grounds that attract all "visiting firemen" and the peregrinating pooh-bahs in their travels. We show them around and complacently feel that they learn much more from us and yet, directly or indirectly, we gain from such contacts. We attend these and other conferences or conventions. Not only do we gain in stature by the exercise of our many parts, but also by the osmosis that transmits both knowledge and perception.

Then what of the man whose orbit lies outside the familiar path and whose magnitude exerts no strong-felt pull on the bright stars in the park firmament? For them and for us all there is definite need for regional mid-winter conferences open to both the administrator and the technician. It seems to me that they could be made to stimulate the membership and interest in this National Conference on State Parks. As I see it, however, they must attract and not exclude, either by title or program, the national and state forest men engaged in recreational work. The problem and the need transcend any quarrel over jurisdiction and any bureaucratic divisions of land use.

There would not be many speeches in such a regional conference. There would be general and group discussions with selected leaders on selected topics to be determined in advance by questionnaires sent out to all likely attendants. There would be a dissemination of bibliographies of recommended books and articles. A week or ten days would accomplish the purpose. How many regions and the places of meeting to be selected are matters for the consideration of this Conference. Someone with initiative and a capacity for detail will have to assume the very considerable burden of leadership and organization in each region. You can't *nudge* these schools along: The wheel-horses have to get in there and *pull*.

We've gotten started an educational snow-ball. This first year's increment alone justified our effort. Given direction and impetus, this movement promises to mold the entire park and forest recreational picture. And I stand by my original conviction that among the administrators in that picture there is no place for mediocre training, mediocre men and men without *roots*.

Federal Aid for State Parks - The CCC

ROBERT FECHNER
Director, Civilian Conservation Corps, Washington, D. C.

IT IS a real privilege to have the opportunity to attend this Nineteenth Annual Meeting of the National Conference on State Parks.

At the onset let me say that I am glad this country had an organization like the National Conference on State Parks when the CCC was first formed. Without its timely aid and without the help of the membership—both official and private—of this organization, I am certain the Corps could never have accomplished as much as it has in the way of improving recreational facilities in this country.

When the CCC was established, the National Conference on State Parks had been in operation for thirteen years. Some States—Minnesota is a notable example—had been active in the state park movement for more than forty years.

The National Conference on State Parks offered its aid at once when the CCC began operations. Its counsel was most useful. I feel that this organization has a right to be proud of the aid it has given the National Park Service, and the Office of the Director, CCC, in the advancement of the state park movement throughout the nation. I know that I am glad to acknowledge the debt which we owe to the far-sighted planning of this group and other civic-minded citizens in furthering a park and recreational program which is proving to be of immense benefit.

The people of this State are to be congratulated for their enterprise in arranging for the development of this beautiful area for the use of its citizens and visitors. For myself, and for the CCC, I want to say that we are proud to have been of help in making the Itasca State Park the recreational center it is today.

Though the CCC is a young organization in point of time, it has already brought about great conservation improvements in our forests, parks and agricultural lands, and is aiding in the gradual upbuilding of our natural resources of timber and soil. I but voice the sentiments of you here and that of many other conservationists when I say that the CCC has given park and recreational area development the greatest impetus it has ever had.

The Corps, as you know, carries out some 150 types of projects in its nation-wide conservation progam—a program designed to strengthen forest and park protection systems against forest fires and the attacks of insects and disease, to plant trees on vast areas of unproductive and burned-over lands, to advance a large scale program for demonstrating practical erosion control measures to farmers, to aid wildlife programs, develop national and state parks, improve drainage districts, rehabilitate the public range, carry out flood control projects, and other types of conservation work.

But I should like to speak briefly today of one phase of the many-sided work program carried on by the Corps. Principally, I want to talk about state parks and their tremendous growth in popularity since the Corps was founded. Our records show that through the coöperation of the CCC, the National Park Service and state park agencies, a groundwork has been laid for a national recreational program of great importance in human as well as natural conservation.

Conservation has come to be recognized as broader than preservation. It involves planning for the proper use of our resources, and most important of these is the human wealth, to which the other resources should be dedicated. Recreation plays a vital part in conservation.

Only through central planning and direction can such national programs best be carried out. As the Federal Government has assisted other important nation-wide movements, so it must assist this movement by providing the central impetus which would be lacking were the States to launch separate, individual programs.

Prior to the establishment in 1933 of the Civilian Conservation Corps, only two or three States had progressive state park programs. Many States had no park system at all. There was first a lack of understanding of the need of such recreational service both on the part of the governments and on the part of the people, and second, a method of procedure that was haphazard at best, in many States; third, lack of funds and lack of man power prevented more areas from being set aside for park purposes, and retarded the development of the designated areas.

Thousands of CCC enrollees have been at work in national and state parks since May 1933. In the national areas they have carried on long-planned and much-needed projects for the protection and development of the millions of acres of national parks and monuments that have been set aside for the use of the public. In state parks, the coming of the CCC really meant a rebirth of the state park movement in this country. This movement was launched in the United States in 1864 in California. In 1889, Minnesota established Birch Coulee Park, a battle-ground of the Sioux War of 1862. Acts of 1891 provided for the establishment of Itasca State Park "for perpetual use as a park."

Succeeding years witnessed a steady growth in the movement. It gained new impetus in 1921 through the organization of the National Conference on State Parks, and then took another long step forward with the beginning of the CCC. In 1933 when the first CCC camp was established there were 792 state parks and related areas in the country, with a total area of 3,259,996 acres. Since 1933, several States have acquired their first properties for park use; and from 1933 to 1939 the acquisition throughout the country of 605 new state park and related areas, totaling 1,072,268 acres, has been reported. This now makes a total of 1,397 state parks and related areas throughout the country with a total of 4,332,264 acres.

But without the coöperation of state organizations the work of the CCC in these parks is of little value. It is with the officials and citizens of each State that the responsibility of maintaining the recreational facilities created by the CCC rests. CCC programs in state parks are planned with the assistance of state conservation officials. The job is a dual one and when we work together it is a job successfully accomplished. Without this coöperation the program is doomed to failure.

Federal and state coöperation has become a firmly established practice in the last six years of emergency activities in park and recreational planning and development and has proved so successful that Congress has passed a bill providing for a permanent system of such coöperation.

Obviously the substantial expansion of areas and facilities has imposed added responsibilities upon the States to provide proper administration, efficient operation and adequate maintenance. These responsibilities can in no sense or to any degree be assumed or financed by the Federal Government. It is a condition of the Act authorizing continued coöperation of the Federal Government and the States, that no projects shall be undertaken unless adequate provisions are made by the coöperating agencies for the maintenance, operation, and utilization of all such projects after completion.

The success of a state park program depends largely upon the proper conservation leadership in the State and the whole-hearted support and interest of civic-minded citizens. People in the park and recreation field are still pioneering—they are still laying the foundations of one of the most important phases of our national life.

Federal Aid for State Parks — The N. P. S.

CONRAD L. WIRTH
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THOSE who have attended these annual meetings of the National Conference on State Parks more or less regularly have noticed, I am sure, a rather significant trend in the subject matter which comes up for discussion each year. It seems significant to me because it parellels so closely the progress of the state park development program which is going forward with Federal and state coöperation.

State park work took such a sudden and tremendous step forward when Federal funds were made available for this purpose as an emergency measure in 1933, that for three or four years we had little time to consider anything except the development program. Naturally, reports on the progress of these operations during the year and the schedule for the coming months were the chief topics for discussion at our annual meetings, at least so far as the National Park Service was concerned. Gradually, however, we all came to realize that the hustle and bustle of

emergency work must sometime come to an end and that the enlarged and improved state park systems which it was producing would eventually confront us with new and even more serious problems.

Our discussions this year have been less on the subject of headlong developing and building, and more devoted to serious contemplation of our responsibilities for the proper maintenance and operation of our increased areas and facilities. It has been wisely said that riches bring responsibilities, and that is clearly our position now. We certainly are richer today in parks and recreational facilities than we were in 1933.

Looking back over the history of the state park movement, I think we can separate it into three distinct periods. Starting in 1864, when the Yosemite and Mariposa Grove were set aside in California as the first state park, the movement came into existence and began its spread to the East. It was a rather slow movement, however, until the National Conference on State Parks was organized in 1921 at the instigation of Stephen T. Mather and others who realized that only through organized effort could the people be provided with this type of recreational facility so much needed for the greater portion of our population. The movement then entered its second era and advanced slowly but steadily under the guidance of outstanding civic leaders, many of whom are still active in the program and, in fact, are with us tonight. Then, six years ago, came the unprecedented surge actuated by the emergency program of the Federal Government, when money and man power in unheard-of quantities were suddenly released to every State in the Union. That was our boom period.

The opportunity to mobilize Nation-wide resources for a concerted effort to bring about the accomplishment of our plans and ideas led to the forming of partnerships between the Federal Government and the States, which provided the greatest single impetus to the state park movement since the organization of the National Conference. The advancement of the movement since 1933 has gone far beyond the fondest hopes of the most ardent state park advocates prior to the time when the vast financial resources and man power of the Federal Government were made available for this purpose. It would be difficult for anyone to estimate the amount of normal growth which has been packed into these last six years. Perhaps ten, twenty or even fifty years would not have seen such development at the old rate of progress. And so we might say that the state park movement has at last "come of age."

That we are glad of this, goes without saying. I, for one, am gratified to know that the National Conference is proving itself to be an organization geared to the times by keeping right up with the trend and, in fact, by continually pointing forward as evidenced by the subject matter outlined for each succeeding annual meeting. Valuable as the influence of this organization has been through the period since 1921, its guidance and encouragement are needed more than ever now by state park people as

they tackle the problems of planning, development and administration which have been so greatly multiplied and enlarged with the growth of the physical plant.

It was not long after we were launched upon the great Federal and state coöperative program of development that we realized the necessity for organizing our activities in a more solid manner. After the first great rush of getting work laid out and started, we gave our attention to questions concerning the use and management of these park areas and systems. The most important step in this direction was of course, the enactment by Congress of the Park, Parkway and Recreation Planning Act of 1936 under which the National Park Service was authorized to conduct the Park, Parkway and Recreational-Area Study and to coöperate with the States in planning recreational areas and facilities. I think we are appreciating that Act more and more, because it gave us authority to continue on a permanent basis the work which was so well started under emergency authorization.

Gradually, the emergency aspects of this whole program are disappearing and we are proceeding on a more permanent basis. This makes necessary, of course, some important revisions in the working agreements between the Federal Government and the States to take the place of the temporary provisions under which many important considerations were waived in view of the urgent nature of the situation. Some of the most important of these I have already indicated in my discussion of the subject of Federal aid to the States. You have taken particular note, I imagine, of what will be expected of the States, in the future, in order to make them eligible to receive continued assistance in their park development programs through Civilian Conservation funds and labor. I am confident that these requirements will be considered fair and equitable. I believe that no person or public agency that appreciates the value of the work done and the money spent in the last six years will challenge our stand in requiring that proper maintenance of areas and facilities be made a prerequisite for continued Federal assistance in park development work. It would certainly be beyond reason to expect the Federal Government or any organization or individual to throw good money after bad by continuing to build new facilities and carry on new developments if an entire park system, including the facilities and developments already accomplished, is permitted to fall into misuse or decay.

As I said a moment ago, we were largely concerned in the beginning of the present state park program with discussions on questions of development. Now, we are giving a much larger portion of our attention to what I might term a more scientific approach to working out the whole problem of recreation, with particular emphasis on use. This is being accomplished largely through studies of various kinds which are being made coöperatively by the Federal Government and the States. I should like to outline briefly the progress which is being made.

First of all I think you will be interested in learning the latest figures on the increase in state park acreage since 1933. A survey which we completed only a few days ago shows that this increase, up to January 1, 1939, has been just a fraction less than 100 percent! Nearly a million acres have been added to state park systems since 1933, making a grand total of 1,908,264 acres. Six years ago the States reported a total of 965,057 acres of state park lands, exclusive of the 2,345,634 acres combined in the Adirondack and Catskill Forest Preserves of New York. In 1939 they reported a total of 1,908,264 acres exclusive of the Adirondack and Catskill areas, which gives us an increase of 943,207 acres, or 97.7 percent.

These figures are very encouraging, because they indicate that the States appreciate the importance placed upon land acquisition for adequate state park systems, under their working agreements with the Federal Government. I feel sure that with such a fine record already accomplished, no State will consider its acquisition program complete until land has been provided in sufficient quantity and proper location to insure the full development of its park system in accordance with its own recommendations under the Park, Parkway and Recreational-Area Study.

In connection with the Recreation Study, I am pleased to be able to tell you that we expect to have received 33 of the state tentative final reports by the end of June. So far, 21 of these are in, and we have also received two summary reports from Missouri and Florida which are excellent. There are now about 44 States coöperating in the Study, although two or three of them are inactive at the present time.

You will be interested to know, I am sure, that the National Park Service has been engaged for the last two months in the preparation of a national report on the Recreation Study, which we expect to have ready to present to the next session of Congress, about the first of next year. Information taken from various state reports will be used in this national report, in addition to our own ideas and recommendations. We may say things in this report which some of you will not agree with, but you must bear in mind that it is a preliminary report and not a final one. It will give Congress an idea of the progress that has been made in the Recreation Study in the last couple of years, and we hope it will be instrumental in obtaining funds with which to continue the Study. It will include a map and general comment on the park and recreation situation in each State.

The matter of proper legislation to permit the best planning, development and administration of state parks is receiving increasing attention by state park people. More and more, efforts are being made to convince legislatures that recreation is a necessary function of government along with health, education, and other responsibilities, and that it should be supported by adequate appropriations and proper administration. Al-

though it is slow and difficult work in many parts of the country to convince legislators that parks should not be expected to pay their way entirely by revenue collected at the gate from those who use them, park budgets must receive larger financial support by direct appropriations. Each passing year sees progress made toward divorcing park administration from political control and placing it upon a professional, civil service basis. One of the greatest battles in this respect has been to give park administration a proper place in the state government organization where it is not subservient to other interests such as forestry or fish and game.

The past year has offered unusual opportunities for the advancement of state park legislation, because 44 of the 48 state legislatures have been in session. They have accomplished a number of administrative changes, generally for the better. One entirely new state park set-up came into being, with creation of a state park commission in Montana through a bill in the drafting of which the National Park Service gave assistance. Alabama switched from a forestry commission to a department of conservation, and a number of other States strengthened their park laws. Of special interest was a bill passed in the State of Washington under which 10 percent of every $2 automobile operator's permit fee will be used for park purposes. It is estimated that this will give the parks a revenue of $100,000 a year.

Most of you are probably aware that the National Park Service is now conducting a study on the fees and charges question, to determine what the practice is throughout the country and how the various States feel on this issue. We hope to have this report published by the end of this month, but at the present time it is impossible to draw any conclusions or make any recommendations from the material in hand. This study involves 40 state agencies, 29 metropolitan agencies, and 170 municipal agencies distributed throughout 42 States.

We are now making preparations for conducting the next five-year period municipal park study, which will be started next year. It will cover the period ending December 31, 1940.

One of the National Park Service activities in the last year in which you will probably be interested is the review of Works Progress Administration projects for park and recreational developments. These projects are carried out on areas outside of municipalities. In the last year or so we have reviewed 152 of these projects involving a total of about $19,000,000, giving the WPA our comment and recommendations on each.

Another activity which I think merits mention is the program of leadership demonstration which is being conducted by several of the southern States. This plan involves the appointment of advisory committees of citizens by the directors of state parks to act as media of public education on aims and objectives of the program, and to assist the

directors, the park superintendents and their staffs in formulating and carrying out activities designed to meet the needs of the communities represented. The National Park Service is acting in a consulting capacity on these programs, the results of which will be used to appraise the value of professional and lay leadership in park activities as a factor in formulating state recreation plans.

Another phase of our partnership which I should like to point out is that which has to do with the exchange of ideas between the States and the Federal Government. In order to achieve Nation-wide coördination, this activity is centered in the National Park Service, although it is made possible by the coöperation not only of the States but also of organizations and individuals interested in the state park movement. The Service has gradually become a clearing house of ideas and information on all phases of the park and recreation subject, and much of this material comes in the form of reports in our various surveys and studies in which the States coöperate. Some of it comes in the form of ideas and suggestions contributed in one way or another.

An important organ serving this phase of our coöperative efforts is the Yearbook of Park and Recreation Progress, which was started last year. The second edition of this annual publication has just come off the press, and I believe most of you must have received your copies by now. You will note that the 1938 Yearbook contains articles and discussions by people outside the Federal Government who deal with many aspects of the park and recreation movement. A number of the States are represented, and there are also articles by people who are leaders either in organizations or as individuals.

Secretary Ickes expressed our intentions regarding the Yearbook when he said in his introduction to this year's edition that he hoped it would be regarded as a forum or clearing house for the exchange of ideas among park people. We want your contributions and we welcome articles from any of you state people who have ideas you wish to get across to the rest of us. Naturally, there are space limitations for every publication, but we shall do our best to print as many of these as we possibly can. Material for the next issue is already being lined up, and we'd appreciate receiving your contributions early.

I believe that on the whole we can feel very much encouraged over our accomplishments in the last six years, and particularly the last year. What we have done has been made possible by that rare American talent for coöperation—for joining forces and doing things together. It has not been a matter of working from one side or from another, but of combining and coördinating every resource of funds and human effort by the Federal and state governments and by organizations and individuals, all with the common objective of getting things done.

Planning a State-wide Park and Recreation Program in the East

FREDERICK C. SUTRO
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THE East has many beautiful state parks and forests. Parks, on the whole, however, except perhaps to some extent in New York and one or two other States, have been the result not so much of state-wide planning as of local efforts to preserve scenery or provide recreation.

The Eastern viewpoint is humorously portrayed by our old friend Albert M. Turner, Secretary of the Connecticut State Park and Forest Commission, who answered a letter I wrote for information about plans for the Connecticut State Parks. The rather elaborate letterhead I use in official correspondence aroused the comment that "I didn't copy the letterhead—just tried to use enough to help the postman out." Then, referring to Arthur V. Parker, Superintendent of Connecticut State Parks as "A. V.," Turner says:

> A. V. has turned over to me the job of answering your appeal of the 9th, recommending no mercy, as I understand him.
>
> I will say that in March of 1914 I started on the job of making plans for a system of State Parks for Connecticut, and have been on it ever since—with mebbe 10 percent success—we can't all be Bob Moses. But that doesn't give me any right to preach about making plans, as I see it. The trouble always is when you try to make plans for other folks, they start having ideas of their own—and if we ever learn how to make Democracy work, it is likely to be along them general lines. But I never was guilty of even trying to plan Recreation for other folks, though it is all too evident that the present generation has some pretty screwy ideas about recreation—but let 'em alone,—they'll darn soon learn if they have a suitable place to play,—and if they ever learn anything at all, it'll be from their own mistakes,—yes, I know, it's a good man nowadays that can even do that.
>
> This makes the Planners howl, I know—but all right, let 'em go ahead with their plans for other folks and see where *they* land—us, we would like to get some of the land that jines us, a few more beaches, a lot more ponds, and lakes and running streams,—and when the wind shifts a bit we'll keep right on doing it,—just now it's dead ahead, and the best we know is to put out a sea anchor and hope to ride it out. Now, of course, that sea anchor stuff and the riding it out is what gets the goat of the poor chap at the wheel,—but that's A. V.'s job and he puts his head down and grits his teeth and smiles,—can you suggest anything better?
>
> If I get the Big Idea, it is that when the Pilgrims landed on Plymouth Rock, they should have set down and drawn up a Master Plan for America, and so saved us all the headaches and cut-throat devil-take-the-hindmost, free-private-initiative and all the rest of it,—mebbe—mebbe not. We have two grand examples in Europe right now of the Very Best Planning—to say nothing of an odd one in Asia, and who likes 'em, eh what?
>
> Nuf sed,
> Turner

Turner has struck in his quaint way the key-note of our problem in the East. The Eastern States are nearly all dead broke, and plan or no plan, there is practically no money available for land acquisition and development unless provided by the Federal Government. State parks even in the Empire State are having a hard struggle to get enough money for ordinary maintenance.

Nevertheless, the East is looking forward to the time when state treasuries will be less empty than they are today and are preparing park and recreation programs on a state-wide basis. New York adopted such a program in 1924. In the middle thirties each of the Eastern States except Delaware, established a Planning Board, Commission or Council. The National Park Service has of course greatly stimulated park planning in all the States.

Let us take a brief glance at each of the States and see what they are doing. In Connecticut, for example, in spite of Turner's lamentations, the State Park and Forest Commission has done a fine job in developing recreational facilities on 78,227 acres of state reservations—a considerable foundation, in so small a State, for future planning.

In Maine, the State Park Commission is supervising the Parks, Parkways and Recreational Study, a Works Progress Administration Project which will provide a detailed report of all existing recreational areas as well as an inventory to be used as a guide for later developments of existing parks and for additional acquisition. The New Hampshire State Planning and Development Commission is making plans for a study of the national endowments of certain districts with a view at the same time to achieving some degree of geographical distribution; and will work in coöperation with the National Park Service. In Vermont during the past six years, park and recreational areas have been constructed and developed in coöperation with the National Park and U. S. Forest Service through the CCC. The Vermont Forest Service employs a landscape architect whose duties are to plan and supervise the park developments and aid in their administration.

Mr. Ernest J. Dean, Commissioner of Conservation in Massachusetts commented:

> State Park planning in Massachusetts is comparatively new and was organized primarily to plan and provide work for the CCC camps established in the State. Massachusetts has only three state parks, of which two were secured by gift and the third—an ocean beach—was acquired by legislative action.
>
> There are, however, within the 175,000 acres of state forests, many areas that have been and are being prepared for recreational use; in fact some of the best areas from a park standpoint, considering the scenery, use of water and proximity to population centers, are within the state forests, are being planned for recreational use, and are so administered.

Commissioner Dean has organized a land-use planning division within his department for long-range planning on a state-wide basis. While they have master plans for all their holdings, it is considered im-

portant that all planning be correlated with and subjected to a statewide conservation plan. It is intended that this planning form the basis of future acquisition policies in order that the State's holdings may gradually become topographical land units with natural, rather than man-made, boundaries. It is hoped that ultimately all the reservations in Massachusetts, from one end of the State to the other, will be connected even if only by narrow strips such as stream valleys, abandoned roads or rights-of-way. Ocean beaches are an important aspect of their future state parks.

Mr. Dean comments on the amazing increase in the use of Massachusetts parks and state recreation areas and the necessity for a planning policy that will keep ahead of this demand by providing more and larger areas.

The only Eastern State from which no report was received is Rhode Island. It may be that there are so many large private holdings and such a varied and romantic coast line that the need for public recreational parks in Rhode Island is not yet manifest. New England on the whole, however, it will be noted, is making real progress in park planning.

Skipping now from New England to the Mason & Dixon Line, we find that Maryland has a state forest acquisition program. The Department of Forestry, which is connected with the University of Maryland, has tried to get land in various sections of the State for demonstrations of woodlot work and the handling of timber, to supply recreational needs in the way of picnicking and camping and also to serve as public hunting and fishing grounds. For state parks they have tried to pick out historic sites and places of scenic value and have five such areas at present. Their need is for a few parks along the coast of Chesapeake Bay in the neighborhood of Baltimore.

From Delaware comes a very cheering message. "There never has been a park plan in the State," says the State Forester, "outside of that which has for many years been under consideration by the State Forestry Department. This plan has not taken the form of a published document nor has it been greatly more than a disconnected assemblage of prospective areas and the development that could be made on each." However, in the last three months there has been a big change in the public attitude on parks in Delaware, "with the result that a Park Commission authorized by the legislature two years ago has been appointed. The Commission has not yet begun operations but there is considerable state-owned land along the Atlantic Ocean on which they hope to build a yacht basin and approximately nine public beach houses. Park planning work will no doubt be done by the new State Park Commission."

This report from Delaware is most encouraging, especially as my own State of New Jersey, Delaware's next-door neighbor, has not yet made a beginning of acquiring ocean front property for recreational use.

Pennsylvania has 1,647,881 acres in forests or forest preserves and 18,563 acres in state parks all under the control of the Department of Forests and Waters. For that department there was prepared in 1937 by Markley Stevenson as Consultant, a "Preliminary Survey for a Comprehensive State Park System for Pennsylvania." This is a very interesting document outlining not only a state-wide regional park plan but also a set-up of regional park commissions and a State Council of Parks similar to the arrangement in New York except that whereas the New York scheme decentralizes authority by vesting complete control over the several regions in the regional park commissions, the Pennsylvania plan proposes to maintain centralized authority in a bureau or division of Parks in a Department of Conservation delegating to the regional park commissions planning and advisory functions. Pennsylvania is fortunate in having an active and progressive Parks Association which no doubt in coöperation with the Bureau of Parks in the Department of Forests and Waters will be largely instrumental in the coming years in bringing to fruition a state-wide park plan.

Minnesota is this year celebrating and New York has already passed the semi-centennial of the beginning of its conservation movement. In New York that movement has developed into one of the most complete state forest and park systems in the country. Three distinctive natural features contributed in large measure to that development. As early as 1883 the Adirondacks and later the Catskills were recognized as ideal areas for forest preserves and provision was made for acquisition of large acreages in those areas. In 1885 Niagara Falls, the islands of the Niagara River and lands on the American bank became the first state park. The Palisades of the Hudson, though almost wholly in New Jersey, are part of New York City's river scenery. Their preservation was of such vital interest to New York that in 1901 the State actually appropriated $400-000, augmented by gifts from citizens of New York, for the acquisition of the cliffs in New Jersey.

Nature herself therefore provided New York with the nucleus of a State Park and Forest Plan, by placing within her borders, or close to them, two of the most picturesque regions of the Appalachian chain—the Adirondacks and the Catskills, and two of the country's great natural wonders—Niagara Falls and the Palisades.

By 1924 other areas had been acquired and developed as state parks and there was urgent need for additional parks and for parkways. In that year there was published the second edition of the State Park Plan for New York issued by a Committee of the New York State Association. With this Plan and a fifteen-million-dollar bond-issue as a basis Governor Alfred E. Smith and Robert Moses projected and perfected the system of state park regions each under the management of a regional state park commission that has been functioning with great success ever since. There are, including the Division of Lands and Forests in the Conserva-

tion Department which has charge of the Adirondack and Catskill Preserves, eleven such regions joined in the State Council of Parks composed of the Director of the Division of Lands and Forests and the Chairmen of the several state park commissions. The Council constitutes the Bureau of Parks in the Conservation Department. The 1924 plan still remains the master plan and in addition each commission has its own plan for the development of its own region but may carry out its designs only with the consent of the State Council of Parks so that the Council is both a planning body and a check on unwise enthusiasm of any of the constituent regional commissions.

The New York Forest Preserves comprise 2,396,681 acres; parks and parkways, 186,717; a grand total of 2,593,398 acres, or about 190 acres per 1,000 population.

My own state of New Jersey has plenty of plans but very little accomplishment. Conceive, if you can, especially you people from the Western States, accustomed as you are to wide open spaces and vast domains in national parks and forests, a State with a population of 4,300,000 endowed with most unusual natural advantages, a magnificent coast line 128 miles in length, a mountainous area in the north of great beauty, much of it heavily timbered, and almost a million acres in the southern part of the State known as the "pine barrens" adapted to no useful purpose but ideal for forest growth;—conceive a State so favored by nature and so congested by man possessing in public ownership, in state parks, forests and hunting preserves only 82,300 acres or 20 acres per 1,000 population,—and you have a picture of the state of New Jersey from the viewpoint of public recreation.

The State owns no part of its great coast line and only isolated tracts in the northern mountains and the southern pinebelt.

The Board of Conservation and Development published in 1937 a "Program for State Ownership of Park and Forest Land in New Jersey," a comprehensive plan for park and forest development of state-wide scope. In addition to the plan promulgated by the Board of Conservation and Development, New Jersey has also had the advantage of the services of a State Planning Board composed of far-sighted and capable men who have published several reports on New Jersey's recreational needs, notably one issued last year entitled "Where Shall We Play?"

The fact remains that with all these efforts, except for the support given in five of its 21 counties to county park systems, New Jersey is not yet "park conscious." To try to remedy that situation there was organized last year a New Jersey Parks and Recreation Association with state-wide representation which is making heroic efforts to bring the facts home to the people of the State.

Proper Classification of State Parks

HAROLD S. WAGNER
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Director-Secretary, Metropolitan Park Board, Akron, Ohio

WEBSTER in the latest dictionary defines the adjective proper as "appropriate, suitable, right, fit, as water is the proper element for fish." The word classification is defined as "A systematic division of a series of related phenomena."

Assignment of the subject of this paper really calls for a much wider knowledge of the range of state parks which has broadened so rapidly in the past ten years, than I possess, but that deficiency offered inadequate excuse from the task. That an excellent chance exists for some classification and systematizing of our ideas is admitted. That any new idea will be expressed here is not probable.

Every land planner has felt the need for some systematic division of park types in clearing his mind for the application of a design to a certain proposed park. Here, we take it that the proper classification is a need and right of the using public, more than of the park planner or administrator. Not that the more careful use of terms will not redound to the advantage of all but it seems quite elementary to admit that the interest of millions of users transcends that of a few thousand officials. This is another matter which demands the attention of the etymologist. When we are agreed about the meanings of not more than a score of words, classification of state parks will have become relatively simple. However, none of us expects that this movement will ever become so inactive that permanence of classification will result. Conversely, the mere fact that this subject continues to provoke discussion is proof of its vitality.

A great deal has been said and written about the definition of the word *park* alone. We need not venture further with it. If we give our attention to the national parks we discover that there has been a great deal of discussion, and perhaps confusion, about the classification of the areas in that jurisdiction. Much healthy debate there has been, and while little that is permanent has been achieved, a good many durable ideas have been born. I do not believe that we are to be convicted or even accused of plagiarism if we adapt the pattern of the national parks in the classification of state parks. Complete adaptation is admittedly not possible nor practicable. On the other hand, it is conceivable, to me at least, that areas in state systems safely may be classified as are the units of the country-wide system. That the latter embraces and should include the country-wide superlatives, is recognized. In the same way, the system of each of the States should have dominion over all of the units within its borders which are of state-wide importance. In neither series does a clean-cut line of division exist, nor may we expect or wish for such precision.

Some state park areas are actually of nation-wide importance, and some county and metropolitan parks are truly of state park status. This lack of precise classification leads me, indirectly if you please, to the idea that it is not only reasonable but entirely practical and proper to classify state park areas in much the same manner that national parks are. Possibly we should say "as they should be," and by doing that merely make it clear that the business of acquiring, developing, and managing parks in every classification continues to be strenuous enough to necessitate postponement of the somewhat less important detail of classification. Of course, I feel that the same system of classification may be applied to the county as to the state and national areas. After all, state and county lines are wholly artificial, and there are counties that are larger than some of our States. Further, we are bound to recognize that state and county parks, at least, must be considered from a population rather than a governmental unit standpoint. There are a number of counties where state park responsibilities exceed that of a number of the separate States.

Coming down to this subject, my feeling is that there is possibility of, and need for state parks which may properly be classed as wilderness parks. There are many staunch advocates of the idea that such parks must be very extensive, so much so that occasionally to spot them within a single State would be impossible. Personally, I believe that as the science of park management develops, the idea is growing that the size of the area involved is not of primary importance. I believe that state parks which do not degrade the high character of the wilderness qualifications are quite possible.

Passing on to that broader field which seems to have inspired most of the progress in this realm of state parks, namely, the areas of non-replaceable natural scenery, we undoubtedly enter the region of greatest difference of opinion. Whether these areas should be termed scenic or natural parks, I do not pretend to know. I prefer the former, believing that the word is unmistakably descriptive to most people. In such areas, the appreciation and enjoyment of undisturbed scenery is, of course, the dominant reason for being. I can conceive that the use of a most appropriate adjective, such as the word scenic, would convey one and the correct idea to most of the people who make up the park-using public.

As to the areas of historical character, it appears there is neither much latitude for description nor necessity therefor. Same thing might be said of parks which preserve outstanding geological, botanical, zoölogical, and other scientific remnants. Perhaps the use of some all-embracive term for all such parks is to be preferred, and more than to suggest its selection, nothing seems to be required here.

Within the time limitation of this paper, we come quickly to the type of state parks which appears to command the interest of most of the people, namely, the natural or naturalistic areas developed for

recreation. Surveys indicate that swimming and bathing are the dominant uses of such state parks. I am inclined to the idea that the outdoor picnic and family or small group play has been detoured by some strange working of the surveys. At least, they have not been reduced to the number of man hours of play in the several sub-divisions, and few will deny that half as many picnickers will spend more time in the parks than do double the number of swimmers and bathers. Be that as it may, and despite the fact that there are many among us who feel that activity in state parks is something to be endured, rather than fostered, a very large share of our state parks may well be classified as active recreational parks. There is nothing to be abhorred in this. Rather is it to be welcomed. I believe that these very parks are the strong links between the man-made parks of yesterday and the finest remnants of natural scenery which remain today. For most of our people, a state park which initiates city folks into the world of nature by way of a picnic or a hike in the woods and fields is quite comparable to the first rung in the ladder which leads to a life made more pleasant by an acquaintance with nature's more subtle graces. The greater the need, therefore, for a descriptive term for state parks which supply this introduction.

In closing, it does appear that there is ample opportunity for healthy differences of opinion in the application of proper classification for a certain state park. Many areas have dual and even multiple attributes under any possible system of arrangement. Of course, the dominant features should be recognized, not only in classifying the park, but also in naming and publicizing them. And through all of this, it must be very apparent that the more intensive the use, whether planned or spontaneous, the less chance for adjustment, the greater the threat to preservation and the more challenging to the management. Proper classification may be grasped as an additional tool by the state park manager, not merely slighted as a subject for periodic discussion.

Teaching Conservation in the Schools

SAM F. BREWSTER
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AS MEN and women either actively engaged in administering state parks or deeply concerned with how they are administered, you realize that you are a spoke in the conservation wheel. The conservation wheel is a big one and it took a lot of grunting and groaning on the part of a lot of people to set it in motion at all. The wheel lay idle for many long years while innumerable destructive agencies such as fire, wind, rain, careless people, ignorant people and exploiters of every description, and in every walk of life were at work on it. The wildlife spoke of our conservation wheel was nearly whittled away. The forestry spoke was worn thin. The scenic resources spoke was terribly weak in places and so on around the hub until the entire wheel was flimsy.

Then came a master mechanic who called together a great horde of willing and intelligent workers who were ready and willing to put their shoulders to the wheel. Today that conservation wheel is spinning as none of us thought possible. It is gaining momentum rapidly and where it will stop no one knows. Like any huge moving object it attracts attention and like a snowball rolling down a mountainside it gets larger as it goes. People are talking about conservation today who six years ago would not have known enough about it to have found the word in a dictionary. Right there we have a big problem and one that will require time and work to correct. There never was a truer saying than, "A little learning is a dangerous thing." Thousands of Americans only partially aware of the problems confronting conservationists today are roaring at public officials, complaining to one another and generally engaging in a campaign of destructive criticism. They know just enough to think the problem of restoring and conserving America's natural resources is an easy one. They believe, therefore, that if a new game and fish director does not deliver fried catfish and quail on toast to each and every one of them each day, he is a crook and should be replaced by a friend of theirs.

In other words, it looks to me as if we have a big educational problem on our hands. An educational problem that must be carried on simultaneously with our other work. I despair of ever being able to do much with the rank and file of Americans that have passed the thirty-year mark without learning the necessity of conservation. The chances are he grew up with the idea that all natural resources were put here for him to live off of and that it is his God-given privilege to use them as often and as much as he sees fit. It is difficult to change his opinion in most cases, because his mind has set like concrete on that idea and it requires more than verbal dynamite to separate the man from the notion. If this were not so, we could dispense with our conservation officers and

put the huge sums of money it requires to pay for law enforcement into conservation education.

Many of our people are living with one foot in the past when our forests and wildlife were in such profusion they were in the way and actually impeded colonization of this continent. It was necessary to clear forests and kill animals in order to build homes and to live in security. Now we have arrived at a point where we may have an equally hard time in recouping and conserving our badly depleted resources in order to live in comfort and safety. Millions now living have heard their fathers and grandfathers describe in such glowing terms the abundance of resources that existed when they were young that it is hard for them to realize the changes that have been made in such a short period of time.

Americans are intelligent in many respects. We are world traders and builders, we have constructed the greatest railway system, the greatest highway system, and the tallest buildings in the world. We have developed high standards of morals and ethics and the best schools and colleges and sanitation systems that history has seen. We have done in two centuries everything a great civilized nation might be expected to do, and yet, with all our advancement, learning and civilization, we have depleted our valuable, necessary, life-giving natural resources as much in 200 years as China has done in 4,000 years.

It is, therefore, only proper and right that we people actively engaged in conservation work should recognize our mistakes of the past and take steps to correct or prevent them in the future. We know that it is possible to take young boys and girls and by proper teaching instil in their minds an understanding of what we, their fathers, have allowed to happen to their country and to stir in their imaginations desire to help correct, as far as possible, that condition. If this fundamental thought had been applied through conservation teaching twenty-five years ago on a large scale, and in the proper way, I am of the opinion that large sums now being spent on conservation law enforcement would be spent instead in acquiring new parks, administering old ones; acquiring state forests, game refuges, fish hatcheries and other assets that are slow in coming in sufficient numbers to appease the lay citizen because of shortage of funds for those purposes. This I believe to be the most glaring fault committed by conservationists of the past. Too much emphasis has been placed on law enforcement and not enough on education. You seldom make a conservation convert out of a man whom you arrest and fine. You merely make him more cautious and harder and more expensive to catch next time—an evader. The same man while young could have been taught why it is not to his advantage to burn the woods, kill over the limit, dynamite and seine the streams, run his furrows straight up and down the hills, exploit the scenic areas, allow his top soil to wash away and in general contribute to his own

ruin as well as that of his community and nation. He would then have been a *convert* instead of an *evader*.

Twenty to thirty years from now the boys and girls of today will have authority and control over the natural resources of this nation. They will handle those resources wisely or indifferently as *we* see fit. We people in attendance at this Conference and other conservation leaders scattered over the nation hold the key to the situation. Just as long as boys and girls are allowed to go through schools that do not include integrated courses in conservation, just that long are we putting off the day when conservation of our natural resources is the sacred trust of everyone instead of the sworn duty of a few poorly paid, greatly abused public servants.

Unless we do teach the younger generation facts about our natural and non-renewable resources we cannot hope to be much farther along twenty years from now than we are at present. We are pouring out about all of the money now that the treasuries will stand. Our limited personnel is overworked and law violators that are apprehended are far less than those who escape. I am of the definite opinion that there is not enough money in the National Treasury and there is not enough money in the States' Treasuries to make 130,000,000 people do what a relatively few say should be done unless the 130,000,000 believe what they are told is right and for their best interest. Public agencies have given the people state parks, forests, refuges, trees to plant on their wastelands, fish to put in their lakes and streams, wildlife to put in their forests and fields, seed with which to plant their gardens, fertilizer to enrich their lands, built terraces to check erosion and all at little or no expense to the individual. Yet in entirely too many instances it is just another case of leading the horse to water but you can't make him drink. They have accepted them when free but tolerated them good naturedly rather than believed in them whole heartedly—lack of education! We must have the whole-hearted sympathetic and intelligent support of a majority of the citizens of this country before we can relax and say our conservation programs are established. What can be done about it?

In the September 1938 copy of *Connecticut Woodlands* published by the Connecticut Forest and Park Association the following important statement appears:

> There is something that can be done about it, must be done about it, in fact, and that is put conservation education into the public schools. Teach the meaning and necessity of conservation from the beginning. When we have educated a generation to the fact that wildlife management, forestry, and water control in all its aspects are of importance not only to the sportsmen, but to every man, woman and child in the state, then we have accomplished something vital in conservation. This new generation may not know anything about the rights and wrongs and ins and outs of technical conservation practices but it will appreciate the fact that the men who do know these things, and who are doing

the work, are doing something which is important to everyone, not only to nature lovers, the farmers and sportsmen, and knowing that there is such a thing as the proper use of the environment, this new generation will give to conservation the public support it so grievously lacks today.

It has become increasingly obvious that a conservation consciousness cannot be obtained wholly by the enforcement of laws and regulations. In nearly every case, States that have developed progressive and successful conservation programs have relied more and more upon the education of the public to attain their ends. It seems that conservation education may be achieved in three ways:

1. Through already existing educational facilities, namely, the schools.
2. Through extracurricular activities in boys' and girls' clubs and organizations.
3. Through extension work among all classes of adults.

It is generally agreed that the soundest and most lasting results can be obtained by giving conservation its proper emphasis in the public schools. There is a definite tendency, and one which I subscribe to, to get away from text books on conservation in the public schools. Where a Department of Conservation has a close working arrangement with the Department of Education, conservation can be integrated into almost every subject now taught. It works in perfectly with Geography and Natural Science. Interesting themes may be written for the English teacher on phases of conservation, and mathematical problems are just as difficult when composed of soil losses, run-off of water, board feet of timber, mineral equations, expenditures at state parks and increase of game and fish. Some of the better teachers seem to prefer factual materials from conservation departments, and allied agencies, containing data which may be applied to local situations rather than the more general information ordinarily found in text books.

Naturally a conservation education program must include the training of teachers. A survey of many of the college courses being given at the present time reveals that most of them deal with facts alone and do not cover in any way the methods involved in teaching conservation. In other words many courses being given in colleges teach conservation rather than teach teachers how to teach conservation.

For the benefit of you who are interested in anything that will increase the use of your parks, I will say that a good conservation education program will do the job better than any way I know. Hold a few teachers' institutes in your parks and your attendance problems will be greatly reduced. Teachers, in most instances, like the parks and will not only go themselves but will encourage their students and their students' parents to go. The teaching of conservation education in Tennessee has helped our state park system more than any one single factor.

As conservationists it is not only our job to hand to future generations as good a heritage as possible, but to see that these future citizens have the very best preparation possible to increase that heritage.

Some of the Various Values of Naturalist Work in State Parks

GEORGE F. BAGGLEY
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MOST of life's real worthwhile values are not determinable in common units of measurement and it has been difficult to arrive at some suitable method for a discussion of values in terms of human use, much less weigh them, in relation to other advantages of our parks. I am not satisfied with my own conclusions, but they may be of some interest.

Before we undertake, however, to determine a unit of measurement or to evaluate this idea variously known as nature study, naturalist work, knowledge tours, or educational programs, let's agree on a rough definition which will, in a manner, cover the present wide field. Generally speaking, most nature study programs are fundamentally scientific, but popular terms and technique are necessary in the execution. Principally, it is best suited to the out-of-doors, though many interesting and worthwhile programs are conducted indoors. In design it is intended to encourage groups and individuals to seek popular knowledge of their environment, to encourage a better understanding of the flora, fauna, natural phenomena, and all natural resources and to interpret the character and function of these in relation to each other in popular non-scientific terms. Essentially, it may be called a broad course in the principles of conservation and human use.

Surely a thing as tangible as this can be given some unit of value and measurement to guide the administrator in his planning and management of parks.

If we are to evaluate nature study it must be given a practical basis and common unit of measurement in order to gauge its present growth and future potential usefulness. In recent years, we have all become more or less accustomed to talking in terms of land use. Let's try that term on nature study and see what results are obtained. It should fit since frequently we turn the "all seeing eye" of land planning on our parks and discuss them in terms of rounded units in relation to communities and regions.

We have established units of measure to determine production of timber per acre. Wheat and potatoes, cotton and corn, are calculated in terms of production per acre. I believe it is just as possible to evaluate park lands on a basis of human use in terms of returns to the individual, state, and county as it is to presuppose that agriculture and timber lands should produce so many bales of cotton or so many cords of wood per acre. In 1938, 56,000,000 people used your state parks, which total 1,633,880 acres. This is slightly more than 34 persons per acre. Many acres of wheat land produce no more than a third as many bushels of wheat. Today wheat is quoted at 80 cents per bushel. Certainly a use

yield of 34 persons per acre is a striking annual return in comparison to the worth of wheat when considered as a yield of health, education and human happiness. Obviously, there is a definite tangible value in a crop of this magnitude. Naturally, only a small percentage of park visitors participate in a nature program, possibly not more than 20 percent, though it is greater in national parks. Even that percentage would give a use yield of six persons per acre. Isn't that a good indication of the interest in these outdoor programs?

So much for a general statement of value. In the broad sense, however, benefits, which are not readily recognizable, accrue to the individual, the local community, the state, and nation. All values accruing to the community, state, and nation are radiated through the individual, so it is with him that we are chiefly concerned.

Man's present place in the sun has been won by his constant tussle with nature. He has advanced in proportion to his knowledge of his environment and his ability to make use of these facts. Present generations have found less and less necessity to maintain their intimate contacts with natural things as a means of existence. Their very environment has been altered to meet the needs of the day with little or no thought of and frequently no opportunity to maintain an active interest in out-of-doors life.

With our parks organized as they are with the objective of providing places of recreation, nature study and relaxation, there is little wonder that park visitors are in a receptive mood to engage in these activities which give them pleasure, relaxation, knowledge and permit the recharging of life's depleted human batteries.

How are these values to be credited on the ledger of the park program? Well, there are several figures one can use. The thrill that comes from seeing one's first deer in the wood, identifying the native flowers and trees, watching silently while a beaver repairs a broken dam; through an archeological exhibit glancing several thousand years into the past to contemplate conditions during that age; recognizing in the field the distinguishing characteristics of lava and sedimentary rock. Simple though they are, these are some of the factors which keep Mr. and Mrs. Average Park Visitor forever interested in parks and what they offer in opportunities for additional knowledge. Other and more indirect returns are recognizable in improved health, wider educational opportunities, decrease in juvenile crime and with all a broader understanding of our dependency upon the natural resources. These are some of the values the individual may enter on the credit side of the ledger from his use of the parks and participation in their planned programs.

All of the benefits of an out-of-door program do not accrue to the individual. The area and the Park Administrator are due considerable credit. A well-organized program in any park is certain to attract a considerable number of persons from the region as well as the immediate

vicinity who will want to satisfy their inexhaustible curiosity by looking deeper into the park; they like to glance behind the scenes along the trails, they will be interested in the bird life and the geology and the flora. Through this type of contact, your park user gains an understanding of the purpose of the area. He will frequently want to know how the administration and protection is financed, how the park is protected, by whom, by what division of the state or county government it is managed and what the plans for the future of the area are. When an individual user has gained this much knowledge of his parks and has had some small pleasure from the experience, he certainly cannot be classed on the debit side of the account book. Chances are that he is the fellow who wrote to the Conservation Commission with enthusiasm about the parks and urged support or an adequate budget or suggested to some one that more improvements were needed. These are advantages definitely creditable to the local unit and the park administrator may realize on them.

Although to the individual goes the greater tangible value, the state and nation are due to benefit more and more from planned field programs. Who can say that these contacts with their environment may not be the real beginning for a great many people of a related understanding of some of our major national conservation problems, such as soil conservation, flood control, reforestation, recreation land use and other conservation problems which are difficult for the layman to grasp when presented as individual projects. I believe if these field laboratories or nature programs take full advantage of their subject and of their participants in the program, they will have an untold number of people in a receptive mood and anxious to obtain scientific knowledge translated into popular terms which affect them and their environment individually and collectively. The results are certain to be beneficial to the park program as well as to related conservation problems.

You probably wonder why there is no tabulation of areas in which out-of-door programs are now under way. That was considered and so many areas were found to offer programs of varied activities that a worthwhile comparison could not be made. It is sufficient to say that the majority of public parks now offer outdoor field programs.

I have also purposely refrained from touching on facilities or technique necessary for the outdoor programs. These are well known and reasonably well developed. The nature trail, the campfire lecturer, the showing of special motion or still pictures, field classes in natural science, and many others are well thought out to give the participant an understanding of the subject.

There are few activities which lack the basic facilities for developing interesting outdoor programs. Leadership is very important, either voluntary or otherwise. Some one must be responsible for planning and carrying on the elements of the program. In many state parks, a part- or full-time naturalist is available during the summer season.

In many instances, the organization of outdoor programs is not given much consideration by the Park Administrator. Usually he is too busy; occasionally he may not realize the importance of these as a medium of contacts with the rank and file of park visitors. I believe that the Park Administrator will soon assume greater responsibility for these outdoor nature programs and that all of us associated with parks will come to realize the great potential possibilities to accrue through them.

Week-Day Use in State Parks

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MY SUBJECT for discussion is "Week-Day Use in State Parks." In having this subject assigned to me I was told that week-end use of state parks was not a problem. Park Area Studies made in 1937 by the National Park Service, as well as Park, Parkway and Recreational Surveys now being made in many of the States, disclose that well over fifty percent of weekly park attendance is on week-ends, and that week-day use averages only about five percent per day. Attendance statistics in Georgia's state parks in 1937 disclosed that forty-five percent of weekly attendance was on Sunday with the other days averaging about nine percent of weekly attendance.

Those attendance records show a lack of balance which, to my mind, is harmful to the parks and to their users. They show that the facilities of the parks are strained with intensive use during the week-end and being largely unused during the week days. They show that well over half the people who visit the parks make a bottleneck out of each week end and congregate in such numbers that no single person is able fully to enjoy either the recreation or the inspiration that the park would normally have in store for him. Particularly in those parks serving the rural sections of Georgia—and I suppose the same is true of many other States—the park visitors congest certain areas and leave many of the beauty spots of the park deserted.

I find it quite simple to describe Georgia's present position. I might say that the park attendance is so unbalanced that both park and public suffer. Equally simple is the task of defining the position we are making an effort to reach—a balance of park use which would allow the parks to be enjoyed to the fullest extent of their value. In other words, we know where we stand now and we know where we would like to be. Our problem is in getting there.

I find myself in the same position I was in some months ago. I had taken one of those detours upon a detour which occur so often on Georgia roads, and was hopelessly lost. I had been stuck in a swamp half the afternoon, had changed a flat tire and my gasoline was low.

I was bumping along from rut to rut when I saw an old darky walking down the road, the first human I had seen in a dozen or more miles. I stopped and asked him how I could reach Macon. He scratched at his kinky mop and thought a minute.

"You go down this road a mile," he said, "and across a creek. Then you come to a big white house where the road forks. Take the right there. About a mile further on you come to a cross road. Don't pay no attention to that. Go on 'til you ford two more creeks and come to where the road forks again. Then . . . " he scratched once more at his woolly scalp . . . "Boss," he said, "there ain't a way in God's world you can get to Macon from here."

For the sake of convenience, I should like to break down the Georgia park users into four classes, each of which offers a distinct type of problem. I should also like to show briefly what we are striving to do to solve that problem offered by the types of park visitors.

Increasing in numbers are the long-distance tourists stopping for an hour or for a day in the park. For these persons, the principal attraction is outstanding scenery or some historic appeal. The length of their visit depends entirely upon the attraction of the scenery, their interest in the historic site, or the ability of the park representative contacting them to sell them upon the idea that the park is a pretty swell place after all. There is no way in which we can control the time of the far traveler's visit to the park. He is likely to appear any day during the week or week-end. We have found that the tendency of such a visitor is to tarry longer on week-days when the crowds are not so large and when our personnel can devote more time and attention to him.

We have learned only one or two methods of attracting a large number of such visitors. One is by making their visit so pleasant that they will make every one of their friends stop by to see the park area, and the other is to flood the travel agencies, automobile associations, tourist bureaus, chambers of commerce, and other affiliated organizations with an abundance of literature. I believe that it pays to advertise. Each park folder so distributed has greatly increased the number of visitors from the far corners of the nation.

Our second class of visitors includes those who spend as long as a week in the park cabins offered for their convenience. This group might be classed as one of our heaviest users during the week-day. Their numbers are limited to the number of cabins and rooms we are able to provide. To date those accommodations have been too few. We have closed each season with a tall stack of applications for cabins and rooms—facilities we have so far been unable to provide.

Our solution here lies in completing our parks. Some technicians advise us that certain parks are already complete, and that we have enough cabins, picnic areas, bathhouse and swimming space and other facilities, but regardless of what the technicians say, it still breaks my

heart to turn away park users and potential park supporters. After completing a number of other badly needed facilities, we are making plans to build more cabins and additional rooms in those parks which are now so overcrowded.

Our third classification deals with those persons who live between a ten- and a fifty-mile radius from the park. We have discovered that a great many of those persons come into our park perhaps once each week during the summer. Sometimes they come on Saturday, sometimes on Sunday, seldom during the week days, but those persons form a foundation for our potential heavy users. To get them into the area, our attractions must be both magnetic and varied. We realize that we must instil into them the *park habit*, and make their visit so pleasant that they will return again and again. The park must provide better swimming than they can get closer to home and it must offer a variety of other attractions such as horseback riding, fishing which is at least fair and even courses of instruction in various sports.

I shudder when I sometimes stop to think how far we are sticking out our necks this summer to increase the use of our parks during the days of the week. At several parks we are providing horses and advertising regular trail-riding trips to points of scenic or historic interest. A number of those trips will cover two or more days. I might say that the first trip, in Vogel State Park, held the latter part of May, was a huge success, even though during two days the riders covered more than thirty miles, a larger portion of it in a downpour of rain.

In one park we are employing a Cherokee Indian and his wife, who will teach archery, basket making, or any other of the Indian arts one might wish to learn. We have had a number of interested inquiries on this phase of our program.

Recently I inquired at several of the large sporting goods stores in the State and learned that our number of fishermen is increasing at an enormous rate of speed. One of the largest firms advised me that they had sold five times as much fishing tackle the first month of the season as they had sold altogether during the past summer. While I was getting this information, a potential fisherman came in. He looked over the tackle and finally selected a cheap rod. He then asked about reels and flies and lines and from his selection of the assortment of all his equipment and from the questions he asked, I knew him to be a novice follower of Sir Izaak Walton. I wanted to know what his reactions were, so I managed to squeeze into the conversation. Outside of being a close reader of the sporting magazines, he knew absolutely nothing about piscatorial art. That was obvious, even with the limited information I possess.

Our friendship began when I gave him a few pointers on handling a rod and fishing a stream, and I am certain that the same friendship will end when he tries to follow my advice. But during that half hour

I conceived the idea of having a course of fishing instruction in one or two of the parks. Realizing that few persons value anything they can have gratis, we tacked on a small charge of a dollar for a complete course in angling. You'd be surprised at the interest it has aroused and the number of persons asking about it. In addition, the sporting goods stores are coöperating with us in offering a prize for the largest fish of various species caught in our state parks this summer.

In one of the parks, where the weekly attendance is especially low during the week-days, we are placing a ranger who completes College this spring. This man's job is to visit the various nearby towns, contact the proper persons to have the civic clubs use the park tavern for some of their meetings, bring in the Boy Scouts, vocational school students, Sunday school groups and other boys' and girls' organizations for picnics, nature hikes, swimming and other organized activities. If this man is able to increase the patronage of the park to any appreciable extent, at least enough to pay his own salary and expenses, then we shall apply the idea throughout the entire system.

Another attraction we are adding this summer is a course in life saving. We have an excellent life guard who has been with us for two seasons. This man has an instructor's certificate from the American Red Cross, and we shall make him available to any group of five or more who are interested in getting their junior life saving certificates.

Those activities and a few others that I might mention will go a long way toward increasing the week-day activity in our parks especially among that group who live within a radius of ten to fifty miles.

The last and one of the most important classes are those who live five miles or less from the park area. At present they are our heavy week-day users of the park. On summer evenings they bring their lunches or suppers down into the park areas, where it is cool, and picnic. Their children use the swimming facilities, their nurses and young tots the wading pools. We do feel that the program we have outlined for the third class will be just as interesting to those persons living within five miles of the state parks. This is especially interesting since most of our parks and other recreational developments are in or very near rural sections. We have learned already that those children who are shy and backward on first sight are some of our most progressive pupils when we get beneath that outside veneer and make an attempt to teach them organized play.

I shall look forward, with a great deal of interest, to see which State within the next few years will develop a state park program which is full and rounded and which, by some miraculous manner or means, manages to distribute its usage throughout the days of the week. If anyone can find the answer before I am able to complete my long list of experiments, I wish you would let me know.

Low Cost Vacations Through Organized Camps

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IN ADDRESSING a group of this type it is, of course, not necessary to elaborate on the desirability of, or the wholesome benefits that might accrue to individuals through a vacation in a delightful natural area. The big question is how to make available such vacational opportunities to the greatest number of people at a low cost and at the same time assure the vacationist of an invigorating and often inspiring experience. All of us no doubt have had some experience in camping-out in varying types of facilities and, in general, we look upon those experiences as satisfying. Those who have experienced a summer, or a portion of a summer, in an organized camp which was run in accordance with the modern techniques know that the camper derives more than just a rest, for the camp environment has values for improvement of social living, personality, character, and health development. These values have long been recognized by far-seeing educators, but the techniques to serve them are coming into use in good camps.

Vacations involve the problem of transportation, facilities, equipment and program. The solution of this problem for the low-income group, and often for the middle-income group in the larger cities, can best be found through the organization and operation of an organized camp to serve a relatively large group of people. The opportunity for this type of recreation is largely dependent on the availability of proper sites and facilities. There are many organizations and groups that can finance the operation of a camp but find the problem of acquiring land and structural facilities an insurmountable obstacle. This difficulty has increased in recent years due to the spread of the Community Chest idea and the reluctance of the Chest to grant permission for the conduct of special capital fund raising endeavors. One solution of the problem has been found in the establishment of organized camp facilities in public areas (national, state, county and metropolitan). The outstanding example of this is, of course, the Palisades Interstate Park which now accommodates over 90,000 campers a year. The majority of publicly owned organized camps are operated by community non-profit organizations. However, there are notable examples of operations of such camps by: (1) cities, (2) counties, and more recently (3) by state park systems and (4) city-educational systems. The 60 camps constructed to date by the National Park Service on the recreational demonstration areas will be operated this summer by organizations of the following types: (1) counties, (2) community chest agencies, (3) labor unions, (4) city boards of education, (5) "Y" organizations, (6) Boy Scouts, (7) Girl Scouts, (8) coöperative leagues, (9) federal employees' recreational organizations, and (10) in South Carolina, directly by the Division of State Parks.

Through organized camps, their directors and qualified staffs, the park authorities of the country have an unusually good opportunity to enlist the efforts of hundreds of thousands of people in the program of conservation and protection of the state parks and other conservative areas as well as an appreciation of the need for conservation on all lands. The enjoyment of the out-of-doors is of primary value in every camp program and every good camp program includes landscape conservation.

As park planners we must realize that the vacation camp makes possible a most intensive use of parks, because campers, while occupying a comparatively small area, are in the park 24 hours of the day and seven days of the week. This, plus the trend toward year-round camping, brings campers back to the park in the fall, winter and spring, and is quite a contrast with other forms of park use which is heavy on Sundays and holidays and negligible during the rest of the year. As a result of the camp leadership, is it not more likely that campers will develop a life-long appreciation of the outdoors and become supporters of park and conservation movements?

Another interesting fact that should be remembered is that many of these campers never would have reached a park if camping agencies had not existed to bring them there and park authorities provided facilities to make this possible. Through organized efforts vacations will be possible for hundreds of thousands in such camps that would not be possible to these same people otherwise. We expect a million camper-days' use in the National Park Service camps this summer.

More camps are needed. Studies so far thoroughly establish the fact that existing camp facilities are not adequate to meet present needs. The greatest needs appear in the southern and western States. Some of the studies made in cities indicate there is a great need for more camps for children in the middle-income group. More girls' camps are needed as well as more camps for Negroes near the concentration of large Negro populations. There is a need for greater coördination of effort among camping agencies so that present facilities can be utilized to their fullest extent. More consideration might be given to the question of public operation of camps and the training of an adequate number of competent camp directors and counselors. Wherever a number of camps exist in a park, more attention should be given to the training of camp leaders by the recreational and naturalist personnel of the park.

Recent and yet incomplete studies indicate that we may expect in the near future a considerable increase in the number of organized vacation camps, particularly those on public land, and consequently it becomes the responsibility of the public park administrator to give adequate consideration to the planning and administrative problems involved in providing these opportunities for wholesome low-cost vacations.

Fifty Years of State Parks in Minnesota

HAROLD W. LATHROP, Director Minnesota State Parks, St. Paul, Minn.

NINETY years ago, on June 1, 1849, the Minnesota Territory came into being and less than nine years later the State of Minnesota was admitted to the Union. Going back into the history of the Legislature, we first find recognition of the need for historic sites in a bill introduced in 1889 for the purchase of the battlefield and camp grounds to commemorate the historic events connected with the last decisive battle of the Sioux Indians in the 1862 outbreak. In 1893, the Legislature appropriated funds to purchase five acres of land. Commissioners were appointed to purchase the land, and it was assumed that the State Auditor, under whom all state lands were then administered, was to be given jurisdiction over the area.

On February 12, 1889, Henry Hastings Sibley, who was the first governor of the State of Minnesota, but who was then President of the Minnesota Historical Society, commissioned Mr. J. V. Brower, of St. Paul, to make a careful and scientific survey of Lake Itasca and its surroundings, with a view of determining the true source of the Mississippi River. The need for this was recognized by the Historical Society because of conflicting reports.

On Wednesday afternoon, it will be our pleasure to dedicate a plaque to the memory of Mr. Brower, who was so commissioned, who did carry on the survey requested, and who spent a number of years as the first park commissioner in what is now Itasca State Park. It is interesting also to note that on March 28, 1889, Mr. Alfred J. Hill made the first suggestion for a state park in Minnesota, in an article which he communicated to the editor of the St. Paul *Evening Dispatch*. As far as we can find, this was the original suggestion made for the establishment of this magnificent park. In that article, Mr. Hill said in part:

> Why cannot we . . . have a real wild park, one far from the hum and bustle of large cities, like the National Park of the Yellowstone, and that once proposed, I believe, for the Adirondack Region in New York? To answer my own question we may have such a park if the Legislature will only take the proper steps toward it, by memorializing Congress to grant all unseated lands in a certain region and by providing for the condemnation of the rest there, the whole to constitute a State Park. The region I refer to is the immediate basin of Lake Itasca and the valley of the Mississippi below it . . . constituting in all about 100 square miles.

A copy of an editorial, prepared by Mr. J. A. Wheelock, and appearing in the St. Paul *Pioneer Press*, was transmitted by Mr. Emil Geist of St. Paul to the Historical Society, with the suggestion that the Society take action for the preservation of forests in the Itasca basin.

Professor Winchell, outstanding geologist, was placed on the committee of the Historical Society, and, in his report for the year 1889, recommended a state park:

> The geographic position of Minnesota is on that border land which exhibits the transition of the forested area into the prairie. It hence preserves the faunal and floral characteristics of both. . . . So long as the natural conditions exist, the State of Minnesota will be visited by students and collectors interested in natural sciences. . . . It behooves the State to preserve, to such extent as may be found desirable and feasible, those natural and aboriginal conditions, and for this purpose there is no better method than to reserve from sale and settlement some considerable tract where they may not be destroyed. Again the State should have a large, public park because of the healthful resort that it would afford those living in cities, and for those, who, coming from further south, seek in summer the invigorating effects of northern latitudes. . . . This park should be located either in the region northeast of Lake Superior, inclosing some of the rock-bordered and rock-bottomed lakes that are a natural curiosity to every traveler or in the area about the headwaters of the Mississippi.

Thus, the first recommendations for a state park were made, well based on the same fundamentals that we use today in selecting areas for state parks.

In chapter 56 of the Laws of 1891, Itasca Park was created. It was to comprise 19,701 acres, consisting of unpatented Federally owned lands and patented lands in the name of the railroad and several logging concerns, and was to be set apart and perpetually used as a public park. Itasca State Park was by law dedicated to the perpetual use of the people of the State. Its title vested in the Auditor of the State. The legislation was based on the complete report of Mr. Brower. The 52nd Congress of the United States, on August 3, 1892, granted forever to the State of Minnesota, to be perpetually used by the State as a public state park a grant of land, which was to revert to the United States, together with all improvements thereon, if at any time it should cease to be exclusively used for a public state park, or if the State should fail to pass legislation for the protection of the timber thereon. In 1893, the State accepted the grant and consented to the purpose set up by Congress.

Funds for the payment of the survey made by Mr. Brower were not appropriated by the Legislature of 1891 and Mr. Brower personally paid the cost of the survey, with the exception of $150 subscribed by the Historical Society. By the end of 1894, the state debt to Mr. Brower had grown to $5,971, at which time the State had acquired ownership and control of 10,879 acres within the limits of the park, with 8,623 acres remaining in private ownership because of the lack of appropriations.

State park history was made again in 1895, when the Legislature authorized the Governor of the State to confer and coöperate with the Governor of Wisconsin, either personally or by a joint commission, on

matters pertaining to acquiring, improving and preserving such portions of the Interstate Park and Dalles of the St. Croix, as may lie in the different States, with the object of making this picturesque area a park for the pleasure of visitors and the perpetual use of the people.

It was apparent that the general awakening had come and people in all sections of the State were realizing the benefit of preserving and protecting forever outstanding scenic and historic areas. In 1895 the Legislature appropriated funds for the erection of a suitable monument to mark the site of Fort Ridgely, to commemorate the siege by the Sioux Indians in 1862.

In 1905, Minneopa State Park was created because of the beauty existing around two falls and a deep glen, the largest fall of which is like the famed Minnehaha Falls in Minneapolis, immortalized by Longfellow.

In 1911 funds were appropriated to increase the amount of land in state ownership surrounding Fort Ridgely Monument for park purposes and designating the area as the Fort Ridgely State Park.

In the same year, the Legislature established Alexander Ramsey State Park and authorized the purchase and condemnation of lands and vested them in the State Auditor. The same year, also, the site on which the treaty of Traverse Des Sioux was signed was established as a state park. The breaking of the commitments made by the Federal Government under this treaty was the cause of the Indian Outbreak of 1862, and in 1907, the area on which the battle of Wood Lake was fought was established as a monument.

In 1913, Horace Austin State Park was established near the City of Austin, because of its historic value, and in 1915, 2,350 of the 3,375 acres now comprising Jay Cooke State Park were donated by the Jay Cooke Estate and citizens of Duluth, Carlton and Cloquet. The Legislature of that year accepted this area as a state park. It is unfortunate that the water rights were withheld, for the State has no control of the water passing through the park, which suffers when the power interests use all of the water during peak periods.

There must have been some question as to who should have the responsibility for maintaining state parks, for, in 1919, when Sibley State Park was created, it was placed under the general care and supervision of the Game and Fish Commissioner, to be forever maintained by the County of Kandihohi, in which it is located. In the same year, Whitewater State Park was established, with no inclusion in the law as to who was to have jurisdiction over it. Consequently the State Auditor assumed control of the park. This year, also, Tequa Lakes State Park was created in the western edge of the State, because of its location on two lakes which have subsequently dried up, leaving the area without the benefits of water for recreational purposes. In 1919, too, the control of Birch Coulee was placed under the State Auditor, because of the failure of the local township to maintain the area properly.

In 1921, Sleepy Eye State Park was established within the limits of the town of the same name, under an Act which created it as a public park and dedicated it to the people of Minnesota, under the care and supervision of the State Auditor. In the same year, Scenic State Park was created and dedicated to the people of the State, to be managed by the State Auditor, until otherwise provided. The forest was to be kept intact. All state and swamp lands within the boundaries were to be transferred to the park. In 1921, too, funds were appropriated to carry out a law passed in 1905, creating a state memorial monument at Lake Shatek. This area has recently been expanded to 180 acres, and, being located on one of the very few lakes in southwestern Minnesota, it is destined to receive extremely heavy use.

In 1923, the only three remaining virgin tracts of Norway pine on the shore of Lake Bemidji were purchased by the State. These acres stand today as a monument, not to the principles of conservation, but as a reminder of the damage wrought by lumbering companies in their desire for private gain.

Thus, continually through this half century new state parks have been established, but never were the principles of good planning given proper recognition. Developments were made in piece-meal fashion in the majority of cases and it is fortunate that the developments were such that an extremely heavy use was not made of these areas. Otherwise it would have been difficult to carry through the revamping process of the last five years.

There have been but few donations to the State Park System, but the donation by Dr. John A. Latsch of Winona, of the park which bears his name, in 1924, should be given recognition. This area along the Mississippi River has great possibilities.

From time to time Legislatures have established monuments both to the memory of people killed in the 1862 Uprising and also to those who lost their lives in two big forest fires which swept Minnesota, one in 1898 and one in 1917.

The state parks were in most cases administered by the Auditor of the State. In 1925 a State Forestry Board, comprising the Auditor, Commissioner of Game and Fish and Commissioner of Forestry, was placed in charge of the parks. In 1931, with the establishment of the Department of Conservation, the state parks were placed under the Division of Forestry. Following the recommendation of the National Park Service, the Legislature of 1936 provided that state parks be placed under a Division of State Parks.

The entire Federal Relief Program has been responsible for increasing the system of state parks in Minnesota. Words cannot express the appreciation which the people of the State owe to the National Park Service and WPA for the assistance they have given in developing facilities by which the public can make better use of these areas.

With twenty state parks, comprising 43,674 acres, four state memorial parks, three state recreational reserves, 11 state waysides and eight state monuments, we have a total of 25,500 acres. Some 6,800 acres of this total has been acquired since the inception of the Federal Relief Program. The Minnesota State Park and Recreational Area Plan, which was prepared through the coöperation of the National Park Service and the Works Progress Administration will, we hope, be a guide to the future expansion, using the same policies followed during the past five years.

We know that our system today has an inventory value of well over six million dollars, due in part to Federal coöperation.

We realize that numerous mistakes may have been made in the past, but we are endeavoring to rectify them in the interests of conservation, at the same time recognizing the demand for facilities to meet human needs. We try to weigh impartially the possible benefits from any contemplated improvement. Is it more necessary to preserve and conserve resources than to satisfy apparent public demand? We hope to make decisions which will eliminate any accusation that we have destroyed Nature's handiwork simply because some people wished us to do so.

Thus, after fifty years of state parks in Minnesota, we still are cognizant of the same sound policies which the early founders of the system held uppermost in their minds. I only hope that fifty years hence the people of Minnesota will appreciate our efforts in conservation and recreation as fully as we appreciate the efforts of the founders of the system.

Recent State Park Progress in Illinois

CARTER JENKINS
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UNDER the Department of Public Works, George H. Luker, Superintendent of The Division of Parks and Memorials of Illinois, administers 11 state parks, 9 state historical parks, 16 state monuments, and 27 memorials, some of which are outside the State but to which the State has contributed. Our state parks range in individual area from 4,742 acres down to 21 acres in size. Illinois' total acreage at the present time amounts to 14,070. During the past few years our acreage has been increased from 5,000 to 14,070, a gain of 300 percent, all of which has been accomplished through awakened park interest in Illinois and throughout the Nation. Credit for this renaissance of park activity must be largely given to the beneficent aid extended by the National Park Service of the Department of the Interior.

Recently, two publications have been prepared of which our Division of Parks is thoroughly proud. First in the Nation was our "Illinois Park, Parkway and Recreational Area Plan" which was prepared jointly

by the National Park Service and the Division of Parks. We have also prepared our "Park Manual," a book of instructions for guidance of park custodians. This has done much toward improving *morale* and *esprit de corps* throughout the entire division.

During the current biennium, Illinois has spent for strictly park expenditures approximately $784,000, plus $100,000 from general funds of the Department of Public Works and Buildings, and the National Park Service has expended approximately $960,000 for direct park benefits.

In addition to the splendid work performed in our state parks by the CCC camps we have also done much by using aid from the Works Progress Administration and from the National Youth Administration. We find that we profit from WPA in direct proportion to the degree and kind of supervision extended by the State. By preparing plans and putting capable engineers over the work, results comparable to CCC work can be secured, but if lack of direction occurs the results are far from desirable. NYA activities have proven to be quite successful, under the leadership of custodians, in office personnel and in construction of tables, benches, signs, stoves and general maintenance work.

For the next two years, the park budget of Illinois amounts to $897,210. In addition, at least $50,000 will be spent from General Office funds and perhaps as much as $100,000 from the Division of Waterways, making a grand total of $1,047,210. Additional park lands acquired during the past two years represent an expenditure of $96,444. We have added 1,449 acres to our park holdings.

Illinois has recently inaugurated an annual school of instructions for its custodians. This is attended by all custodians from every park, at the State's expense, and we believe the school has done much towards acquainting these employees with the aims and objectives of state parks. By allowing them to become acquainted with what other custodians are doing, there is instilled a spirit of healthy competition which reacts favorably on the division.

During the past year Illinois has provided all custodians and guides with a complete semi-military uniform of good material, which has enhanced the appearance of our employees and done much toward creating public respect and added prestige for them.

A feature recently added to the service extended by the Division of Parks has been the employment of two distinguished naturalists. In addition to the museums operated at Cahokia Mounds, Fort Kaskaskia, New Salem and Fort Chartres, new museums have been opened at Black Hawk and Starved Rock.

Several of our large parks in Illinois have been subject to criticism in the past because of lack of proper food facilities. Illinois can now boast that in at least four of the parks food service is unsurpassed and the reputation of the concessionaire in each location has become wide-spread.

Illinois has sought to eliminate "hit or miss" concession operation and has decided upon a program of furnishing concession stand and kitchen equipment. Comfortably furnished lounge rooms in the lodges are also provided.

Through our publicity division, strenuous efforts have been made to inform the general public of attractions and available facilities at our many parks and memorials. This has frequently been submitted to inquirers in the form of a tour, with information showing the location of the parks having overnight accommodations and full meal service. Intermediate park stops are also suggested where clean up-to-date concessions are available. Individual park pamphlets in color for free distribution at all our parks have been prepared after considerable study; furthermore, each park in turn is provided with pamphlets of attractions and facilities in other parks and in this way we have built up a chain of information which can extend all parks information to any visitor at a particular park. Because of our publicity policy three times as many inquiries on state parks have been received each month this year as compared with the same months of the preceding year. A total of more than 5,000 inquiries on our parks were received in the past three months. Last year state-park visitation exceeded 3,000,000 and this year we expect it to exceed 3,500,000.

An expenditure of $50,000 has been made to provide appropriate signs on our main highways leading to our state parks at distances of about 30, 20, 10, 5 and 1 mile. Park-like landscape signs have also been erected on the arterial highways at the intersection of secondary highways leading to the parks. In this the Division of Highways has given excellent coöperation.

Week-end excursions have been organized by coöperation between the Division of Parks and the Burlington Railroad for visitors desiring to reach White Pines State Park and in a similar way with the Illinois Central Railroad for visitors desiring to reach Giant City State Park.

One of the developments now under way is the creation of a great Wild Life Refuge located at the confluence of the Illinois and Mississippi Rivers, comprising about 35,000 acres. This is being developed in coöperation with the Illinois Natural History Survey and the University of Illinois, at the junction of two great flyways of migratory birds and water fowl, and has been possible through the building of the Alton Dam by the Corps of Engineers of the War Department.

The famous old Illinois and Michigan Canal, which now is jointly under the Division of Parks and the Division of Waterways, was first foreshadowed in a letter written by Father Marquette on August 1, 1674, in which he proposed the creation of a canal from the "Lake of Illinois" into the "St. Louis River." Marquette and Joliet in 1673 had traveled along the Illinois rivers in the vicinity of Lake Michigan. In 1819, after investigating and receiving reports on the feasibility of

such a canal, Secretary of War John C. Calhoun recommended its construction because of the admitted commercial and military importance. In 1822 Congress authorized the State of Illinois to construct a canal. In 1823 the Canal Commissioners were appointed by the Legislature and this act marks the beginning of what is now the present Division of Waterways. Finally, in 1829, the Canal Commissioners laid out the canal town of Chicago, and on July 4, 1836, the canal construction was begun with great ceremony. The canal was eventually finished and the first boat passed through on April 19, 1848.

Business over the canal increased steadily to a maximum toll collection of approximately $300,000 in 1865, and freight continued to increase to a maximum of 1,011,000 tons in 1882, although the tolls collected had been reduced at that time through rate slashing to compete with the Chicago and Rock Island Railroad which had been built more or less parallel to the canal. Eventually, because of the shallow draft and narrowness of the canal and the advent of mechanically propelled boats, the canal reached obsolescence and now its principal use is as a marine parkway embracing a length of about 100 miles, extending from Chicago to La Salle.

Splendid progress has been made in the restoration of the towpath roadway and many hydraulic structures, to make this extended parkway of recreational use to the hiker, the automobilist and the navigator of small water craft. Bridges have been rebuilt, shelters constructed, locktenders' houses restored, creek diversions repaired, aqueducts, and much dredging and maintenance work performed.

The Division of Waterways has been given authority to oversee and direct all hydraulic and marine developments in our parks. Four full-time employees of this division spend their entire time with the Division of Parks, in addition to those of the Illinois and Michigan Canal Bureau. Purchases of materials and part-time assistance of our other technical personnel also are extended to the Division of Parks.

The greatest inland body of water in Illinois is the Fox Chain of Lakes, embodying Lake Catherine, Channel Lake, Lake Marie, Bluff Lake, Petite Lake, Grass Lake, Fox Lake, Nippersink Lake, and Pistakee Lake, which are located in McHenry and Lake Counties. These publicly owned areas embrace about 3,300 acres and are visited by hundreds of thousands of people every year.

Supplementing the state parks of Illinois are the county park systems, two of outstanding importance—the Cook County Forest Preserve District under the direction of Superintendent Charles G. Sauers and the work in DuPage County under the direction of Forest Preserve President T. F. Hammerschmidt. These counties provide metropolitan park facilities for a huge population, and the State has observed with pride and sometimes envy the splendid record being made by these two organizations.

Wisconsin's System of Recreational Areas

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ALTHOUGH the establishment of state parks in Wisconsin had received some attention prior to the beginning of the present century, the development of the state's park system dates from that time. Since then the state park movement has grown steadily in Wisconsin and it is important to note that the acquisition of state park lands has generally followed plans laid out in advance.

Wisconsin's oldest state park was acquired in 1900 as a result of an investigation of the St. Croix River region in Polk County, made by a committee appointed by Governor Edward Scofield in 1899. This park, with a contiguous area in Minnesota, is known as Interstate Park.

In 1907, sentiment for developing a state park system had crystallized to the point where the Wisconsin legislature of that year appointed a State Park Board which employed John Nolen, a nationally known landscape architect, to make a survey of Wisconsin's outstanding scenic areas and prepare a report for Governor James O. Davidson. This report, published in 1909, recommended the acquisition of four unusually fine state park areas. Three of these, Devil's Lake, Peninsula and Wyalusing, are now state parks. But of even greater value to the state of Wisconsin were the standards for state parks which Mr. Nolen so ably presented in his report. The state park agency has referred to it constantly as new parks were considered and consequently most of the present state parks in Wisconsin are of the highest calibre.

In recognition of the great need for large recreational areas in southeastern Wisconsin where more than one-half of the State's population is contained within one-seventh of its land, a plan was prepared and published by the Wisconsin State Planning Board in 1936. The state legislature of 1937 appropriated $75,000 for that and successive years to purchase forest lands for conservational and recreational purposes in that region. Several forest areas have been established and over 2,800 acres have been acquired to date and a considerable additional acreage is now in the acquisition stage.

At this time the state park system is composed of nineteen units—ten state parks, four historic monuments and five roadside parks, containing a total of 13,107 acres. The eight state forests contain many sites devoted to recreational use.

During 1938, 1,258,000 people visited the Wisconsin state parks, 46 percent of whom were from outside of the State. Devil's Lake State Park accounted for more than one-third of the total number of visitors. It is interesting to note that 79.4 percent of all those persons visiting the state parks were over 18 years of age. In no park did the number of visitors under 18 years account for more than 28 percent of the total

attendance for that park. We are wondering if this is a peculiarity of Wisconsin parks or if others have had a similar experience.

Extensive work programs are under way in most of the parks, there being CCC camps under the supervision of the National Park Service operating in four of them and well-organized WPA operations in the remainder of the areas. Better facilities for public use are constantly being made available and at the opening of this season the parks were in excellent condition for an anticipated heavy use.

A recent development of noteworthy interest in furthering Wisconsin's recreational program has to do with the provision of highway waysides along the major highways of the State. The State Highway and Conservation Commissions are coöperating in the acquisition and development of these areas which will be maintained by the Highway Commission. The program for this year calls for the establishment of twenty-five waysides throughout the State.

Of considerable importance in the recreational plan for Wisconsin is the large part played by county park systems. Of Wisconsin's 71 counties, 31, comprising 64.2 percent of the population of the State, now maintain county parks totaling 15,500 acres, exceeding the state park system acreage by 2,400 acres. This provides an average of 8.6 acres per 1,000 population in the counties possessing such systems. With this general assumption on the part of the counties to furnish "country" parks for their residents, the State need only concern itself with the establishment and development of state parks according to the highest standards of park quality. The widespread use of the county parks to satisfy purely local recreational requirements relieves to a great extent the demand present in some regions for the establishment of state parks for that purpose.

To encourage the extension of county park systems, the Wisconsin Park, Parkway and Recreational Area Plan recommended that the State offer aids to the counties in the establishment of these parks. The report suggested that the State make funds available to assist the counties to acquire lands by appropriating not more than $2,000 annually to any one county to be matched dollar for dollar by the counties for the purchase of park lands. Additional to this was the recommendation that the state park agency and the State Planning Board extend assistance in the planning of the park areas. We have had some experience with the latter part of the program and feel that it is a successful means of extending and improving the county park systems.

The development of an interest in extending Wisconsin's recreational system by the State Highway Commission and the counties is of great value in satisfying the recreational requirements of the people of this State and their visitors. The Division of Forests and Parks is well pleased with this arrangement and feels that by these means a well-balanced recreational system for Wisconsin may be achieved.

North Dakota State Parks

RUSSELL REID, Superintendent, State Historical Society, Bismarck, N. D.

THE State Historical Society of North Dakota has been given legislative authority to administer all state parks and historic sites owned by the State of North Dakota. The Society has been endeavoring to preserve historic sites since its establishment as a state organization in 1905. The first areas acquired were the sites of military posts, Indian villages and other archeological areas.

While North Dakota is a comparatively young State, its citizens are much interested in preserving its history and little difficulty was experienced in securing adequate support for the preservation of historic sites. After the first historic sites were established it was noted that many visitors to historic sites not only enjoyed them because of their historic significance but they also enjoyed picnic or recreational facilities, if they were provided. Because of this need some areas were acquired by the Historical Society which had little or no historical significance but which were desirable for park or recreational purposes.

The purpose of the Historical Society is to preserve all state history. This not only includes the preservation of historic sites but the preservation of all native flora and fauna which have had an important bearing on the early history of our State. At an early date the Historical Society decided that all areas placed in its care should be kept as natural as possible, and in no case should foreign plants or animals be introduced.

Although many valuable additions to the state park system were acquired prior to the event of the Emergency Conservation Work program, it can be truly said that the development of North Dakota state parks and historic sites really commenced with the establishment of the first CCC park camp assigned to the State in 1934. Before that date the Society was active in acquiring suitable areas but unfortunately did not have the means of properly developing them. During the summer of 1934 North Dakota suffered a severe drouth. As a partial relief measure eight drouth camps were assigned to the State in August of that year. The State showed its willingness and desire to coöperate with the Federal government by acquiring areas suitable for park development. Five of the areas selected were deemed desirable for long occupancy and permanent camps were constructed. The following year two more permanent camps were added. These camps were assigned to new park areas and to existing park areas which had been enlarged in order to provide an adequate work program.

Since the acquisition of many new state parks and historic sites, the State Park Committee of the State Historical Society has found it desirable to re-classify the areas it now controls as follows: six state parks; seven recreational areas; and thirty-five historic sites. With the exception of one area all of our state parks have been developed by means

of CCC camps under the direction of the National Park Service. Some of them are practically completed while others will not be completely developed as planned for some time. It is not possible in a brief report adequately to describe North Dakota's park system. However I would like to mention some of the parks and historic sites which we believe are of interest not only to our own people but to out-of-state visitors as well.

Of major importance are the two Roosevelt areas in the North Dakota Badlands. These areas are not only of unusual scenic and scientific interest but have a deep historical background. It was in this area that President Theodore Roosevelt operated two ranches when he was a young man and it was here also that the colorful Marquis de Mores established his ranch and packing industry at Medora. These areas are now being developed as a Recreational Demonstration Project by the National Park Service.

The International Peace Garden, located on the Canadian boundary in the Turtle Mountains, is without question a unique undertaking. The area comprises about 2,300 acres located on both United States and Canadian soil. In addition to the formal garden area, which is being developed on both sides of the boundary line, a splendid recreational area has been developed on the American side. With the constant threat of war and unrest, which is at present being experienced in other parts of the world, the International Peace Garden indicating the close friendship of the United States and Canada takes on a new significance and value. The work in this park is also being conducted through the coöperation of a CCC camp sponsored by the National Park Service.

The Fort Lincoln State Park is, without question, the best known historic site in the State. It has indeed a colorful history. Approximately 200 years ago a tribe of Mandan Indians selected it as a site for one of their permanent earthlodge villages. In 1804 Lewis & Clark camped adjacent to the present park boundaries and found the village site in ruins. In 1872 Fort McKeen was established and the following year Fort Abraham Lincoln. It was from Fort Lincoln that General George A. Custer left for the Black Hills on the gold discovery expedition of 1874 and for the Little Big Horn in 1876 when he and all of his immediate command were killed. Five of the earthlodges have been reconstructed. The sites of all of the original Fort buildings have been adequately marked and the three block houses of Fort McKeen reconstructed. A large substantial museum of cut native granite, which tells the story of the Indian village and the historic military forts, has been constructed and will be opened to the public soon. The development of Fort Lincoln State Park was also accomplished by CCC work in coöperation with the National Park Service. Since the CCC park camp has been moved to another area a WPA project has been approved to complete some of the projects which the CCC camp was unable to finish.

Turtle River State Park is located on the western edge of glacial

Lake Agassiz. It is located in the beautiful wooded valley of the Turtle River. Although it has many features of special interest to geologists and has much value as a wildlife sanctuary, its primary purpose is recreation. The development is, at present, far from complete but we have found the park to be immensely popular. It is quite probable that steps will have to be taken to enlarge the park area in order to provide the facilities needed without overcrowding. A CCC park camp under the direction of the National Park Service is at present developing this area.

Lake Metigoshe State Park contains 640 acres of native woodland in the Turtle Mountains adjacent to a large lake. The park is at present not adequately developed as far as recreation and picnic facilities are concerned. It does contain a splendid group camp which has been operated during the past two years with marked success. The group camp has proven to be so popular that it has been difficult adequately to provide for the larger groups who desire to make use of it. Plans are now being made to add the needed picnic and recreational facilities but the State Park Committee desires to keep a large portion of this park as a native woodland area.

In addition to the larger state parks many smaller recreational areas and historic sites such as Fort Abercrombie, the first military post constructed in the State in 1857, Fort Union, one of the more important fur trading posts in the west, constructed in 1829, and the de Mores Chateau at Medora, are also administered by the State Park Committee of the State Historical Society.

North Dakota is a prairie State and practically all of its area is farming or grazing land. Consequently, areas which are entirely suitable to state parks are not plentiful. We have found, however, that the areas designated as state parks have become extremely popular with North Dakota people. In some of our park areas care must be exercised to avoid overcrowding. Native vegetation is seldom luxuriant and excessive use in many instances might cause serious damage.

Although the Park Authorities of North Dakota have enjoyed popular support it has been impossible during the past few years to secure adequate appropriations needed properly to finance a state park department and for the maintenance and administration of park areas which have been developed. During the past few years North Dakota has been going through a severe financial crisis due to adverse crop conditions. The general tendency of the State has been to reduce appropriations drastically whenever possible. While North Dakota state parks did not secure the support we had hoped to receive, they did receive an increased appropriation which clearly indicates a desire to have parks properly developed and maintained.

Needless to say it would have been impossible for the State to acquire and develop areas suitable for state park purposes without the assistance

of the Federal Government. The CCC camps under the direction of the National Park Service have been of immeasurable value to us. The National Park Service has made it possible for the State to develop parks of which we are justly proud. Without the benefit of their criticism and experience it could not have been done. Works Progress Administration projects have also been used with splendid results in some of our smaller park areas.

Although North Dakota has made vast strides during the past few years much work remains to be done. With the increased support we are receiving I am sure that we will be able to continue our work in order that we may adequately meet the needs of our people.

Progress of State Parks in Missouri

E. A. MAYES, Assistant Director, Missouri State Park Board, Jefferson City, Mo.

PROBABLY the outstanding scenic features in Missouri are the large springs which are located in the Ozarks. Many of these springs have a measured daily flow of water in excess of one million gallons. The largest is known as Big Spring and has a maximum daily measured flow of eight hundred million gallons. This is more than enough clear spring water to supply the daily needs of either Chicago or New York City. This spring is located in Big Spring State Park, and seven other parks include large springs.

Other scenic features are the mountains, the many miles of clear Ozark streams, and the Lake of the Ozarks, an artificial lake of 60,000 acres, which was created by damming the Osage River at Bagnell.

Eleven of the state parks in Missouri are located in the Ozark region and the other sixteen state parks are scattered over the remainder of the State.

While a preliminary Park, Parkway and Recreation plan for the State has been prepared, in which additional parks are recommended, the present system is well distributed and the parks are so located that they are reasonably accessible to practically all parts of the State.

Of the total of twenty-seven state parks, six include hotel accommodations and are operated as major recreational areas, two are primarily game refuges, three are historical in character, one is a forest preserve designed to preserve 1,000 acres of virgin timber in the Mississippi River bottom, three are Recreational Demonstration Project areas, eight are day-use areas, two are on the shores of oxbow lakes in the bottom of the Missouri River, and two additional new ones are to be developed as major recreational areas.

The State Park Department was created in 1917 by Act of the State Legislature. The Act provided that five percent of all collections from the sale of hunting and fishing licenses should go into the "State

Park Fund" to be used for the purchase, development, maintenance and operation of state parks. A State Park Board was created to administer the State Park Department, which was composed of the Governor, the Attorney-General and the Fish and Game Commissioner, all as ex officio members.

In 1921 the legislature increased the portion of collections from hunting and fishing licenses which should go into the State Park Fund from five percent to twenty-five percent.

This fund accumulated until 1924 when six state parks were purchased; during the last fifteen years the number has increased to twenty-seven, by purchase from the State Park Fund, by special appropriation from the State Legislature, by gift and by purchase of the Federal Government.

In 1936 the present Conservation Commission was created by vote of the people and as a result of this action, the 1937 State Legislature provided that the Director of Conservation should serve ex officio as a member of the State Park Board in place of the Fish and Game Commissioner. The Governor and Attorney-General were continued as ex officio members. The 1937 law also provided that the Director of Conservation should also serve as Director of State Parks. Since the amendment to the State Constitution which created the Conservation Commission precluded the further financing of state parks from the proceeds of the sale of hunting and fishing licenses, funds have since been provided by the legislature from general revenue.

All of the existing major parks are in or near the Ozark region. The south part of the State has been served by parks for many years but there has been an absence of highly developed areas in the north portion of the State. It is planned to develop Crowder, Pershing and Mark Twain State Parks as major recreation areas, and after the development of these three parks, all portions of the State will have reasonable access to major recreational areas.

The census of park visitors which was made in 1938 indicated seven hundred thousand annual visitors to the parks. The first census of park visitors in 1926 indicated 95,000 annual visitors and records show a steady increase of park visitors between 1926 and 1938. It is expected that the number of visitors will increase as progress is made in the development of facilities.

Arkansas State Parks

SAM G. DAVIES, Director, State Park Commission, Little Rock, Ark.

ARKANSAS has always had beautiful and interesting scenery but prior to 1923 just took it for granted and did nothing about it. Our first state park was established on Petit Jean Mountain that year. Dr. Hardison, who is now chairman of the Arkansas State Parks Commission, is directly responsible for its inception. He was inspired and assisted by such enthusiastic park men as Stephen T. Mather, Raymond Torrey, Major Welch and Colonel Lieber. The CCC and the National Park Service came to Arkansas just ten years after our first park was established. At this time our present Governor, Carl E. Bailey, became interested in state parks and has been most helpful.

We now have nine areas, under the supervision of the State Parks Commission. Four of these meet every requirement of a state park and are being developed by the National Park Service and CCC so that our citizens and our friends from other States may enjoy them. Of these four, Petit Jean, which has been operating since 1935, is becoming more popular every year, and we are having to increase our accommodations as rapidly as possible to keep up with our increasing patronage. Fishing, boating, swimming, camping, picnicking, dancing, hiking and nature study are all available here.

Devil's Den, another of our real state parks, has started its first year of operation this spring and promises to be a very successful venture. Swimming, fishing, camping, picnicking, dancing, hiking and nature study are available now and when our large lake is completed we can add the boating. Both overnight and housekeeping accommodations are provided here.

The other two of our larger parks are Lake Catherine and Buffalo River. Development has not yet reached the stage in these two parks where we feel justified in opening them to the public, but we have CCC companies in both and hope to present one or both next year.

We have a fine small park or recreational area in the northeast section of the State, Crowley's Ridge. This area leads all the other parks in attendance. Swimming and picnicking are the principal attractions here, and we have group camp facilities which are popular with Boy Scouts, 4H Clubs, and similar groups.

Arkansas is not a wealthy State and our appropriations for maintenance and construction are small, but by coöperating with Federal agencies we are getting a state park system of which any State might well be proud. We are working with CCC, WPA and NYA. The state park for negroes is being developed entirely by NYA negroes. The Park Commission does all the planning and furnishes some supervision. The sponsor contribution for this work is being made by the negroes themselves in five- and ten-cent contributions. Very creditable work is

being done and nearly every negro in Arkansas knows about this park and is interested in it.

We have not as yet charged a parking or maintenance fee in any of our parks, but I think we are coming closer to it every day and will probably put one or the other in effect next year.

All our concessions are operated on a percentage basis and this method has proven very satisfactory. Prices for food and lodging and other services are subject to the approval of the Parks Commission.

Our ever-increasing park use, as reflected by the very valuable data being collected by the Recreation Study Project of the National Park Service, leads us to believe that we are on the right trail and that there is a brilliant future in store for Arkansas State Parks.

State Parks in Florida

SUSAN FORT JEFFREYS, Secretary, Florida Board of Forestry, Jacksonville, Fla.

FLORIDA is generally accepted as a recreational State. We who live in Florida feel that this advantage of our state individuality is a reputation to uphold. When our park system in Florida was first planned the strong sentiment already well formed was for certain types of recreation at considerable disadvantage to the general plan. The plan in unfolding seemed slow but it has proved sure.

The fact that the scenic beauties and advantages of our State have been advertised to all parts of this country and other countries as well has formed a definite picture of just what was expected on a trip to parks in Florida. Floridians who make the State their year-round home know the solid foundation of facts in selling the all-year idea to our visitors. Now in Florida we consider the large influx of tourists as a most important function to be met. In former years this trek southward was largely for three months of the year. That is where the test came in. Would the system prove practical for a year-round use? It has seemed from the first of importance that the state park system should show the all-year recreational advantages in the state parks. We want our state parks to show Florida as Floridians know it.

The Florida State Park System must of necessity take into its outlay first a beach area. The northeastern section of our State contains such a park. Indeed, this park, Fort Clinch, is a real example of recreational, historical and scenic excellence.

Gold Head Branch State Park in the central part of Florida is typical of the regions it serves. Lakes which are good for fishing and lakes which are good for bathing and boating are greatly enjoyed. This particular section of Florida has not been as accessible previously and the good roads now are more than justified, particularly in the summer.

Along the shores of the Suwannee River is an acquisition area which

in time it is believed will make a famous river even more famous. If ever a stream typified simplicity of living, simplicity of home-loving heart, the Suwannee does. Flowering plum trees in the spring, jessamine, magnolias and all the scenes of song and story are there. Many hundreds who see the Suwannee from a highway bridge have yet to know the real river.

Florida was fortunate in having Highlands Hammock in central part of south Florida given to be administered as a state park. This sub-tropical wilderness has been made accessible by good roads, but the original Florida beauty has been held intact. An outdoor amphitheatre of extreme beauty and simplicity is a jewel of rarest green. I like to feel that Highlands Hammock is indeed our green cathedral and surely a visit there will suggest the fact that the architecture of cathedrals was inspired from the strength, the depth and beauties of the forest.

On the west coast Hillsborough River State Park is the kind of landscape which reminds you of Van Dyke's little rivers. It is interesting to note that only last week a marker was placed near the spot where De Soto landed in Florida before discovering the Mississippi.

At this conference near the headwaters of the Mississippi I feel there is a definite realization of the nation-wide interest in historical facts through the medium of state park systems. Hillsborough River State Park has many scenic spots, which, even today, suggest the fact that in such scenes as these conquering explorers, with flaming banners, marched through green fastness, looked over the landscape and called it theirs. It is not easy to build into park systems Spanish types of architecture. In fact it is more desirable to suggest that these park areas contributed their own inspiration to early explorers.

Myakka River State Park, on the west coast, is an entirely different revelation of Florida history. Within its borders, less than 50 years ago, a fair and beautiful lady, Mrs. Potter Palmer, of Chicago, built what she called her ranch home and that ranch idea is somewhat the key to this scenic park.

Caverns State Park in northwest Florida is unique not only for the attractiveness of its landscape but for the charm and loveliness of the Chipola River, enchanting in midsummer as well as other seasons.

Torreya Park on the Apalachicola River is reminiscent of the plantation country which was settled by Virginians in the early days. An old house built by a cotton planter of those days before the war is drawing much attention, and when completely restored will present a picture of Florida in the sixties. But the Torreya Tree for which the Park was named is the most unusual attraction. Torreya Park boasts here the last stand of the Torreya. The climax type of hardwood forests in Torreya is in itself a reason for preserving the area. The help of the Civilian Conservation Corps and the National Park Service has been of invaluable aid in planning for the continuance of activities in Torreya.

NATIONAL PARKS

PAPERS PRESENTED AT THE THIRD NATIONAL PARK CONFERENCE OF THE AMERICAN PLANNING AND CIVIC ASSOCIATION WITH THE NATIONAL PARK OFFICIALS, HELD AT LA FONDA, SANTA FE NEW MEXICO, OCTOBER 8-10, 1939

The Patio, Region III Headquarters, National Park Service, Santa Fe, New Mexico

EDITOR'S NOTE.—There was held at Santa Fe, New Mexico, on October 8–10, 1939, a most stimulating Conference on National Parks which Mr. Albright summarized in his Introduction of Assistant Secretary Chapman at the final dinner. The Introduction of President Albright and the final addresses at the dinner are presented here as the Preface to the excellent papers which were given at the Conference.

The Conference arrangements were under the able leadership of Colonel T. B. Catron, Chairman of the New Mexico Chapter of the American Planning and Civic Association. At the opening session, Governor Miles, Mayor Ortiz, and Regional Director Tolson of the National Park Service, welcomed the delegates. Assistant Secretary Chapman, Assistant Director McEntee of the CCC, Associate Director Demaray of the National Park Service, Major Tomlinson, outgoing, and Edmund Rogers, incoming, Chairman of the National Park Superintendents, made brief responses. Colonel Catron described Santa Fe, where three civilizations meet.

During the Conference a series of charming events was arranged. There was a fine Musical Program in the St. Francis Auditorium of the Santa Fe Museum, where the delegates were received by the Museum authorities. In the evening a colorful fiestecita was given in honor of the Conference. The second afternoon visits were made to three different types of homes and gardens where the delegates were graciously received by Mrs. Sarah McComb, Miss Amelia Elizabeth White, and Mr. and Mrs. Herman Baca. On the third afternoon visits were made to the Laboratory of Anthropology and the new National Park headquarters of Region III.

La Fonda, under the able management of Fred Harvey, is built in the Santa Fe style of architecture and reflects the atmosphere of old Santa Fe. David Cole, its genial host, arranged each function to satisfy the eye and the palate. The dinner programs were planned to amuse as well as inform the visitors and particularly to give them some idea of the traditional Spanish and Indian dances.

Following the Conference there was, under the efficient direction of Region III headquarters of the National Park Service, an eight-day Tour of the back country, which included San Ildefonso Indian Village, Bandelier, Chaco and Aztec National Monuments, Mesa Verde National Park, proposed Escalante National Monument, Monument Valley, Canyon de Chelly, Ganado Mission, the Navajo and Hopi Indian country and the Grand Canyon National Park. When it is recalled that much of the 1350-mile tour traversed country where the population averages less than two persons to the square mile, it may be realized that those who were privileged to participate in the Tour saw parts of the United States seldom visited by tourists, and received some idea of the Indian modes of living and working.

The papers presented at the Conference follow.

An Introduction and a Summary

HORACE M. ALBRIGHT
President, American Planning and Civic Association, New York City

I WISH that everyone in the radio audience as well as those here in person this evening might have attended the joint conference of the National Park Superintendents and the American Planning and Civic Association which is now drawing to a close here in Santa Fe. Never in my almost 30 years of interest and participation in conservation work, particularly with reference to your great national park and monument system, have I found a gathering with quite such a mature outlook in the park and recreation field.

The talks and discussions have been representative of clear thinking by people of long experience with social problems of the entire country, particularly as related to the use of land. Indeed, we have here in Santa Fe tonight most of the ablest authorities in America concerned with the conservation of human values through the medium of the national-park type of land use.

I believe that the magnificent spirit and the traditions of this impressive Southwestern country are felt so keenly in the souls of all of us who are fortunate enough to be here attending this splendid joint conference, that it seems as though the land itself has spoken a quiet, friendly word of welcome and acceptance.

In such an atmosphere, that higher order of thinking about the problems of our work to which we all aspire has come to us without great effort. We have found ourselves. There is a calmness among us that brings our thoughts into greater order and perspective, such, I dare say, as we would have achieved, as a group, in few other communities. Santa Fe is, indeed, one of those remarkably vital centers of our country where the powerfully moving cultural forces of the land and its people bring out vividly to the visitor his own sense of values and his honest desire to be a better neighbor back home.

The National Park Superintendents and the American Planning and Civic Association are grateful to you people of Santa Fe and the Southwest, who, in your great capacity for friendship, have opened your homes and your hearts to us who are with you on this occasion.

I do not forget for a moment when I say this that we would not be so acceptable to you if we did not do our part in our way to merit the respect you show us. You know that our work is of a non-profit, public nature; that it is concerned with that nation-wide movement to preserve for the people the things of nature which are most inspiring, most educational, and most beautiful. I need not talk to you about the treasures of your hills, your plains and valleys, nor of your national parks and national monuments. They are a part of your own way of life here in New Mexico, a number of them being located so close to you

that they are literally a part of your own front yard. You know them well, and, by the same token, understand clearly how our principal objective at this joint conference is to perfect ways and means to make the outstanding features of your State, and of other States, even more beneficial and enjoyable than they now are for the people of our country.

Secretary Chapman is a Western man. He has been keeping in close touch with the affairs of this joint conference. He understands the problems involved in the conservation of western natural resources, because a part of his job is to keep in touch with them, and to advise with Secretary Ickes in their handling. One of his special duties in the Department of the Interior is to coördinate National-Park-Service affairs. That is why he is here this evening. He also is in a position to understand a great deal about foreign affairs and to see the value of the ideals and objectives we are expressing at such conferences as this, in terms of their present and ultimate effect on national character, and further, the way in which our national character balances with that of the peoples of other countries. He is in a position to view our national affairs from a high vantage point in the structure of our government. He is a friend of long standing, one who has proved himself to the National Park Service and the American Planning and Civic Association, and to me personally in many ways on many occasions. And so, I am particularly proud and happy now to introduce to you the Honorable Oscar L. Chapman, Assistant Secretary of the Interior.

Conservation

HONORABLE OSCAR L. CHAPMAN
Assistant Secretary of the Interior, Washington, D. C.

THE proceedings of the past two days have been most stimulating and heartening. It is gratifying to me, as an officer of the Department of the Interior representing Secretary Ickes, to know that the national parks, and the natural resources of the country in general, have such staunch friends as you in the American Planning and Civic Association.

When this Conference was planned a year or so ago by the Association, in coöperation with the National Park Service, it was as part of a broad campaign to overcome public indifference to conservation problems. People visit, use, and thoroughly enjoy the national parks. But they do not sufficiently realize the dramatic importance of the problems of conservation that underlie park protection and the steady expansion of recreational activities to meet growing national needs. Probably we are all too willing to accept, without question, the gifts our heritage has provided; we are all too eager to ignore our responsibility for perpetuating this heritage through prudent use.

The situation has changed deeply since we planned last year. Now

war has overtaken Europe, and the shadow of the conflict falls across this continent. We hope the shadow may not materialize into substance. But in any case we must be alert to the fact that the present situation presents opportunities for war-time raids on our natural resources, and we must be prepared to combat them. When the demand for materials is sudden and heavy, and huge profits are involved, too many of our people may close their eyes to the future—may see only the chance of immediate profits and ignore future consequences. I speak advisedly, for as the first bombs fell in Europe, the Department was faced with two attempted raids on natural resources. These, I am thankful to say, did not involve national parks, but were related to our petroleum reserves. That was a very early beginning; the would-be raiders lost no time.

The best way to keep the national parks out of the path of such destruction—to prevent their utterly priceless and irreplaceable treasures from becoming war casualties—it to continue to educate our American people.

I know of no better implement of knowledge than the American Planning and Civic Association. With your high-minded devotion to the public good and with your state and local chapters throughout the country, you can be as you have been in the past, one of the principal defenders of national park standards and ideals, and I know you will gather 'round the standard now and carry it forward in the immediate future. We will depend upon you, individually and as an association, to be leaders of thought in each community, to examine, carefully and dispassionately, each proposal that may affect national parks or other national heritage. Together we must analyze each plan presented, look behind the immediate gain to see who will profit most and to what extent—and then look into the future and weigh the consequences for our children and our children's children of any action we might be asked to take.

We have been going over the record in the Department of the Interior, to see what happened to our natural resources a quarter of a century ago. We find that in 1916 legislation to establish the Olympic National Park was introduced in both houses of Congress. You all know the long history of endeavor that lay behind the actual creation of the park in 1938, for the American Planning and Civic Association supported the Department valiantly in that protracted struggle. In 1916 those pending bills probably would have been passed had not a war psychology prevailed. Certainly they would have received more attention. But there was war abroad, and there appeared an immediate opportunity to sell airplanes. Airplanes were then constructed largely of Sitka spruce—and Sitka spruce grew within the proposed park area. The result was that the Olympic National Park was not established for another twenty-two years. And a further result was that thousands of Sitka spruce trees were

felled. After the damage was done, it was discovered that there was no practical, economical way to remove the down timber. So there they lay, creating a fire hazard that endangered thousands of living trees—and so some of them lie today, memorials to blind waste of natural wealth in time of hysteria. Living, they would have been a constant, renewing resource of natural wealth. But they perished—futile casualties of a needless attack. No sane, patriotic person—and I hope all of us here are both—would for a moment withhold any resource, no matter how precious, if it were needed in a crisis to preserve our Nation or our national integrity. But in 1916 we were not at war, the spruce cut was never used, and in the final analysis loss and not profit resulted.

That is the point I want to emphasize. Conservation is not a matter of months or years; nor is it the outcome of wishful thinking. Rather, it is wise use of natural resources, planned on an economy extending into the future for generations and centuries. Yet the results of all the wisdom and careful planning involved in the highest degree of conservation can be undone almost with a stroke of the pen. That certainly is true of the values in the wilderness national parks. Their natural grandeur is the result of Nature's unhampered work during many centuries, indeed many thousands and sometimes millions of years. In a period of war hysteria, think how easy it would be for unwise or too hastily enacted legislation to obliterate or sadly mar those parks.

And there is no doubt in my mind, and Secretary Ickes is firmly of the same opinion, that should war come again, or should the European war last for several years without involving us, the same forces that worked against conservation then would again be strongly active. There would be those who impetuously, but unwisely, think only of the moment, without regard for the rights of future Americans; and there would be those others who, under the cloak of patriotism, would endeavor to seize—to have and to hold for themselves alone—whatever lumber or mineral or grazing ground, or water-power rights they could pry from an unsuspecting public.

The American Planning and Civic Association has been an unswerving protagonist of our national park ideals and of the integrity of the areas themselves. Should war come to us again—and may it not—or even should there be a demand, masquerading as a pre-war emergency, to use the resources now conserved with the national parks, we will again depend upon you, as we have so often in the past, to enlist in our conservation cause.

Perhaps, with all of us working together, we can even forestall any such attacks on our national parks and on other resources upon which the welfare of our homeland largely rests. This can be done only by arousing an enlightened public opinion. I earnestly ask you, therefore, to lose no time in carrying to our people the real facts concerning our natural resources and their conservation.

In the national parks, for instance, there is very little material that would be of any national assistance should the Nation become involved in a serious crisis. It is true that there are forests—but either the larger part of the park forests are composed of trees of little commercial value, or insuperable physical difficulties bar practical lumbering and transportation—witness Olympic's Sitka spruce.

In the last World War pressure became so heavy, in the name of national need, to graze cattle in the western national parks that eventually areas in several of them were opened to cattlemen—just for the duration of the war, it was understood. Our participation in the war lasted about a year and a half. But it took the Department of the Interior ten years to eradicate completely the grazing foothold which had been gained within the national parks by the granting of emergency war-time permits. Further, once grazing ceases, another ten to fifteen years, and often longer, are required to return the mountain meadows. It may indeed be doubted whether overgrazed areas ever fully recover.

Even that isn't the whole story of the war-time grazing. All the grazing that could be done in the western national parks could not, from an economic standpoint, influence the meat situation to any appreciable extent. Take Sequoia National Park, for example, located high in California's Sierra Nevada. Some 2,100 head of cattle were grazed there under emergency permits. Yet less than one section—or 640 acres—of irrigated valley lands would have supported more cattle than the scores of thousands of acres grazed by these cattle in the park.

It just doesn't make sense—and perhaps that is the best line of approach for us to use. Let us educate our friends and associates, and all those whom we can reach in any way, to the danger of acting impetuously and through mass hysteria. If we are going to survive intact the critical years ahead—and they would be critical, you all will admit, even though we were not faced with international complications—it is important that we scrutinize objectively every proposal to use or dissipate that which makes up our reserve of natural resources. We must think things through to their logical end. Let us not cut any more trees, whether in reply to hysterical demand or insidious attempts of selfish interests, unless we are shown beyond any doubt that they are vitally needed in our national defense and will be so used. Let us not permit cattle to graze in the parks unless we are sure that there is no grazing land left elsewhere, that our national security demands that more cattle be raised and that this can be done only in the national parks. Let us be prudent in the use of our minerals, our oil, and our water power. Let us be idealists, but practical idealists—idealists with a long view.

I had intended to talk to you today of other matters—of the need to conserve our human values through the conservation of things; of what these important human values are, and what we can do about them.

Then came the action that I mentioned earlier—the two recent

attempts to raid petroleum resources which the Department of the Interior is charged to protect. Europe had been at war only about two weeks when these incidents occurred. I felt so strongly about them—and about the dangers inherent in the whole situation—that I was impelled to discuss that phase of conservation now. If we can profit in advance by the mistakes of a quarter of a century ago, we will have accomplished much. It is much easier to take a firm and enlightened stand now than to suffer the consequences of blind acquiescence afterwards. Wars, and most severe emergencies, last but a comparatively brief span of time compared with the periods of peace in between. Yet in those so-called periods of peace much time is devoted to healing the ravages of war—many of them wounds inflicted by our own impetuousness, by mass hysteria, and a refusal to think things through.

In closing, I earnestly bespeak the concerted coöperation of the American Planning and Civic Association, its affiliated organizations, and the individual members along two main lines of national park endeavor during the perilous days ahead. The Department of the Interior will depend upon you for an intensified watch service, to the end that national park ideals and integrity may not suffer through any war-inspired raids, related to war emergency only in so far as opportunism chooses to relate them. And we hope you will support us in our efforts to secure, for the national park system, scenic areas of primary value for recreational use. That includes working for the establishment of areas already approved for park purposes, such as the Big Bend, Everglades, and Cape Hatteras Seashore projects. Establishment of the Olympic National Park apparently was put back twenty years as an indirect result of the last World War. Let us not permit the present war, or any of its future ramifications, to blind us to the need of preparing now to meet our future peace-time needs for an expanded park and recreational system.

I am indeed glad to have had the opportunity to be with you during this conference and to have some small share in your discussions. It was a pleasure to meet so many of you personally. I look forward in the future to continued associations with you and your fellow workers.

SELECTION AND USE OF NATIONAL PARKS

Presiding: H. MARIE DERMITT
Secretary, Civic Club of Allegheny County, Pittsburgh, Pa.

The National Park System and Its Future

HORACE M. ALBRIGHT
President, American Planning and Civic Association, New York City

THE National Park System as it exists today was not organized consciously as a system. The setting aside of the Yellowstone National Park was the result of an emotional impulse and a profound conviction that here was marvelous country, which should belong to all of the people. The little group of explorers who pushed through the legislation enacted in 1872 to create the Yellowstone National Park had no idea of other national parks. Theirs was a specific act, which, however, had far-reaching effects.

Earlier, in 1864, when Congress granted to the State of California the Yosemite Valley and the Mariposa Grove of Big Trees, it was certainly not in the mind of Congress to set up a National Park System. The scenic attraction and recreational value of the Yosemite Valley and the Big Trees were recognized, but the Federal Government then, and for years yet to come, was conceived of as an agency to give away land to the States rather than to hold it for administration.

In his journals John Muir refers back to a time in the sixties when he had speculated on the desirability of protecting some Federal lands. After 1868, when he arrived in California, he became familiar with the Yosemite. In the 1870's he watched the influx of travelers and the inadequate administration of the Valley by the State. Late in the seventies he advocated a national park status for Mt. Shasta mainly for the purpose of forever protecting its magnificent forests. In the eighties he strongly advocated other national parks in California.

As a result of sentiment aroused largely by John Muir and George W. Stewart, the equally farseeing although not so widely known, conservationist, Congress passed laws withdrawing from settlement the unappropriated land of the public domain adjoining Yosemite Valley and the forest regions about the General Grant Tree and the lower watersheds of the various branches of the Kaweah River, thus forming the second, third and fourth national parks—Sequoia, Yosemite and General Grant. These new acts provided for the preservation from injury of all timber, mineral deposits, natural curiosities or wonders, and directed that they be retained in their natural condition.

When there was one national park it was not conceived as the first in a system. When there were four national parks it was inevitable that other groups in other places should propose additional national parks.

When Muir published his book on the national parks as late as 1901,

there were only five extensive national parks—Yellowstone, Sequoia, Yosemite, General Grant, and Mount Rainier. It is rather evident, however, from the book that he thought of forest reservations very much in the same terms as national parks, for his first chapter was called "The Wild Parks and Forest Reservations of the West."

In 1897 he complained of the devastation being wrought in the Sierra. "The axe and saw are insanely busy, chips are flying thick as snowflakes, and every summer thousands of acres of priceless forests, with their underbrush, soil, springs, climate, and religion, are vanishing away in clouds of smoke." John Muir, 1897, quoted in *Life and Letters*, William Frederic Badè, Editor.

John Muir was a practical man. He worked in saw mills. He knew the uses of timber but all of his descriptions are of standing timber untouched by the devastating axe. As a policy he believed in protecting extensive scenic forests. On the other hand, the explorers of the Yellowstone region were apparently not so much impressed with its scenic resources as with the heat phenomena—the geysers, hot springs, mud and paint pots, etc., nor were they concerned about the preservation of wildlife, which at that time was abundant throughout the West.

With the formation of the Sierra Club in 1892, there was a citizen group of mountain lovers, who were to play an active rôle in protecting the scenic lands and waters in California.

In 1904 the American Civic Association was organized in St. Louis, composed largely of members at that time living in the eastern part of the United States, with Dr. J. Horace McFarland as its head. This organization was soon crusading for a Federal agency to administer the national parks and for the development of a National Park System. We are all familiar with the work of Dr. McFarland and Secretary of the Interior Walter L. Fisher in attempting to have a bureau of national parks established in the Department of the Interior. We know too that it remained for Secretary Franklin K. Lane, who took office March 4, 1913, to bring into his Department, first Dr. Adolph C. Miller and then Stephen T. Mather, as assistants especially charged with the duty of doing everything possible to secure the establishment of a national park bureau and to bring important new areas into the national park system. Furthermore, it is not necessary to recount in detail the successful activities of Secretary Lane and Mr. Mather in bringing about the enactment of legislation creating the National Park Service, which was signed by President Woodrow Wilson on August 25, 1916.

We all know too that in 1915 Mr. Mather began promoting the great enlargement of Sequoia National Park to include the high country of the Kings and Kern watersheds. It will be recalled that he took through that country in the summer of 1915 a very large party of prominent men, including members of Congress, writers, explorers and conservationists.

When the Service was organized in May 1917 it took over the ad-

ministration of 15 national parks and 21 national monuments, and Hot Springs Reservation, Arkansas and Casa Grande, Arizona.

At that time we who were the first executive officers of the National Park Service naturally thought in terms of a National Park System and its future. We had a National Park System to build on. Mr. Mather and his associates were youthful enthusiasts, anxious to move forward with all possible speed and complete what we then thought should be the National Park System lest it soon be too late to get certain great areas of outstanding quality and of national importance. We were idealists too. So much so that we worked out park boundaries on a very liberal scale, and we drew legislation so as to prohibit activities within the proposed national parks that would be inconsistent with the broad protective mandate of the National Park Service Act.

We had been shocked by the relative ease with which the Hawaii, Lassen Volcanic, and Mount McKinley Parks had been established, all of which permitted certain obnoxious operations to be continued—mining and hunting in Mt. McKinley, summer homes in Hawaii, and railroad lines, reservoirs and summer homes in Lassen. These three national parks had been planned and legislation relating to them drawn before Mr. Mather accepted leadership of the national park movement.

We were determined to have the Grand Canyon National Park, the Kings and Kern extensions to Sequoia National Park, and other large projects put through Congress on the scale of size and the ideals of protection of natural features that were in accord with our conception of the perfect park. We were unsuccessful in getting any new park legislation while we held to an uncompromising position.

In other words, in the years 1915 and 1916 we were primarily securing legislation to establish the National Park Service, and although we took punishment in amendments to the Service Bill it did not teach us as much about putting measures through Congress as we should have learned. We had to go through 1917 and 1918 without any favorable action on our cherished projects while we learned through bitter experiences that we could not have ideals translated 100 percent into legislation. We found out too that we had to put in about as much time fighting adverse legislation as we could devote to desirable measures.

Nevertheless, Mr. Mather and his associates envisioned a National Park System of the future. We very early cast our eyes on the few military parks that then existed—Chickamauga, Shiloh, Gettysburg, Vicksburg, and Guilford Court House, and also the Lincoln Farm National Park. I recall that in December, 1915, while en route from Hot Springs, Arkansas to Washington, I went to Shiloh Park and spent a few hours looking over the battlefield. And about the same time Judge Howard Ferris of Cincinnati, Mr. Mather's old friend and fraternity brother, came to see him about Yorktown Battlefield.

In the meantime, Mr. George B. Dorr was engaged in acquiring lands

for what was to become the Acadia National Park, the first park in the East, and his work finally received the blessings of Secretary Lane and Mr. Mather in 1916.

In the early reports there was even mention made of Mammoth Cave, the Everglades and a possible park in the Appalachians. Authority to add the Grandfather Mountain in North Carolina to the National Park System was hung as a "rider" on the Sundry Civil Appropriation Bill early in 1917. It was not acceptable because it did not conform to our ideas of what a national park should be.

It must be admitted, however, that generally speaking in the early part of their service Mr. Mather and his staff, who were western mountain men, gave little or no time even to dreaming of great parks in the East. We had our hands full in the West. We had new park projects out there, and we had large extensions planned for existing parks—for Sequoia the Kings and Kern regions; for Yellowstone the Teton and Upper Yellowstone country; for Crater Lake Diamond Lake; for Yosemite the return of the Minarets and Devils Postpile; for Rocky Mountain Park the high country south of the park and originally in the park plan. Then we had urged upon us, and I will mention only a few, the Olympics, Mt. Baker, Mt. Hood, Mt. Adams, the Grand Coulee in the Northwest; the Coast Redwoods, Lake Tahoe, Mt. Shasta in California; the Sawtooth in Idaho; Mt. Evans and even Pikes Peak in Colorado. Thoroughly committed to ideals regarding the size of new national parks in the West, limitation of private holdings, which we saw no chance to eliminate, having already had experience in buying the Giant Forest, we rejected projects right and left, even refusing to inspect areas such as Mt. Baker and Mt. Hood because of large private holdings and entrenched industrial interests.

Perhaps in retrospect we can and should be criticized for our policies. Yet when consideration is given to the fact that we had no technical staff to make investigations, that appropriations were miserably small, that lands could not be bought, that our park proponents who thought they were conservationists saw nothing wrong with the continuation of commercial exploitation of park resources and were interested mainly in tourist trade, it seems to be a reasonable course that we followed at that time now more than twenty years past.

By 1919 we had developed a technique in legislation that was to solve some of our problems, add to the national park system and make substantial progress in land acquisition at the legitimate expense of the unappropriated public domain and national forests. So successful were we in our new approaches to Congress that we added Grand Canyon, Acadia and Zion National Parks to the system in 1919. We had at last realized that it was necessary to take new parks somewhat on the terms that Congress, under pressure from local interests, was willing to give them to us. The few parks created in the decade of the twenties were not

seriously handicapped by authority temporarily to continue certain undesirable activities of a commercial nature. Substantially the ideals of protective policy were maintained.

In 1925, thanks to the extraordinary work by Mr. Mather and Mr. Cammerer, the great eastern parks—Shenandoah, Great Smoky Mountains and Mammoth Cave—were authorized. Mr. Cammerer's stroke of fortune in interesting Mr. John D. Rockefeller, Jr., in the Great Smoky Mountains project should never be forgotten.

It was not until 1930 that the Service at last got definitely into the field of historic site preservation on a large scale. This movement was probably due to the very deep interest in history and historic sites which Congressman L. C. Cramton of Michigan and I had held all our adult lives. Soon after I became Director, Mr. Cramton and I, with authorities of the State of Virginia, including W. E. Carson and State Historians Eckenrode and Conrad, visited Williamsburg where we met Kenneth Chorley and Dr. W. A. R. Goodwin, who for Mr. Rockefeller were beginning the restoration of the ancient colonial city. We were fascinated by the possibility of the Yorktown-Williamsburg-Jamestown combination of historic sites. We never rested until in 1930 both the Colonial and George Washington Birthplace Monuments were placed under the jurisdiction of the National Park Service by Congressional statute, and not by the usual Presidential proclamation.

Up to this time we had been thinking in terms of a National Park System and its future just as we do today. In 1931, we had to face the problem of what the National Park Service was to be in the future, for general Governmental reorganization became a burning issue. Was our rather small bureau to be merged with the great Forest Service as an economy measure or as a step in moving the latter bureau to the Interior Department, a sort of sacrifice on the altar of executive department reconstruction? As Director, I took vigorous action to secure military parks and historic sites under the War Department, and even parks of the District of Columbia. President Hoover's plan of reorganization published in 1932, but not approved by Congress, transferred all these areas to the Department of the Interior.

Still apprehensive as to what might be the fate of the National Park Service when President Roosevelt advocated reorganization, I again urged an enlarged Service. As you know we got more than we expected under the reorganization order of June 10, 1933, which became effective sixty days later. This order not only gave the Service the military parks and the parks in the District of Columbia but a host of cemeteries, all of the public buildings and grounds in Washington and some elsewhere, and worst of all the name of the Bureau was changed to Office of National Parks, Buildings and Reservations. The old name was not resumed for nearly a year.

So after 1933 we find the Service heavily loaded with new and ex-

traneous responsibilities of a most serious and arduous nature. While Secretary Ickes with consummate skill, superb courage and unremitting effort, drove ahead for new parks and did add the Olympic National Park to the system and saved enormous bodies of valuable timber in California as well as greatly expanded the monument system, the burden on the Washington officials of the Service became heavier than human brain and sinew could bear. Officials could not cover the field. Regional offices were established and assumed much of the administrative oversight but the incessant grind in Washington continued.

Then came the reorganization of 1939, only recently made effective. At last we have come to the point where we can really survey the National Park Service and the National Park System and consider what may be their future. As I see it, the Service is being deflated to a land administration bureau, which it was originally intended to be. The public buildings are gone. The Travel Bureau, a most worthy thing, is a separate organization. The recreation demonstration camps are scheduled to go to cities and counties. The state park work, where the Service has made a contribution of incalculable value, must inevitably be assumed by the States, but as long as Federal money is available for expenditure in them the Service, as a collaborator of the CCC, must provide a large measure of technical and fiscal supervision. But the National Park Service will for the most part confine itself to its own land.

I earnestly hope that it will not seek general jurisdiction of recreation on other Federal lands except in special cases such as in Boulder Dam recreational area, and I hope that such special assignments will be resisted at every turn lest too many be made.

Like education, the providing of recreation for the American people is a function of city and state governments and not of the National Government. With the Service back to its original plans confining itself to maintenance of its own areas and the educational and interpretative work that must be a part of its service to the public as well as a background for protection and development of its property, it can proceed to acquire new parks and monuments, parkways, historic sites, shrines and memorials that it needs to round out the system.

The avenues for expansion of the Service have been well outlined in the Toll-Wright report published by the National Resources Committee. It is understood that this report, while very comprehensive, is suggestive and advisory, and, of course, it is unreasonable to expect that all of the areas mentioned in it can be obtained for the National Park System, and doubtless there are a number of areas which upon further examination will not be regarded as satisfactory candidates for admission to one of the classifications of national areas administered by the Service. Nevertheless, this report supplemented by detailed findings of staff technicians after careful study of each area before recommendations are made for final action ought to be the basic program for the future.

So we have the pattern of the National Park System of the future. It will include practically all of the areas now under the jurisdiction of the Service, and it will be rounded out by a few more great scenic national parks with large wilderness regions, and some outstanding stretches of beaches along the ocean coasts, the shores of the Great Lakes and perhaps the Gulf of Mexico. Particular emphasis will be laid on securing nationally important historic and prehistoric sites, artifacts and structures. Monuments will be added to complete the preservation of wide range of representative native American plants and animal life, and the most instructive and scientifically valuable geological exhibits. More scenic and historic parkways will facilitate travel between many members of this system and these in themselves will have great inspirational and recreational importance to our people.

The National Park System today contains eleven different types of areas with 154 units totaling in area as of June 30th this year 20,817,228 acres, of which about one-third is in Alaska. The pattern of the future system is broad enough to embrace many new units chiefly in the monument and historic site groups and conceivably the acreage may grow another ten or twelve million acres.

Use of Wilderness Areas

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IN DISCUSSING the use of wilderness areas, one is first faced with the dilemma of two possible alternatives, directly contradictory.

One group of ardent conservationists urges that wilderness areas should be kept forever set aside in the nature of an "untouched museum." Under this policy, people would be excluded as far as possible from interfering with the relationships nature has established in the region. Not only are roads to be excluded but even trails are to be avoided and some extremists have advocated quarantine from human contact.

Another group of conservationists is equally sincere in believing that wilderness areas can only be preserved by making them available to "the greatest use by the greatest number." They justify this on the theory that it is only by making the value of the wilderness known to a majority of the voters of the country that enough interest and voting power can be aroused to bring about appropriate legislation and other efforts towards a proper preservation of wilderness areas for all time. This group of people would even go so far as to urge moderate extension of a road-building program so that as many as possible might come in contact with the enjoyment of the wilderness and urge its preservation.

Like most other problems of life, it does not seem that either extreme is a correct solution of the problem. The Sierra Club has felt that a middle ground can be found which will make the wilderness available

to large numbers of people and at the same time preserve the wilderness values and characteristics of the region. The Sierra Club is vitally interested in the problem, since wilderness areas are disappearing in the United States at a rate which has brought them almost to extinction.

I was exceedingly sorry to note last year that the Colorado Mountain Club was forced to give up its Twenty-sixth Annual Outing because not enough people applied to make it worth while. A similar problem faced the Pacific Northwest where the Mazamas, after 45 years of two- and four-week outings in the mountains, had to restrict their 1939 outing to a one-week's trip in each of two separate areas. I understand indirectly that the cause in both cases has been the gradual destruction of wilderness areas in those parts of the United States by the gradual encroachment of roads, buildings and other uses incompatible with the rather intangible values of wilderness character.

Fortunately, the Sierra Club has not yet had the problem to the same extent in the Sierra Nevada. I am advised by Norman B. Livermore, Jr., an ardent advocate of the wilderness, that until recently an area in Idaho was the largest wilderness of the United States. Since the loss of that distinction there through building a new road, Livermore advises that the Sierra Nevada region is now the largest wilderness area in the country, with the possible exception of the San Juan-Colorado River region of southeastern Utah. The Sierra Club is therefore fortunate in being able to travel for four weeks at a time every year for six years in the Sierra Nevada before having to repeat any of the country previously covered. It therefore is clear that the wilderness concept is of far more than academic interest to outdoor conservation clubs for their very means of enjoying mountain country is in danger unless wilderness areas can be preserved.

If wilderness areas are to be made available to as many people as can use the country without harming its wilderness values, access must not be limited to "the aristocracy of the physically fit," as so aptly expressed by Frank Kittredge, nor to the "aristocracy of money" as exemplified by most people's conception of some luxurious pack outfits. In the Sierra Club we have attempted to meet this problem by making available to our membership and those in other mountaineering and conservation clubs, trips for nearly every purse and every degree of physical ability. Through this means, over seven thousand man-days of enjoyment in the high mountains were indulged in without leaving any indication that anyone had ever been there. The mountains are just as wild and fresh as ever and only a narrow trail with a bridge now and then has been needed to make this travel possible.

The most luxurious trip was the saddle horse trip, led this year by Norman B. Livermore, Jr., consisting of 28 members in the party, with saddle and pack stock for all. They traveled a distance of about 120 miles from Sawmill Pass in the proposed Kings Canyon National Park

down the John Muir Trail and over Forester Pass into Sequoia National Park and finally, after ascending Mt. Whitney, ended the trip at the extreme southern portion of the Sierra. The trip lasted two weeks and cost the members $100 each, including food, cooking, cost of animals and all expenses except their transportation to the point of departure. This trip could obviously be taken by anyone well enough to ride a horse at elevations up to 13,000 ft.

The main trip was the "annual outing," started by William E. Colby in the year 1901 with the enthusiastic support of John Muir. Mr. Colby organized and perfected these trips and then continued to conduct them for a period of 36 years. Finally, feeling that it was time to turn the trips over to a younger person, he asked me to handle them, commencing in 1937. Our trip this year covered almost all of the higher portion of the proposed Kings Canyon National Park. Starting from the extreme northwest corner of the proposed area, we traveled along the John Muir Trail, leisurely enjoying the country for a period of four weeks, finally ending the trip at Sawmill Pass, where the saddle horse trip was to commence a day or two later. Some think of these trips as being limited only to persons in good training, hardened by continuous hiking at frequent intervals throughout the year. However, this is not the case. The trips are intended to obtain the most enjoyment from the mountains in a manner compatible with wilderness values. For instance, we would camp three or four days at an exceptionally beautiful location, such as Colby Meadow on Evolution Creek, climbing the peaks and enjoying the country in the vicinity, then we would move on from eight to fifteen miles to a new location, equally beautiful but entirely different. After remaining at that location for a few days more we would then travel on to new scenes and new country. Over two hundred people participated in the trip this year. Some were as young as ten years; there were many over sixty and at least two over seventy. All of them walked the entire way, but their equipment and dunnage were transported for them by pack train. Likewise, all meals were prepared by a group selected for that purpose so that, after eating breakfast, one had no responsibility throughout the day and could arrive at the next camp, unroll his sleeping bag and find supper ready for him. The cost of this outing, or the "High Trip" as it is often called, is $40 for two weeks or $75 for the four weeks. This again covers all expenses with the exception of transportation to and from the mountains.

A third trip was suggested by Joel Hildebrand, President of the Club, designed primarily for the purpose of increasing the use of wilderness areas in a wilderness fashion. It is intended to teach members of the club how to handle pack stock and all the problems of camping in the mountains so that they may be competent to take such trips of their own. The burro trips are limited to twenty on each trip, with a competent leader but no one to perform the duties of packing, cooking, dish washing,

wood chopping, etc., for them. The members of the party pair off and each couple has one burro to manage throughout the trip. They are taught the ways of finding them in the morning, saddling and packing them, how to get them across streams and snow banks during the day and finally all the problems that come into the choice of a camp site, setting up and preparing camp for the evening. Along with this we have tried to cover all the other phases of enjoyment of mountain life so that they may know something of the geology, flora and fauna of the region, or the fun of fishing and sport of mountain climbing. The trips have been so enthusiastically received that from the beginning of two trips last year we had to schedule four consecutive trips this year to meet the demand. The cost of the trip covering all expenses is $25 for two weeks. I believe that these trips can be made a permanent part of our means of enjoying the mountains and hope that groups in other parts of the country can make similar use of this type of trip. It is inexpensive, relatively easy to plan and conduct by reason of the small number of people involved and is enthusiastically received and enjoyed.

The fourth trip of the series is at the opposite end of the scale from the "aristocracy of money" but is distinguished by being limited so far to the "aristocracy of the physically fit." This is a knapsack trip at an all-expense cost of $12 for two weeks. On this trip, everything is carried by the members of the party who gain large returns in spite of the comparatively severe labor required. One of the values is the feeling of independence, and being able to travel and camp wherever one wishes without being restricted to trails or routes with pack animals. One also has the pleasure of doing the job himself, a real satisfaction in being able to participate in much of the original pioneer spirit of living on one's own resources in the wilderness. It is hoped that we may possibly be able to make this trip with all of its fun and values at low cost, available to others than the super-physically fit. We hope to do this by arranging a series of caches at reasonable cost at intervals of one to three days' travel time so that one would not have to carry more than two or three days' food at any one time. Personal equipment, by proper study, can be brought down to a maximum of 15 to 20 pounds per person. If the weight of food can be kept to a maximum of two or three days' load, nearly any person who is capable of hiking through the mountains, including women, would be able to enjoy this type of trip.

I would like to refer to another form of use of wilderness areas which the Sierra Club is also beginning to develop. This is the use of the country in winter. Superintendent Scoyen has very properly stated that no other use of mountain areas can be indulged in with so little damage to the country traveled through. Not even a trail is left upon the ground, for the recurring snows of winter and the sun of summer wipe out the tracks. However, it must be recognized that although use of wilderness areas, in the ways which I have described, is entirely safe in

summer, use of such areas far removed from civilization in winter is subject to considerable hazard unless the party is exceptionally well prepared with training and equipment to meet almost arctic conditions that may arise. For that reason, some protection should be offered and I believe that it can be arranged in a manner that will be entirely compatible with the wilderness use of the country during the summer season. The best trail for winter purposes does not necessarily or even frequently follow the exact route of summer travel. Accordingly, if care is taken, small shelters for protection from storm can be located in such a way that they will intentionally be removed from routes of summer travel and thus rarely seen by those who wish to enjoy the wilderness at that season. Even in winter, these small shelters, scattered at intervals of five to ten miles, will be only too difficult to find under their blanket of snow and need not conflict with the wilderness character of the country.

A somewhat similar development that would make the knapsack trips available to those of less physical ability, would be to arrange small "cache cabins" which would not be available as shelters but would simply have a series of a dozen or more lockers, lined with metal to keep out mice and other rodents, so that parties could arrange to have supplies of food left there for use either in summer or winter. Some development of this kind is needed if people are to be able to use the wilderness without the necessity of taking a large pack train with each party. A cache exposed to rain, rodents and bears is so hazardous as an isolated source of supply that many people who might be interested in such a trip would not dare to rely upon the chance that the cache had not been destroyed in the meantime. In midwinter, the loss of such a cache might indeed be very serious. These small cabins could be constructed at small cost and could be very inconspicuously placed. The problem of over-use of mountain areas by pack stock is already becoming quite acute so that encouragement of traveling without animals is a necessary approach to use of wilderness areas without destruction of their essential values.

I have stated the experience of the Sierra Club, since it is an organization with an experience of nearly fifty years in the use of one of the largest of these areas in the United States. Its present membership of over 4,000 is deeply interested in the problem of conservation and the means to obtain public support of the wilderness concept without at the same time making such serious compromises in order to obtain such support that the ideals for which we are working would be destroyed by the means to the end. Our trips have ranged from a cost of $100 for two weeks down to $12. They range from the rather elite saddle trip to the hardy mountaineer packing everything, entirely independent of anything other than his own ability. Instead of the use of the mountains in this region declining in any manner, it has been steadily increasing with the result that a much larger number of people are enjoying the wilderness in more ways than ever before.

Identifying Areas of National-Park Caliber

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WHAT is meant by this subject? Is it a matter of standards and nomenclature? Does it have reference to the mechanics of park establishment? Or does it suggest the whole approach to the problem of setting apart all of the lands of park caliber under some park system—either Federal, state or local.

In simple terms: We know that the park principle is correct because it has been properly demonstrated. We have laws which exemplify that principle, and we usually have every opportunity to gather whatever facts are necessary for each new project. Thus the principle, the law, the facts, plus enough human energy, sooner or later are bound to result in park identification and establishment.

The sculptor, or the painter, strips his idea of its non-essentials, so that its beauty is revealed for everyone. That is exactly what the park worker, or parker, as we shall call him, does in identifying a park area.

When the sculptor sets himself to the task of creating a figure from some rough block of stone, he clearly sees before him the image of the completed work. His own feeling and understanding of what he wants that stone to do for people is so profound that the object later disclosed to general view is already there for him. It needs only to be brought forth—to be identified for others—by setting apart from it the non-essential material by which it is surrounded. And here the experience of the sculptor again illustrates the situation in which the parker finds himself, when he identifies a park area.

All the sculptor's indecision as to whether the result will be worth the effort; all the agony of choice as to the full significance of form it must take; and all the hazards of acceptance upon completion, are with him to guard his conscience as he proceeds. He is fallible and knows it. He is humbled by his responsibility, yet he is encouraged and determined because he is certain that the urge to create something of beauty and inspiration for his fellow man, is right.

A similar kind of traditional public-service feeling forms the perspective of the parker when he discovers in a block of land those opportunities for superlative recreational usefulness that characterize one of the types of areas found in park systems. It is in this sense that the parker's work, like the sculptor's, is creative.

Just as the successful sculptor must live in the light of almost phenomenally high standards of art expression, so must the parker be bound to the highest possible standards in the art of land-use interpretation. Although in both fields, as in all fields, the likelihood of human frailty is dangerously constant, in neither field will second-rate analysis or workmanship suffice.

Everything the sculptor does well influences people toward a more natural and more constant grace and dignity. He is actually a maintenance man, just as are your doctor and your minister. From the time when some remote ancestor first discovered a talent for decoration it has been the sculptor's duty; and it is now the duty of the minister, the statesman, the parker and the teacher, to instil man with man's own virtues; to make him aware of his own potentialities for truth and beauty.

Everything the parker does well results in the provision of a more suitable environment in which man's instinct for grace, and dignity, and orderliness of mind may be nourished as we know they must be nourished to survive. Nature as a standard of integrity transcends all others, and in the economy of our people we must remember to cherish our land because of its moral stimulus as we do for its commercial uses. Colonel Charles Lindbergh said recently during his now famous address on the question of neutrality:

> Our safety does not lie in fighting European wars. It lies in our own internal strength, in the character of American people and of American institutions.

No more penetrating or encouraging statement than that could be made today so far as our National Park Service ideals and objectives are concerned. Park areas as understood in our democracy are symbolic of peace and prosperity, of self respect, of thrift, and good will to all mankind. Give the parker the price of one battleship, one bombing plane, and one submarine, to use in dedicating suitable land to esthetic purposes, and he will show you dividends compounded many fold, in the stabilization of national patriotism, and in the improvement of national character—which, in themselves, form the source and the reason of national defense.

It is easy, in the surge of enthusiasm that comes to the parker when he considers the success thus far of the park idea, to forget for the moment the difficulties of park selection. In his more expansive feelings he is as emotional and fallible as any other artist. Fortunately, however, the realities of identifying park areas are inescapably practical.

The successful parker is no near-fanatic whose heart bleeds for Nature whenever a tree is cut or another dam is built, just because those things happen. His job is to seek out those areas in which those things should not happen; those areas that are nationally of more value for recreation, in the sense of inspirational and cultural benefit, than for anything else; to decide their boundaries, and to see that they are properly preserved for all time as a guarantee against indiscriminate invasion. And another part of his job is to aid, where possible, in the identification and development of recreational areas of regional or local significance; and in areas such as we have at Boulder Dam and in the Tennessee Valley, where some other existing dominant land use itself produces a large measure of recreation.

He must set about his work with as much willingness to understand and sympathize with the nonconformities from which a national park area must be segregated as he has for the park purpose itself.

When he finds an area predominantly useful for purposes of commercial exploitation, such as the San Juan area of Colorado, even though it also has some park and recreational qualities, he must adopt the principle that the greatest good for the greatest number is right, and harbor no reservations in the matter.

But when he finds an area predominantly useful for park and recreational purposes, such as the Kings Canyon area, he must be ready to say so, and to face whatever difficulties and setbacks there may be in proving his judgment from then on. He must have sufficient maturity to deal honestly in principle while establishing fact, and then with fact for itself when he finds it. To attempt the work of identifying park areas with a less exacting logic would soon reduce the parker to aimless preaching, and probably to complete frustration.

We have in the United States a billion nine-hundred and three million acres. Today, a billion four-hundred and three million acres are privately owned. The States own seventy million acres, and the Federal Government owns the balance, of four-hundred and thirty millions.

When the national park idea found substance in the establishment of the Yellowstone in 1872, only one-fourth of our total population of forty million people lived in the cities. Today, about 61 per cent of our population of one hundred and thirty millions live in towns and thickly settled suburban communities. Although our rate of growth is said to be slowing down, we are scheduled to gain another thirty million people by 1975.

In the 67 years since establishment of the Yellowstone our billion odd acres of land mass has risen fabulously in value because of the combination of expanding population and improvement in communications and transportation, coupled with a wide diversity of land use. Already the pressure of population on natural resources is showing the danger of poverty and cultural stagnation for many people. There is a need for equalization between country and city of cultural opportunities involving more prudent use of land. All this is important as background in the work of identifying areas for national, state and local park systems.

The parker must keep himself in tune with these expanding land values and practical human needs. It should not be considered that his brand of conservation means only the *protection* of scenery, of forests, of wildlife and other beauties of nature. His ideals and objectives anticipate that each park area will be accepted under standards of *use* —of complete land use—and destined to fit as serviceably, or more so, into the social and economic program of our people a hundred, two-hundred, five-hundred years from now as it does today.

We Americans are faithful enough and stubborn enough to believe that in all this process of national development our national pride and

character are being enriched. There must be great moral substance and native wisdom in a people who, during a few brief years of persuasion among themselves, have brought forth the national park system, as a means of self encouragement in the art of enjoying their own homeland.

It is with some such an organization of ideas as this, that the Federal parker, who you may agree by now is at least a realist, is busy these days seeking out, appraising, identifying, and here and there securing nationally important properties, such as Recreational areas; Seashores; Historic sites, objects and buildings; Fine representative examples of plant and animal life; Instructive geological exhibits; and Scenic and historic parkway routes.

He is lending a hand with the States, and with other Federal agencies, in their recreational projects. Although constantly increasing pressure on existing parks tends in a social way to prove the need for more parks, he, nevertheless, discards many suggested areas as unsuitable for every one that finally identifies itself as a possibility.

For standards of identification he turns to natural grandeur, and unique wonder, and to social needs.

Contrary to some thought we do not fear that the system will be filled with inferior areas. They set their own standards today. And if a good park area does not belong at the national level it will find a place sooner or later at some other level. The thing to do is to find and classify *all* of the suitable places before they are gone, beyond reach or restoration. The danger of selecting poor areas is trifling compared to the danger of losing all chance to secure those superlative seashores, high mountain regions, sweeping plains and historic tracts which still remain insufficiently protected from misuse, and every day are more difficult to obtain. Katahdin in Maine, the Everglades in Florida, the Olympic extensions in Washington, and the Kings Canyon in California are among the magnificent lands now far too close to just that danger.

As we think back and recall that the Yellowstone Park Act of 1872 marked the beginning of *all* public conservation of natural resources; that the Antiquities Act of 1906 gave broader meaning to the park idea; that the National Park Service Act of 1916 brought discipline to the whole park and recreation movement; that the Park, Parkway and Recreational Area Study Act of 1936 confirmed the maturity and the scope of that movement; when we recall all that those statutes signify in advancing the technique of land-use planning—then it ought to be true, as I for one think it is, that the *work* of identifying and preserving park areas is a high art—a noble tradition—in which every basic factor of our esthetic life is expressed. It is, I believe, destined to become our greatest single guarantee against impoverishment of the American scene and our distinctive native American culture.

RECREATION

Presiding: ARTHUR E. DEMARAY
Associate Director, National Park Service, Washington, D. C.

The CCC in National Parks and Monuments

JAMES J. McENTEE
Assistant Director, Civilian Conservation Corps, Washington, D. C.

IN ITS campaign to bring the great outdoors within the reach of everyone who likes to get out into the open, the American Planning and Civic Association merits the whole-hearted support of the entire nation. In this audience there are undoubtedly many men and women who are pioneers in the nation-wide movement to set aside and develop suitable Federal and state lands for the use of the public, and to preserve our national monuments in order that future generations may learn something of the history and the tradition of the past. To these men the history of the acquisition and development of the early national and state parks is an old story; to many it is a personal story in which they played a leading part.

There are so many at this gathering who are veterans in the many battles to save magnificent scenic areas from exploitation that it would be presumptuous on my part to attempt to trace the growth and the history of the national and state park movement. I do, however, want to discuss briefly some of the reasons back of the slow growth of the state park movement and the laggard development for recreational use of so many of our national parks.

As you know, the first state park was launched in 1864 in the Yosemite Valley in California. Later, this became a national park. During the ensuing sixty-five years, the National Park System developed to almost its present size, although many of the parks remained largely undeveloped so far as visitor accommodations were concerned.

The state park movement started slowly and was still lagging far behind state needs in 1933. By the late twenties, the population of our country was well above the hundredth-million mark. The roads were filled with automobiles. People were going places.

The public began to discover the national parks. A real need developed for the building of new trails and other accommodations for visitors in these areas. In both national and state parks there was need for enlarged camp grounds, new picnic areas and overnight cabins. There was also a great need for the acquisition and development of new state acreage for recreational use. But in spite of the automobile which furnished quick transportation and the desire of the public for improved recreational facilities, little progress was made prior to 1933.

The National Park Service was anxious to go ahead with plans for developing national parks for recreational use, but neither funds nor man-power was available. The depression, which reached its greatest

fury in 1933, broke the jam. In fact, it took the depression to drive home the value and the necessity of Federal and state coöperation in the development of recreational facilities.

With man-power and money available in the national campaign to furnish employment and restore economic stability, the Nation has made great strides in recent years in developing existing parks and forest recreational facilities and in opening up new areas.

One of President Roosevelt's first acts was to recommend approval of legislation authorizing the establishment of the CCC. Within three months after the President's appeal to Congress, the CCC camps were well under way. On July 1, 1933, something like 1,500 camps were in operation and 300,000 formerly idle young men were employed.

I am glad to be able to say that both the National Park Service and the U. S. Forest Service were ready to grasp the opportunity afforded by the launching of the CCC. Both organizations had programs ready which could be and were put into instant use.

Because the National Park Service had plans ready for development, approximately one hundred camps of 200 men each were assigned to that work at once. Later, the demand for state park facilities became so insistent that camps were assigned to the development of these areas.

May I dwell on state parks for just a moment? My friend, Connie Wirth, who is going to speak to you later—and one of his many responsibilities in Washington is the responsibility for the state park development—will undoubtedly go into more detail with you. At least, I hope he will. My reason for mentioning it is to urge upon you that you devote some of your efforts toward necessary legislation in the various States to the end that proper laws are passed and money allocated for the proper maintenance of state parks and state forests that are developed by the Civilian Conservation Corps under the supervision of the Park Service of the Interior Department and the Forest Service of the Agriculture Department.

State park acreage throughout the country totaled 965,057 prior to 1933, exclusive of the Adirondack and Catskill State Forest Preserves of 2,345,634 acres in New York State. By June 30, 1939, the total state park acreage was approximately 1,918,000 acres exclusive of the Adirondack and Catskill Preserves, showing an increase of some 952,000 acres, or about 99 percent increase. Facilities for healthful, outdoor recreation thus provided also stimulated public appreciation and use. It is vital that after the camps are withdrawn from these areas proper arrangement be made by the State to maintain them. Since the inception of the Corps, there have been 183 camps established in national parks and monuments, and some 681 camps established in 867 state recreational areas. In supervising this work, the Corps through the technical services coöperated with 47 States, 33 counties and 72 cities. We in the Civilian Conservation Corps are especially proud of the results of the use of CCC

labor in national parks and other recreational areas. The work has been well planned and well carried out.

One of the important and unique elements in the Civilian Conservation Corps program is the coöperation which is necessary between our organization and the various other departments of the Federal Government which are in charge of the camps and supervise the different types of work. An important function of government is helping to build up great industries, a sound financial policy and recreational areas such as we have been talking about here tonight. Those things are important and necessary functions of government. They are not the most important functions of government. The most important function of government is the building of its citizens, men and women, into intelligent, happy citizens. President Roosevelt, in that dark industrial and financial period in 1933, by executive order called upon four major departments of the government to assist in carrying on the work of the CCC—the War Department to furnish officers to be in charge of the camps, looking after the physical welfare of the enrollee and to do the housekeeping in the camp; the Labor Department to do the selecting (which function has since been transferred to the Office of the Director). He called upon the Interior Department to furnish technical supervision by its various agencies of that portion of the work that came under that department; and upon the Department of Agriculture, with its United States Forest Service, to be responsible for its part of the technical program.

He brought these agencies in, in order that in the handling of these boys whom the Federal Government was taking from depression-hit homes, they would get the tradition and the loyalty of the Army and the benefit of the supervision of their work projects by the Park and Forest Service, with all of their fine traditions and technical knowledge of the work. This is one of the elements which has made the program so unusual. Never before in the history of our government has there been such a workable example of coöperative effort. It has involved not only coöperation between departments and bureaus of the Federal Government but also between the Federal Government and State and local governments.

I have made no attempt to single out individual projects, nor talked to you at any great length about the technical side of the work because most of you are familiar with that. May I say to you, however, that the operation of this Corps over the past six and a half years has cost the American people $2,285,000,000. Of this amount, $524,000,000 has been sent in allotments to the families of the enrollees in the camps. The Corps has been a great benefit to industry because of the vast sums of money spent for necessary equipment and supplies, and we believe the work of the Corps, what it has accomplished, will amply repay the government for every dollar expended. Sometimes, in evaluating the work of the Corps, we talk of the benefit it has been to the enrollees, and it has been

of a vast amount of benefit because it has kept these youngsters engaged in healthful outdoor work, but the enrollees of the Corps are not the only beneficiaries from a health standpoint. By far a greater volume of the health gains will come to the millions of people who will use the areas that these enrollees have built under your supervision. The Corps originally started out as an experiment in unemployment relief on the largest scale ever attempted anywhere in the world. It has developed into a going concern—no longer an experiment.

The camps differ greatly from so-called work camps in other countries in that the nations in Europe which operate work camps operate them on the theory of destroying initiative and making the worker in the camp feel that he is wholly dependent upon the government and that the government will do his thinking for him. The theory in the operation of the CCC camps and its educational program is to fit the young man for a position in industry, teaching him something of the value and discipline of work and instil into him a feeling that there is for him a future in America depending upon his own effort and that he must not lean entirely on his government. That is why we only permit the enrollee to stay in the camp for a certain length of time.

In closing, let me say again that we appreciate the coöperation of the members of this Association, and we in the Director's Office keenly appreciate the very fine coöperation that the Park Superintendents have rendered in the carrying on of the program of the Corps. Not only has a great deal of work been accomplished in the conservation of our natural resources which comprises soil erosion control, reforestation, protection of our forests from fires, as well as building recreational areas, but you have also helped in benefiting these young men in the camps, given them physical hardihood, helped to knock the childishness out of them and to develop the ability to care for themselves. You have helped to give these young men, who otherwise would have been denied an equal chance for success, the opportunity to gain work experience and to get ahead.

Recreation in Wilderness Areas

FRANK C. W. POOLER
Regional Forester, Southwestern Region, U. S. Forest Service, Albuquerque, N. M.

THE active interest which the American Planning and Civic Association has taken in the advancement of outdoor recreation and the cordial relations I have enjoyed with representatives of the National Park Service make it a pleasure for me to address this gathering.

How long ago the demand for wilderness recreation began to develop, I hesitate to say. But as long as 16 or 17 years ago Forest Officers in the Southwest and elsewhere became aware that national forest land-use plans should include provision for the preservation of wilderness conditions in selected areas in order to meet anticipated public demand.

Even as early as then, the increasing use and development of national forests, the expected increase in more common types of forest recreation, the motorization of fire protection forces and other trends—all tending to multiply road facilities—made it apparent that the only way to preserve wilderness conditions in suitable areas was to close those areas to road building and to several of the forms of use ordinarily permitted under national forest administration.

Some of you have watched the national forest developments which followed recognition of the situation. You have seen how policies were formulated and how, here and there in national forests the country over, primitive areas (as they were then called) were designated and managed with a view to maintaining wilderness conditions in so far as practicable. We now term them Wilderness Areas.

Among the first areas so designated in a national forest—my recollection is, it was the first—is the Gila Wilderness Area in the southwestern part of New Mexico, in the regional designation of which in 1924 I am happy to say I had a part. Located in the heart of the Gila National Forest, of which it is an integral part, this area now comprises some 570,000 acres and is closely associated with the Black Range Wilderness Area comprising 170,000 acres. Today there are six Wilderness Areas in our region of Arizona and New Mexico with an aggregate area of about one and one-half million acres.

They each exceed 100,000 acres and are operated under management plans that prohibit road building, commercial timber cutting and structural improvements for recreation. They are supplemented by a half-dozen or more areas less than 100,000 acres in size, known as Wild Areas, which are of the same general character and are similarly administered.

In other respects administration of our Wilderness and Wild Areas in general follows ordinary national forest practice. Regulated grazing by domestic livestock is permitted on terms acceptable to administration and sufficiently conservative to encourage an increase in the wildlife population. Hunting and fishing are allowed in season. Wood supplies are still available for local domestic use. The fire protection organization and facilities are intensified to offset the handicap of slower travel due to absence of roads.

What has been going on in the Southwest has been happening throughout the national forest system as a whole until by 1936 there were, using present terminology, approximately eight million acres in Wilderness Areas, supplemented by over one and a half million acres in Wild Areas.

Naturally, as this movement progressed, administrative policies passed through a period of development, finally crystallizing in the Secretary of Agriculture's recent regulation reading as follows:

Regulation U-1. *Wilderness Areas.* Upon recommendation of the Chief, Forest Service, national forest lands in single tracts of not less than 100,000 acres

may be designated by the Secretary as 'wilderness areas,' within which there shall be no roads or other provision for motorized transportation, no commercial timber cutting, and no occupancy under special use permit for hotels, stores, resorts, summer homes, organization camps, hunting and fishing lodges, or similar uses; provided, however, that where roads are necessary for ingress or egress to private property these may be allowed under appropriate conditions determined by the forest supervisor, and the boundary of the wilderness area shall thereupon be modified to exclude the portion affected by the road.

Grazing of domestic livestock, development of water storage projects which do not involve road construction, and improvements necessary for fire protection may be permitted subject to such restrictions as the Chief deems desirable. Within such designated wildernesses, the landing of airplanes on national forest land or water and the use of motor boats on national forest waters are prohibited, except where such use has already become well established or for administrative needs and emergencies.

Wilderness areas will not be modified or eliminated except by order of the Secretary. Notice of every proposed establishment, modification, or elimination will be published or publicly posted by the Forest Service for a period of at least 90 days prior to the approval of the contemplated order and if there is any demand for a public hearing, the regional forester shall hold such hearing and make full report thereon to the Chief of the Forest Service, who will submit it with his recommendations to the Secretary.

Another regulation provides for the designation by the Chief, Forest Service, of Wild Areas in single tracts of less than 100,000 acres but not less than 5,000 acres, to be administered in the same manner as Wilderness Areas with the same restrictions as to use.

These regulations go somewhat beyond those previously in effect in placing restrictions on allowable use. Through the procedure set up for formal establishment and modification, the newer regulations offer positive assurance against changes in Wilderness Area boundaries or policy without the Secretary's consent, besides introducing the added safeguard of public advertisement of contemplated action on boundaries.

But what are Wilderness Areas supposed to supply in the field of recreation that other portions of national forests do not? Primarily they make it possible for people of all classes to experience for themselves the thrill of living in the open under frontier conditions; of camping, riding and hiking over vast areas in comparative isolation, far removed from the blare of auto horns and the creature comforts of modern civilization.

It is difficult to get human beings to become enthusiastic about the preservation of something they have never seen. But no real human can visit the wilderness country without thrilling to it and being seized with a conviction that it is a heritage to be preserved at all costs. Probably this very fact was one of the main reasons the American Forestry Association launched the non-profit undertaking known as Trail Riders of the Wilderness. Starting in 1933, the Trail Riders movement has gained a strong foothold. It facilitates pack trips into Wilderness Areas on the national forests at very reasonable rates for the average citizen.

The summer just past saw Trail Riders making expeditions of two

weeks each into five Wilderness Areas in Montana, Idaho, Colorado, California and New Mexico.

The Trail Riders expedition into the Gila Wilderness Area consisted of 17 riders, not counting representatives of the American Forestry Association or the Forest Service. The 17 were from eight States—New York, California, Missouri, Wisconsin, Ohio, Massachusetts, North Carolina, and Pennsylvania.

Several of these men and women had never been west of the Mississippi. Even for others used to the outdoors, some of them veterans of several Trail Riders trips, the expedition into this primitive expanse of nearly 600,000 acres was an experience not to be forgotten in a lifetime.

They rode over mesas which were alive with flowers; up into the pines and firs, down a thousand feet into the canyon of the West Fork of the Gila River; and finally topped out on Mogollon Baldy, nearly 11,000 feet in elevation. They stalked deer and other wildlife, and rode for hours in the rain and liked it. Deep in the area they inspected the ancient cliff-dwellings of the Gila National Monument.

Gila expeditions in the past have included some prominent and some wealthy persons. But to me it is a refreshing fact that most of the Trail Riders who have come to the Gila Wilderness Area in the past several years have been average citizens—working people for whom the Wilderness offers a healthful change in pace, a beneficial form of escape from the grind of civilization.

Wilderness recreation consists of just this kind of simple life with seasonal hunting and fishing thrown in for those who so desire. Supplementing organized trips like the one I have just used for illustration are an increasing number of impromptu packing and camping trips, starting from guest ranches in the surrounding country that supply saddle and pack stock and guide service as desired. Hiking, too, has a very distinct place in the wilderness recreation picture. Strangely enough, the joy and thrill that come from wilderness travel are not so much the product of splendid scenery as of the very simplicity and freedom and remoteness of the life itself.

There is a distinct place and a real need for Wilderness Areas and wilderness recreation in our increasingly complex modern life. There is need for the spiritual exaltation that wilderness surroundings inspire and public recognition of this need is certain to increase rather than diminish as frontier conditions make way for human progress.

In moving to meet this need adequately by designating appropriate areas for wilderness recreation on lands under their respective control, the Forest Service, the National Park Service and more recently the Indian Service are recognizing the indisputable fact that unless there is staunch adherence to definite plans for preservation of wilderness, this irreplaceable national asset will gradually disappear before the onslaught of civilization's influences.

Federal Park Activities

CONRAD L. WIRTH, Supervisor Recreation,
Land Planning and State Coöperation, National Park Service, Washington, D. C.

THE problem we face in providing recreational areas and facilities and in developing a program for their use arises out of human needs brought about mainly by the industrial development of the Nation.

In ancient Greece the privileged classes freed themselves from long hours of toil and were able to follow recreational and cultural pursuits because they possessed human slaves to do their work. In America we acquired mechanical slaves but these, in turn, threatened to enslave us until we realized that a new social system must be built under this new order. We realized that it is necessary to divide the individual's day into three parts: (1) a period for work, (2) a period for rest, and (3) a period for free time for whatever purpose to which the individual wishes to devote it. The work period is strictly controlled, and the free-time period may also be said to be controlled to a certain extent, by the availability of various forms of recreation. To meet the growing demand for leisure-time out-of-door activities and to provide adequate facilities therefor we are concerned in devising: (1) a park system, (2) access and travel, and (3) use and direction. The first involves establishment, development and maintenance of areas. The second involves a coördination of travel promotion such as is being done through the United States Travel Bureau. The third involves guidance (not regimentation) of people's use of park systems in order that they may realize greater benefits in physical, mental, and spiritual re-creation.

The various items of such a program are handled by different governments which are most logically divided into three levels: (1) Federal, (2) state, and (3) local. In the matter of setting up our park systems we should keep in mind that different types of areas can best serve different purposes and must be studied and classified accordingly.

Certain areas are of national importance, and therefore fall into the Federal level of administration. Others are of state-wide significance and therefore should go into the state system. Still others are of purely local character and therefore should be managed by the local authorities.

The Federal Government's emergency program for park and recreational planning and development by the use of CCC and relief labor and funds has been under the technical supervision of the National Park Service. This program, launched in 1933, has given the park and recreation movement a great impetus, particularly with respect to the extension and development of state, county and metropolitan systems.

While the Federal-aid program has brought about wide-spread physical development of park areas, the effect it has had in stimulating interest in parks and outdoor recreation on the part of both park authorities and the public is of primary importance. Many States which had

been slow in their steps to establish state park systems as a greatly needed recreational outlet were encouraged to make this program a major activity when Federal assistance was offered for the development of their areas.

State park acreage throughout the country totaled 965,057 prior to 1933, exclusive of the Adirondack and Catskill State Forest Preserves of 2,345,634 acres in New York. By June 30, 1939, the total was approximately 1,918,863 acres, almost double the 1933 acreage. Since 1933 there has been an increase of about 500 park areas in 44 States, and these now number more than 1,200 areas.

The development program also led most of the States to strengthen their park laws, and in many instances they have consulted with the National Park Service in mapping out legislation for the proper maintenance and administration of the areas under development.

Reports from various parts of the country indicate that state park use has increased tremendously in the last few years. Such data are being collected through the Park, Parkway, and Recreational-Area Study which is being conducted by the National Park Service in coöperation with the States under authority of an Act of Congress.

Since 1933 there have been 183 CCC camps operating in 84 national park areas, and some 681 camps in 867 state recreational areas. In supervising this work the National Park Service has coöperated with 47 States, 33 counties, and 72 cities. In addition, a large amount of relief labor has been employed on projects supervised by this Service, particularly in the development of 46 recreational demonstration area projects, situated in 24 States. These are National Park Service projects on lands purchased by the Federal Government, and they are being developed primarily for organized camping.

The work of the CCC alone has increased greatly the facilities for more extensive use of park areas by the public. In both national and state areas and in the territories the enrollees have built 6,481 miles of park, truck, and minor roads; 6,855 miles of foot and horse trails, 3,535 bridges of the foot, horse, and vehicular types; 28,361 buildings of 16 major types, 763,749 rods of fences and guard rails, 1,640 water sources, such as wells, reservoirs, springs and water holes; 1,063 large impounding and diversion and small dams which create swimming places, 818 drinking fountains, water storage facilities with total capacity of 29,945,000 gallons; public picnic ground development of 3,378 acres, public camp ground development of 14,725 acres, and 3,965,788 square yards of parking areas.

The CCC has devoted 151,947 man-days to lake and pond development, 205,457 man-days to archeological and historical reconnaissance, 520,978 man-days to the fighting of forest fires, and 335,625 man-days to tree nursery work. Enrollees have carried on tree disease and pest control work over 1,028,439 acres, and have planted 87,177,300 trees.

Forest stand improvement has been carried on over 64,415 acres. Fire hazard reduction work has been done along 7,681 miles of roads and trails, and 457,481 man-days have been devoted to fire prevention and presuppression. Telephone lines for forest protection and park administration have been strung for a total of 2,829 miles.

Erosion check dams built by the CCC number 38,088. Erosion control planting has amounted to 23,327,542 square yards. Channel clearing has been carried on for 19,680,805 square yards, and channel excavation totals 4,734,575 square yards. There have been 318 fish-rearing ponds built, and fish stocked totals 9,670,913.

Uniformly good standards of planning and design have been maintained by the National Park Service in its technical supervision of these operations. The result is that the public, in visiting both its national and state park areas, now finds many new and improved facilities permitting increased enjoyment and recreation in the parks. Buildings are substantial, well arranged, and pleasing in appearance. Bridges are sturdy and attractive, and dams are well engineered. Foot and horse trails lead to interesting points within the areas and through forested lands adequately protected against fire, the arch enemy of the woods. Proper water supply and sanitary facilities, which are of primary importance in a park area, have been provided. Access has been made easy through the improvement of entrances and park roads, and control and administration of the parks has been facilitated by proper planning. In a word, the States have had the benefit of Federal assistance in the conservation, protection and development of their park and recreation areas.

Federal Aid to the States. There are many ways in which the Federal Government can and does assist the States, aside from the giving of actual cash grants. Coöperation in planning and in working out problems is a form of assistance which cannot be evaluated in dollars and cents.

In the last six years the National Park Service has had an important part in the state park development program financed by CCC and other Federal funds. In this program there arose many problems which could not be solved merely by the giving of funds. And so the Service came naturally into the position of consultant and adviser to the States on many important questions of park and recreational planning.

The unprecedented size and scope of the state-park program in the last six years has necessitated sound planning all around. Under this heading the Service has attempted, through studies and surveys, to assemble, analyze, and coördinate information for the guidance of all the States in planning their systems, developments, and administration:

1. Park, Parkway and Recreational-Area Study.
2. Municipal Parks Study.
3. Fees and Charges Study.
4. State Park Legislation.

In addition, the Service offers consulting service to the States on their problems, as authorized under the Parkway and Recreation Planning Act (49 Stat. 1894). Much advantage has been taken of this consultation service already in connection with CCC and ERA-financed operations The Service continues, however, to advise on special problems in recreational planning.

The National Park Service has also become a recognized clearing house of information. This service is accomplished largely through such special publications as "Park and Recreation Structures" and the annual "Yearbook of Park and Recreation Progress." Special consultants on recreational matters employed by the Service and other facilities, place the NPS in a good position to advise on the whole field of outdoor recreation.

Such assistance to the States is given cheerfully and willingly, to aid the nation-wide park and recreation movement. However, the States also have certain responsibilities.

Of great importance is the matter of land acquisition. The Service does not intend to devote time and effort to assist a State in planning a mythical park system. Neither assistance in planning nor actual aid in development will be given unless a State shows beyond question its intention of acquiring the necessary land for such developments.

Probably with the beginning of the next CCC period, a new method of allocating camps for state, county, and metropolitan park work will be in force. This method involves a "four to one" ration, that is, camps will be allocated on the basis of population (which carries a weight of four) and area (which carries a weight of one), provided, however, that certain other conditions and prerequisites are met. These, briefly, are as follows:

1. Applications by the States for camps must specify needs anticipated on the basis of their findings in the Park, Parkway and Recreational-Area Study, and must indicate the State's ability to make a substantial financial contribution over and above that which is asked from CCC funds. It is expected that we shall require a State (this also applies to county and metropolitan areas) to submit a three- or five-year program for the development of each area, with a comprehensive estimate of the work to be done and the cost of materials needed. The work program submitted by the State will be reviewed by the National Park Service to determine whether it conforms to the recommendations of the Recreational Study, before the Service commits itself to any participation in the program.

2. The ability of the State to maintain its parks will be a major consideration. The State will be required to furnish concrete evidence that on completion of a park area, it will be satisfactorily maintained. This will be judged largely on the past record of the State in maintaining its parks, because we feel this is the best scale by which to judge future action.

3. The National Park Service has instituted a system of state-park-area reports through our field offices which we feel will give us a check on the condition and operation of parks, both those in which we have worked and those in which we may be asked to coöperate on projects in the future. Our field men, when traveling, will report on the condition and maintenance of every state park they visit.

One thing should be emphasized: the National Park Service does not intend to approve any projects in state parks which are of a maintenance character, either maintenance of newly constructed facilities or older facilities. Federal funds will be available only for new developments.

Recreation as a By-Product of Reclamation

CLIFFORD H. STONE
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IN THE treatment of this subject, "Recreation as a By-Product of Reclamation," the word "reclamation" means the process whereby water is made available for the production of agricultural crops in arid regions. It denotes irrigation of arid lands. Irrigation involves the diversion of water from natural streams through a system of diversion dams, canals and ditches and, in most cases, reservoir storage of water for use when it is needed. The word "recreation" as used in this discussion, refers to the opportunities afforded by the great outdoors for enjoyment of scenic attractions and the wildlife usually found in such surroundings.

Consideration of the subject is confined to the Western portion of the United States where reclamation is practiced. Roughly, there are fifteen reclamation States.

In general, opportunities for both reclamation and recreation are found in the same localities in varying degrees. The one appeals to those engaged in agricultural pursuits, and the other attracts those who are interested in nature or indulge in the sportsmanship associated with game and fish. There is, however, a third interest represented by those who seek to commercialize these outdoor attractions. The latter profit by the tourist business which has built up a substantial industry.

It has been assumed that there is a definite conflict between these various interests; and too often there is evidence of a clamor on the part of one for full recognition even though it may exclude the other. As a matter of fact a sound policy of conservation will preserve as far as possible both the reclamation and recreational values. It means, of course, careful planning, coördination and a realization that in all cases it will be impossible to protect fully all these values. If these principles are followed, out of reclamation can come many times an improvement of recreational attractions; and in most cases reclamation can be so ordered as to interfere in only a limited degree with the outdoor facilities of those who seek scenic beauties and wildlife.

Mountain and stream resources have been and will continue to be developed; but the principle of conservation should dominate their utilization rather than exploitation. The exclusive use of vast areas solely for the nature lover may be exploitation in the same degree as the

unnecessary spoliation of scenic attractions for industries such as mining and agriculture. Certain areas should be reserved solely for scenic attractions and wildlife. In others an extensive recreational use is possible even though provision is made for other coördinated uses which do not in any unreasonable degree interfere with the recreational objective. There are many places in the West where the opportunity to utilize water resources for irrigation will be defeated and potential agricultural development forever forestalled if reservations for recreation purposes are attempted; but there is no reason why, out of such development, an effort cannot be made to preserve as far as possible recreational values. In such cases there will result recreation as a by-product of reclamation.

The arid West is not now in the condition in which the Indians left it. An enterprising and hardy race of people have for decades carved out of it homes and industries. They have added to the Nation's wealth and created markets for the older sections of the country. They have opened up and improved a section where, in increasing numbers, people come to enjoy scenic wonders and wildlife in a degree of comfort which is demanded by the average tourist. A natural industrial development, in which the whole people of the Nation participated, brought about the present condition. In many cases it resulted in spoliation and exhaustion in a short space of years, without any thought of conservation, of resources which must be restored as far as possible. Such restoration is the work of both the Federal and state governments under a coördinated program; and future development should proceed on the basis of preserving all the values possible.

The scenic wonders of the West with the wildlife which makes this area a habitat are in a large degree the property of the public. By far the greater part of these lands is owned by and subject to the control of the United States. The conservation of the forests and the grazing on public lands are now regulated by appropriate Federal agencies. National parks are established and administered by the Federal Government.

On the other hand a large acreage of western land has passed to private ownership; mines and mineral claims are subject to private ownership under Federal and state laws; the appropriation and control of water which arises in the mountains are subject to the jurisdiction of the state governments. The wildlife, in a major way, as in Colorado, is the property of the State, and large sums of money are expended by the various state governments for its protection, conservation and propagation.

The opportunities for the easy and inexpensive use of water are gone and the present trend involves large irrigation and power projects which can only be financed by the Federal Government, and the cost of which is repaid by the water or power users. Floods, especially since the denudation of many areas of grass and timber, have destroyed much

of the beauty of mountain and plain. Not until recently has much attention been given to the matter of flood control in high sections of the country near the source of rivers. Soil conservation, which in reality is part of a flood program, is a comparatively recent endeavor. The prevention of floods and the conservation of soils are in the interest of the public and involve a Federal program. More and more it is realized that many projects are of a multiple purpose—water utilization, power, flood prevention, and preservation of recreational values.

National parks and national monuments without adequate reservation for rights-of-way for storage and transportation of water should not be established in areas which afford the only source of water for the irrigation of large areas of potential agricultural land. In many, if not by far the majority of cases, available water in such places is needed for supplemental uses. By this is meant provision for a supply of water to farmers who do not now have sufficient water to mature a crop. An additional amount represents the difference between a crop and a crop failure. These farmers are on the land and have made sizable investments and the delivery of additional water to them means stabilization of their industry. To deny this chance through large reservation exclusively for recreational purposes, is not justified.

On the other hand there should be no extensive drying-up of streams for irrigation projects where provisions can be made to maintain fish life. Projects can be so planned that although portions of a stream system may be seriously depleted in stream flow, other portions will be improved. By such a development the regimen of streams will be changed. Some streams within the scheme of development may be converted into scenic and wildlife attractions, where for decades their erratic flows have made them the source of destruction in certain seasons of the year and nothing short of a sandy stream bed at other seasons. During recent drouth periods, it has been realized by many interested in fish life that storage and stream regulation required for adequate irrigation facilities is desperately needed for fish culture and protection. Experience has shown that streams which periodically suffer from drouth conditions, even though there is sufficient water for fish life, provide an opportunity for fish catches which seriously deplete the stream. Sportsmanship, because of these conditions, gives way to "slaughter."

Quite aside from this change of regimen of streams is the building-up of new recreational attractions through irrigation and power projects. This results largely from the construction of reservoirs. Large bodies of water, especially in high mountain areas surrounded in many cases by timber, are attractive spots. They can be made valuable additions to the natural storehouse of things sought by the nature lover and the sportsman. This requires planning and a settled policy as to regulation of privileges afforded by them. For preservation of recreational ad-

vantages, provision should be made for retention at all times of sufficient water for fish life. Sufficient area surrounding reservoirs under proper control is necessary to insure access. Regulation and policing of the adjacent area to prevent monopolistic control of boating and fishing privileges should be kept in mind. Otherwise the value to the general public will be largely lost and the benefits will be commercialized. In general the planning and regulations should be such that the scenic attractions, fishing and boating privileges, and opportunities for temporary abodes for those who seek such places are made secure for the general public.

To accomplish this objective involves not only planning when projects are built, but there are other considerations which should be noted.

First, there is again the question of relation between Federal and state agencies. The state laws, as has been pointed out, protect, and regulate the taking of fish, and they fix the fishing season and open and close bodies of water for such purposes. State officials, expressing the general sentiment of local interests, are very apt to resent a Federal control which imposes restrictions and fees for boating or for other privileges and makes ineffectual their efforts to make such improvements available to the public under proper regulations. If reservoirs are sometimes to serve for recreational attractions which were formerly found on streams, then these state agencies will no doubt seek to maintain effectual control of these privileges. Often these storage facilities are built on public land where the Federal Government controls the reservoir site and adjacent area. In some cases the site is partly on government land and partly on private land obtained through purchase or condemnation by the project sponsors. Since the United States has exclusive jurisdiction to dispose of the public domain and reserves the right to control its use, the States are not in a position, where easement rights for a reservoir are obtained on public lands, to regulate effectually recreational privileges growing out of these water storage developments. There is then a conflict.

In the second place, there is also the conflict between private and public interests. Where the easement rights for irrigation and power reservoirs are acquired by the water users from private individuals and storage facilities constructed by them, there flow rights in the water users to control these facilities and enjoy directly or indirectly the revenues arising from their use for recreational purposes. These facilities may be privately stocked with fish and closed to the public. The fishing privileges may be commercialized.

In the case of governmental financing of a project, these recreational privileges for use of the public might be reserved at the time of authorization. This may be a solution. But when water or power users obligate themselves for large sums of money and obtain in many cases water storage at a cost which approaches the limit of their ability to pay, it

seems only proper that the recreational benefit to the public should be borne by the public and the cost to the farmer reduced accordingly. This principle is recognized in flood control and river and harbor improvements.

It is obvious that, if the large-scale development of facilities for irrigation and power is to be almost wholly financed with Federal funds and if recreational opportunities are to be protected for the public, some plan must be worked out in coöperation with the Federal and state governments and also with the water users who ultimately pay the cost of these developments. Undoubtedly, some legislation will be necessary, and in many cases proper reservations will have to be considered when projects are authorized. An enlightened public anxious to realize as full a measure of conservation and development as possible and understanding the value of water and the legal considerations surrounding its use, should recognize the necessity as well as the possibility of these adjustments. Conservation should contemplate, in a reasonable degree, a balancing of reclamation and recreational values; and the program should afford an opportunity, if possible, to develop and preserve a secondary use out of that which represents the primary objective of a project.

This program of coördination in many States is being attempted through water conservation and planning boards and fish and game commissions working with Federal agencies; and these same state agencies strive to coördinate the divergent interests within the State for realization of maximum values.

Those who are primarily interested in the recreational phase of conservation of water resources should not fail to realize their great value to agriculture in the West for there water is a limiting factor in agricultural development. Then, too, water of these rivers is claimed by many States and in some cases by other nations. The Colorado and the Rio Grande carry water claimed by both the United States and Mexico. The Supreme Court of the United States has said: "A river is more than an amenity, it is a treasure. It offers a necessity of life that must be rationed among those who have power over it. . . ." (New Jersey *vs.* New York 283 U. S., 336). Water of a stream may be denied to irrigation development because of possible deleterious effect on recreation in one State only to be later claimed and developed for agricultural development in another State.

It must also be remembered that in some States water cannot be legally appropriated for piscatorial purposes. The constitutions of some States, such as that of Colorado, provide for appropriation only for domestic, irrigation and manufacturing purposes. It is not likely, because of the opposition of agricultural interests, that such constitutional limitations governing the acquisition of water rights will ever be changed.

With the disastrous effects of drouth conditions and the competition

among States for the realization of the beneficial uses of rivers and streams before the opportunity is forever gone, it is likely that before many decades there will result complete appropriation. This development, of course, should recognize, as far as possible, all resources. It means a broad outlook and an understanding of legal and physical limitations.

In this discussion the writer has recognized and advocated the development in the fullest degree possible of recreational values as a by-product of reclamation. An attempt has been made to indicate the limitations and problems. The solution of the problems is not offered except to suggest some of the main considerations. There are here presented matters which must be given serious consideration by those who would preserve as fully as possible all the values innate in our natural water resources.

Planning for Water Recreation on a National Scale

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WATER was taken for granted in the East for many years—for drinking and bathing and other domestic uses; for swimming and sailing and easy transportation; hardly a topic for conversation until the constant concern over water in the West leaped into headlines through wind erosion and the sufferings of people in the Dust Bowl. Then the true significance to the West of Boulder, Bonneville, and Grand Coulee slowly penetrated the consciousness of the East. Steadily increasing problems of river pollution and the inherent difficulties of converting streams saturated with industrial sewage to domestic use have gone hand in hand with the rapid urbanization of the United States. Together with alarming shortages of water and a steady drop in the water table in many areas of the East, such problems have finally become sufficiently dramatized to convince the man on the street that nature's bounty in the form of steady annual rainfall must be conserved and not wasted.

Ever increasing amounts of leisure time and the yen to get outdoors have called the attention of the average man, woman, and child to our ocean shores, lakes, and rivers as glorious opportunities for healthful recreation. Yachting is an old pastime for the millionaire, but the little boat with an outboard motor has only recently become the symbol of water transportation for many thousands who enjoy being on the water. In populous areas the demand for shore uses now exceeds the supply. In preparing a regional plan and report on the Baltimore-Washington-Annapolis area, for the Maryland State Planning Board, I found that as late as 1910 some 265 miles of beach on Chesapeake Bay in the vicinity of the three cities were largely undeveloped. These beaches could then

have been bought for the proverbial song and suitable areas reserved for future public development and use. Two years ago less than 60 miles remained similarly available, at tremendously increased real estate values, for a tributary population nearly double in size.

The growing recreational travel movement which annually shuttles increasingly large numbers of our population back and forth between the Atlantic and the Pacific and the Great Lakes and Florida has made people aware that all sections of the United States are not equally endowed by nature with water areas for recreation. The bulk of our people who live in the Northeast with its numerous natural lakes have found that the Southeast, the Central States, and the Southwest are not blessed with the glacial lakes of Minnesota, Wisconsin, and New England.

The Federal Government's gigantic projects to conserve and develop the nation's waters in those portions of the country not naturally endowed with lakes have caught the public's fancy. They have come in great numbers to see such projects as Boulder Dam, Grand Coulee, and the newly developed dams and reservoirs in the Tennessee Valley—and their interest has been sustained beyond the construction period. Although they may have come only to observe, they have remained or returned to fish and boat and swim. Their interest is reflected in booming sales of boats, fishing tackle, and other sporting equipment, in over-taxed recreation facilities, in greater consumption of gasoline, and in the necessary and ever-increasing activity on the part of Federal, state, and local agencies in planning for recreational development.

This increasing public interest in the recreation use of its waters has brought a new responsibility to all of us engaged in planning the conservation and utilization of the Nation's waters. A generation ago we used to build single-purpose projects for irrigation, flood control, navigation, power, or public water supplies. Then we learned that two or more purposes could be combined, and we undertook the multipurpose projects exemplified by Bonneville, Boulder, and the Tennessee Valley Authority. We now are forced by public demand to include provision for recreation as another of the multiple water uses. It is safe to say that there is no project, however large or small, concerned with the use and conservation of the Nation's waters but what will permit of some form of recreation use—whether it be relatively infrequent use for hunting and fishing or highly intensive use for swimming, boating, group camps, lakeshore cottages, and a host of other activities.

I, therefore, urge that the most careful consideration be given to potential recreation values in every project concerned with the use and conservation of the nation's waters. *Such consideration must start with the original inception of the project to insure the inclusion of adequate legislative authority for the agencies concerned with the necessary planning, development, and management of recreational areas.*

In the Tennessee Valley we have been exploring new possibilities of

meeting public demands. We have attempted a most thorough analysis of the situations as we found them. Our planning has been preceded by a careful inventory of potentialities—first on a Valley-wide scale, then in greater detail by individual lakes. It early became apparent that one of the greatest recreational needs of the Valley was the stimulation of activity in park development on the part of local and state agencies. In coöperation with the National Park Service and the CCC, the Authority developed two demonstration parks on Norris Lake and others on Wheeler, Wilson, and Pickwick Lakes. These have been directly responsible, through the coöperation of Federal, state, and local agencies, for the development of three additional state parks on Authority property in Tennessee and undoubtedly were instrumental in stimulating other state park development in the Southeast. It is, I believe, significant that in 1933, prior to TVA's recreational activities, only three of the seven Tennessee Valley States had established state park systems of limited extent. Now each Valley State has a creditable park system and a state park administrative agency. Several of the Valley States are pioneering along lines related to recreation and conservation, operating under new and advanced legislative machinery, and are establishing standards of achievement that may well be of benefit to other States.

In addition to recreational developments of a purely public character, the Authority recognizes certain quasi-public, commercial, and private forms of recreational uses of its lands. While individually, these developments are smaller than the public developments, in the aggregate they bulk sufficiently large to create a *National Recreation Area* along the nearly 6,000-mile, Federally owned shoreline of the Tennessee River chain of lakes. We have not yet reached the point of development where we can meet the demand for recreation facilities on the part of the nearly 80,000,000 people—two-thirds the population of the entire country—who live within 500 miles of the Tennessee Valley watershed. To serve adequately the needs of this heavily populated area, we are making the most careful plans. In our studies of potential recreation land uses, we are making ample provision for future development, reserving areas which will not be developed this year, or the next, or for many years to come, but which will be available when the demand is evidenced.

Meanwhile, we are exploring other important questions. We are seeking to determine a desirable balance of public and private development. We are trying to establish the correct relationship between agencies of design and management. We are being confronted with new questions in public administration of recreation areas and are seeking answers to those questions. We are making an effort to serve tourist needs and at the same time bring new social and economic benefits to the people of the region. And, above all, we are finding new opportunities for experiment and demonstration which will be of profound significance.

ARCHEOLOGY, HISTORY AND SCENERY

Presiding: HERMON C. BUMPUS, Chairman, Advisory Board of National Parks, Historic Sites, Buildings and Monuments, Duxbury, Mass.

Southwestern National Monuments

FRANK PINKLEY, Superintendent, Coolidge, Ariz.

ON BEHALF of the Southwestern National Monuments, I wish to thank you for this opportunity to address you, and to give you some ideas of what a "monument man" thinks about monuments and some of his opinions as to how his unit might be allowed to render more efficient service to the people of the United States in the future than it has in the past.

The national monuments, as a rule, at a park service conference, are seated just a little below the salt, as it were. Nor do we complain about this arrangement because, of course, park men predominate at our conferences and their business should have the right-of-way. It is, however, very nice to be able to hold forth at a little meeting like this and try for a brief time to inculcate some specific monument ideas.

It has been interesting to sit on the side lines during recent months and to study the various definitions of national parks and national monuments which have been offered. Unless we can define what we are talking about so our hearers understand us, there is little point to our talking at all.

A long time ago I heard Dr. J. Walter Fewkes tell a story which has remained in my mind through the years. The story had to do with a Frenchman who had recently come to this country and was asking one of the natives for information and for a definition.

"What," said the Frenchman, "does ze paller bear?"

"What do you mean?" replied the native. "I don't understand you."

"What," repeated the Frenchman, "does ze paller bear?"

"Do you mean to ask me what are the customs and habits of the polar bear?" said the American.

"Oui, oui," said the Frenchman. "What does ze paller bear?"

"Oh, I don't know," remarked the American. "I guess he doesn't do much but sit around on a cake of ice and eat raw fish."

"I will not accept! I will not accept!" cried the Frenchman. "I have been invited to be ze paller bear at ze funeral!"

The general point I want to drive home is that definitions should be accurate and easy to understand, otherwise they are likely to miss the subject and cause confusion.

If everyone had a clear conception of a national park and a national monument, there would be no need for these words of mine, but the very fact that we have the present intermixture of parks and monuments under the two heads is proof that we have not heretofore understood

exactly what is ze paller bear. Parks should be parks, and monuments should be monuments, and never the twain should meet in the same class, but the very fact that we have tried officially twice in recent months to define them to the public is evidence that we have been working with them these many years without a definition on which we are all in agreement.

The only reason which brings me into this matter is that, while there are many, many park experts in our ranks, I have to stand before you as about the only monument expert who has spent the last third of a century on, in, and around monuments and who, therefore, thinks about national-park basic problems with a monument angle. It is, at least, an odd viewpoint, whether or not you may agree with me, but there is a possibility that handling 27 national monuments in all their intimate details has given some of us "monument men" a worthwhile angle on their problems.

Stripped to its essentials, we know what a national monument is because the basic act tells us. It is an historic, prehistoric, or scientific exhibit which is reserved by a proclamation of the President. It does not need to be a small area, as is hinted in various definitions, and we get considerable amusement out of the small area definers by pointing out that two monuments are larger than Yellowstone, which is one of the largest parks. You had better leave size out of your definitions of parks and monuments because size no more defines your park from your monument than blondness defines men from women.

Under the basic law, a monument cannot be reserved for its scenery. A good many of the national parks were first reserved by presidential proclamation as national monuments, whence, after a more or less number of years they were "promoted" by an Act of Congress to the park classification. This was done with the very laudable intention of preventing homesteading, mining, and various other forms of ownership claims being made in the long interval during which the Congress was making up its mind that the area was suitable to bear the park name.

Some of us could plainly foresee the danger of this custom and the thing we foresaw actually took place. Gradually it grew up in the mind of the public at large that national monuments were scattered and rejected odds and ends, the left-overs out of which the national parks had been picked. This is not true, of course, and the parks have no more business in the monument class than elephants have in the bird house at the city zoo.

The trouble with most of the definitions now offered for parks and monuments, so far as I have observed them, is that the definer keeps one eye on the arbitrary set-up which we now have and tries to make his definition fit the much scrambled situation as it now stands. It doesn't seem to occur to the definer that, if the present classification were perfect, there would be little need of his definition. We are really trying

to get some definitions which will act as a formula to unscramble the present eggs and prevent future ones from becoming scrambled.

I have said that the monument law makes no provision for the reservation of scenery. I wish to stress this because there is a widely scattered feeling among park-minded persons that a lot of scenery just a little below park status is still good enough to be declared a national monument. Neither the monuments law nor our definition can countenance such a proposal. Many times in past years I have had some enthusiast for a proposed national monument tell me what wonderful scenery there is in his proposed monument area. Ask him why he doesn't make a national park out of it and he will quickly hedge and say, "Well, you know, it isn't quite park stuff." Point out to him that it isn't monument stuff at all and he won't agree with you: he has a definite idea that there should be some place in a national system of scenic reservations for second- and third-class scenery. You will have a difficult time proving to him that there may be places for his scenery in state, county, or metropolitan parks, but there is only one kind of scenery provided for in the national-park classification and that must be national in caliber.

All this is not to say that we do not have some very fine scenery in some of our national monuments. It is there incidentally, as at Canyon de Chelly, Rainbow Bridge, Navajo, Natural Bridges, Arches, and many others; but the monument was reserved for scientific or prehistoric value.

When you begin playing up your monument for scenery, I get suspicious and begin checking to see whether you have an elephant over in the bird house. That is the way it generally checks out. On the other hand, when I look over some of the so-called national parks and find some historic and prehistoric places where the scenery runs from second to third class, I have an idea you are putting some of your birds over in the elephant house. I then don't agree with the accuracy of your classification.

It seems to me any definition of a park or monument must take into account the difference between the two in the reaction of the visitor. That there is a difference has always seemed to me very apparent. That difference in reaction is your best test of whether the proposed area should be reserved as a park or monument. The difference lies, not in size nor in grade of scenery, but in the reaction on the visitor.

My own definition of a national monument would be that it is:

An area reserved by Presidential Proclamation which contains something Historic, Prehistoric, or Scientific in character, of National Importance which is primarily educational, secondarily inspirational, and may or may not have a recreational value.

I believe that definition will stand the test.

A few of us who were active in southwestern archeological matters when the Antiquities Act was passed will recall that, in those pre-

automobile times, the hearings on the proposed Antiquities Act contemplated nothing much more than a police protection over such ruins as were made national monuments until the excavating institutions could get around to opening the mounds and removing the artifacts to city museums. No one, at that time, could foresee the hundreds of thousands of people who were going to visit the excavated ruins. Conditions have changed completely since those early days and what was thought of at that time as a watchman's job has since developed into a very important educational work.

There is a roving-ranger phase of our work in the Southwestern National Monuments which we have never been allowed to enter upon. We have been crying for years about the continually increasing pot-hunting which is going on in the ruins situated on Government land in the Southwest. Add four new $1,860 men to my present force of 42, give us four new pick-up trucks with camp outfits, and the money to keep these men on the road constantly for the next two years, and we will have the pot-hunting in our district pretty well extinguished. We may need a little more police powers requiring an amendment to the basic National Park Service Act, but that would not be such a difficult matter. I would have these men cruise the district, of about 360,000 square miles, and acquaint themselves with its hundreds of major ruins. They would keep us in touch with their work by means of the daily diary which our custodians now keep. They would be turning up at unexpected times and places all over the district and, upon finding the first evidence of pot-hunting, one of them would take the time and trouble to run down the offender and settle the case. They would, by use of slide and movie talks and lectures at the various civic clubs, preach against vandalism, inculcate ideas of conservation, and, being archeologists along with their other training, they would know their subject from all angles and be able to hold the public interest. This is a natural part of our work because we already cover the Southwest and we need no overhead to put it into effect; we can take it in our stride.

Another phase of work which we might just as well be doing with little increase in overhead would be to operate a system of "Reserved National Monuments." This has long been one of my hobby ideas and we once accumulated an inch or so of correspondence in the Washington Office files about it which was closed by its being declared impracticable at that particular time. Later, I caught a Director when he was visiting in my district and while we drove across a lovely stretch of desert country I mounted my hobby and explained the whole scheme to him. When I finished he said: "That is a fine idea, Frank; why don't you write me an official letter about it?"

The scheme is based on the fact that there are many ruins in the Southwest which are not important from the spectacular standpoint of showing to visitors, but are very important from the standpoint of the

archeologist who wants them left alone until he can get around to opening and studying them.

I see no reason why we should not take over these ruins under some arbitrary name or number and protect them until, in the future years, the time comes for the scientist to open and study them. If his studies should develop some important and spectacular field results. we can then transfer the monument from the reserve list to our working list and put a custodian in charge and invite visitors to come and see it. If, as will happen in many cases, the "Reserve Monument," upon having been excavated, should yield no worthwhile field results, it will have served its purpose as a reserve monument and can then be returned to the status of general public land to be used for any further purpose for which it may seem available. As a matter of fact, we have one of these monuments now under our charge in Yucca House National Monument. At present, it is a group of immense mounds with practically no walls above ground. We discourage the visitors from going there because it is a disappointment to most of them. Some time between $50,000 and $100,000 will be expended in excavation and study and we will then have a magnificent ruin standing into the second and third stories; a splendid educational exhibit for visitors to see. In the meantime, we are giving a very real service in protecting the ruins until the time comes for opening them. And, mark you well, this service does not mean the erection of a long ladder of overhead officials. We are a running machine and two or three more cogs will enable us to turn out this by-product.

I will not attempt, in my short time with you, to name or describe the 27 national monuments under our supervision known as the Southwestern National Monuments. Archeological monuments, as you might suspect, predominate in numbers. Geology, history, and botany are also represented. National monuments being, by their very nature, different from national parks, require a different technique in handling and that is why we think it much better to put a group of them together and handle them as a unit than to parcel them out in twos and threes to near-by parks where they are generally handled as little parks. The ideal monument of course is educational and the ideal park is inspirational and the visitor reaction in them will be quite different.

You may be surprised to know that in the first eleven months of the visitor year we conducted just under 16,000 field trips and just over 10,000 museum talks. With 26,000 talks in eleven months consuming a little under a million minutes of time you can see that the Southwestern Monuments are something bigger than a peanut stand. If you will assemble the figures in the Washington Office you will find that our 26,000 talks will be about half the talks given by the whole park service; at least it was that way during the previous year. Please note that I am not claiming that we talked to as many visitors as all the rest of the Service combined. Our parties were very much smaller and our talks

as a result, go over very much better; our men are hosts receiving a group of friends rather than platform lecturers talking to a crowd. In eleven months, for instance, we gave 15,875 field talks to 82,488 visitors and it took 721,273 minutes to do it. This means that the average party was a trifle over five persons and our man talked to that party a little over forty-five minutes. Your educational possibilities are big when you can talk to five persons for forty-five minutes. The individual gets a chance to have his questions answered and the talker has a chance to study the results of his talk as he gives it and vary it to suit the occasion.

We are administering approximately the same area as the Grand Canyon National Park. In visitor year 1938, we handled about 95 percent as many visitors. This fiscal year, we have about 85 percent as much funds under administration, protection and maintenance and about the same number of permanent positions. If we should be rated as a park we should rate near the head of the Class II parks, but we assure you no Class I or Class II park superintendent gets half the fun out of operating his unit that we get out of the Southwestern National Monuments.

Our Archeological Heritage

JESSE NUSBAUM, Senior Archeologist, National Park Service, Santa Fe, N. M.

IT IS particularly fitting that the subject of archeology be emphasized at this Santa Fe meeting. Here in New Mexico, you have several scientific and educational institutions interested in the fields of anthropology, both research and exhibition. Here you have a great abundance of diversified archeological resources and, most fortunately, both here and in Arizona, surviving descendants of the Great Pueblo Cultural period, living largely after the manner of their ancestors.

Most of the Southwestern National Monuments, which have just been discussed by Superintendent Pinkley, are prehistoric archeological sites—cliff-dwellings and great pueblos. The Mesa Verde National Park was established primarily to preserve and protect its many notable cliff-dwellings and other archeological sites. There are also important prehistoric sites within other National Park Service areas in the Southwest established primarily for scenic and geological reasons, notably Grand Canyon National Park and Petrified Forest National Monument. Outside the Southwest, Ocmulgee National Monument, Georgia, and Mound City National Monument, Ohio, are prehistoric archeological sites of an entirely different type.

These archeological sites, protected and preserved by the National Park Service, are among the outstanding examples of the thousands and thousands of such sites within the United States. Not only those under National Park Service protection, but all such sites are interesting and

important. They are the source-material for the prehistorian, representing the various cultural developments of the various divisions and groups of prehistoric American Indians. They are of interest and of value to all, as reminders of a way or ways of life totally distinct from our own, of peoples who coped with American environments, more or less successfully, with far sparser cultural equipment than ours.

All the methods of science are essentially methods of discovering order in natural phenomena: to seek natural causes of phenomena and to discern the connections between them. To discover order in any class or group of phenomena is to explain them; that is to make them clearer, more intelligible to man. The ultimate aim of science is to discover order in nature.

Archeology is the reconstruction of preliterate human history; its objectives and results are those of the historian; only the primary source-materials differ. The primary source-materials for the archeologist are not documentary, but are the sites and artifacts left by the peoples studied—their surviving material remains. Nowadays, to fortify his documentary findings, or supply missing chapters and data, the historian increasingly employs the methods of the archeologist in searching for and revealing hidden material remains of the historic period. The Williamsburg Restoration, sponsored and supported by Mr. John D. Rockefeller, Jr., confirmed and supplemented the documentary history of the colonial village of Williamsburg by intensive and extensive application or use of archeological methods.

The prehistory of the Western Hemisphere is far from being a finished product. Subject to change as new information is garnered, the story that has been outlined by students of American archeology runs about as follows: Over a period of several thousand years, successive groups of more or less primitive hunting peoples drifted from northeastern Asia across Bering Strait into Alaska, eastward up the Yukon River Valley, and across the low divide into the Mackenzie drainage, then southward up Mackenzie River into the Great Plains Region, spreading thence into various portions of North America. It is perhaps possible that other groups later followed the coast south from Alaska to California. Certain of these peoples progressively continued on through Mexico and Panama into South America, and multiplied and expanded there. The tip of South America, the region of Patagonia and Tierra del Fuego, was probably reached something like five thousand years ago. The earliest immigrants seem to have been non-Mongoloid in physical type, quite unlike most recent Indians. Among the earliest groups were the makers of the well-known Folsom points.

The civilizations of the Americas were basically founded on the development and perfection of maize which furnished the means of storing up the results of agricultural labor in indurated form, and the accumulation of future food reserves. The practice of corn agriculture

induced more sedentary habits of living and concentration of peoples within areas where the most favorable conditions for the growing of corn obtained. As the product and its production were improved, the elements of labor and time were lessened, thus releasing human effort for other activities.

In the general Middle American area, from Bolivia to southern Mexico, advanced cultures developed, with pottery, weaving, agriculture, adobe and stone architecture, and many other traits. These became high civilizations, such as the Inca, Maya, and Toltec, within this general Middle American area; they also diffused cultural influence to neighboring regions, as far as the mouth of the Amazon, and the Mississippi Valley. The Southwest has many cultural connections with Mexico—the Mississippi Valley, apparently, with the Maya area.

In the Southwest, whose prehistory is relatively well understood, an advanced culture appeared early on the lower Gila River drainage of Arizona; and a distinct culture developed among the so-called Basketmakers of the northern Southwest, to be taken over and carried forward by a new people, the Pueblos. The widely scattered small villages of Developmental Pueblo times became concentrated in the 10th and 11th centuries into the great urban centers of the Classic Pueblo period. Near the ending of the 13th century, a great 23-year drought, and probably the other factors, forced the abandonment of many of these large and populous cultural areas, and by the time of the first Spanish entradas in the 16th century the Pueblo area was reduced almost to its present extent.

This is a brief summary of the outline of American prehistory as it now stands—far from proved, and far from complete. It is what is generally thought by American archeologists from the study of archeological sites and artifacts.

The story of American prehistory can be learned only from the sites themselves. Consequently, archeological sites and artifacts are of extreme importance, as the only and irreplaceable sources from which the prehistorian can attempt to reconstruct the history of nonliterate peoples. The destruction or disturbance of archeological material is vandalism comparable to the destruction of historical documents of which no copies have been made.

An example of the importance and usefulness of archeology is afforded by the trip I made recently with my friend, Under Secretary of Agriculture M. L. Wilson, and about a hundred other men from various Federal agencies and educational institutions, covering over a thousand miles in the northern Southwest and terminating in the U. S. Department of Agriculture Conference at Flagstaff, on man and nature in the Great Plains and the arid Southwest, considering the difficult problems of land use in the arid regions of the west by bringing together data and ideas from the fields of meteorology, geology, and archeology. The problems of

adjustment of human life and culture to nature, and of the ecological factors limiting or channeling human endeavor in difficult areas, are anthropological problems; the successes or failures of previous attempts to cope with conditions in the arid Southwest, as revealed through archeological studies, give a most enlightening approach to the subject.

The accepted pattern of life has been rudely upset through world-war and world-wide depression. Great human questions everywhere have come into focus, but we find it a poor focus. The world is suffering from mental astigmatism. New thought is mandatory. There exists a vital need of utilizing man's past experiences as a basis of solving present world problems which have reached their greatest crisis.

The people that doesn't know its past is not likely to have any future. Where there is no vision, the people perish. The science of anthropology has developed the deepest and widest vision that human knowledge has thus far presented. The findings of the historian and prehistorian constitute the "lens of knowledge" that brings man's past into clearer perspective and focus, and gives the insight with which more soundly and accurately to project the future, formulate and appraise its problems and work to their solution.

The history of man is the story of the rise and fall of civilizations; the relentless tides of cultural progression that ebb and flow through the sea of humanity. Little heeding inherent weaknesses achieved in attaining a position of smug complacence, civilizations totter to a fall before the virile attack of savage hordes who, in introducing new blood and order, strengthen the foundations on which new and sounder social organizations are normally erected. Perhaps, in final analysis, our greatest benefactors have been the barbarians.

In modern times we are seeing another onrush of savages—*not* of new tribes from outside the *known* world, as in previous times, but of the lower and more ferocious elements of the extant Euro-American culture —to use the striking phrase of the contemporary Spanish philosopher Ortega y Gasset, a "*vertical* invasion of the barbarians." Let us hope that the taking-over of modern civilization by the vigorous, but completely uncultured, groups imbued with the *totalitarian* political philosophy will in time bring about a similar fusion of the good features of both old and new, and that their extreme notions regarding nationalism, war, and racial "purity" will yet be replaced by that internationalism which some of us thought was in sight prior to the rise to power of the most virulent of these nationalist, totalitarian, and barbarian leaders.

We stand upon the foundations reared by the generations that have gone before. We now know man lived and loved while former chapters of geologic history were in the making. We can but dimly realize the painful and prolonged effort that it has cost humanity to struggle up to the point which we have attained. Individually and collectively, we reflect man's accumulated experiences, through this vast stretch of time.

That which we often falsely assume as our crowning glory is fundamentally our heritage from forebears to which it is our birthright privilege to add our increment of enlightenment, however small, for posterity. The amount of new knowledge which one man, even one generation, can add to the common store is small.

Our archeological heritage in the Americas is indeed great and uniquely different in many of its aspects. The sequent phases of cultural progression and achievement in the Americas in prehistoric times are documented by the countless thousands of archeological sites spreading from Alaska to Patagonia, from the Atlantic to the Pacific. Unmolested and unmodified these provide the source-material from which the archeologist may reconstruct the human history of the Americas, from earliest discovery and occupancy, to times that fall within the provenience of the historian and the ethnologist. Public institutional funds for proper training of students in archeological method, and for promoting wide-spread investigation of material remains have been meagerly available through the past 25 years. A large body of information has been garnered and published by organized scientific and educational agencies, and certain individuals have independently supported or conducted investigations and contributed to our common archeological knowledge.

The greatest concern of present-day archeologists and scientific educational agencies is not in immediate and comprehensive survey and investigation of the archeological resources of the Americas, but rather in preservation, unmodified and undisturbed, of the archeologic sites which constitute the source-materials for orderly and progressive investigative procedure in the future.

The limited market for the sale of archeological materials excavated by the commercial pot-hunter of the 1880–1890 period in the Southwest was largely satisfied by the turn of the century. The Act of 1906 for the Preservation of American Antiquities provided the first Federal instrument for preservation and protection of archeologic and other scientific resources of the Federal domain. Prompted by the destructive activity of those who sought cultural artifacts for remunerative gain, the weakness lay in failure to provide adequate enforcement responsibility.

The protective problem of those horse-and-buggy days, restricted primarily to residents of the Southwestern intermountain area, was comparatively simple in contrast with the problem presented by the present heyday of automobile traffic.

The increase in motor travel in the Southwest has been tremendous in recent years, and the road improvement and development of each year brings the tourist farther into the desert and the mountains and in far greater numbers. Thus even greater despoliation of archeological sites is threatened than that of the 1880's and 1890's. Many of the thousands of motorists and summer visitors are potential pot-hunters, and there

are still many local residents interested in the commercial possibilities of unlawful digging.

Because of the tremendous area involved, the problem of protection of archeological remains on Federal land is primarily that of educating the public to a proper appreciation of the value of scientific investigation by qualified institutions as against the destructive vandalism of the commercial pot-hunter and the curio-seeker.

This is not enough, however. Direct protection of archeological remains against vandalism is needed.

A number of archeological sites within the United States are protected and preserved, and interpreted to visitors by the National Park Service, which is the Federal agency concerned with historical and archeological sites. Additional sites are protected by other agencies, Federal, state, and local, or by individual owners. But the vast majority of sites are not specifically reserved and protected, and *all* archeological sites are of value and of importance.

Despite the Federal Antiquities Act of 1906, and the comparable laws in certain States, there is a vast deal of pot-hunting in various parts of the country, which can hardly be prevented under the present conditions, with the lack of centralized responsibility for enforcement of the Antiquities Act, and of personnel for enforcement.

The spectacular material recently found with a burial in the Ridge Ruin near Flagstaff, and the increase in general archeological field work in the Southwest this last summer, will undoubtedly give a renewed impetus to pot-hunting in the Southwest. Something must be done, something more effective than wishful thinking; actual and active enforcement is needed. The best idea so far is a group of "roving rangers" such as Superintendent Pinkley has suggested. The public knowledge that such inspectors were moving about on irregular itineraries unquestionably would alone act as a strong deterrent to illegal excavations. These inspectors or "roving rangers" *should* have full police authority on all lands controlled by the Department of the Interior, and should be vigorous men well acquainted with the country and with the subject of archeology.

Enforcement, however, of laws protecting archeological sites from vandalism, as is true of many other laws, is impracticable without the support of enlightened public opinion. The American Planning and Civic Association is one of the major organizations concerned with various phases of conservation, and can lead the way in forming and guiding public opinion along these lines.

Escalante Way—An Opportunity for the National Park Service

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THE Southwest offers a rich and varied historical supplement to the scenic and recreational assets of its national parks and monuments. Of all sections of the United States except Florida it has the longest written record. It has been the meeting place of several distinct peoples: the Pueblo Indians, the non-sedentary tribes, the Spaniards, the early Anglo-Americans, and recent contingents. The natives still occupy essentially the same localities in which the Europeans found them, and retain the fundamentals of their early civilizations. Indian and Spaniard have lived here side by side for three and a half centuries; neighbors to both for a century has dwelt the Anglo-American. While all have borrowed from each other, each group retains its characteristic qualities; each has made its peculiar contribution to the most interesting and in some respects the finest culture in the United States.

The history of the Southwest has been colorful. The region has always been a borderland, between nomad and sedentary native, European and Indian, Spaniard and Frenchman, Spaniard and Anglo-American, Mexican and Southwesterner. Its history embraces sharply distinctive epochs, each with its outstanding characteristics: the long period of Indian occupation, the interplay of the Pueblos and their primitive neighbors, the Spanish explorers, the search for fabulous kingdoms, the Spanish settlers and missionaries, the Pueblo Revolt and reconquest, the establishment of the Mexican regime, the Yankee fur hunter and caravan trader, Texan dreams of empire, the United States conquest, the Federal explorers, the day of the cattle man, the Indian wars, the railroads, the mines, the development of the Southwest as a Mecca for archeologists, ethnologists, historians, novelists, poets, and artists.

All these phases of Southwestern history offer materials for enriching any program for the development of national parks and monuments. Nor have they by any means been overlooked by our National Park Service. Indeed, quite the contrary is the case. Nevertheless, the historical values of the region have scarcely been tapped.

Instead of discussing all the general aspects of history in the national parks and monuments, I propose to confine myself chiefly to a single illustration, one which has a very direct bearing on an immediate interest today and which will serve as an example of one historical episode out of many. One of the important projects under consideration by the National Park Service at this moment is the establishment of an Escalante National Monument. It has, therefore, seemed to me appropriate to set forth the historical basis for the name chosen for the area, and at

the same time by the story itself to illustrate the way in which scenic and recreational assets of a park or monument are enriched by historical association.

Remarkable among North American adventures in the later eighteenth century, that time of remarkable adventures in the Southwest, was the expedition made by Father Escalante from New Mexico into the Great Basin in 1776, the year of the declaration of independence by the English colonies. The aim of the expedition was two-fold. The government in Spain—for all this country then was a part of Spain's empire—desired to open direct communication between old Santa Fe and recently founded Monterey in Upper California. Escalante himself had visions of Indian missions in the farther west, beyond the Colorado River. Objectives coincided and forces were joined. The governor of New Mexico contributed provisions for the journey; Escalante furnished ideas and driving power. Nine men besides himself made up his little party. Father Domínguez, the other friar, was Escalante's superior, and he furnished riding horses and pack mules, but actually he was Escalante's faithful follower. It is for this reason that the subordinate and not the official is remembered. Don Pedro de Miera y Pacheco went along as map maker. Two others in the party, Pedro Cisneros and Joaquín Laín, merited the title of "don"; the rest were of humbler castes, half breeds or Indians. One who knew the Yuta tongue went as interpreter. This proved to be highly important, for all the way through the regions that are now Colorado, Utah, and Arizona, till after the explorers crossed the Colorado on the homeward journey, all the natives encountered were of Yuta stock. Miera made astronomical observations, and drafted a map of curious interest. Escalante himself kept a superb diary which gave the heroic odyssey its place in history. The expedition was made, as Escalante requested, "without noise of arms," and barter with the Indians for gain was forbidden.

To the right and left as they marched along, the eyes of these "splendid wayfarers" beheld much of the most impressive scenery of the Great West, two-thirds of a century before any of it was viewed by Frémont the Pathfinder. The journey covered some two thousand miles, and lasted five months of almost continuous horseback travel. Its memory is one of the precious historical treasures of four States today—New Mexico, Colorado, Utah, and Arizona. To this list a fifth State should be added, for the objective of the expedition was the opening of a new route to California.

The start was made at Santa Fe, then a city already as old as Pittsburgh is now. Mounts were fresh and riders exuberant with the prospect of adventure. Northwest the travelers rode across the Rio Grande, up the Chama, over the San Juan and its numerous branches, to the Dolores at Mancos, down that stream through southwestern Colorado, skirting the Mesa Verde wonderland. Doubt arose as to the choice of

routes, and lots were cast. Chance voted for a wide detour to visit a Comanche band called the Sabuaganas, so east the explorers turned, over Uncompahgre Plateau, and north down Uncompahgre River to the Gunnison.

To here Escalante and his followers were in known country; henceforward they were pathbreakers until after they crossed the Colorado on the return journey. On they rode, east and north over majestic Grand Mesa. Here, among the Sabuaganas, they picked up two young Laguna Indians, so-called because they lived on Laguna de los Timpanogos (now Utah Lake). Homeward bound, these new guides led the explorers on another long detour; down Buzzard Creek, over Battlement Plateau, across the Colorado at Una; up the steep sides of Roan Mountain, down the narrow gorge of Douglas Creek, to White River at Rangeley, and still north over a desert plateau to the ford of Green River above Jensen, Utah. The crossing of the stream was made only a few hundred yards from the now famous Dinosaur Quarry, but of these mammoth relics Escalante seems to have had no inkling.

West they now turned, up Duchesne River, and over Wasatch Mountains to Lake Utah at Provo, where the Laguna guides lived. The boys had come home. There under the shadow of imposing, snow-covered Timpanogos Mountain, Escalante spent three days, one of the longest stops of the entire journey. Autumn was advancing, and with new guides the Spaniards continued southwest two hundred miles or more to Black Rock Springs. They were now near the latitude of Monterey, and the plan was to strike west. But here, on October 5, snow fell, and all hope of crossing the great Sierras to California vanished.

So they set their faces toward Santa Fe. Continuing south they discovered and described the sulphur Hot Springs at Thermo, crossed the great plain now called Escalante Desert, entered Cedar Valley, descended Kanarra Creek, climbed Black Ridge, dropped down to Virgin River, and entered the summerland now affectionately called "Dixie." But they could not stop to bask in its autumn sunshine, so onward they urged their sore-footed mounts.

Unaware of the existence of amazing Zion Canyon just a few miles to the northeast, they skirted precipitous Hurricane Ridge, continued south forty-five miles, across the Arizona boundary, into Lower Hurricane Valley, and climbed the cliffs by a trail which a century later became known to the Mormons as Old Temple Road, because down it they hauled timber for the building of the Temple at St. George. On the arid plateau, burning with thirst, they swung east twelve miles and southeast six, finding a welcome draught at some natural tanks on the edge of a cedar-covered ridge. They were at Cooper's Pockets. Here the Indians told them of a great chasm ahead—the Grand Canyon of the Colorado. So they swung sharply north and northeast, to find a crossing of which the natives had told them. A hard march of forty miles carried

them over Kanab Creek near Fredonia. Forty more miles east and northeast took them once more across the Utah line.

Before them for a hundred miles lay the toughest part of the whole journey. They were now on the edge of the area of the proposed Escalante Monument. Buckskin Mountains, the low ridge to the east, looked innocent enough, but to cross their rugged hogbacks almost overtaxed both horses and men. Swinging south and east, they skirted stupendous Vermillion Cliffs. To find a ford across the Colorado cost two weeks of anguish and of transcendent toil. The gorge of Navajo Creek was scarcely easier, as is well known to anyone who has tried it. And in the weakened condition of the men and horses, the long, dry desert thence to Oraibe seemed to stretch out interminably. It is on this segment of the trail, near Kaibito Springs, that explorers have recently been looking for a reputed Escalante inscription.

It is always darkest just before dawn. Supplies obtained from the none-too-friendly Hopis renewed waning strength and revived drooping spirits. From Oraibe home the way was well known. Zuñi, Escalante's own mission, was the next station on the road; and thence, after a brief rest, the familiar trail was followed past Inscription Rock, Acoma the Sky City, Laguna, Isleta, and up the fertile pueblo-dotted valley of the Rio Grande to home and friends. The start had been made on July 29. The day before the wayfarers dismounted in the Plaza at the Governor's Palace the church bells of Santa Fe rang in the New Year.

The high point of this great adventure was the crossing of the Colorado River, a feat which well merits a little more detail. After negotiating Buckskin Mountains, Escalante turned south across the Arizona line, up Coyote Canyon, and down House Rock Valley, then swung northeast along the base of Vermillion Cliffs to the Colorado right at the site of Navajo Bridge. Continuing five miles upstream, he crossed the mouth of Paria River, halted on the bank of the Colorado near a standing rock (Piedra Parada), and with grim humor named the camp Sal-si-puedes, "Get out if you can!" The Standing Rock is still there and is now called "The Urn" because of its shape. The camp was square at the place where Lee's Ferry was established a century later.

Here, at Salsipuedes, Escalante spent a whole week in an attempt to get across the river. Two swimmers were sent to see if they could find a way out over the cliffs on the eastern shore. They swam across the river naked, with their clothing on their heads, lost it in midstream, and returned to camp in a state of nature, without making the reconnaissance. Next day the explorers made a raft of logs, Escalante and others boarded it, and propelled it with poles four yards long, which did not reach the bottom. In three attempts they failed even to reach midstream because the wind drove the raft back to land. Miry banks on both shores were considered dangerous for the animals. So this ford was abandoned. Escalante had missed his best chance.

Four more days were spent in camp here at Salsipuedes while scouts looked for a route and a better ford upstream. Food was running low, and a horse was killed to supply the lack. On November 1 Escalante and his party ascended Paria River Canyon a league and a half, made camp, and the men nearly froze in the night. Next day the climb of half a league up the Paria Canyon wall to the top of the Mesa cost the adventurers three hard hours. Four leagues northeast "through rocky gorges" and across difficult sand dunes took them to Sentinel Rock Creek. Camp San Diego, made here, was "near a multitude of barrancas, little mesas, and peaks of red earth which . . . looked like the ruins of a fortress."

Going forward, on November 3, they swung down Sentinel Rock Creek to the Colorado and tried another crossing, called by Escalante the ford of the Cosninas. Here Camp Carlos was pitched high on the mesa above the river. The descent to the Colorado was so scarped that two mules which got down to the first ledge could not get back even without their packs. While the Padres watched operations from their perch on the mesa, horses were somehow taken down to the river and across it by swimming. The problem again was not how to cross the stream, but how to get out through the cliffs on the other side. Two men, Juan Domingo and Lucrecio Muñiz, were sent to look for an exit and did not return. The horses in camp on the mesa went without water that night.

November 4 was another day of anxiety for the wayfarers, and hunger stalked in their midst. The horseflesh had been exhausted, and the diet of the Padres was reduced to toasted cactus leaves. In spite of the dangerous descent, that night men and horses, driven by thirst, somehow slid down the canyon walls to the river to get water. In the process some of the animals were injured by slipping and rolling long distances. Before dark Juan Domingo returned without having found an exit. Lucrecio was still absent, and it was feared he was lost, or perhaps had been killed by Indians.

San Carlos was now counted out along with Salsipuedes, for no way up the east canyon wall could be discovered. So, on November 5, Escalante and his party continued upstream, leaving Andrés Muñiz to wait for his brother Lucrecio. This was another grilling day. The explorers traveled a league and a half north, up ridges and down barrancas, descended into a very deep canyon, climbed out of it by an Indian trail, continued north some four miles, found pasture and water at Warm Creek, and pitched camp at a placc called Santa Romana near the Utah line. It rained all night and some snow fell.

Next day Escalante moved forward three leagues, and was stopped by renewed rain, wind, and hail "with horrible thunder and lightning." Then, turning east for half a league, he found the way blocked by cliffs, and halted at San Vicente, high up on the mesa above the river, some

two or more miles north of the Utah line. Before night Lucrecio and Andrés arrived, safe and sound, but with no encouraging news regarding a ford.

Here at San Vicente a third attempt to cross the river succeeded, and made immortal both the incident and the place. Cisneros examined the ford and the way out, and pronounced them both good. But the problem now was to get horses and baggage down from their eerie perch on the lofty mesa, for the river could be reached only by a very deep side canyon. This side canyon now came into history, and Escalante literally made his mark on the face of the land.

Here are the words of the historic record. "In order to lead the animals down the side of the canyon mentioned," says the diary, "it was necessary to cut steps in the rock for a distance of three varas, or a little less,"—only about nine feet, but tremendously important under the circumstances. Those historic steps cut in the rocks are still to be seen.

The diary continues: "The rest of the way the animals were able to get down, though without pack or rider. We descended the [side] canyon [using the steps cut in the rocks], and having travelled a mile [down the side canyon] we descended to the river and went along it down-stream about two musket shots . . . until we reached the place where the channel was widest, and where the ford appeared to be." Here they crossed the river without great difficulty. Evidently the Padres were not great swimmers, for the others helped them over, guiding their horses.

So the ford was passable and the Padres were across the Colorado—with their precious diary! But some of the men in charge of the baggage were still in camp at San Vicente, a mile or more away, perched on the mesa as if suspended in mid-air. They were now sent for. The method for getting the baggage down was unique. Mules without packs could descend the side canyon by sliding and using the steps cut in the rocks. But descending with loads was another matter.

The faithful diary tells us how they did it. They let the packs down over the cliffs. "We notified the rest of the companions who had remained at San Vicente," says Escalante, "that with lassoes and reatas they should let the pack saddles and other effects down a very high cliff at the wide bank (*ancón*) of the ford, bringing the animals by the route over which we had come." That is to say, the animals were to descend from the mesa by the steps cut in the rocks, the baggage being carried to the edge of the cliff near the ford and let down by lassoes and reatas. The artist has something to work on here. Escalante continues: "they did so, and about five o'clock they finished crossing the river, praising God our Lord, and firing off a few muskets as a sign of the great joy which all felt at having vanquished a difficulty so great and which had cost us so much travail and delay." They had made one of the historic river-crossings in North American history.

Since first reaching the Colorado at Lee's Ferry (Salsipuedes), the wayfarers had spent thirteen hard days, tried the river at three places, and zig-zagged along its western banks for fourteen leagues, or some forty fearful miles, before they could get across. The Padre's Crossing is a justly celebrated spot in the history of early adventure in the Southwest. But few persons ever see it, for it is still nearly as inaccessible as it was in 1776.

This extraordinary feat of exploration through the Great West, accomplished "without noise of arms" by Escalante and his little band, has tremendous historical value which can be utilized by the Park Service. Much of this value might be realized by designating an Escalante Way through the four States of New Mexico, Colorado, Utah, and Arizona, and this without special expense for road building by the Park Service or by any other agency. A map of Escalante's route, projected on the road maps of these four States, shows that even now the motorist can follow exactly, or with surprisingly close approximation, almost the entire Escalante itinerary of two thousand miles. The most inaccessible portion of the route is that between Lee's Ferry and Kaibito Springs. In other words, we have the constituent elements of an Escalante Way already built, and they merely await synthesizing in a map, and under a unifying name.

Escalante and his party passed through or near many of the conspicuous natural features of the Great Basin and the Southwest, a considerable portion of which are now embraced in our National Park System. A visitor to the parks and monuments of this vast region will find his interest and profit greatly enhanced if, as he travels from park to park or monument to monument, he knows the thrilling story of Escalante.

One of the increasing difficulties of national park administration is that these areas are becoming over-crowded with visitors at the height of the seasons, and relief is being sought in supplementary attractions easily accessible from the park areas. Much relief of this kind could be found by utilizing to the full the historical assets of the regions within or adjacent to the parks and monuments.

The Escalante Way would be a string on which a whole rosary of national park jewels could be strung by the motorist in the West. The trail starts from Santa Fe, one of the most historic spots in all the Western Hemisphere. Going north it passes through or close by a whole line of historic Pueblos. Capulin National Monument, Wheeler National Monument, Mesa Verde National Park, Aztec Ruins, Yucca House, Hovenweep, Natural Bridges, the Arches, and Colorado National Monument are close at hand as one follows Escalante north. Coming south and east from central Utah, between Cedar City and Santa Fe the Escalante Way would run right along the main street of national parks and monuments. Near at hand on one side of the trail or the

other, within easy reach, lie Cedar Breaks, Bryce Canyon, Zion National Park, Pipe Spring, Grand Canyon, Rainbow Bridge, Rainbow Lodge, Wupatki, Sunset Crater, Walnut Canyon, Montezuma's Castle, the Hopi Pueblos, Canyon de Chelly, Petrified Forest, Zuñi, Chaco Canyon, El Morro, Acoma the Sky City, Laguna, Isleta, and the historic Tiguex pueblos, not to mention other attractions within or outside of the park areas along the Way. This enumeration is illustrative rather than exhaustive.

A map of the Escalante Way might be printed, showing in colors, or in appropriate symbols, the Escalante Trail and the corresponding highways. On the reverse side a brief and vivid account of Escalante's historic feat would accentuate interest and multiply the profit as well as the pleasure of the traveler. Gasoline companies or other private agencies would perhaps be glad to print and distribute such a map. Markers of Escalante's campsites or the scenes of outstanding episodes in the expedition, with appropriate data, might be erected along the Way.

The Escalante Expedition is but a single example chosen out of many romantic, interesting, and important episodes and phases of Southwestern history which could be drawn upon to supplement the scenic and recreational values of the national parks and monuments and to put these areas in their historical setting. Any one of the epochs of Southwestern history which I have mentioned above would furnish a long list of episodes and subjects capable of utilization. If such a program were to be developed, the descriptive bulletins such as are now issued by the Park Service might properly include a considerable amount of material regarding the history of the regions within and roundabout each national park or monument.

The study of history in its broader meaning has a high cultural value for the simple reason that culture is nothing more nor less than the epitome and the resultant of human experience. The rich materials of history are lying all around us, and one of the things needed is to make our citizens history conscious. The Park Service has made a magnificent contribution toward this end through the creation and intelligent administration of its archeological and historical parks. And it seems to me that much might be done to supplement the utilization of historical materials within the individual parks, by coördinating them with the broader historical resources of adjacent areas. If my simple suggestions should appear to be out of order so far as the National Park Service is concerned, as they may well be, possibly they may be of interest to the American Planning and Civic Association, whose province and vision are all-embracing.

Conservation of the Natural Beauties and Recreational Values in National Parks

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IT IS a healthy sign that these subjects continue to be discussed publicly. It is certainly desirable that those intimately connected with park administration, both in Washington and in the field, should tell, in such meetings as these, how carefully they have to study and work, both to maintain high standards and to resist the selfish or thoughtless demands of minority pressure groups and individuals. It is important that nature lovers and interested associations of all kinds should know how they may be of service in the conservation and recreation programs of our National Park System.

To protect the essential values and, at the same time, provide facilities for the use and enjoyment of areas in this far-flung system, is a challenge to the skill, vision and courage of the whole Park Service. The management of the 155 land units, covering over 20,800,000 acres, in the United States is of importance to the people today and to the generations to come.

Preservation of Natural Beauty. We must admit that the best way to preserve natural beauty is to leave it alone. Man has quite generally been able to spoil every natural scene except the sky, and *it* is dimmed above our cities. Only a few have learned how to maintain, restore, or in certain places enhance, nature's handiwork. Dr. Frederic E. Clements, in "Highways and Landscapes of Tomorrow," says:

> The older idea of a static *balance in nature* has been abandoned, and the present view is one of a shift of population in cycles. What we have to realize is that the *unity of nature* is such that disturbance is like the proverbial pebble which is followed by ever widening but diminishing circles of action.

The importance of the ecologist in problems relating to the treatment of the natural landscape and of wildlife must be increasingly recognized.

The first problem in the parks is how to *mar* and *scar* as little as may be the natural beauty, while, at the same time, opening large areas of unique scenic and historic interest to public occupancy, use and enjoyment. It will be a continuous struggle in the future to preserve some of the great wilderness areas untouched, uncrossed by motor roads; in other words, to continue to concentrate motorists and campers in restricted areas and guide the hiker, and particularly the packer or trail rider, where the greatest privacy may be secured and the finest scenery may be observed with the least danger to land or man.

Interested groups will constantly have to show their interest and exert their influence if road programs are to be subordinated to "the preservation of the Park System's irreplaceable primitive. Many

park concessionaires and neighborhoods within easy driving distance, will join in demands for roads to develop outlying points within this or that park. These pressures are constant."

Landscape and Architectural Treatment Important. The engineering and landscaping of park roads has been in recent years successful to an extraordinary degree in preserving the natural beauty of the landscape. The few examples where it has not been successful stand out in contrast. The demonstration of such simple but effective methods as the rounding of slopes has had tremendous influence in improving methods throughout the country. The U. S. Bureau of Public Roads and the National Park Service are to be congratulated upon adopting and demonstrating high standards of highway landscaping.

The building of observation points and trails near the roads in places where this construction does not harm the scenery has made park travel tremendously more interesting. Every effort to get park visitors out into the open where they may see, hear and smell the outdoor things, feel sun and wind and even raindrops, is a contribution to their well-being and to their happiness. The realistic provisions of waste barrels and comfort stations are practical contributions of efficient park management. The few signs of direction, explanation, admonition and command are important aids. One of the most appealing signs I have seen reads, "These flowers are under the personal care of each visitor."

The second important problem is how to limit construction of buildings to essentials and to harmonize them with the landscape. The architects and landscape architects have done splendid work in adapting their designs for utilitarian buildings to styles indicated by indigenous structures, such as those found in the Southwest, and in the use of native building and plant materials. At Mesa Verde can be seen a most attractive museum in the pueblo style which shows how successfully the Park Service can harmonize its structures with their surroundings. Park structures have not always, but should be, architecturally and esthetically sound and should be located so that they interfere as little as possible with the natural beauty of the area. There is no reason why the high standards already established should not be maintained, and even raised.

Minor Structures. The improvement in technique during the past few years and the increasing amount of work turned out at the laboratories in Washington, D. C., and California have helped to make the educational buildings and their contents a source of stimulation and interest. The museums, trailside museums, and roadside exhibits, are growing in number and value. This effort is worth while from both the recreational and the educational standpoint. It is well that the designs of these minor structures should blend with the landscape (see three volumes on "Park Structures"). The signs on the nature trails make self-conducted walks through interesting areas more worth while and enjoyable than could

otherwise be imagined. There never have been enough of them, perhaps because there are still too many human predators along the paths. Again, these efforts of the Park Service are having far-reaching effects in the development of similar aids to nature study and the enjoyment of the out-of-doors in smaller parks and sanctuaries throughout the country.

Protective and Preventive Works. Some of the most difficult and least-known efforts of Park Administrators are those which seek to prevent, so far as possible, the most destructive effects of natural forces, such as fire and flood, both too frequently the result of human handiwork or carelessness. Other efforts are those which seek to check epidemics of the insects and pests which can so readily and quickly destroy established values in our forests. Still other work must be done to correct conditions which spread disease among the wildlife in the parks.

In addition to roadside beautification and building safety into motor roads, a vast number of hours of the CCC workers have been devoted to the protection of the forests in the parks. The young men have built fire trails, cut fire breaks, fought fires, installed fire telephone lines, planted new trees, gathered seeds of native plants, etc. The 1939 summer series of fires on the Pacific Coast would have reached even greater proportions without the use of these trained young men.

In Northern California and in the Northwest, one of the greatest tasks in the field of conservation, now in progress, is the eradication of all species of *ribes*, gooseberries, etc., in order to exterminate this intermediate host of the *white pine blister rust* before it can attack and destroy the great stands of the magnificent pines that still remain. This work requires the examination, foot by foot, of every bit of ground-cover, and the white strings running thirty-three feet apart uphill and down dale in our national parks and forests mark the trail of these pest hunters.

Research and Interpretation. The importance of scientific research in all these fields of conservation is apparent. It is evident that the National Park Service should continue its broad-minded policy of encouraging all qualified research agencies interested to help study and solve these problems in different areas. Perhaps it is proper to emphasize that as the cost of research is very great, the Park Service should devote its efforts to encouraging and directing others and coöperating, in so far as its staff may, in year-round investigation, but that it should retain and expand so far as possible its function of interpreting these findings to the general public which it contacts.

The point which can be emphasized here is the importance of the National Park Service not only as *protector* but *interpreter*. Glenn Frank said:

> The future of America is in the hands of two men—the *investigator* and the *interpreter*. . . . We have an ample supply of investigators, but there is a shortage of interpreters. . . . The interpreter stands between the layman, whose

knowledge of all things is indefinite, and the investigator whose knowledge of one thing is authoritative. History affords abundant evidence that civilization has advanced in direct ratio to the efficiency with which the thought of the thinkers has been translated into the language of the workers.

A dozen fields of thought are today congested with knowledge. . . . But where are the interpreters with the training and willingness to think their way through this knowledge and translate it into the language of the touring vacationist?

Hail to your Ranger Naturalists with their museum and campfire talks, their nature walks and auto caravans. We need more of these interpreters.

Appeal to the Family. The National Park System as developed for the use and enjoyment of the people should render a greater service than ever before in these years when the war of nerves continues on many battlefronts. The pressure upon all of our people makes it more than ever wise and proper that they should be led to visit and enjoy our national, state and local recreation areas, to see if possible some of their country's wilderness areas and its places of historic interest.

It is acknowledged that the best, the healthiest recreation is out-of-door recreation with family and friends. The effort should be made by all publicity agencies working with national and state parks and forests to stress the opportunity for family recreation in these public areas.

Recreation and Education. It is unnecessary to mention the details of the organized recreation program as it applies to park work. It is suggested that there is still further opportunity for studying, experimenting with, and selecting those simple forms of recreation which supplement the educational and interpretive program by providing healthful activities for the different age groups within the family which stay in our parks for longer periods of time than a single day. It should never be necessary to permit the advertisement of national parks as the location of great sporting competitions, which attract hordes of spectators and not participants in natural sports and activities, nor should it be necessary to provide the usual facilities found on urban playgrounds. As suggested before, the chief emphasis should hereafter be made upon *family* recreation in the out-of-doors.

Park Rangers. The Park Ranger is the first line of defense, the administrator and chief conservator. He should be featured more and aided in every way possible. He is the one most familiar with all the problems relating to the handling of the people in the park, and has tried out the great variety of methods for preserving park values. In Horace Albright's "Oh, Ranger," some of his problems are sympathetically and wittily related.

The Ranger Naturalist has made nature study so interesting, and the techniques of adult education have been so cleverly adapted that his program constitutes one of the chief recreational attractions of the national parks and monuments.

An Iowan recently said:

> I knew there were lots of interesting things to see in these mountains and I thought I could see them in a day. I've been here a week and now I know I haven't discovered half the things I ought to see right around this camp.

Like many others, that man had come in touch with *Interpreters.* He did not realize that the knowledge of a hundred scientists had been skilfully presented to him. So, most of the park visitors are not aware of what a storehouse of knowledge has been made available through students of archeology, ethnology, biology, history, botany, zoölogy and geology.

In the national parks and monuments are pictured nearly a thousand years of Indian life and history. From the Atlantic to the Pacific, areas have been preserved, which, combined, furnish part of the pageant of America. When the process of acquisition has been completed and all necessary fragments added, the pageant story will be complete, an era of conservation activity finished. Some parks have been called "chalices of beauty"; others have been described as "islands of wild life," and it has been noted that the environment that is good for the animals is good for man too. Many books and articles about the wonders preserved for our people have both an inspirational and educational value. We particularly honor and revere those men, such as John Muir, who not only discovered and explored wonderful wilderness areas but told, with vivid words and thrilling phrases, of the natural beauty and scenic grandeur of our country. Their enthusiasm has been contagious over a long period of time.

Teaching Appreciation. Only a few unfortunates cannot appreciate natural beauty, just as only a few are color-blind. Apparently a good many are selfishly indifferent to the need for sharing and saving our natural resources. For these little can be done, but we need to protect ourselves against those who drive against the signals and cause damage and loss. We do need to increase the appreciation of the character and beauties of natural phenomena which can be increased only by knowledge of them. Nearly everyone, as spring approaches, feels the impulse to work in the soil or to seek out the beauty spots of which we have heard or which we happily remember. Thousands and thousands, at least in California, respond to the call, "The wild flowers are out." They never forget the colorful scene which actually may have been spread before their eyes for only a few brief minutes, just as no one can ever forget his first glimpse of the Grand Canyon, the Yosemite, or the Canyon of the Yellowstone. Millions of Americans in vacation time will continue to hasten to outdoor places for recreation. The National Park Service and those others with which it shares the responsibility of developing and safeguarding the recreation areas of the country, whether in national forests, state or local parks, should try to teach the people how better to

profit from contact with the out-of-doors, how better to use it; in other words, how to become *wiser recreationists, finer conservationists.*

Suggestions and Comments. Every effort which can be made to slow up this touring of the parks and forest campgrounds, of which the collecting of stickers is a symptom, should be encouraged. Better far for the individual and the family to know one park than to visit ten in a two-weeks' vacation.

One thing these touring citizens should have taught park administrators is the importance and necessity of establishing similar rules and regulations wherever they can be applied within the whole park system. There is also a need to simplify and cheapen the directional park literature given out gratuitously, while making the fine detailed guide to educational, inspirational and recreational features available only on request. There is a need for standardization of statistics concerning park visitors, their length of stay, use and enjoyment of facilities.

The insistence upon safeguards for adventurous park visitors is to be commended. Publication of some of the costs of search for lost and needlessly injured persons might be helpful. We agree that the ill-equipped or inexperienced should not be permitted to climb mountain peaks, descend rough canyons, or ski alone. The reputation of the Park Service for safeguarding such recreationists is in itself an asset.

I list here some suggestions, practical and otherwise:

1. Conserve the conservationists. What strains can be avoided or lightened?
2. Arrange more frequent lecture leave for ranger naturalists, particularly in cities and schools in their region when park work is lightened, during the winter. A contribution in conservation education is particularly needed in the field of wildlife study and with regard to the small flora of our hills, forests and deserts. (This work could be self-supporting.)
3. Provide a regional representative, with some freedom of action, of the Public Relations and Information Office. Prepare brief, but vivid materials for school use. Consider and advise departments of education on curriculum material related to national parks.
4. Supply illustrated articles to non-service magazines dealing with problems, policies, experiences and findings, not just tourist guide articles.
5. Expand direct educational efforts, such as the Yosemite School of Field Natural History, the Nature Study Course for children in Yosemite and the class in General Grant National Park. (These efforts should be to a degree self-supporting.)
6. Help develop regional plans for recreation—This work will be distinctly aided by the completion of the state studies on Parks, Parkways and Recreation Areas. Emphasize the fact that recreation areas in national forests, state and local parks are of great importance and, in fact, serve to relieve pressure upon the more distant and sometimes more precious areas in national parks.

THE NATIONAL PARK SERVICE

Presiding: RICHARD LIEBER
Vice-President, American Planning and Civic Association, Indianapolis, Ind.

An Interpretation

ARTHUR E. DEMARAY
Associate Director, National Park Service, Washington, D. C.

SLIGHTLY less than a quarter of a century has elapsed since Congress enacted legislation establishing a Federal bureau for the conservation, protection, and general administration of the national parks, the flower of the Nation's magnificent scenic heritage. Those of us who have been with the National Park Service for many years, especially those who were in at its beginning, look behind the actual creation of the Service in 1916, and think of it as having been born when Stephen T. Mather came to Washington as Assistant to the Secretary of the Interior to champion, on the ground, the cause of national parks.

We like to refer to Steve Mather as the father of the National Park Service. He will take his place in history as one of the stalwarts of conservation; as one who finally gave his life, that the people of the United States might come to know and love their national parks as he did.

While we regard Mr. Mather as the father of the Service, we may well look upon J. Horace McFarland, at whose feet we all have learned many of the principles of conservation, as the godfather of the parks bureau. Sometimes I wonder if he is not tempted occasionally to claim the paternity! Certainly the spade work he did for many years, as the leader of the American Civic Association, prepared the ground for that last great drive that sent through the epoch-making Park Service legislation. He and Mr. Mather made an unbeatable team.

When Mr. Mather took over his first national park duties in 1915, the problems of administration which confronted him were enormous. Especially grave was the responsibility for establishing standards which would indelibly mark future development and use. But he and his associates (among them Horace M. Albright, who is our host here at this Conference) builded well, as the park structure of today attests.

Looking back at 1915, we realize that what we park enthusiasts were doing in that year was but a nucleus for the expanded work and recreational work with which we are charged today. We are somewhat breathless at the rapid pace set for us by public need for an appreciative use of the facilities we make available.

I like to think that when the National Park Service was given the mandate of protecting our national parks and monuments for the enjoyment of future generations—these last few words are time-worn but not hackneyed—we were given in trust the flower of the Nation's magnificent scenic heritage. During its earliest years, the Service devoted its energies to protecting that flower, to making sure that nothing could mar its

beauty. And, at the same time, we went in for cultivation; in place of the simple flower of 1915 with its petals—there were then 33 national parks and monuments—we developed a double blossom, adding such petals as the Grand Canyon—a somewhat hefty petal—the Grand Tetons—Hawaii National Park—Mount McKinley—Lassen and Zion and Bryce—and then several areas in the East. By that time our blossom must have developed a triple row of petals! But, throughout this growth, our conscientious endeavor was to protect the most sublime in nature and in the field of archeology and history.

After a time, it was realized that, if we were to fulfill the responsibilities laid down for us by Congress in establishing the Service, we must build up a stem for that flower, and also a root system. There was a real danger facing the national parks which every understanding and far-sighted person, both within and without the Service, appreciated. It was the danger of too great an intensification of use for types of recreation for which the national parks were neither suited nor intended. It was a danger which would continue to threaten our national park system as long as there were not sufficient areas and facilities established and developed to take care of these other types of use.

Please understand that the National Park Service never has and never will adopt a policy of exclusiveness with regard to the use of the national parks. That is not at all what I mean. The national parks are open, of course, to all persons alike. But these areas could not possibly fulfill their real purpose if, for lack of supplementary park systems of local character, they were required to meet practically the entire scale of recreational needs of the American people.

It was obvious, then, that extensive development of state, county and metropolitan park systems was necessary in order to provide the recreational outlets so greatly needed and desired by people for short week-end or holiday trips, picnicking, camping, and similar types of activities. In 1921, Steve Mather took the leadership in supplying the stem of our growing park and recreational plant, by organizing the National Conference on State Parks. An analysis at that meeting of the country's needs in the field of parks led to a growing interest in preserving places of state and more local character, and to education of the public to the use of these types of areas. And so the National Park Service continued to provide leadership and advice to encourage the States in the development of their own park systems to meet their particular needs.

A dozen years passed, during which the national park and state park systems grew apace—the flower and the stem expanding, adding a petal here and a leaf there. But we discovered we still had not supplied a root system for that stem and flower.

Then came our big opportunity. As part of its effort to turn the tide of economic depression by taking direct action for the relief of unemployment, the Government made available huge sums of emergency

funds, part of which were allocated for the planning and development of state and local parks. The National Park Service was designated to coördinate and give technical supervision to this program, which involved the Civilian Conservation Corps, and other emergency works.

At first, this wide-spread program, made possible by the sudden release of unprecedented amounts of manpower and funds, was pretty much of a hurly-burly of planning and work activities. Gradually—and not before very long—this settled down to a well-ordered system of operation on a splendid coöperative basis between the Federal and the state governments. Then, more recently, there began to grow out of it all a fresh concept of the park and recreation movement. We began to realize that we were engaged in a national movement and not just in scattered and unrelated development jobs. We realized that it was a movement which had to be coördinated if it was to be at all effective in meeting the needs of the American people.

The opportunity to do this kind of planning and to coördinate our efforts for the best results came when Congress enacted the Park and Recreational-Area Planning Act in 1936, under which the National Park Service was assigned the responsibility for coördinating the first Nation-wide study ever made of all the existing and potential recreational areas, systems, programs, and needs. This study is still in progress, and through it, one State after another is drawing definite conclusions as to its recreational area and program needs.

This study is also giving a much clearer picture of park and recreation requirements from the national standpoint. We are much wiser in these things, now, than we were a few years ago. The necessity for Nation-wide coördination of recreational developments accomplished with Federal emergency funds has demonstrated the necessity for such coördination of the entire national recreational program. We have learned that recreation, in the United States, is the responsibility of three different levels of government: the Federal, the state, and the local. Each has a distinct and separate field of operation to meet particular requirements. But for the best results in planning and execution, it is necessary that those in charge of the programs on all three levels understand and appreciate their relationship to each other. This requires coördination of effort, and coördination, of course, can be accomplished only on the Federal level. And on this level the National Park Service is the logical agency to undertake the responsibility, because it is the agency whose function is recreation, and whose experience fits it well to assume the task.

There is a splendid opportunity in this for everyone connected with this work, whether on the Federal, the state, or the local level. It is the opportunity to make a tremendously important contribution to conservation. I refer to conservation, not only of our natural resources, but of our human resources, in order that our people, through proper rec-

reation, may live the full, rich and complete life to which every American citizen is entitled.

This, then, is the root system for the park and recreation movement throughout the United States. I have spoken of the National Park System as the flower of our plant, and of the state and local park systems as the stem. These two important members can live for a while like a cut-flower in a vase, but not for long. We must have the root of Nationwide, coördinated planning, and we must keep that root buried deep in our American soil, which is just another way of saying that we ought to keep our feet on the ground.

Do not think that, as we expand into these broadening channels of park planning and use, we have in any way relegated the National Park System to the background of our endeavors or wrapped it up in lavender and put it away, cherished but requiring no further attention.

On the contrary, protection and broadening of the National Park System is, and always will be, our major objective. National park planning is constantly being pushed, and new areas nominated for park or monument status are scrutinized in the light of national park standards from every angle by experts in natural history, landscaping and engineering; and by historians and archeologists. We must round out our national system by the addition of those areas which fit into the national picture. There still are areas of superb wilderness that are most valuable in our national economy as national parks; historic areas or those of archeological interest which tell vividly the story of our national evolution. All of these must be included in the system.

I would like to implant this thought in connection with proposed additions to the system: while it is imperative that we acquire them as quickly as possible to guard against loss through commercial development or other destruction, we should not, however, be in too much of a hurry to accomplish their development. Let us give them true national park protection, study them from every angle as to use development, but wait until an increased need for recreational facilities makes imperative their use.

On behalf of the officials of the National Park Service, present and those unable to be here, I acknowledge a deep debt of gratitude to the members of the American Planning and Civic Association for their unflagging interest in parks and their ever-present help, especially in time of emergency. The counsels of Miss James, Dr. McFarland, Mr. Delano, and our own Horace Albright are invaluable to us. So, too, is your personal friendship which many of us are privileged to know, and which we treasure highly. As the years go by, may the friendships between members of the Association and the Park Service deepen and widen, and may our mutual coöperation find renewed channels of strength and opportunity.

PLANNING

Presiding: S. HERBERT HARE
Fellow American Society of Landscape Architects, Kansas City, Mo.

National Parks in the National Plan

IRVIN J. McCRARY, Planning Consultant, Denver, Colo.

ONE day about ten years ago in the autumn of 1929, that well-known and amiable old gentleman, Uncle Sam, was suddenly taken quite ill. After making a superficial examination, the doctors concluded there was nothing radically wrong with the old man, though it was common gossip that he had been living rather high. Give him a good rest and he would be about in no time. But the case did not respond to ordinary treatment. New symptoms of distress appeared as Uncle Sam's unemployment steadily mounted. By this time his many relations had become extremely worried over his condition. Could he be restored to a state of sound health, or was he heading for a long, long decline? The doctors then announced the treatment they had agreed upon, including regular doses of public works. This and other measures were calculated to make the patient more comfortable, steady his heart action, and brighten his mental outlook. Incidentally, it was decided that the mixture of public works would be more beneficial in the long run if the formula were to include a little tincture of planning. Consequently it was arranged that this slightly known ingredient be prepared by certain specialists who had previous experience in its use. Long were the arguments as to the actual causes of Uncle Sam's illness, and many were the proposed remedies. He did, indeed, recuperate to a great extent, though his unemployment problem interferes with normal sleep. The doctors now are convinced that whatever else is required to insure his lasting good health, he must in any event take better care of his resources than was his habit as a younger man.

And so, to make a long story short, there has been established in the Executive Branch of the Federal Government a National Resources Planning Board, which continues with the studies of our national resources begun back in 1933 and 1934. From time to time the results of these studies have appeared in the form of published reports with which many of you are doubtless familiar. Such was the report to the President in 1934 on the land and water resources of the country, a report which in its comprehensive character was quite without precedent. In its preparation there was collaboration by all Federal departments and bureaus having to do with these subjects. Here we see the patterns of present land uses, estimates of our future requirements in each of these uses, and analyses of many problems brought about by unwise uses of land, together with statements of policy and recommendations for action.

In this report the use of land for recreation is clearly distinguished from other land uses, and the distinction is likewise clear between

national parks and other lands used for recreational purposes. In the inventory of existing land uses and estimates of future requirements there are some interesting comparisons of area. The land area of continental United States is slightly more than 1,903,000,000 acres. In 1930, about 93 percent of the total was used for agriculture and forestry, about 4.1 percent represented lands of little or no present use, such as desert and barren land, and the remaining 2.8 percent was occupied by miscellaneous non-agricultural non-forest uses. The latter classification included urban lands, public roads, railroad rights-of-way, private golf courses and cemeteries, unused swamps and tidal marshes, bird and game refuges, state and country parks, and national parks and monuments. National parks and monuments in 1930 occupied only four-tenths of one percent of our total land area, or 7,000,000 acres.

The assertion was made that by 1960 there would almost certainly be a large increase in the amount of land used primarily or secondarily for recreational purposes. Significant for our attention is the suggestion that by 1960 the area in national parks and monuments be increased to 32,000,000 acres. At that figure the park system would comprise about 1.7 percent of the total land area. It was further suggested that the area in bird and game refuges be increased from 1,000,000 acres in 1930 to 38,000,000 acres in 1960, by setting aside for migratory birds marshlands of little or no present use, and for upland game refuges suitable areas in the public domain. It is evident that this program for extending the National Park System has been moving along, for it has grown from 7,000,000 acres in 1930 to nearly 21,000,000 acres in 1939. In addition there are the new projects authorized by Congress, though not formally incorporated into the system, which include such important areas as the Big Bend Country of Texas, the Everglades of Florida, Isle Royale in Michigan, and the Cape Hatteras National Seashore in North Carolina. These projects are evidence of ability to find and secure new scenic areas worthy of national park status in parts of the country far distant from the early national parks of the West. Thus the park system is taking on a character more truly national, both in the wider distribution of the component units, and more complete representation of all the various types of distinguished natural scenery.

At the present time less than four percent of all the land administered by the National Park Service lies east of the Mississippi River. This proportion does not apply to number of units, but only to area. The reasons for this distribution are understandable. A large share of the more spectacular scenery of the United States happened to be located in the West, where most of the land needed was in public ownership.

Not only have national parks been increasing in number and area, but they have increased their patronage tremendously. One wonders if their success in attracting great throngs of visitors will not prove to be their undoing. Something vital in the enjoyment of natural scenery is

lost when the crowd presses too closely. A visit to an art gallery may become distasteful when one must shoulder his way about in order to see the paintings. I know this problem is recognized by park administrators, and I mention it only to indicate one reason why still more national parks and monuments are desirable, presuming of course additional areas are available which meet the highest standards for scenery or for scientific or historic interest.

Another problem must be solved if we are to have the fullest returns from the enjoyment of national parks. That is the necessity of protecting the areas in the near vicinity, including approach roads, from unattractive and undesirable developments. I have in mind particularly one national park where the arriving and departing visitor must run the gamut of nearly everything that is out of harmony with the natural scene. It seems rather difficult to obtain recognition of the thesis that the approach to a park should itself be park-like in character. Failure to recognize this is bad business, to say the least. When a jeweler sells his customer a diamond ring, he delivers it in an attractive case designed to display the brilliance of the gem. He would not have the effrontery to wrap it in a piece of discarded newspaper. Fortunately a few of our western States have passed enabling legislation for protecting rural areas through zoning regulations, and the means is at hand for at least preventing the spread of this type of rural blight.

It seems probable that people are growing in their appreciation of unspoiled natural scenery and the stories of the natural world which these scenes reveal. We have come to think of contact with the great out-of-doors as a remedy or antidote for conditions peculiar to this industrial age in which we live. Yet it was long ago, as Lawrence Gilman recalled, that Saint Jerome cried to the monk Heliodorus, in praise of God's solitudes, "How long will you let the houses press you down? How long will you shut yourself up in the prison of smoky cities?"

It is necessary that the planning process continue for the progressive utilization of our varied resources, including recreational resources, because our requirements are in constant evolution and consequently our advance planning must be adjusted from time to time to fit new requirements. In the treatise on landscape design by Henry Hubbard and Theodora Kimball, one finds this prophetic and inspiring passage:

> Almost within the memory of living men has come the effective conception of the city as a complete organism which must provide for its inhabitants such things as they cannot provide for themselves for complete and efficient living; and with this conception has come the realization of the importance to the individual and so to the community of beauty, and especially of outdoor beauty, and the duty which the community has to provide it. We are now coming to see that this same conception of a complete functional organism applies as well to the state and to the nation; that the lands of the nation should be studied as to their various fitness to all the purposes which lands may serve, and then so regulated that each may best serve that purpose, economic or esthetic, to which in the general national scheme it is best fitted. (Published in 1917.)

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