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New Mall nearing completion in accordance with original  
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# AMERICAN PLANNING AND CIVIC ANNUAL

A RECORD OF RECENT CIVIC ADVANCE INCLUDING THE PROCEEDINGS OF THE JOINT CONFERENCE ON PLANNING, HELD AT RICHMOND, VIRGINIA, MAY 4-6, 1936; SELECTED PAPERS FROM THE CONFERENCE ON THE NATIONAL PARK SERVICE, HELD IN WASHINGTON, D. C., JANUARY 22-24, 1936; THE STATE PARK REGIONAL CONFERENCES HELD IN MINNESOTA, SEPTEMBER 26-28, 1935, AND ALABAMA, APRIL 2-4, 1936; AND THE NATIONAL CONFERENCE ON STATE PARKS, HELD AT HARTFORD, CONNECTICUT, JUNE 1-3, 1936

EDITED BY  
HARLEAN JAMES

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## PREFACE

**T**HE AMERICAN PLANNING AND CIVIC ANNUAL this year is quite different from those which have preceded it and probably different from those which will appear in future years.

Last year we endeavored to present a broad picture of what was being done by the Federal Government in the field of planning, housing, land-uses, including rural land problems; parks and forests, together with a résumé of state planning activities. The Joint Planning Conference in 1935 devoted its sessions to the subject: "Must American Cities Decay?" and the proceedings of the conference, therefore, formed the section presented in former years, entitled "In the Cities and Towns."

At the Cincinnati planning conference in 1935, a merger of the National Conference on City Planning and the American Civic Association was voted. On July 1, 1935, an organization meeting of the new Board of Directors was held in Washington and the charter of the American Civic Association, an incorporated body, was amended to meet the desires of the joint organizers. The name of the new organization became the American Planning and Civic Association.

At its annual meeting, held at Skyland, Virginia, June, 1935, the National Conference on State Parks voted to place its business management in the hands of the staff of the American Planning and Civic Association, to continue to use *Planning and Civic Comment* as its official organ, to use the AMERICAN PLANNING AND CIVIC ANNUAL each year for an enlarged section on "State Parks," and to cooperate with the American Planning and Civic Association in all ways where the respective fields of the two organizations touched or were related.

During the past year, the American Planning and Civic Association and the National Conference on State Parks held, in Washington on January 22-24, 1936, a Conference on the National Park Service which furnished us with an unusually fine set of well-prepared papers by the staff of the National Park Service, including an excellent representation from the field. The National Conference on State Parks held two regional conferences, one in Minnesota and one in Alabama, and a national conference in Hartford, Connecticut, all of which yielded useful papers on state parks, prepared by experts in their fields.

The Joint Conference on Planning, held at Richmond, Virginia, on May 4-6, 1936, by the American City Planning Institute, the American Planning and Civic Association and the American Society of Planning Officials, included papers which formerly would have been distributed throughout the ANNUAL under the customary section-headings.

In view of the fact that these five conferences produced so much excellent and timely material, and in further view of the fact that not enough time has elapsed since the presentation last year of the activities

of the Federal Government to note much change of policy and that it is still too early to evaluate land and housing projects, we have determined this year to present in Part I the papers presented at the park conferences, together with a few related articles, which seem the more appropriate because this is the 20th anniversary of the creation of the National Park Service. In Part I, also, we are including a section on "The Federal City," omitted last year, since 1936 marks the tenth anniversary of the creation in 1926 of the National Capital Park and Planning Commission, following nearly four years of continuous effort by the Committee of 100 on the Federal City of the American Civic Association.

In Part II we are presenting the Proceedings of the Joint Conference on City, County, State, Regional and National Planning.

The omission of sections on land-uses, forests, housing and local civic improvement does not in any way indicate a lessening of interest in these subjects, but merely that in the ANNUAL this year we have an abundance of material on other subjects growing directly out of our own activities.

May we hope that our readers will find information, interest, and entertainment in perusing the pages of the 1936 AMERICAN PLANNING AND CIVIC ANNUAL.

THE EDITOR

# INTRODUCTION

By FREDERIC A. DELANO  
President, American Planning and Civic Association

**I**N A democracy no great advance can be made by government without a degree of support from the citizens. This is particularly true in planning for sound utilization of our natural resources. Some rather complicated scientific techniques have been developed, but, as they are applied, they affect in a very practical way the physical environment of the people.

Within the city, the application of zoning laws at first may have seemed academic to many laymen, but the individual home-owner, when threatened by a filling station next door or across the street, is glad enough to invoke the zoning laws for his immediate and definite protection. The building up and protection of a home neighborhood, however, is not so easily seen by the residents, because, ordinarily, the process extends over years—sometimes a generation—and, by the time that a neighborhood is recognized as ill-planned and inconvenient, it is too late to do anything about it. Then, the only remedy for the family is to move on. That is difficult enough for a family, but increasingly difficult for a group and worse still for a community. We see the result too late in the shape of blighted areas and slums.

In those cases where, through forethought, residence neighborhoods have been planned in proper relation to arterial street systems, adequately provided with schools, playgrounds, parks and libraries and conveniently served on the bounding thoroughfares with neighborhood marketing and shopping centers, there has developed a pride on the part of the residents which, in itself, tends to permanency of values and comfort in living.

It is the appreciation of city planning processes and their relation to living and working conditions on the part of the citizens which makes possible the continuous, consecutive financial support of planning and zoning commissions without which no city plan can be created, kept up to date and applied, and without which no well-founded economies can be worked out.

The Proceedings of the Joint Conference on Planning, which form Part II of this ANNUAL, offer suggestions on these *city planning* problems.

In the more recently conceived *state planning*, many States are still in the stage of gathering the necessary basic information essential for the production of worthy working plans. And yet many of the plans and projects fostered by state planning boards affect citizens of the State in very vital ways. The articulation of state highway systems with rural school sites and parks, as well as with towns, offers new opportu-

nities for a balance between convenience and economy. We are learning that in most States, a complete disregard of natural-cover planning and unwise water policies are bringing about a totally unnecessary destruction of wildlife, including both migratory and native birds and mammals.

The state planning boards are only beginning to prove their usefulness, but we observe in those States, like Iowa, where state planning of natural resources began some years ago, and where the State has been fortunate in having the leadership of Jay Darling to dramatize and publicize the abuses which had grown up, that there is already a very general knowledge of existing conditions on the part of the citizens and a laudable pride in the progressive program of the State. Other States will meet the same experience as plans develop, but, in the meantime, every State needs, particularly during the pioneer period, the understanding and support of its citizens, if state planning boards are to survive their infancy.

These state planning boards are all the more important at a time when state park systems have been violently expanded by emergency programs, and when state planning boards and state park agencies should be studying their common problems and building adequate state park systems. Colonel Lieber and his associates in the National Conference on State Parks offer in this year's ANNUAL excellent advice on state park standards and on state park administration—advice which the officials in the States may well study earnestly in order to profit by the experience of the pioneers in state park building.

As always, the American Planning and Civic Association is interested in roadside improvement. Some progress has been made by the devoted service of leaders like Mrs. Lawton, Chairman of the National Roadside Council. The Supreme Court of the Commonwealth of Massachusetts has contributed to the literature and law on the subject. But we must find a way to go farther. Why should the millions of public moneys spent on rural public improvements be made ineffective in some degree, and in many cases actually nullified, by ugly, inappropriate and ill-considered roadside developments on the very private property that has been benefited most by the improvements? Carefully prepared land-use plans, fearlessly applied, would make our present haphazard roadsides obsolete. Flavel Shurtleff, as Counsel for the American Planning and Civic Association, using a fund made available by Mrs. John D. Rockefeller, Jr., is working on a plan to bring the use of private property along rural highways into planning control. Dr. John M. Gries has made a careful study of roadside conditions in Michigan and offers some suggestions for improvement. I commend the section on *Roadside Improvement* to the attention of our readers.

As for *national planning*, in a country 3,000 miles wide and 1,000 miles deep, including a broad range of climate, soil conditions, water resources and topography, no Federal agency can hope to gather reliable

data and in coöperation with the 48 States develop adequate working plans in the space of two or three years. In the national field, it is absolutely essential that the central planning agency be given continuous administrative and financial support. Piecemeal and interrupted planning can never accomplish the results which planning in its very nature is designed to accomplish.

Take the proposed diversion of water from the Colorado watershed to the Platte watershed through the Rocky Mountain National Park. Until the National Resources Committee has made the studies of our water resources by watershed areas directed by Executive Order of the President, we cannot know whether we should be robbing Peter to pay Paul or whether the national economy would be served by such a diversion. The question also arises, in this case, as to the *place* of the proposed diversion. Generally we, in the American Planning and Civic Association, have adopted the principle that an area of extraordinary scenic grandeur, once set aside as a National Park, should be protected from all forms of commercial exploitation. The principal reason for proposed commercial invasions in the National Parks is one of economy to special groups of people. And the price is paid by the permanent marring of the National Parks. If these commercial projects are authorized, as Judge John Barton Payne remarked about a similar project to dam up Yellowstone Lake, the beginning of the end is at hand and the people of the future may wake up some day to find that they have no National Parks worthy of the name, but only remnants of a once-scenic country fallen prey to the national urge for immediate commercial utilization of resources which grew out of pioneer conditions and necessities.

The National Park section this year contains the best thought of those who for the past twenty years have been laboring to develop sound principles of action while they were obliged to meet immediate problems as they arose.

When we take stock of our ten years of planning in the Federal City we find that the cumulative result is imposing though we all admit that there is still much to do. The section on the Federal City should give our readers some idea of what the National Capital Park and Planning Commission has been about.

In other years we expect to present other phases of national planning problems. In this ANNUAL we hope that our readers will find accurate information, stimulating thought and an urge to join with us in our effort to coöperate with city, state, regional and national planning agencies for a realization of better living and working conditions brought about through avoidance of waste and an application of planning principles.

## Our Contributors

ANSEL ADAMS, a leader of Sierra Club activities, is officially a director of the Club. He is noted all over the West for his outstanding photographs of the Sierra Range and is one of the most expert mountain photographers in this country.

HORACE M. ALBRIGHT, before becoming vice-president and general manager of the U. S. Potash Company, was director of the National Park Service from 1929 to 1932. He is second vice-president of the American Planning and Civic Association and a member of the board of directors of the National Conference on State Parks.

BUSHROD W. ALLIN, a native of Kentucky, received the degrees of B.S. and Ph.D. in agriculture and agricultural economics from the University of Wisconsin. He has been with the Department of Agriculture since 1930 and is the author of numerous bulletins on taxation problems in various States and has written on soil conservation. He is co-author of "Migration and Economic Opportunity."

EDWARD BROOKS BALLARD, Harvard A.B. and M.L.A., is a native of Massachusetts. He has engaged in private professional landscape practice, has been assistant to the editor of *Horticulture Illustrated*, and has written numerous magazine and newspaper articles.

CHARLES B. BENNETT, city planning engineer of Milwaukee, is a member of the board of governors of the American City Planning Institute.

ALFRED BETTMAN has lately organized the Ohio Valley Regional Planning Commission. He is district chairman of District No. 5 of the National Resources Committee comprising Ohio, Indiana, Kentucky, West Virginia and Tennessee. He is a member of the Ohio State Planning Board and is chairman of the Cincinnati City Planning Commission.

FREDERICK BIGGER, architect and town planner, is a former president of the American City Planning Institute. He is a member of the Pittsburgh City Planning Commission, a member of the board of the Pittsburgh Housing Association and a member of the executive committee for community housing of the Allied Architects of Pittsburgh. He is active in numerous planning and housing organization of Pittsburgh and Pennsylvania.

RUSSELL VANNEST BLACK is consultant to three state planning boards, New Jersey, Pennsylvania and Virginia. His volume in the Harvard City Planning Series, "Building Lines and Reservations for Future Streets" written with the assistance of his

wife, Mary Hedges Black, has received great commendation. He is president of the American City Planning Institute.

G. M. BOWERS, a civil engineer, is director of public works, Richmond, Virginia.

ARNO B. CAMMERER, director of the National Park Service, has been connected with the service since 1919 and has served both as assistant and associate director. He holds the degrees of LL.B. and M.P.L. from Georgetown University, Washington, D. C.

ELLWOOD B. CHAPMAN is a member of the Pennsylvania State Parks Commission and is president of the Pennsylvania Parks Association, vice-president of the Philadelphia Housing Association and director of the Pennsylvania Forestry Association. He is a director of the National Conference on State Parks.

VERNE E. CHATELAIN was formerly the head of the department of history and other social sciences in the Nebraska State Teachers College. His educational and historical work have given him an excellent background for his present position as chief historian of the National Park Service.

GILMORE D. CLARKE, graduate of Cornell with the degree of B.S., is now lecturing at the University as Schiff Foundation lecturer on regional planning. He was consultant landscape architect for the Westchester County Park System and the Mount Vernon Memorial Highway, and is collaborator-at-large to the National Park Service. A member of the National Commission of Fine Arts since 1932, he is also a member of the New York State Planning Council.

ARTHUR C. COMEY received his degree of A.B. *cum laude* from Harvard in 1907 as a graduate of the School of Landscape Architecture. He has been planning consultant to numerous American cities and since 1930 has been assistant professor, Harvard School of City Planning, and lecturer, Harvard School of Landscape Architecture. He is the author of "Transition Zoning," one of the Harvard Planning studies, and of several other volumes on planning.

MARSHALL N. DANA, a native of Ohio, has been connected with the *Oregon Journal* of Portland since 1909 and has been associate editor since 1918. He is a former chairman of the Pacific Northwest Regional Planning Commission. He is a member of the board of directors of the American Planning and Civic Association.

J. N. (DING) DARLING, nationally known as a cartoonist, resigned as chief of the Biological Survey in 1935 to return to private life. He is a leader in the movement for



wildlife restoration in the United States and served as chairman of the North American Wildlife Conference called by the President, February, 1936. He is a member of the board of directors of the American Planning and Civic Association and was recently elected to membership on the board of directors of the National Association of Audubon Societies.

WILLARD DAY, civil engineer, is county manager of Henrico County, Virginia.

S. R. DEBOER, city planner and landscape architect, is consultant to the Denver Planning Commission and the Boulder Planning Commission. He is now serving as consultant to the Wyoming, Utah and New Mexico State Planning Boards. He designed Boulder City, the model city built by the Government at Boulder Dam.

FREDERIC A. DELANO, as vice-chairman of the National Resources Committee and chairman of its Advisory Committee, exerts an important influence on national and state planning; as chairman of the National Capital Park and Planning Commission, he influences city planning; as president of the American Planning and Civic Association he leads the group interested in the promotion of planning in the United States.

A. E. DEMARAY, a native of Washington, D. C., entered the government service in 1904 as a draftsman in the Reclamation Service. He entered the National Park Service in 1917, and rose rapidly through the positions of editor, administrative assistant, second senior assistant director to his present position as associate director.

MARSHALL E. DIMOCK is a graduate of the University of California and Johns Hopkins University. He received a fellowship from the Social Science Research Council and spent a year abroad specializing on the subject of British public utilities. He has made several reports to the Secretary of War which have been published in book form.

CHARLES W. ELIOT, 2d, holds the degrees of B.A. and M.L.A. from Harvard University. He has lived in Washington since 1926 and before becoming executive officer of the National Resources Committee was connected with the National Capital Park and Planning Commission as director of planning.

CHARLES N. ELLIOTT is associate forester to the Branch of Planning and State Coöperation of the National Park Service with headquarters at Atlanta, Georgia. He was formerly connected with the Forest Service, is a great lover of the outdoors and is interested in the development of the Appalachian Trail.

P. H. ELWOOD received his training at Michigan State College and Cornell Uni-

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HERBERT EVISON, a former Seattle, Washington, newspaperman and former executive secretary of the National Conference on State Parks, is now regional officer of Region 1, Branch of Planning and State Coöperation, National Park Service, with headquarters at Richmond, Va. His present position with the Park Service follows his work as supervisor of State Park Emergency Conservation Work.

ROBERT FECHNER, who has directed the Emergency Conservation Work since 1933, is a native of Chattanooga, Tennessee. He was formerly executive officer of the International Association of Machinists. He has lectured at the Harvard School of Business Administration, Dartmouth, Simmons and various other colleges and has been a contributor to many journals.

C. MARSHALL FINNAN, born in Baltimore, Maryland, was educated at Loyola College and Johns Hopkins University. For nine years he served at Mesa Verde National Park in the capacity of ranger, chief ranger, and park superintendent. In October, 1933, he was transferred to Washington, D. C., to be superintendent of National Capital Parks.

B. FLOYD FLICKINGER is a graduate of Shepherd College and Lafayette College (*summa cum laude*) and was an instructor in History and English at the College of William and Mary. He was formerly assistant park historian and is now coördinating superintendent of Revolutionary War Parks in the South.

GERALD GIMRE, a graduate of the University of Illinois, has been connected with the city planning and zoning commission of Nashville for the past few years, and also serves as consultant to the Tennessee and Mississippi State Planning Boards.

ALBIN GRIES, a native of Chicago, acquired his training as landscape architect and engineer at the Universities of Illinois and Michigan and at Trinity College, Dublin. Before his connection with the Illinois Division of Highways, he engaged in the private practice of landscape architecture in Chicago.

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SIDNEY B. HALL is superintendent of Public Instruction, Richmond, Virginia. He holds the degrees of B.A., College of William and Mary; M.A., University of Virginia; Ph.D., Harvard.

WILBUR C. HALL is a native Virginian. He studied at Washington and Lee University and in 1915 received his LL.B. at Georgetown University, Washington, D. C. He has been a member of the Virginia House of Delegates and a member of the Judicial Council, Commission of Fisheries.

CLIFFORD W. HAM is executive director of the American Municipal Association, an organization which promotes the establishment of municipal leagues and furnishes information to assist them to function effectively.

MELVIN C. HAZEN, a native Virginian and a graduate of the University of Maryland with the degrees B.S. and C.E., has had been a resident of Washington, D. C., since 1890. During this time he has been an active participant in all civic activities. Before becoming President of the Board of District Commissioners he held the office of Surveyor of the District of Columbia.

ELISABETH M. HERLIHY holds two outstanding planning positions as chairman of the Massachusetts State Planning Board and Secretary of the Boston City Planning Board. She has been a member of the Board of Governors of the American City Planning Institute and is affiliated with numerous civic and planning organizations. She edited the memorial volume, "Fifty Years of Boston," and is a special lecturer at Simmons School for Social Work.

JOHN IHLDER received the degree of B.S. at Cornell in 1900. He has been director of the Philadelphia, Pittsburgh and the Boston Housing Associations and has served as housing consultant to the National Capital Park and Planning Commission. He was manager of the Civic Development Department of the U. S. Chamber of Commerce and is now executive officer of the Alley Dwelling Authority for the District of Columbia.

ELIZABETH B. LAWTON is chairman of the National Roadside Council. She has made roadside surveys of a large number of States and cooperates in securing the passage of effective billboard laws.

RICHARD LIEBER, born in Germany, educated in Dusseldorf, became a naturalized citizen of the U. S. in 1901. He was Director of Conservation for Indiana from 1919-1933 and served as military secretary with the rank of colonel to Governor J. P. Goodrich, 1917-21. He is president of the National Conference on State Parks.

FRANK LORIMER, technical secretary of

the Committee on Population Problems, National Resources Committee, graduated from Yale in 1916, and received his Ph.D. from Columbia in 1929. He is the author of "The Growth of Reason," "The Making of Adult Minds in a Metropolitan Area," "Dynamics of Population" and is the secretary-treasurer of the Population Association of America.

MAURY MAVERICK, who represents the 20th District of Texas in Congress, is the grandson of Samuel A. Maverick, pioneer, patriot, and signer of the Texas Declaration of Independence. He was admitted to the bar at the age of 20 and at 23 was president of the San Antonio Bar Association. He commanded a company of infantry in France during the War and was cited for gallantry in action. He is a charter member and director of the San Antonio Zoological Society.

J. HORACE MCFARLAND, as a pioneer in civic development, visited several hundred American Cities lecturing on civic improvement. For 20 years he served as president of the former American Civic Association. He enjoys an international reputation as a rose expert and has developed Breeze Hill gardens at Harrisburg as a testing garden for roses and other ornamental plants.

HENRY T. MCINTOSH, Chairman, District No. 4, National Resources Committee, which comprises Georgia, Alabama and Florida, is president of the Herald Publishing Company of Albany, Georgia and editor of the *Albany Herald*. He has been regional adviser to the PWA since 1933.

GARDINER C. MEANS, Director of the Industrial Section, National Resources Committee, holds the degrees of A.B. and Ph.D. from Harvard. He was associate at law, School of Law, Columbia University, and economic adviser on finance in the office of the Secretary of Agriculture. He is the author of "Industrial Prices and Their Relative Inflexibility," and several other volumes.

CHARLES P. MESSICK, chairman of the New Jersey State Planning Board, is secretary and chief examiner of the New Jersey Civil Service Commission. He graduated from the Delaware State College in 1907 with the degree of A.B.; in 1909 he received his Master's degree from the same institution and in 1910 received his A.M. from the University of Pennsylvania. He is a recognized authority on public personnel administration and has served as consultant to a number of commissions throughout the United States and Canada.

JOHN NOLEN, JR., son of the eminent city planner, is a graduate of the Massachusetts Institute of Technology, 1920, and before coming to the National Capital Park and Planning Commission in

1931 as assistant director of planning was connected with the Regional Planning Federation of Philadelphia and a number of special town planning and housing projects in Ohio and Florida.

JESSE L. NUSBAUM for many years engaged in photographing, exploring, excavating and repairing the ruins of the Cliff Dwellers of the Southwest. He organized the Laboratory of Anthropology at Santa Fe and served as consulting archeologist to the Department of the Interior. He has been a member of the State Park Commission of New Mexico since 1933.

THEODORE S. PALMER recently retired as senior biologist of the Geological Survey. He is a member of important scientific societies all over the world, serving in many instances as a directing officer. His scientific writings, especially on ornithological subjects, are prodigious. He maintains an active interest in important conservation movements.

GEORGE C. PEERY, Governor of Virginia, holds the degree of B.S. from Emory and Henry College and B.L. from Washington and Lee University. He has practiced law in Virginia for many years and was a member of the 68th, 69th, and 70th Congresses of the U. S. His present term as governor extends to 1938.

GEORGE T. RENNER holds the degree of A.B. from Cornell and the degrees of M.A. and Ph.D. from Columbia. He has lectured and taught geography at Columbia, the University of Washington and the University of Minnesota. At present he is serving as senior economist with the National Resources Committee.

W. R. RONALD is Chairman of the South Dakota State Planning Board.

IRVING C. ROOT received his B.S. from the Kansas State College and his M.S. in landscape architecture from the Massachusetts State College. During the War he was civilian city planner for housing developments, U. S. Shipping Board and Emergency Fleet Corporation, and later for a Federal industrial housing project at Niagara Falls. He has been city planning consultant to Flint and other Michigan cities.

JULIAN HARRIS SALOMON, after his graduation from Erasmus Hall, took special work at Columbia University. He has been a special lecturer at New York State College of Forestry, Columbia and Western Reserve Universities, private camping consultant, a camp director and Scout executive. He is the author of "Book of Indian Crafts and Indian Lore" and numerous articles on camping and outdoor recreation.

FRED E. SCHNEPFE, chief engineer, Federal Employment Stabilization Board, has done much research in advance plan-

ning of public works and in airport design. He has contributed various articles to engineering journals and is the author of "Drainage and Surfacing of Airports." At present, as director of the projects division, PWA, he is in charge of the preparation of Advance Program of Federal Construction.

E. T. SCOYEN was born in Yellowstone National Park and received his education in Minnesota. He served as park ranger in Yellowstone and as chief park ranger in Grand Canyon National Park. In 1927 he became superintendent of Zion National Park and in 1931 was transferred to the superintendency of Glacier National Park.

L. SEGOE, a native of Hungary, is a graduate of Technical University in Budapest. He came to the United States in 1921 and is now consultant to the Ohio State Planning Board. He is a member of the American City Planning Institute.

WILLIAM R. SHANDS received the degree of LL.B., University of Richmond, Virginia, in 1921 and engaged in active law practice for many years.

FLAVEL SHURTLEFF was educated at Harvard, receiving his A.B. in 1901 and his LL.B. in 1906. One of the organizers of the National Conference on City Planning, he served as its secretary until 1935 when it merged with the American Civic Association to form the American Planning and Civic Association. As Council of the new association he is now engaged in research in planning, zoning and roadside improvement looking towards more effective legal control of roadsides.

KENNETH B. SIMMONS, after receiving his B.S. in 1923 from Clemson College, S. C., took post-graduate work at Massachusetts State College, receiving his M.L.A. in 1927. In 1930 he received his M.L.A. from Harvard. He engaged in professional practice and landscape architecture prior to his connection with the National Park Service. He has been in charge of the Southeastern field office of the Branch of Plans and Designs and is now Deputy Assistant Director of the Branch of Planning and State Cooperation.

BRANCH SPALDING received his education at the Alabama Polytechnic Institute and graduated from the University of Virginia with the degree of M.A., in 1931. He engaged in graduate study at Marburg University, Germany, and at Johns Hopkins University. He entered the National Park Service in 1933 as historical technician and is now coördinating superintendent of the Virginia National Battlefield Parks.

VAN BEUREN STANBERY, who is consultant to the Oregon State Planning Board, also serves as executive secretary of the

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L. C. STOLL is Executive Secretary of the Clakamas County Planning Board, Oregon.

BEN H. THOMPSON graduated from Stanford University in 1928 with the degree of A.B. in Philosophy and from the University of California with the degree of M.A. in Zoology. Since 1929 he has been connected with the National Park Service and was with the Wildlife Division before becoming assistant to the director.

C. G. THOMSON is a graduate of Cornell. He served as Captain with the U. S. Army at Camp Gordon and Camp Dix in 1917 and as Lieutenant Colonel, commanding all troops at Lux, France, from August, 1918 to May, 1919. He is the author of several books and a contributor to many magazines.

L. DEMING TILTON is consultant to the California State Planning Board, director of planning of the Santa Barbara County Planning Commission, and president of the California Planners' Institute. He is a Fellow of the American Society of Landscape Architects.

ROGER W. TOLL, so tragically the victim of an automobile accident last February, entered the National Park Service in 1919 as superintendent of Mt. Rainier National Park. He was superintendent of the Rocky Mountain National Park before becoming superintendent of Yellowstone. An alpinist of note, he had climbed all of the fifty peaks in Rocky Mountain National Park and made the first ascent of Mt. Rainier. He was the author of several books on mountaineering.

HILLORY A. TOLSON, a native of Missouri, was appointed attorney with the National Park Service in 1932, being designated as observer for the Service at Senatorial investigation of land purchases to extend the Grand Teton National Park. In 1933, he was appointed assistant director, Branch of Operations. He holds the degrees of A.B. and M.A. from George Washington University and LL.B., LL.M. and M.P.L. from the National University, Washington, D. C.

C. B. TREADWAY is chairman of the Florida State Road Department and member of the Florida State Planning Board.

ALBERT M. TURNER, born at Litchfield, Conn., graduated from Yale in 1890 with the degree of Ph.B. and from Trinity in 1933 with the degree of M.S. He practiced civil engineering in Connecticut until 1914 and then became field secretary of the former Connecticut State Park Commission, now the State Park and Forest Com-

mission, in charge of acquisition, collaborating in design and construction.

MORTON L. WALLERSTEIN is vice-president of the American Society of Planning Officials, executive secretary of the League of Virginia Municipalities and chairman of the Virginia State Planning Board.

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**PART I**



## NATIONAL AND STATE PLANNING AND PARKS

SELECTED PAPERS INCLUDING THOSE PRESENTED  
AT THE CONFERENCE OF THE NATIONAL PARK  
SERVICE, HELD IN WASHINGTON, D. C., JANUARY  
22-24, 1936; AT STATE PARK REGIONAL CONFERENCES,  
HELD IN MINNESOTA, SEPTEMBER 26-28, 1935, AND  
ANNISTON, ALABAMA, APRIL 2-4, 1936; AND AT THE  
NATIONAL CONFERENCE ON STATE PARKS, HELD  
AT HARTFORD, CONN., JUNE 1-3, 1936.







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## AMERICAN PLANNING AND CIVIC ASSOCIATION

THE purposes of the Association include the promotion of public understanding and support of national, regional, state, and local planning for the best use of urban and rural land, water and other natural resources; the advancing of higher ideals of civic life and beauty in America; and the safeguarding and developing for the largest good to the people of natural wonders and scenic possessions and of national and other parks and recreational facilities.

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## NATIONAL CONFERENCE ON STATE PARKS

THE purpose of the Conference is to urge upon our governments, local, county, state, and national, the acquisition of additional land and water areas suitable for recreation, for the study of natural history, for the preservation of wildlife, and for historical monuments leading to better understanding and appreciation of the history and development of our Nation and its several States, until there shall be public parks, forests, and preserves within easy access of all the citizens of every State and territory in the United States.

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**THE NATION**



**NATIONAL PLANNING**





# The National Resources Committee — A Review

By FREDERIC A. DELANO, Vice-Chairman

EDITOR'S NOTE.—On the basis of the notes he used for his address at the banquet of the National Conference on State Parks at Hartford, Conn., June 2, 1936, Mr. Delano prepared this more formal talk which was delivered in Texas in July, 1936.

I AM glad to describe as briefly as possible the work of the National Resources Committee and review the conditions three years ago when it really came into being. Because we are of a cheerful, buoyant disposition, we have already forgotten the critical situations that we have passed through. However, you know that the newly elected President had convened the Congress in extra session to meet a condition certainly as serious and perplexing as had ever faced our Nation. Millions of people were out of work; in many cases the savings of a lifetime gone; the future looked very black. What to do?

The Congress acted with promptness and courage. It realized there was an emergency before it equal to those of war-times. Balancing the budget, already far out of balance, was no more thought of than it would have been if an enemy had been at our gates. Thoughtful men, regardless of party, realized that the forces of unrest and the general loss of morale created a condition so serious that we must first administer temporary restoratives and then follow with a constructive program which should, so far as possible, forever banish the possibility of a recurrence of this malady.

Among the constructive plans set up by the Congress was a provision for setting up a public works program—a program calculated not only to help industry in general, but most important of all, to put willing and deserving men to work. Incidentally, of course, these public works were intended to create valuable, permanent, and, in many cases, much needed public improvements.

My honorable friend of former years in Chicago, Harold Ickes, the Secretary of the Interior, had been named the Administrator of this fund. He took off his coat and went to work. He was eager for results and fully appreciated the impatience of the public. He had no previously conceived plans, no ready-made program. Already groups hither and yon were calling upon him to do this or that—even before he had had the opportunity to set up a staff or to choose the good from the bad projects. Mr. Ickes, working nights and Sundays, with a keen bunch of men headed by Colonel Henry M. Waite, of Cincinnati, was not able to stem the tide. Field forces were set up in each of the States, and regional chairmen appointed, to keep some sort of supervision of the thousands of projects coming in for approval. Naturally, and in spite of the pressure from everywhere, Secretary Ickes would not let things go ahead without study and investigation. Pressure groups began to get im-

patient, they complained of delay; they came to Washington to see the Secretary in person and urge their case—unwilling to await an orderly procedure for consideration of projects involving millions. Unnecessary to state, Secretary Ickes fully realized the seriousness of the matter. He knew the country's needs and realized the human emergency, but he was also determined that no breath of scandal should attach to his administration of public works.

It was in the midst of this struggle that the germ of a national planning organization came into being, not with any expectation of immediate benefits, but in the hope that an instrument might be created which would place this or any future Administration in a position to deal intelligently with such problems as might arise in the future.

The first organization set up by Executive Order of July 20, 1933, as a "National Planning Board," consisted of three men: Dr. Charles E. Merriam, professor of "Government" in the University of Chicago (Dr. Merriam, an independent in politics, had been active in planning the Chicago region, had served as Alderman, and was co-author with Wesley C. Mitchell and others of the report to President Hoover on "Recent Social Trends"); Dr. Wesley C. Mitchell, Professor of Economics at Columbia University, a former associate of Merriam's in studies of long-range planning, social trends, the business cycle, etc.; lastly, the man who addresses you—whose experience had extended thirty years in the realm of physical planning, first in the Chicago region, then in New York, and lastly at the Nation's Capital. This Committee was given the assignment—as a *part-time job*, mind you—to gather data from such bureaus of the Federal, state, and city governments as were willing to contribute their accumulated data, acquired knowledge, and considered judgment.

The work was enormously interesting, and with the full-time service of a competent secretariat and clerical staff, much was accomplished. The enthusiasm was not unlike that of war-times—when everyone was glad to do his bit. Federal bureaus and state officials collaborated—men and women worked overtime, and those of the Committee, in spite of their full-time professorial duties, put in a good many Saturdays and Sundays. The first important report was presented to Secretary Ickes the end of June, 1934, entitled "A Plan for Planning." This report was at once sent to the President, who was sufficiently impressed with its importance to authorize its printing and publication forthwith. At the same time he expressed the thought that the work should be carried forward in a slightly modified form. After some discussion, the program adopted embraced the following formula:

Setting up of a "National Resources Board," consisting of the Secretary of the Interior (Mr. Ickes) as Chairman, plus the Secretaries of War, Agriculture, Commerce, and Labor, and Mr. Harry L. Hopkins, of the Relief Administration, to which Board would be added as an

"Advisory Committee" the Committee previously named by Mr. Ickes. This plan of operation was made effective by Executive Order dated June 30, 1934, and began to function immediately.

The first work of the Board was to develop its function of making, so far as possible, a broad *inventory* of our resources—both natural and human—not an easy problem and indeed an impossible one but for the splendid coöperation of all the chief administrative functionaries of the Government. So far as I can now recall, there have been no slackers, and a splendid result has been secured to a large extent by a determination from the start to assure to every contributor not only patient consideration of all data or opinions expressed, but, in addition, full credit for the value of the work done.

Our first undertaking of importance was the report of the National Resources Board which embodied an elaborate study of *land-uses*, conducted under the general direction of Dr. L. C. Gray, at that time Director of the Land Planning Section of the Agricultural Adjustment Administration. He was assisted by a large group of well-known bureau chiefs, representing a thorough knowledge and experience with every phase of land-use and development. A similar and very complete study of the development of our *stream-uses* was made by a committee headed by Mr. Morris L. Cooke, now Administrator of Rural Electrification. A third section of this important initial report dealt with our *mineral* resources, and was under the direction of Dr. C. K. Leith, long well known for his large experience in this field.

Fourth, "Public Works Planning" by an experienced group consisting of Messrs. Russell VanNest Black, Maurice Clark, and Arthur D. Gayer. The publication of this report—a truly monumental task—not only aroused nation-wide interest, but proved of great value to the Congress and to the public in general. It was the first effort on a broad scale to bring together in readable and comprehensive form a statement of the Nation's chief resources, which, as everyone must appreciate, is necessarily the basis of wise planning for the future.

Another advantage gained by the publication of this report was the fact that it greatly stimulated the interest of the States in their own problems, and we now have planning boards set up in each of 46 States, many of which have already submitted important reports. The National Resources Committee has never attempted to dictate to the States the character of their reports, and it is noteworthy that they differ widely in method of approach and conclusions arrived at. The National Resources Committee has, on request, furnished in many cases the part- or full-time services of consultants, and Mr. Hopkins' organization, the Works Progress Administration, has supplied from its funds the services of many of the men employed on the state staffs.

The National Resources *Committee* (as now designated) sees distinct advantage in the complete autonomy and detachment of each of these

state groups in this planning field. We are glad to help them in their problems, but we are fully convinced that the work, to be of permanent value, must be done by the States themselves and by the men and women naturally most interested and competent. Thus it was that the publication of our general Resources Report was followed soon after by a report summarizing the reports of the States and referring specifically to them.

These two studies served to bring forward the important relationship of States in their interstate groupings and so led to studies of regional groups, such as the New England States, or the Columbia River States, and this, in turn, has been followed by the study of the subject of Regionalism as it appears to be developing in the administration of our various Federal functions, such as the regional Reserve Banks, the regional grouping of railroads, etc. In this way, our report on Regionalism aroused wide interest and comment.

Other studies are in process, as, for example, in regard to the trends of city growth, which has already shown that half our population are residents of a hundred cities. This fact by itself is important, but its future implications or its probable effects have even more importance.

The pollution of our stream-valleys by sewage and factory waste, oil, etc., is another subject of study because this is menacing to health and destroying our fish-life. The Congress of the United States had before it at its last session several important measures dealing with this problem, and many States are actively interested in attempting to find an adequate and appropriate solution to the problem.

An interesting feature of all these studies is the subject of how we shall best cope with these problems in our cities, our States, and in the Federal Government. Obviously, so great an undertaking as planning for great groups of people with widely differing points of view may be viewed in widely different ways. When we talk of an inventory of our resources, we think of the physical basis of planning, but any intelligent man knows that on the wise and far-seeing use of these resources depends the future happiness of our people, and even of the children yet unborn.

But how shall we plan intelligently? How shall we become, first of all, aware of our problem, and, second, find a plan for carrying it out?

I have no intention of suggesting the formula. It isn't easy—that I know. No one man can do it, that I know; but of one thing I am certain, and that is that we have in our many States, in the Government bureaus, in private life, in our state universities, in our Land-Grant Colleges, in our school system, a great wealth of available data. We have in Congress men who, like Mr. Maverick, have taken an active part in advancing this work. The real trick is how best to assemble these data, evaluate them and finally interpret them so that when they are finally presented, our executives can make use of the information. Money wisely spent is not thrown away even if it does exceed the budget

of a particular year or month. A grain or a cotton farmer has to exceed his monthly budget perhaps eleven months out of twelve and yet shows a profit for the whole year. No one would argue that any Nation or State can permanently ignore the importance of balancing its budget, but, on the other hand, I can point out to you some Nations of the world and some States in our own commonwealth which are apparently oblivious of the fact that while balancing their annual expense budgets, they are really shrinking in wealth, drawing down on their capital because they are living on their capital, and that their human as well as their natural resources are diminishing.

Mr. Elihu Root, one of the most far-seeing men ever in our Government service, inaugurated, some thirty-four years ago, in the Army what is known as the "General Staff" system. The functions of the General Staff were to be to familiarize itself with the problems of National Defense, and advise the Secretary of War and the President as to its recommendations. That is a system now generally believed to be essential for the intelligent study of the problems of national defense in peace and in war.

I believe it is equally necessary in the conduct of all our great functions of government and without it we shall make the same costly mistakes which we, as well as other Nations, have made before. Fortunately, we are still a strong and vigorous Nation. We already realize that we have wasted some of our resources, but they are not yet gone, and we have learned the fact before it is too late.

In an able article recently appearing in one of our great newspapers, it was pointed out that of the twenty-two resources catalogued as essential to national defense in war-time, we are strong in seventeen. No Nation is so fortunate, and yet, another hundred years of careless exploitation might leave us in a bad plight. However, as I have already said, this is no one-man job; it is a job for many. Emerson wisely said that "Most great enterprises were but the elongated shadow of a man," but this is not that kind of project—this is an undertaking that requires the comprehension and the enthusiastic support of many men.

The close relation of economic and physical factors is well exemplified in some of the inventions and mechanical developments which have played so important a rôle in changing our habits of life and the development of our cities. A hundred years ago it was the steam railway, whereas in our generation it is the motor vehicle which has had a profound influence on our lives and our planning. The radio, the cinema, the telephone have ceased to be just interesting scientific curiosities and have become a necessity in our daily lives.

And again, if we admit that physical facts, such as I have described, have their repercussions in economic conditions amounting sometimes to serious disaster, it is equally true that economic policies long continued

may produce results that affect our physical well-being and compel us to restudy our entire program.

An important illustration from our national experience is of historic interest. For more than one hundred years we were a debtor nation, having for a long time borrowed largely from Europe, at the same time inviting a great population from foreign shores, developing our national resources under forced draft, and as rapidly as possible. *Suddenly*, an almost complete reversal of our economic policy became necessary. We put up the bars against foreign immigration; next, we found ourselves no longer a debtor nation, but instead a creditor to a huge amount; and that was a situation very difficult to deal with. I am not here to talk politics, and I am not blaming any political party for this change of conditions. I am simply stating facts and pointing out that such economic facts have compelled and will compel an entire change in our planning, both economic and physical. We cannot plan, for example, to produce goods for a foreign market which has shrunk to small proportions; we cannot expect foreign nations to pay us what they owe us and at the same time send them more goods than they send us and thereby increase their debt to us. We must, therefore, change our plans to meet changed economic conditions. Curiously enough, somewhat similar conditions exist between the sovereign States of our Union in their interstate relations one with the other. Some States are creditor States, while some are debtor States. Some States produce more than they consume, whereas some States consume more than they produce. Some States are receding in population, where other States are increasing. "What is the answer?" you ask me. My answer is *study the facts, interpret them*, and lay them before your legislative and executive officials so they may have the basis for an intelligent decision.

Planning, as I have tried to explain, depends to a large extent upon assembling data actually in existence, either in the bureaus of the Federal Government, or in our state or city departments, or, as in many cases, in our colleges and other institutions of learning and research. The gathering and coördination of all these data obviously requires tactful methods by properly qualified men. Fortunately, it does not require any large expenditure of money for the reason already emphasized, that the data are to be gathered from the sources where they exist.

After the coördination of data comes the next step—that of a wise *interpretation* of it, which is oftentimes more difficult, because it requires a kind of wisdom less commonly found. Planning then follows, based upon the gathered data and its interpretation and the task of carrying out the plan becomes in the first instance the task of the legislative and executive departments, be they Federal, state, or urban.

EDITOR'S NOTE.—For further information on the National Resources Committee, see: Part II—Regional Planning Accomplishments, Charles W. Eliot, 2d, page 116; Section on National Planning, pages 123-145.

NATIONAL PARKS

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# Standards and Policies in National Parks

By ARNO B. CAMMERER, Director, National Park Service, Department of Interior

EDITOR'S NOTE.—The papers in this section were presented at a Conference on the National Park Service, held in Washington, January 22-24, 1936.

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THE standards for national parks should be divided into two categories: standards of selection and standards of treatment for the areas selected.

The standards of selection were broadly conceived and clearly stated in the Lane policy letter of May 13, 1918, which states:

This policy is based on three broad principles: First, that the national parks must be maintained in absolutely unimpaired form for the use of future generations as well as those of our own time; second, that they are set apart for the use, observation, health, and pleasure of the people; and third, that the national interest must dictate all decisions affecting public or private enterprise in the parks.

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In studying new park projects, you should seek to find scenery of supreme and distinctive quality or some natural feature so extraordinary or unique as to be of national interest and importance. You should seek distinguished examples of typical forms of world architecture; such, for instance, as the Grand Canyon, as exemplifying the highest accomplishment of stream erosion, and the high, rugged portion of Mount Desert Island as exemplifying the oldest rock forms in America and the luxuriance of deciduous forests.

The national park system as now constituted should not be lowered in standard, dignity, and prestige by the inclusion of areas which express in less than the highest terms the particular class or kind of exhibit which they represent.

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It is not necessary that a national park should have a large area. The element of size is of no importance as long as the park is susceptible of effective administration and control.

You should study existing national parks with the idea of improving them by the addition of adjacent areas which will complete their scenic purposes or facilitate administration. The addition of the Teton Mountains to the Yellowstone National Park, for instance, will supply Yellowstone's greatest need, which is an uplift of glacier-bearing peaks; and the addition to the Sequoia National Park of the Sierra summits and slopes to the north and east, as contemplated by pending legislation, will create a reservation unique in the world because of its combination of gigantic trees, extraordinary canyons, and mountain masses.

A few years later Secretary Work somewhat amplified the statement of policy, as follows:

Owing to changed conditions since the establishment in 1917 of the National Park Service as an independent Bureau of the Department of the Interior, I find it advisable to restate the policy governing the administration of the national park system to which the service will adhere.

Our existing national park system is unequaled for grandeur. Additional areas when chosen should in every respect measure up to the dignity, prestige, and standard of those already established. Proposed park projects should contain scenery of distinctive quality or some natural feature so extraordinary or

unique as to be of national interest and importance, such as typical forms of natural architecture as those only found in America. Areas considered for national parks should be extensive and susceptible of development so as to permit millions of visitors annually to enjoy the benefits of outdoor life and contact with nature without confusion from surroundings.

We respect these statements of policy as we would any achievement which stands the test of time. We realize that their authors dealt with practical affairs, just as we must today, and used their best human wisdom to meet those circumstances. We must do likewise. Standards must not be crystallized into static abstractions. But, rather, they must embody an ideal which is sufficiently malleable to comply with human needs and to be achieved in terms of human satisfaction. Otherwise, the world goes on without them. If our national park standards are to mean anything, they must be interpreted in terms of conservation and human use. We must deal with the realism of the problem.

There was a time when superlative areas could have been set aside as national parks, with only the question of a suitable natural unit to be considered. It is to be regretted that the entire Yellowstone-Thorofare-Teton area was not included in such a unit when Yellowstone Park was established. But today no such area can be arbitrarily given park status and be preserved in pristine perfection, because the face of our country has been modified. Civilization has moved into the choicest areas faster than they could be established as national parks, and consequently some parks must now be carved out of areas that are not entirely primitive. To permit a previously established, and perhaps temporary, commercial venture to thwart the establishment of national parks now would mean the loss of all remaining areas of national park quality. An ideal is something toward which to work; it should not be something which prohibits us from working.

The proposed Great Smoky Mountains National Park, with its 750 square miles, exemplifies this point. Approximately 60 per cent of that area will in time be primitive. Nature will restore the primitive forest and heal the scars of past cutting.

Because the existence of an ideal is in all probability a contributory force toward its accomplishment, the National Park Service has done, and will do, all within its power to sustain the national park standards and to promulgate the national park idea as the most effective implement for conserving superlative natural areas.

These statements do not deviate nor detract from the ideals of the authors of our policies. They simply interpret those ideals in terms of the conditions today. Following those ideals and recognizing present trends, I believe that all areas of national park or monument quality should be included in the National Park System and should be administered by the one agency of Government created by Congress to conserve them unimpaired for the benefit and enjoyment of the people. I

believe that areas of national park quality are the superlative natural areas and that areas of national monument quality are the outstanding sites or objects of historic, prehistoric, or scientific value.

The areas to be established as parks and monuments must be capable of being preserved intact. The national parks must be complete administrative, recreational, and biotic units if they are to be properly protected. The unit basis is the premise upon which boundary adjustments and proposals are advocated. If a superlative natural area is to be preserved, it must be a unit capable of sustaining itself. It would be futile to attempt to provide a city with pure water by controlling the area of the reservoir only. It is necessary to control the watershed above the reservoir to assure pure water within it. In like manner, it is futile to set aside a superlative area and attempt to preserve it unimpaired without including the tributary areas which give rise to and sustain its superlative character. Zion Canyon was set aside as a national park. The canyon itself is the feature which it was desired to preserve. But the watershed above the canyon, not included within the park, is overgrazed by domestic sheep. Run-off is violent. Floods are frequent. The needed floor of the canyon is washing away. The unit character of a superlative area has been ignored.

What has been said of parks is true also of the natural and historical monuments. Monuments established to preserve natural features must be administrative and scientific units. Monuments established to preserve historic sites and objects must be administrative and historic units. The test of these standards of selection comes in their application.

No better example is presented than in the proposed extension of Grand Teton National Park. When the park was established it included only the east face of the range. But the Teton-Jackson Hole area is a great natural and recreational unit—using the term "recreation" in its broadest sense to connote that which is recreative of the individual. It is a unit because of natural causes, regardless of its present subdivision under different departments of government. Its natural unity and perfection have been impaired by different and conflicting forms of land-use. The once beautiful Jackson Lake at the very foot of the Tetons has been marred by its conversion into an artificial reservoir. For that reason, there have been some differences of opinion regarding its suitability for inclusion within the park. It is believed by some that to do so would be a violation of national park standards. I should like to ask your consideration, however, of the problem in the light of what I have said about standards and their meaning.

The National Park Service is unequivocally opposed to construction of power and irrigation reservoirs within national parks and monuments. If any precedent is involved, that is the precedent by which we stand. The damming of Yellowstone Lake, for instance, or of Grand Lake in Rocky Mountain National Park, should be resisted by the united efforts

of all conservationists. Such projects are destructive of irreplaceable features which the parks were created to protect. Congress has approved that principle by the amendment to the Federal Water Power Act of March 3, 1921.

But the construction of a new reservoir which means violation of another great scenic area is a very different thing from the attempt to save a previously violated area from further exploitation. And that is the crux of the whole question. Exploitation of park waters is not involved in the Jackson Lake question. The reservoir is already there. Should we refuse to apply national park standards to the whole Teton-Jackson Hole unit because Jackson Reservoir has been built, we would be discarding a great area. Should we refuse to accord this great natural unit the protection which a park can give because the lake in the heart of it is not natural, we would be evading the challenge of conservation and would be guilty of taking refuge behind our standards.

The natural unity of that superlative area has already been invaded. The reservoir is an accomplished entity. We would not change that fact by drawing the proposed boundary of Grand Teton National Park so as to exclude the lake. That would be a retreat. It would be the same as re-drawing the boundary of Yosemite National Park to exclude the Hetch-Hetchy reservoir, which would likewise help the situation not one whit. Moreover, it would be establishing a very dangerous precedent, namely, that there can never be established a suitable park unit because of previous commercial exploitation.

Certainly, it would be far better to have Jackson Lake, which is in the heart of the area, protected from further exploitation by including it within the park than to leave it unprotected by excluding it. In the latter case, the reservoir would still remain a thorn in the side of the park, about which we could do nothing. I submit that the one pertinent fact which we have to consider is this: The reservoir is now in the heart of Jackson Hole; nothing that either you or I can do changes that reality; but we can do a great deal to determine what the future developments at the lake shall be. Some of the grandest views of the Tetons are mirrored across Jackson Lake. The lake-shore should not be given over to private developments. Even though the lake has been violated, it is still a magnificent setting for the picture.

The few remaining trumpeter swans of the Yellowstone flock back and forth from the lakes of the Teton region to Yellowstone. Elk which summer in Yellowstone drift down into Jackson Hole in winter. Their natural habitat and range should not be usurped by petty commercial competition. The lakes of the Teton region still harbor wild fowl, moose, otter, beaver, mink, and others. But if the wildlife about these lakes, and in fact the primitive grandeur of the whole area, is to be restored and preserved, the area must be made a permanent refuge and haven. It should be once more the teeming wilderness which the early fur-traders

discovered over a hundred years ago. Historically, Jackson Hole is magnificent. There is opportunity to restore that picture. But the area must be treated as a unit under one agency of Government with one definite and constant objective.

A national park is the only classification of land-use which has ever been devised for such purposes and which presents any guaranty of permanence. The crop-production practices, called "sustained yield" and "multiple use," were not designed for the restoration and preservation of such a superlative natural area, for it is under those very principles that reservoirs are built, trees cut, meadows grazed, and wildlife hunted.

Many of the national parks were created with some sort of reservation for commercial use which had to be recognized in order to secure the parks. At the time of the original National Park Service Act it was necessary to permit grazing in all national parks except Yellowstone. Later, in 1931, Congress passed a bill which corrected many of these abuses and excluded many non-conforming uses from the parks.

A different problem in the application of policies is met in the proposed Sawtooth Park in Idaho. The problem presented is not whether the area lacks suitable quality, but that it is said to resemble the Tetons and might, therefore, be a duplication within the system. This presents an interesting interpretation of our standards of selection. If the area is as fine as the Tetons, should it be excluded, even if it does resemble the Tetons? That, too, I believe, would be as difficult to justify as throwing out all but one of Raphael's paintings. Values are not all relative; many of them are intrinsic and positive.

I do not believe that the original framers of our standards ever intended that the system should be limited to only one example of each type of area. I believe that the so-called duplications are nothing more than figments of the imagination. If a natural area is fine enough to be preserved as part of our heritage, I believe it should be made a national park.

A case in point is Diamond Lake, on the border of Crater Lake National Park. In 1915, the forest supervisor of the Umpqua National Forest, in which Diamond Lake is situated, made the following statement:

From a standpoint of public benefit there is no doubt that the region about Diamond Lake should be included in the national park as it is undoubtedly one of the finest potential summer resorts in the entire Cascade Range.

The timber here consists principally of lodgepole pine and is of little value. The soil is composed of fine pumice and a very small amount of vegetable matter, and, as a rule, produces little grass.

Diamond Lake is essential to the Crater Lake unit. Its inclusion within the park was advocated and sponsored by organizations throughout Oregon. But the Forest Service defeated the project and the lake was promptly developed as a private summer-home and recreational resort. Since that time we have been forced to concentrate more develop-

ments at Crater Lake than we consider appropriate or desirable. Because of the high altitude of Crater Lake we were obliged to establish both summer and winter headquarters for the park. I tell you this because it has a definite bearing on our discussion of standards. We did not advocate the inclusion of Diamond Lake as a competing and detracting exhibit; we advocated it for the protection of Crater Lake, so that it would not be marred by over-development. It might be said that Diamond Lake could perform that function in the forest just as well as it could if it were in the park. But, as a matter of fact, Diamond Lake has never been developed to take care of the Crater Lake visitors and it does not perform that function. It has been given over to a different type of land-use.

It is a curious fact, but a fact nevertheless, that where national parks have been proposed and authorized in areas where no national forest complications were involved, such as in the Shenandoah, the Great Smokies, the Isle Royale, the Mammoth Cave, and Big Bend areas, legislation for their creation was speedily enacted, and the parks have either actually been created or they are well on their way to establishment. In the cases of the Kings Canyon and Diamond Lake, though we have fought for years to bring them into the National Park System, the opposition emanating from local forest officials, in some instances even where their higher authorities have concurred in the merits of the national park projects, has been successful in preventing the inclusion of the areas in the park system. Clear-cut and significant issues have been obscured and confused until many people have lost sight of the two different forms of land-use at stake and have been led to believe that the problem is merely a bureaucratic scuffle. Parks and forests provide two entirely different forms of land-use. National park creation is a Federal policy just as is the establishment of national forests. And where such national park projects as Kings Canyon and Diamond Lake are involved, they should not be sewed up with a rash of private summer-home sites and adverse local propaganda while their park status is still undecided by Congress. Such projects should be decided on the basis of their value to the Nation, particularly where Federal lands are involved. Classifying such areas as forest "recreation" and "primitive areas" with concomitant and destructive commercial uses, and without guaranty of performance, is no substitute for national parks.

*Standards and policies governing the treatment of areas which have been selected* are quite as important as standards of selection. The core of the national park idea is conservation for human use. That brings us face to face with the problem of what the legitimate uses of national parks are and how they may be achieved without impairing natural conditions.

In a growing country, such as ours, where everybody is reaching into the soil and its resources to gain a living, there is no such thing as setting aside vast areas, even though of superlative quality, without some sort of recompense. If we are to preserve the areas and objects which we

cherish, their conservation must provide an economically justifiable and humanly satisfying form of land-use, capable of standing on its own merit in competition with other forms of land-use. If we are to gather together enough men so that their combined strength will protect an area, we must provide some recompense for them all—whether that recompense be spiritual satisfaction, scientific information, recreational enjoyment, or commercial returns.

The problem is best exemplified in the attempt to preserve primeval or wilderness areas. The primitive and recreation areas within national forests do not exclude uses which tend to modify them and are destructive of their primeval character. That is, grazing, hunting, and mining are permitted, and logging and power developments will be permitted if and when they are economically feasible. These are the compensations which are given for maintaining certain wilderness aspects of such areas. Such practices are not permitted in parks, except in the few instances in which Congress, as the final authority, has so ruled, or in which we have not yet been able entirely to eliminate them. Those few cases stand as exceptions only. It is evident, then, that such terms as "wilderness," "primitive," and "primeval" do have an entirely different meaning as applied to parks than they have in any other form of Federal land classification.

If we are to protect the wilderness areas of our parks, and cannot cut the trees or graze the meadows as the price of protection, what forms of use are we going to permit? I believe that our experience has justified the principle that national parks must be made accessible for all who can and care to enjoy them. To be sure, the kinds of enjoyment derived will vary all the way from scientific research to boating and fishing. But types of recreation foreign to the maintenance of natural conditions should not be introduced. The developments of a park should be conducive to enjoyment of the inherent natural characteristics of the area, and no artificial lakes should be permitted.

Such developments, however, mean sufficient roads of adequate standard to permit the touring public to see representative sections of a park. That is not only a proper use of the resource, but it has been made mandatory by the Act which created the National Park Service and prescribed its duties. This does not mean that roads must penetrate every section of a park; on the contrary, that would, itself, defeat the purpose for which the park was established. But by building roads into a portion of an area, so that people can enjoy it, we are able to save even larger sections of wilderness for the relatively few who enjoy wilderness. It should be remembered that roads may be used as an implement of wilderness conservation.

The spiritual quality of wilderness is real but it is subjective. Because it is subjective and is not universally perceived, it will surely go down before the onslaught of pragmatic, local, economic demands unless it is

bolstered by definite, tangible returns. If a road must be built to save a forest so that the general public may actually view its beauties, then let us build it rather than to see the forest cut, or mined, or grazed, or sold for private privilege, or any of the other commercial practices which are destructive of superlative areas. Relatively, the road may be a small price and it may make many friends for the rest of the wilderness.

I do not mean by this that I am insensitive to what the road does to the wilderness. But I think enough of the wilderness that I am willing to employ the most effective tools to preserve it. If these tools cannot preserve it in such perfection as it is in the abstract, nevertheless, I am still willing to see them save what can be saved. With commercial demands organized as they are, we shall save little enough wilderness, even at best. Without roads, millions of people who have enjoyed the parks could never have seen them. People do not know what a wilderness is until they have a chance to go through it.

In most of the older national parks, the road-building program is complete. While there has been improvement of the loop road system in Yellowstone in recent years, no new roads have been constructed for over twenty years, and it is not contemplated that any more will be built. Likewise, no new roads are planned in Yosemite, Sequoia, Grand Canyon, Glacier, Crater Lake, and others.

In the last three years the new resources in funds and man power provided by the Civilian Conservation Corps and other emergency organizations have presented new opportunities, as well as new problems, in the treatment of national parks. Many improvements around development centers—projects necessary for better protection and administration of the areas—have been made possible. Great strides have been taken, through the additional resources provided, in various types of historical material and the preparation of museum exhibits and facilities. There has also been the danger of over-development, which is so characteristic an expression of human energies and ingenuity, where the wilderness is involved, and we took special precautions to avoid that. We do not want primeval areas modified; we do not want the parks tamed and gardened. A wilderness cannot be "improved," because its unimproved state is what we are trying to preserve. I believe that the time is not far distant when the Civilian Conservation Corps camps will not be needed in national parks and monuments except for the simple forms of maintenance, repair, and research.

Many new types of areas have come into the National Park System. The entire historical-sites program is an innovation if considered from the point of view of those who first proposed the Yellowstone National Park. But the inevitable and desirable growth of the park system, demanding readjustment of concepts, as it has, does not mean that the fundamental policies and standards of the original system are no longer applicable. On the contrary, they are the very life of the system.



## The Philosophy of Standards for National Parks

By GEORGE M. WRIGHT, Chief Wildlife Division,  
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EDITOR'S NOTE.—This paper was presented at a meeting of the National Parks Council of the American Planning and Civic Association, held in connection with the Conference on the National Park Service, Washington, January 22, 1936, less than a month before Mr. Wright's tragic death. In this memorandum we believe that Mr. Wright has left a valuable contribution to park administrators.

**I**N PLANNING for a national parks system of satisfactory quality and extent, we can argue more intelligently if first we consider human requirements and then we search the United States for whatever may be provided in nature that will satisfy these requirements. Yellowstone and Hot Springs were set aside before the perplexing subject of park standards ever became a *bête noire*. I can see no logical reason why either the one or the other should set the standard for national park selection.

Human use is predicated on human need, and the term natural resource has no meaning whatsoever except as it relates to human use, either present or future. So let us start correctly by considering one kind of human need, proceeding then to a consideration of available resources for the satisfaction of that need, and, lastly, feeling our way to the best method of handling such resources that we shall neither lock them up, nor waste them, nor use them up.

For the moment we will forget that there are in existence national parks and monuments, and a National Park Service. In the manner of the President's National Resources Committee—and a mighty sane approach it is—we will start with recognition of the several kinds of land-use, many of them conflicting, with the realization that public agencies must play a rôle in harmonizing land-use in the public interest, and finally with appreciation of the practical advantages and common sense inherent in grouping generically related forms of land-use under the guidance of a single agency.

There being a clearly recognizable need to withhold from commercial exploitation and incidental destruction a totality of unspoiled lands and waters sufficient to meet the present and predictable future recreational needs of the people, it would appear in the public interest to set up a Federal agency for the specific purpose. The general functions of such an agency would fall into three categories: First would come the stimulation and guidance of the States and local subdivisions in providing for the outdoor recreational needs of their peoples. The prime responsibility is, and always should be, theirs. Secondly, this agency, upon invitation, should stand ready to assist in planning for the protection and use of the recreational resources of any or all Federal lands, it being the prerogative of the administering agency in each case to determine whether or not recreational use would conflict with the main purpose for which the area

was set aside. Thirdly, it would be the duty of this Federal agency to serve as the actual administrator of those areas whose greatest usefulness is for outdoor recreation and whose attributes are such as to make their perpetuation in an unspoiled state nationally important and hence a Federal responsibility.

Since our concern here is with standards of a national parks system, I shall not elaborate upon functions one and two. Passage of the state park bill, so-called, will make it possible for the Federal Government to function in the first-named capacity, that of advising and stimulating the States and their subdivisions in providing adequate outdoor recreational facilities. Function number two is, in part, being performed already under more or less formal interbureau agreements. For example, the National Park Service has undertaken to aid the Reclamation Bureau in protecting and developing the recreational potentialities of the Boulder Dam Reservation.

And so we come to the third function of our still hypothetical agency, the actual administration of areas containing features of national recreational importance. Again we must defer consideration of what are nationally significant characteristics, in other words the consideration of standards, until we have determined what kinds of objects and areas may be considered as appropriate candidates.

To avoid any possibility of misunderstanding, the following meaning of recreation is given as applicable within the boundaries of our discussion and indeed wherever reference is made to recreational land-use:

Recreation connotes all that is recreative of the individual, the community, or the Nation. In this sense it is broader than the "physical activity" concept. It allows gratification of the nearly infinite variety of tastes and predilections so far as that gratification is consistent with sustained utilization of the Nation's recreational resources.

Because the usefulness which attaches to each of the following area classes is primarily recreational, within the scope of the definition of recreation given above, they are candidates for our consideration. As they come to mind, they are: wildlife refuges, primeval areas, archeological sites, historic sites, areas of prime paleontological, geological, or biotic value, areas of preëminent scenic quality, areas combining two or more of the above characteristics, and finally the regional park system of the District of Columbia commonly called the National Capital Parks.

Any particular area qualifying under the above may vary in quality from any other as to kind of recreational value, inspirational, scientific, active recreational, and so on, but all certainly have one thing in common. Their best use is not commercial use.

Why are these area types nominated, and if acceptable as types, how shall the specific areas be selected?

1. The National Capital Parks present no problem here. They are for recreation. Symbolically and in point of persons served by them

their character is truly national. They are a unit, and since there can be no competitors, the unit is its own standard.

2. Historical and archeological sites are two types of areas which logically belong in the system, their greatest human usefulness being for recreation. Not only do they provide opportunities for cultural recreation but the historical sites are invaluable stimuli to a more worthy patriotism.

Standards of selection for archeological sites may be fixed with relative ease. This is because evaluation can be made on the basis of scientific formulæ. A committee of leading archeologists recently canvassed the known sites and supplied the National Resources Board with a list classifying them into several categories, according to their value in a national program.

American historic sites present a perplexing though fascinating problem in standards of selection. Since historians working in this very field are not ready yet to define the standards that should prevail, little or nothing can be said here. Suffice it that the whole question is at last being approached in the right manner to the end that there may be included in the Federal system only those sites related to historic events of noteworthy national significance or interest.

3. Next we come to migratory-bird refuges and sanctuaries for rare big-game animals. I believe that these types of reservations would come most appropriately under the jurisdiction of the national recreational agency because they serve to perpetuate a recreational resource. Careful thought makes this conclusion inescapable. The set-up of the Canadian Government recognizes this affinity more clearly than does our own. One is led to wonder if the constant difficulty experienced by the United States Bureau of Biological Survey in securing appropriations for the benefit of migratory birds and big-game ranges as against projects for the benefit of farmers and stockmen is not due to an original jurisdictional assignment which disregarded function. It is a line of thought worth further consideration. Irrespective of assignment to agency, the standards of selection would always be determined by application of scientific criteria in the field of wildlife management.

4. Since there is no clear demarcation in kind between areas possessed of exceptional wilderness, scenic, geological, paleontological, and biotic values, they, of necessity, must be considered together. Yellowstone illustrates the point. Wilderness, scenic, geological, paleontological, and biotic factors are all present. If one factor is dominant, and I doubt it, nevertheless the absence of a majority of the others would disqualify Yellowstone for parkhood. An area conspicuous for a single feature is more appropriately a candidate for monument status: Dinosaur for paleontology, Devils Tower for geology, and so on. Size becomes an important factor here because greater size leads to diversified character.

Scenic grandeur taken by itself is not a yardstick, because it does

not have common meaning. Some like the mountains and abhor the deserts; others, contrariwise. Some admire the deep woods; others the long vistas. Some like floral beauty; others find greater emotional satisfaction in the frozen wastes. For years we have listened ever more yawningly to heated arguments over the superiority of this or that park in contrast to some other.

What then shall be the standards for national park selection?

Certainly those areas of natural grandeur or unique wonder such that they draw not only national but international attention should be included. The majority of these have been set aside already. Yet others, such as the coast redwoods of California, whose fame has been worldwide for a century, have not found their place in the Nation's hall of fame.

Clearly enough, it seems to me, the remaining primeval areas of 1,000,000 acres or more should receive a unanimous vote. Being large, they embody not one but many values that are recreationally significant. Their very scarcity and the imminence of ruinous exploitation makes them of utmost value. They are absolutely irreplaceable and only Federal action can save them. Moreover, only park status would give legal guaranty against commercial pressure to exploit them. Shame upon any standard bearer so narrowly dogmatic as to stand in the way of the perpetuation of any one of these last precious bits of our primeval American heritage. If we must in this century develop the last twenty million acres of a two-billion-acre wilderness in order to sustain our civilization, then that civilization will surely crumble in the succeeding century.

For standards of selection, when considering areas not accounted for above, let us go back to the social or human-need basis. But proof of need is the increasing pressure on the existing parks. The logical answer is more, not less, park area. Use is demonstration of need, and since more parks are required to satisfy the growing need, it would be hallucination to believe that creation of more parks would be a locking up or withdrawal of resources. Areas more valuable for the satisfaction of national recreational needs than for anything else should be established as parks.

Consider the lava cones of the Pacific Northwest, Mount Adams, Mount Baker, Mount St. Helens, Mount Hood, Crater Lake, Mount Olympus, and others. They are all related, all superb, all recreationally rich, yet each is distinctive in its way. They are all more valuable to the people of the United States for recreation than for their timber or their grass. Then why not make them all national parks? Who is the qualified judge to choose between them? Let us draw an imaginary line across Sequoia National Park dividing its big trees about equally. Each half would qualify as a national park though the General Sherman tree would be included in only one of them.

Divide the lava cones of the Cascades in similar fashion. One group would then include Mount Rainier. Surely this would not disqualify the other group as not being up to standard.

I no longer worry as I used to for fear the National Park System will be loaded with inferior areas. Once this was a real concern. Now we have a system of national parks and monuments which in their aggregate set the standard. We have a National Park Service now, and park bills must run a formidable gauntlet of committees. These bills are referred to the Secretary of the Interior, who refers them to the National Park Service. It is next to impossible today to establish a park over unfavorable report of the Department. What if a substandard area should slip in? This would not be calamitous. The failure to save Mount Olympus' forests, the Kings River Canyon, the Okefenokee Swamp, and a host of others just as valuable would be the real calamity. Let the friends of our national parks leave it to the National Park Service to safeguard itself against intrusion of trash areas and devote their energies instead to completing the parks system while there is still time to do it. The inclusion of Platt is not a burden upon our consciences; the failure to save one good example of our prairie grassland should be a very real cause for mental anguish.

The sound and the fury rage around such academic questions as to whether this mountain or that is the best of its kind, drowning out the echoes of the axes that eat their way into the hearts of four-hundred-year-old monarch trees on their slopes. When the argument is ended, neither mountain will be fit for national park status.

## Public Use Policies

By C. G. THOMSON, Superintendent, Yosemite National Park

**E**VEN this thumb-nail sketch requires, for an understanding of the picture, a brief historical background of the National Park Service. Certainly it is necessary to emphasize that the service is less than twenty years old; that at its birth it faced a vague and untraveled road. It had to pioneer an institution new in this or any other government of the world; had no benefit from the errors and successes of others. The Four Guardsmen, Secretary Lane and the three directors, Mather, Albright, and Cammerer, had to elbow rudely for any attention and support in a country preoccupied first with the World War and subsequently its aftermath.

The task they faced was discouraging, to say the least. The parks were all in the West; were practically unknown and unvisited; years previously these great areas had merely been withdrawn from public entry and had become static; enjoyed no formal administration, being protected in the summer-time by some fine army officers and troops, with not even one whole-time clerk in the Department of the Interior in Wash-

ington charged with the sole duty of their administration. The masses of America knew nothing of them: transportation was meager, accommodations primitive or non-existent; and until twenty years ago the average educated American would have exhausted his knowledge of the parks by reciting vaguely that he had heard of Yosemite Falls, Old Faithful, and the sequoia trees. The parks were remote, access was difficult and expensive in money, and more so in time, so that they were accessible only to the well-to-do, the local people, and the carefree vagabond.

The early task of the small National Park Service group was to contrive some administrative order out of bewildering conditions in these far-flung areas; to secure a small personnel; to produce discipline among local groups and individuals living in and near the parks; to conjure out of thin air fairly satisfactory accommodations, roads, trails, and public facilities; to publicize the great value of the parks to the Nation; and to referee, formally and informally, innumerable situations where the long-term necessities of the parks interfered with the real or fancied legal or moral rights of persons and corporations in the parks, particularly those who had pioneered in business in perfect good faith. Driven by a relentless enthusiasm, continuously asking the advice of scores of thoughtful men and women who for two decades have been a bulwark of the parks, and with the support of a small, loyal field-force, the service unraveled most of the tangles, and, in so doing, evolved policies and standards which have withstood the amazing transition of the past fifteen years. From the beginning, the Service has been under extreme pressure. Its birth was almost synchronous with one of the most astounding phenomena in American history; namely, the enormous momentum in the manufacture of automobiles and the construction of highways. Almost overnight the American people surged into the highways, took to camping like Gypsies, flocked into the parks, overtaxing every facility and imposing serious problems of sanitation, water supply, and circulation; in one park alone travel increased 200,000 in the short space of one year. Vacation habits changed almost instantly; people came by auto instead of rail; stayed one or two days instead of two weeks; came by the hundred thousand instead of the thousand; camped out in family groups; wanted cabins instead of hotels; wanted cafeterias instead of dining-rooms; wanted beauty parlors, golf, Swedish massage—it was a different and hectic period.

But the policies established in 1918 stood up under enormous pressure, and stand up today. They can be briefly outlined:

1. The first consideration is the faithful preservation of the parks for posterity in essentially their natural state.
2. They are set aside for the use and benefit of all the people.
3. The national interest must dictate all decisions.
4. The commercial use of the parks, except incidental to the accommodation of visitors, will not be permitted.

5. The grazing of sheep must not be permitted; the grazing of cattle is to be eliminated as fast as possible legally.

6. The leasing of park lands for summer homes is never to be authorized.

7. The cutting of trees is to be limited strictly to necessary construction, the cutting of vistas, and the elimination of insect infestations; and then only under the joint control of administrative and technical authorities.

8. In the construction of roads, trails, buildings, and other improvements, meticulous attention must be devoted to the harmonizing of these improvements with the landscape.

9. Full Federal control is to be secured whenever possible in every park, eliminating state and county authority.

10. Private holdings must be eliminated as rapidly as possible.

11. Every opportunity is to be afforded the public to enjoy the parks; every appropriate method of transportation, private or public, is to be encouraged; all outdoor sports, consistent with the protection of park features and the safeguarding of the distinctive park atmosphere, are to be encouraged. No definition of appropriate recreation has yet been attempted, but in general the service has permitted all of those sports and activities which require participation by the individual—hiking, pack-trips, swimming, mountain climbing, and so forth. Fishing is a major recreation; in the face of the great pressure exerted on the lakes and streams by enormously increased crowds, the best thought of the Service and of the Congress will be necessary to maintain a reasonably good fishing condition in the parks. But the Service has frowned on baseball, ski-jumping, races, and all other sports which are merely spectacular, which require a physical set-up of bleachers or other structures inappropriate in a park, and which merely tend to produce destructive peak loads of onlookers. Hunting is never permitted.

12. The educational use of the parks has been emphasized. Museums, nature schools (both adult and junior), nature walks under competent guidance, and lecture service, are all free; and, as time goes on, unquestionably, this phase of park-use will reach heights now undreamed of.

13. People must have shelter, beds, meals, stores, and transportation. Their provision not being an ordinary Government activity, these necessities are provided by groups of park operators whose types of services and schedules of rates are under control of the Government. Accommodations must vary in quality and price to meet the reasonable requirements of a cross-section of Americans able to travel. Generally speaking, competitive business should not be authorized where a park operator is meeting public requirements. All such concessions should yield revenue to the Government, but not so high as to impose a burden upon the visitor. Contracts are granted for sufficiently long terms to give businessmen a fair opportunity to amortize investments. Operators

may not conduct in the parks types of business merely because they are profitable, but only those required for the comfort and convenience of visitors. All such contracts represent the mutual hopes and ambitions of the Government, speaking for the public, and of the investors. Operators are regarded by us as public utilities, and are subject to practically the same regulation as are the railroads and similar utilities by the Interstate and State Commerce Commissions.

14. For assistance in the solution of administrative problems, the Park Service always has secured the advice of the scientific bureaus of the Government, of the States, of universities, and other authoritative sources. One of the most fixed policies and practices of the Service is the reaching out for the best counsel from specialists both inside and outside the Services to guide the superintendents and other laymen in their administration and in park developments.

15. In publicizing the parks, the policy is merely to encourage Americans to take advantage of all that awaits them in the various parks and monuments. We believe that the life of a blacksmith may be enriched even more than that of a college professor, and yet that a millionaire businessman may find in the parks a quietude and an appreciation not purchasable anywhere. We address ourselves to no particular section or class. In every sense the parks are for America. The parks are not resorts; we try not to ballyhoo. The parks are not designed for promotion, for high-pressure methods.

These are the basic policies. Their interpretations have been widened or narrowed as the park picture has changed with almost kaleidoscopic speed. New conditions have necessitated new emphases. For example, as the wildlife problem has become more involved and difficult—partly because of inadequate boundaries—the maintenance of a balanced fauna has become a highly important and a more articulate necessity. Similarly, the forestry problem has required emphasis; waking to the fact that man's mere presence in an area changes both the fauna and the flora, rousing to the knowledge that the mere suppression of lightning-caused fires provokes new unbalances in the forest and in the meadow, we are coming cautiously but surely to the handling of the forests by highly trained and careful technicians. It is splendid to realize that we have passed—I might better say survived!—the period of intensive development permitted by the recent re-employment appropriations, and that we actually are engaged here and there in restoring former areas of development back to the wilderness. Landscaping has become so paramount in its importance that we now find some of our engineers almost abreast of the landscape specialist in their desire to prevent even the most minute destruction; and certainly some of the park operators have caught the viewpoint and carry on their own work with fine feeling toward the parks as an institution. In our research problems we now avail ourselves of the big fellows in the great institutions, universities, and



so forth. The great hordes of campers have raised new problems, particularly that of the long-term stayer who sets up his canvas for a period of six or seven months; there is a sharp division of opinion within the Service today as to whether a charge should not be imposed for camping; the new tendency of the camper to trail a big bungalow behind his car is an administrative headache in some areas. The habits of visitors are in continuous flux. It is impossible to gauge who and how many and for how long people will come this year; the critical are a bit more articulate than heretofore, but the vast majority are highly appreciative of what the parks afford, and by their own attitude have helped us achieve that distinctive atmosphere that now prevails in most of the parks. Fortunately, too, there is a growing tendency of visitors to get off the highways into the by-ways of the parks—the wilderness increasingly attracts them. Those of the parks that can be maintained open are coming into a year-round use which has led to the establishment of a new Service policy to encourage the year-round enjoyment of these great areas. The great momentum of winter sports has contributed to this off-season popularity; appropriate winter sports themselves are encouraged in every way—no other park user can appreciate what the skier sees as he traverses the great white ranges of the winter parks, and the utter quietude of a winter day; but the policy is to encourage not alone winter sports, but the winter pleasure of people physically unfit for such strenuous exercise.

In conclusion, let me emphasize that certain profound convictions are paramount in the day-to-day administration of the parks. First, the fear of over-development is a specter that haunts nearly every move we make; we don't need to do it all now—we are modest enough to leave things for another generation to decide and to do. Our job now breaks down into two elements; namely, to provide for the safety and comfort of the millions who use the parks today, to render them the most kindly service, to contribute all that we can to them. To do this—but always with an almost savage determination that our primary responsibility is to pass these masterpieces down to our children's children, who are going to need them infinitely more and, God knows, are going to know a whole lot more about what to do with them.

## Protection Policies

By E. T. SCOYEN, Superintendent, Glacier National Park

**I**N VIEW of the fact that I am just rounding out thirty-nine years of practically continuous residence covering five of our national parks, I think I can lend some authority to the statement that the word "protection" has been, and must always be, the most important of all words to the national park administrator. Every approved Act of Congress, as well as the published statements of high officials who have directed national parks policy, clearly set out the fact that the national parks must be preserved.

The entire history of national park administration to date shows a continual succession of battles against destruction. It is fortunate that the parks have never lacked eager defenders, not only in Congress and the executive departments, but among the public generally. Ever since the first park was established, the leaders of conservation movements have stood strongly behind the park movement. Looking to the future, we have no reason to expect that these attacks against the national parks and the principles which are advocated and enforced for their protection will diminish, and there are some indications that they will be intensified. Those who have the direction of our parks in their hands must be protectionists above all things.

Looking back twenty years I cannot see where the fundamentals of park protection have changed a great deal. The standards and policies have been expanded to cover many items which were considered to be of no importance years ago and many which were never even thought of until recently. On its face it would appear that the protection of the national parks, although it may be a constant battle, is a simple problem. Such has never been the case. Even today we are finding increasing difficulties in trying to establish definite policies which will adequately protect the parks and at the same time allow a reasonable development so that the public may see and enjoy them.

The National Park System today contains diverse and varied types of exhibits. Some parks are important for one thing and some for another. The question of protection is the same in all of them. The same two principal agencies of destruction are found everywhere. Of these we must first mention man, who may himself deliberately try to break down the safeguards which protect the parks, and either unintentionally or through accident or ignorance, cause damage. In the second place, we have the forces of nature, which are constantly engaged in creating and destroying.

Of the two, man is perhaps the most important problem, as the changes he makes, or attempts to make, inside a park area are artificial and violate the principle of preservation in a natural state. Acts of Congress creating national parks call for preservation and, at the same

time, provide for utilization by man. The earliest of the park Acts—that establishing Yellowstone—states that regulations governing the park shall provide for the preservation from injury or spoliation of all the timber, mineral deposits, natural curiosities, or wonders within said park and their retention in their natural condition. The same Act also dedicates the park as a pleasure-ground for the benefit and enjoyment of the people. In the light of present-day knowledge we know that these two statements are, to say the least, somewhat contradictory.

This contradiction was of no importance until the advent of the automobile. Prior to that time visitors to the park were comparatively few in number, and ninety per cent of those who did come traveled by stages over fixed routes and their activities were confined to the narrow limits of a day's travel by horse and the accommodations provided by established hotels and camps. Protection was quite simple then.

The change which motor transportation brought, not only in the number of people entering the parks, but in their type, character, and method of utilizing the parks, made necessary a new statement of park policy. The definition was made by the Secretary of the Interior, Franklin K. Lane, in 1918, and very clearly, concisely, and accurately states the principles and standards upon which park protection are based.

Three broad principles are recognized: First, "that the national parks must be maintained in absolutely unimpaired form for the use of future generations as well as our own." Second, "that they are set apart for the use, observation, health and pleasure of the people." Third, "that the national interest must dictate all decisions affecting public or private enterprise in the parks." The present policies and standards of park protection are based on these principles. The first two statements merely affirm the expressions of Congress. The third was something new, although it also was thoroughly in accord with Congressional intent.

The earliest attacks on the principles behind the creation of the parks came from those who would exploit the park for private benefit. Thus we have seen such projects proposed as the fencing of Old Faithful in Yellowstone with an admission fee charged to see the eruption. Grazing interests never relax their pressure to make the parks available for the ranging of sheep and cattle, and to prevent the elimination of reduction of permits already in force. Applications have been made to use the water-power, forests, minerals, and practically every natural resource of the parks for personal profit.

Many of these schemes have been strongly backed and victories for the parks have been won only after hard battles. In a few cases it must be noted with regret that the park defenders have lost the fight and damage has been done to the natural features of the parks as a result. As a policy for park protection the problem of exploitation for purposes entirely inconsistent with park principles must ever be our first line of defense.

Although every encouragement is given to people to visit the parks, their presence inside the boundaries produces an important protection problem. Occurrence records of forest fires will show that the majority of these occur near centers of tourist concentration. Unrestricted use by large numbers of people of any area will eventually result in the destruction and elimination of the native trees, flowers, animals, and birds. It is absolutely essential that park policy recognize the fact that areas of intensive public use must be confined to narrow limits and the numbers of such developed areas kept to a low minimum.

There have been a number of cases in which damage has been done with full knowledge of the facts and laws involved, but the majority of these cases arise from carelessness or lack of information. Park areas subjected to public use must be regularly patrolled and carefully policed. The neglected spark of the abandoned campfire or the carelessly thrown cigarette butt too often flame into great forest fires causing destruction in a few minutes which centuries of careful toil by nature cannot repair.

Poaching has always been one of the most important of the protective problems in the parks. As all of the parks and monuments are wildlife preserves, they seem to be especially attractive fields of operation for the lawless killer of wildlife. There is never a day of the year when the park rangers are not alert to their responsibility for the protection of park animals. From my own experience I know that the rangers take a greater interest in this part of their work than anything else. Park policy must always hold firmly to the rule that hunting must never be permitted in the national park, not even for the purpose of controlling a surplus.

The problem of defending the parks from possible damage by man must, in the light of the above statements, be considered as being highly important. For his especial benefit we have established rules and regulations to govern his conduct in the park. These regulations must give adequate protection to the park and at the same time not impose unreasonable restrictions on the park visitor. Enforcement must be strict but not rigid. While a youngster in Yellowstone, I saw minor offenders of park regulations marched five miles from park headquarters to the boundary-line, escorted by a fully armed soldier mounted on a horse. Such things are no longer done. The unintentional offender gets away rather lightly, while the flagrant violator frequently finds the going very rough. The enforcement of laws in the parks has been so well worked out on a cooperative basis between the rangers and the visitors that very few cases ever go to trial.

The educational programs of the parks exert a definite influence towards making man less dangerous. Definite written and oral instructions are given on the prevention of fires and other protection activities. This is on the sound basis that prevention is better than cure. People are taught to appreciate the beauty and significance of the parks and this is one of the surest methods of enlisting defenders. If the only

people ever allowed to enter a park were the true and well-informed nature-lovers, most of our protection problems would vanish.

In contrast to man and his effect on the parks, we really get into deep water when we consider the problem of defending the parks from the inroads of nature's own forces. Fires often start from natural causes and do tremendous damage. Insects probably cause even more damage. In addition there are many other so-called pests and diseases which take their toll. In handling this problem we are faced by the fact that nothing in nature is stationary. We cannot carry on our protection program from the viewpoint that immediately upon the inclusion of a given area in a national park every process of nature is brought to an abrupt halt. Park philosophy must recognize the fact that the world was not completed in six days but that creation is an eternal process.

Our park records contain many instances where interference on our part with natural conditions has produced anything but desirable results. For years we relentlessly hunted down certain species of predatory animals. Soon we were feeding our excess population of what would normally have been their prey. Now we are reluctantly brought to the conclusion that feeding is a mistake and must be stopped.

The principal difficulty lies in not being able to decide just when control should be attempted and when no curb should be applied. Here is a wide field for scientific investigation and research virtually untouched up to the present. I have seen articles advocating that no control of any kind be placed upon natural destruction in the parks. On the other hand, when the recommendations of the various specialists are added, it sometimes appears that the only way to preserve the park is to destroy it. It seems that the proper attitude is to adopt the rule of letting nature take its course and make exceptions when they are considered justifiable.

Against fire we maintain in Glacier National Park an organization of highly trained specialists. Equipment is up to the latest standards. Fire still remains our principal enemy of destruction in the parks.

Park protection frequently fails to reach objectives because of factors beyond control of park officers. In many cases, boundaries are unsatisfactory and do not enclose logical units. It is impossible to build up our wildlife population along the east side of Glacier Park because the winter range is on the Blackfeet Reservation. Here the Indians, under an old treaty right, hunt at all times of the year and slaughter game without reference to bag limits.

Among other things which must be considered as having an important bearing on park-protection programs is that of advance planning. The National Park Service has been one of the pioneers among Government bureaus in this regard. This in itself is definite recognition of the fact that careful planning has a most important bearing on the preservation of the parks. Every move which is made toward developing some park

project results in some damage to its primitive condition. Such work must be studied well in advance to determine if some way cannot be found to avoid doing it in the first place, and, if not, see that the least possible damage is done consistent with the necessities of the case. The real protectionist must be practical and realize that, after all, the public does have the right to see and enjoy the park, though this is no excuse for making too easily accessible all of its treasures.

Finally, and most important, the standards for protection of the parks and the application of policies for carrying these into effect can be no higher and no better than the park personnel. Adequate finance is also important but well-grounded officers in the park can offset many handicaps. Practically all employees must consider protection of the park their main duty. Solution of the many important problems now and in the future is dependent to a large extent not only on the devotion of employees to park ideals but on adequate training and background of experience. The time will soon come when there will be a premium on solitude. Our task is to see that the areas under our charge are maintained in essentially unimpaired form for the use of future generations.

## Wilderness Policies

By JOHN R. WHITE, Superintendent, Sequoia National Park

IT IS a sign of the times that in conservation circles we have been seeking new phrases to express changed conditions. One of those phrases now much used in the national and other parks and forests is "wilderness area." Others are "primitive area," "research area," "sacred area," and so forth. They are used to describe those tracts of land within our national parks and elsewhere which are to be left undeveloped. At least they are to be preserved from those octopus tentacles—highways or other roads—which have been so rapidly extending into the canyons, the meadows, and the forests of our mountain regions.

The expression "wilderness area" is perhaps not etymologically correct, for the dictionary states that a wilderness is a tract of land uninhabited by human beings, inhabited only by wild beasts—even a desert. With us, in the national parks, it merely means an area undeveloped by roads, or at least by roads open to the motoring public. It may be conceded that low standard protection roads may be needed in wilderness areas at the lower elevations; but, in general, the wilderness area is free from mechanical transportation; it is an area where those congenial companions of the trail, a man and a mule, may wander without hearing the roar of the steam, electrical, and gasoline age.

I need not recount to this audience the value of the wilderness, the refreshment, physical and mental, that comes from communion with

Nature in all her moods. I am now concerned with the standards and policies which must obtain in the national parks in order to preserve for all time those values which we find in the wilderness.

From the beginning of the national parks, in creative Acts of Congress and in declarations of policy laid down by successive Secretaries of the Interior, it has been declared that the national parks are, so far as possible, to be preserved in their primitive condition, to be handed down to future generations unimpaired. It has been reiterated that development shall be limited to that necessary for the public enjoyment of the parks, that all forms of commercialism other than those necessary for the accommodation of the public are forbidden.

Under such a definite declaration of policy it might be supposed that it would be easy to establish a standard by which to decide which areas of the park are to be opened by roads, developed in campgrounds, hotels, and so forth. It would seem clear that development must be limited to the less scenic and more accessible areas; that roads might be brought near to the "holy of holies," but not through them. It might be presumed that visitors would be willing to walk a few hundred feet or yards from a parking-place to obtain a view. But after over sixteen years in the Park Service I am not optimistic about the desire of the average motorist for pedestrian exercise.

The policies of the national parks, however, have been built up slowly, largely during the past ten or fifteen years, and in the midst of the intensive development of the automobile age. We in the parks have been like engineers required to build a dam without opportunity to divert the water. We have had to handle the increasing flood of motor visitors in some cases before we had funds, and while we were training personnel, to plan development and protect the wilderness values entrusted to our care. Under such pressure it is conceivable that we have made mistakes. But we have preserved the vastly greater part of our scenic and wilderness inheritance in the national parks; and we are now in many cases able to undo the mistakes of the too hurried past.

It will be easier for me, I think, to illustrate the general problem by reference to a single national park; and naturally I choose the Sequoia National Park, of which I have been superintendent for nearly sixteen years. It is not difficult to state what standards should be applied in designating wilderness areas in the Sequoia National Park which, although created primarily to preserve the groves of big trees, also includes two Yosemite canyons, the Kaweah and the Kern, with magnificent mountain ranges, the main Sierra Crest culminating in Mount Whitney; the Great Western Divide, over 12,000 feet; the Kern-Kaweah Divide, over 13,000 feet and the Kaweah Peaks, of nearly 14,000 feet. The park is divided into three broad general zones: first, the foothills, between about 1,200 and 5,000 feet; second, the heavy conifer belt between about 5,000 and 7,000 feet; and third, that glorious region of

mountains and meadows, lakes, and canyons, between about 7,000 and 14,000 feet.

With these roughly defined zones a wilderness policy may be established which freely concedes all roads necessary in the foothill zone, for access to higher country, and for fire protection, while at the same time preserving large examples of the chapparal or "elfin forest" in a wilderness condition. The policy may even concede a considerable amount of road development in the second zone of heavy forests up to about 7,000 feet, provided that the choicest sequoia groves are not traversed and that the roads are carefully landscaped to prevent scenic damage. But the policy should rigorously exclude roads from the third and highest zone for many reasons: for social, economic, and esthetic reasons; because of the heavy cost of construction and the comparatively short seasonal summer use; because we should look to the future and preserve some wilderness areas for future conservationists to handle; and because temporary practical considerations should not blind us to permanent natural wilderness values. Here I would like to touch on a point presented by Governor Scruham. We should not attempt this road-building now. Then, if the Congress in the year 2000 determines we should have these roads, let us build them, but let us leave some wilderness area for future conservationists to handle. For these and for a host of other reasons we should let nature alone in some part of the little wilderness that remains of the great open spaces that were once the America of the Indians and the buffalo.

Now as to the policies which should obtain within the declared wilderness areas: Granted that roads of any nature must be excluded, just what may be included? Here, I think, we must feel our way. It is certain that we shall need trails, simple campground development with, in heavily traveled areas, even camp-stoves, tables, and comfort stations. We must have small cabins for rangers or caretakers, even trail-side shelters for hikers and campers. Fenced pastures are needed for stock, with hitching-racks to prevent damage to trees and shrubs. I can even concede the presence of hikers' camps like those so well developed in the Yosemite and to a lesser degree in Sequoia, where the unequipped hiker may obtain lodging and meals. If we hold all development to the simplest form and confine ourselves to the use of native materials, there will be little fear of overdeveloping the wilderness areas—provided the roads are kept outside.

Specious reasons are often adduced for building new roads in the mountains. We now have a comparatively good highway to Giant Forest, the summer headquarters of the Sequoia National Park, although by modern highway standards it is below par. I was told by highway engineers, by automobile clubs, in fact by everyone, that the road would not handle the increasing travel to the park; that it was absolutely necessary to build a new 15-mile road on a 5 per cent grade. Time



after time I turned down plans for a new road and just a week or two ago, on January 11, 1936, we had about 900 cars and 3,000 visitors over the road in one day in midwinter; and we have had in summer as many as 1,700 cars with over 5,000 visitors a day over this same road.

On my way to Washington last week I stopped at Fresno to confer with certain men of the Chamber of Commerce who are interested in the contemplated Sierra Way, a proposed north and south road along the Sierra of California from Lassen Park on the north through Yosemite and Sequoia down to where the Sierra runs into the foothills in Kern County. One proposed section of 30 miles or so would cut through the scenic heart of the Sequoia National Park in the Upper Kaweah Canyon, and we of the Park Service have objected to it. One of my Fresno friends who advocates the road said: "Ninety per cent of the people come in automobiles and less than 10 per cent now see the grand scenery of the high mountains which would be opened up by the Sierra Way." I pointed out the error in such a statement. In the first place, scenery cannot really be best seen and enjoyed from an automobile going at 40 to 50 miles an hour; but even granting that only 5,000 people going over our present High Sierra Trail on the 10-mile stretch to Bearpaw Meadow see the magnificent scenery along the route, those 5,000 people would spend an average of ten hours en route on foot or horseback, which totals up 50,000 hours of scenic enjoyment.

Now let us suppose we build a road over that stretch of 10 miles to take the place of the trail; and 100,000 people spend half an hour each driving over the 10 miles; that also gives 50,000 hours of scenic enjoyment. But if we take into consideration the quality of the relative enjoyment of the hikers and the motorists, if we consider the relative physical benefits derived by the hikers or the horsemen, if we consider the relative appreciation possible by the pedestrian or equestrian way as compared with the mechanical way—why, then the balance is tremendously thrown against the road, and in favor of the trail.

Unfortunately, the agencies which want to build roads are usually on the ground and well organized, while those who want to retain the high country undefiled are often at a distance and not always organized, although I pay tribute to such organizations as the American Planning and Civic Association here in Washington, the Sierra Club in California, and others, as perhaps our strongest bulwark against those who merely want to commercialize the parks. But I think that if the man in the field, the superintendent of the park, will, under the general policies of the National Park Service, take a firm stand, he will develop more local support than he at first expected.

I remember some seven or eight years ago attending a dinner and meeting at Big Pine in Inyo County, Calif., under the shadow of the Sierra. It was called by the High Sierra Recreational Association to discuss road-building into the adjacent mountains, to open up new

country and establish more resorts. There were representatives of the resort owners, the packers, the automobile clubs, newspapers, supervisors, highway engineers, and the national forests and parks. Speech after speech was made; road after road was outlined and planned amid great applause. Finally, toward the end of the evening I was called on for brief remarks and I began by saying that I was probably rushing in where angels might fear to tread, for I had been listening for hours to advocates of road-building but wanted to declare myself as unalterably opposed to the construction of a road into the Kern Canyon or into the Upper Kaweah Canyon within the Sequoia National Park. Much to my surprise I received a greater volume of applause than any speaker, and when the meeting broke up, several men who had loudly advocated roads because of their connection with some organization or another, came to me and said that they were glad that I had spoken as I did; and that they hoped the park would keep some place where they could get away from roads and enjoy the back country as they loved to do on a pack-trip.

There are a lot of people, not always organized or vocal, but often influential who, like the poet, yearn for some retreat where they may:

“ . . . burst all links of habit, there to wander far away

On from island unto island at the gateways of the day.

There methinks would be enjoyment more than in this march of mind,

In the steamship, in the railway, in the thoughts that shake mankind.

There the passions cramped no longer shall have scope and breathing space.”

We need to preserve those breathing spaces in the national parks, and we of the national parks are indeed appreciative of this opportunity to be with the members of the American Planning and Civic Association; and we are glad to know that we have the officers and members of the Association behind us in our policies of preserving the wilderness areas.

## Archeological and Historic Sites

### OBJECTIVES

By VERNE E. CHATELAIN, Acting Assistant Director, National Park Service

THE National Park Service, during its twenty years of existence as a separate organization, has given some attention to the problem of national historical sites, especially in the last six years, since the passage of legislation creating the Colonial National Monument and the George Washington's Birthplace National Monument at Wakefield, Va.

Before going into the subject in detail, a definition of our terms might be desirable. What is an historical site? We may think of it in this way: as a place where man and nature have conspired to produce some result of notable importance in the history of the human race. There are two elements that are always involved in the creation of a truly historical site—the physical condition, and man's enterprise and activity. Along any of the great rivers of our continent, the water flowed year after year through the geologic ages down to the period when man made his entrance upon the scene. His contact with that river made it, for the first time, of historical importance to the human race. It takes the contact with man to produce that situation.

In our treatment of historical sites, there is no distinction between the period we call "pre-history" and that which we call "history." The method of study of those two periods in the development of the human race is a thing about which we all have some notions.

The historic period has been distinguished from the prehistoric period, usually on an artificial basis—the presence or absence of written records. Today that distinction is of very much less importance than it once was. As the archeologist's techniques in working with material remains improve, he learns more and more about the so-called prehistoric period, and is able to present us with a better interpretation, constructing with more delicate precision the patterns of the prehistoric era.

I listened with keen interest the other evening to a discussion of the subject of prehistoric man in Florida by a distinguished scientist of the Smithsonian Institution. The thing that impressed me particularly about his talk was the fact that he was able to present us with a well-rounded picture of the customs, language, and complete culture of man's activities in a period for which no written records exist. But no matter whether the period is of pre-history or history, in either case it is the human story that interests us.

Of course, historical sites are of different kinds, and that fact is one of considerable importance to us, particularly in a consideration of the question of what our program is going to be and what selection of sites for preservation we shall make.

There is the type of site where man has come as a colonist, pioneer,

and settler, perhaps to a harbor where geographic conditions are suitable and has made a permanent settlement there, with material remains of a considerable number and kind. Progress has continued, perhaps through several centuries, and in that case there will exist both material objects and written records to illustrate the story of man's activities at that site. That kind of problem is comparatively easy, so far as the evaluation of the site is concerned, but the physical problem of preservation and treatment may be difficult.

Then there is the type of site where the contact between nature and man has been very casual. Two nations or groups may be struggling for supremacy, and their forces may have met on a battlefield. Perhaps no material remains of the struggle are left, and, as a result, only our racial memory of the event perpetuates it in our minds, rather than any material remains associated with the site.

But the site is important, as it may have determined the supremacy of one racial group or nation over another. In the eyes of the student of history, whether the period is prehistoric or historic, the site is still very important. Thus it will be seen that the presence or absence of material remains does not necessarily determine the value of an historic site. And for that matter, the length of time a man remains on a site may not necessarily determine the number of material modifications he makes in the physical site.

Today we can with steam shovels cause a greater change in the physical appearance of a site in a few hours than perhaps generations of men have caused in ages gone by; so that the absence or the presence of material remains is not a safe criterion by which to evaluate an historical area.

What should be the basis of selection in a national historic-sites program? When the National Park Service considered the problem of selecting historic sites, the thing that struck our attention immediately was the fact that the whole existing program of historic-sites preservation was a planless one. We have not, as a Nation, acquired historic sites on the basis of any planned program. This or that interested group has, perhaps, brought particular areas to the attention of Congress, Congress has then yielded and an act has been passed or the necessary Executive Order has been given—with the result that the site in question is acquired. This is the program as the National Park Service inherited it in the reorganization of Governmental Departments in 1933. There was no philosophy underlying it; there was no frame of reference for determining whether one site is preferable to another in the scheme of things.

It seemed that perhaps the best thing to do was, first, to make a list of as many historic sites as we could possibly survey, and then to divide these in separate classifications based on their historical value and significance. So we began to make such a list of sites a few years ago. Many sites have been listed and many suggestions have come to us.

But back of all of this we have been trying to determine just what kind of policy we should use in the selection of historic sites. We have come to feel that our national historic sites should be those which, taken in their entirety, represent a more or less definite sequence in American history. We have sites representing all the different periods of man's development in this new world. These sites present the story of human life on this continent from the earliest prehistoric land-occupation down through the ages to comparatively modern times. Each site is more or less typical of certain stages of man's progress and, taken collectively, they present a more or less complete picture of American History.

This suggested method of selecting historic sites must, of necessity, be only tentative. It may or may not be the right method, but I present it to you here for your consideration.

In the acquisition of historic sites we need a national pattern, so that if the visitor had the time to do it he could pass from one site to another, acquiring an understanding of each area in its relation to the others, thus finally arriving at a more complete understanding of human progress.

Perhaps we should ask, why should we, as a Nation, want to keep them and develop them for coming generations of Americans? Answering: The site is valuable as a means of teaching history. No amount of reading can ever give so full a realization and appreciation of the historic situations with which the race has had to deal as a study of the physical conditions under which it has lived. An historical site is source material for the study of history, just as truly as any written record, and unless we regard it in that light, we fail to realize its true significance.

It is clear that the historian has failed to use this type of source material to the fullest possible extent. Very frequently history is written by men who have never studied on the ground the physical conditions which have moulded human development. The Middle Westerner who has seen a great many of the pictures relating to the story of the founding of Jamestown, and who may have read widely on the subject, still can never have a clear conception of what occurred at Jamestown until he goes there. The physical site must be used just as any other source material, making due allowance for the changes or alterations that the passage of time may have caused in the physical record; in other words, the physical site must be critically used, in the same manner as the written source. There is no more effective way of teaching history to the average American than to take him to the site on which some great historic event has occurred, and there to give him an understanding and feeling of that event through the medium of contact with the site itself, and the story that goes along with it. That procedure is basic in the national parks program for historic sites.

A national program of historic sites is a program that ought to comprehend the activities of all of us, no matter whether we are handling the site under Federal auspices, state auspices, or, perhaps, under some

private association. As a matter of fact, if we look at it in that way, our task is to do a general job of planning, to look at the whole problem, and then to fit the individual problems of the Federal Government, the State, and private associations into whatever niche they logically should fall.

The result will depend upon a great many things. It will depend upon the resources of the various States and of the Federal Government itself or the resources of private associations whose strength will, in turn, vary a great deal from locality to locality, according to the wealth and energy of the community involved.

That fact is recognized in the Act for the Preservation of Historic American Sites, which was enacted by Congress and approved by the President last August. The Act contains a very flexible working arrangement for the treatment of the national historic sites problem in all its aspects. It authorizes the Secretary of the Interior, acting through the National Park Service, to make a nation-wide survey of historic sites, to be classified on the basis of their national or local importance, and as far as possible, for the distribution of the load of work through the most appropriate agencies which must necessarily deal with it.

A good deal of attention needs to be paid to the problem of the treatment of the site after we have obtained control of it. Methods of restoration and treatment are almost as numerous as there are people to carry them out. There certainly is no general agreement when it comes to the question of the proper policy to follow in treating a particular historic site. Well-meaning people frequently get control of a site, and immediately propose some plan for handling it, which, if carried out, would ruin the very things they wish to safeguard and to exhibit to the people.

Proposals for restorations, for the introduction of roads, and for accommodations for visitors would oftentimes spoil a site so badly that its original character would be entirely altered, and its historical importance consequently lost. The safe principle in handling historic sites would seem to be that of trying to bring them back to a condition as nearly as possible to the condition they were in at the time when the historic event took place, which is the object of our control of the site. If we are going to tell a story of a definite period of time, then we ought to get the site in as nearly as possible the condition which will make possible the covert telling of that story.

A site like Jamestown is an excellent example. Excavations have been carried on there of an archeological nature and certain remains and artifacts have been uncovered, but the problem as to proper treatment of the site is very complex. We discover that if we are to restore Jamestown as of a certain time period, we must necessarily sacrifice every other time period in the presentation of that story. We cannot construct a restoration of the year 1650 without necessarily ignoring a possible restoration of the year 1700, and so on.

Perhaps the better thing to do is to enter on a formal museum program, and by means of models and objects of all kinds of visual aids to the visitor to tell the whole story by means of these things and thus not to destroy arbitrarily a large part of the story in making a restoration of a single time period.

At Yorktown, we selected a time period because it seemed almost compellingly necessary. That may be an exception to the rule. We have selected the year 1781 as the period to emphasize to the visitor who goes to Yorktown. There he will see a battlefield, a story on the ground as of a particular historic event.

Finally, we come to the question of the National Park Service function in a national historical program. We are forced to adopt a certain attitude, though many aspects of the situation are not exactly to our liking, as in many cases we would have looked more carefully into the facts and would have taken more time to study the problem before taking over certain tasks and certain sites.

Historic-site work all over the country needs more attention. Tremendous interest has been aroused in it and there is at present a great deal that needs to be done, but which cannot be undertaken because of inadequate resources; yet it is a fact that much is being done, even with a program that had to be thought out hurriedly and put into execution in the emergency through which we have been passing.

### NATIONAL PARK SERVICE IN THE FIELD OF SOUTHWESTERN ARCHEOLOGY

By JESSE L. NUSBAUM, Superintendent, Mesa Verde National Park, and Former Director, Laboratory of Anthropology at Santa Fe, New Mexico

**I**T IS stimulating to get back here again, and to return to full-time duty with the National Park Service. I have been on detached service for nearly six years with the Laboratory of Anthropology, at Santa Fe, New Mexico. During this period, I have aided the Service and the Department of the Interior as Consultant in archeological work. It is nice to be out under the blue skies and in the open spaces once more.

Mr. Chatelain was speaking of civilization, just what civilization constituted in the beginning, and I am reminded of the statement that Mr. Edmund Burke made some 150 years ago. It is, perhaps, the briefest, most pertinent, and most comprehensive statement of civilization that I know, namely, "that civilization is a contract between the great dead, the living, and the unborn."

The field of the archeologist pertains solely to reconstruction of the history of man prior to the written record. This he does by interpretation of man's material remains, such as art, architecture, and artifacts, on the basis of which the pre-history of mankind is projected and established. Thus is the gap bridged between the great dead and the living.

Archeology constitutes a very large and important field in the Southwest. There are probably few areas in the world that have a greater concentration of ruins than the Southwestern part of the United States, principally New Mexico, Arizona, Southern Colorado, and Southern Utah, with the adjacent sections of Nevada, the extreme western parts of the Panhandle of Texas and Oklahoma, including adjacent peripheral areas of northern Mexico.

This area has such abundant archeological resources that people generally did not realize their significance and value to science for a long time, and some have not yet. Lacking appreciation, "Sunday-digging" by commercial exploiters became a popular pastime. When Federal and other scientific agencies purchased archeological materials from these pot-hunters, as they did for museum display, they thoughtlessly stimulated a greater activity on the part of unscientific diggers. Control of unlicensed activities has constituted a very serious problem over a long period of time. The "Act for the Preservation of American Antiquities" was passed by the Congress in 1906, but there was no enforcing agency behind it. The situation was, and largely remains, comparable to that prevailing during the prohibition period, when we had a prohibition act which was practically impossible to enforce effectively.

When Director Cammerer, of the National Park Service, told me I was to talk for about fifteen minutes, he assigned the subject of "The National Park Service in the Field of Southwestern Archeology." The National Park Service is not a primary agency to establish the archeology of an area, but rather to assemble and make available through ranger service, through museum and educational activities, whatever facts have been established by research of competent scientific agencies.

Archeology is the primary or a secondary field in nineteen national parks and national monuments of the Southwest. Mesa Verde is the only national park in the whole system that has been created by Act of Congress specifically to protect and preserve notable cliff dwellings. Grand Canyon National Park has a large number of small ruins. It has a modest archeological museum, established adjacent to an excavated ruin. Here, members of the educational division present the story of man in the Grand Canyon area. There is a museum in the Petrified Forest National Monument, in which the limited archeology of that area is presented. The museum at Aztec Ruins National Monument is devoted solely to archeological materials of that area.

Originally, at Aztec, the museum was established in a well-preserved, connected series of rooms within the ruin. If it were practicable to leave archeological materials in the positions of their finding, that would be the ideal method of presentation, but unfortunately, materials cannot be properly safeguarded under these conditions. Recently a new, modern museum has been established at Aztec to overcome objectionable features of the earlier method of display.



Museum service has long been developed at Mesa Verde. The Mesa Verde Park museum, first in the National Park Service, was established through the generosity of interested friends, and in the absence of Federal appropriations for this purpose. To insure permanent preservation of important archeological materials, museum housing and equipment is essential.

So, as we look back in time to the Southwest, I am going to review Park Service history at Mesa Verde, because of the three special problems which are continuously before us in archeological areas: first, the protection of the ruins from vandalism; second, their preservation, including maintenance and repair; and third, their demonstration and interpretation for the visitor.

The problem of protecting the ruins from careless and thoughtless visitors stimulated the establishment of protective ranger service. I shall not attempt a detailed account of the damage suffered by the ruins prior to the jurisdiction of the National Park Service in this area, and prior to the establishment of ranger service.

The problem of preservation of ruins, so that their character shall not be modified or altered, will perhaps always remain a difficult one.

Last year at Mesa Verde, under a special grant from the Public Works Administration, a ruins survey was initiated, that had as its purpose a precise recording of all features of the ruins by means of maps and photographs, so that they could be maintained unaltered. The records of this survey will function as a control for all future maintenance work. They give a precise and complete picture of the character and position of every structure and feature of a ruin, with respect to the terrain of its location. Additionally, this fund permitted stabilization and repair of important structural features in certain of the major cliff dwellings most visited by the people, thus insuring their preservation over a long period of time. In some cases, limited restoration has proved to be essential. It should always conform to the pattern, lines, and character of aboriginal workmanship; never be extended beyond that necessary to under-pin and strengthen walls and structural features, nor should it so exactly match aboriginal work as to confuse the public mind as to its legitimacy.

Protecting the ruins from the careless or thoughtless acts of the public visitor prompted the regulation that visitors shall not visit ruins unless accompanied by a park ranger. Careful selection of rangers for this purpose from properly qualified college and university eligibles, majoring in anthropology, resulted in the establishment of an informative educational ranger-guide service which has been universally commended by visitors.

Interpretation of the ruins for the public has become an increasingly important function of the educational ranger service. Guide service through the ruins is supplemented by the Park Museum, where organized

exhibits of cultural material found in the ruins are displayed. The third feature of educational service is the daily lecture at the evening campfire, conducted by the superintendent, naturalist, and rangers. Daytime educational and museum service is primarily confined to the human history of Mesa Verde itself, while evening campfire talks briefly review significant phases of the history of man in America, and the definite time, place, and part of sequent Mesa Verde civilizations in this picture.

The establishment of a method of precise dating of ruins in the Southwest has, fortunately, been developed within recent years. The National Geographic Society supported the initial studies of Dr. A. E. Douglass on the fluctuations in annual rainfall as reflected in tree-ring growth of beams incorporated in the construction of prehistoric buildings. Carnegie Institution of Washington and local scientific institutions and individuals assisted in furthering this study, with the result that exact dates were established by Dr. Douglass for more than forty major ruins in the Southwest, largely in Mesa Verde National Park and the national monuments. This chronological sequence, now extended back to the year 11 A. D., may perhaps be carried into B. C. times when beams from early Basketmaker sites in southern Utah, buried by the speaker at the time of their excavation in 1920, are studied by Dr. Douglass.

In considering the pre-history of the Southwest after the introduction of agriculture in the early centuries of our Christian era, we must conceive of civilizations dependent primarily upon corn—actually subsistence farmers cultivating small fields. Continued occupation of these areas depended on the sufficiency of seasonal rainfall, a factor which fluctuated widely in this semi-desert region from year to year. Homes were shifted to new localities as periodic local droughts prevailed, and this, in part at least, accounts for the more than 15,000 ruins already recorded by three institutions in southwestern archeological surveys. The greatest drought in the history of the Southwest, established by tree-ring studies as extending from 1276 to 1299 A. D., abruptly terminated prehistoric occupation of Mesa Verde.

The most important ruins of the Southwest are largely incorporated within Mesa Verde National Park and thirteen national monuments. Time permits me only to name, locate and describe briefly the principal features of the latter.

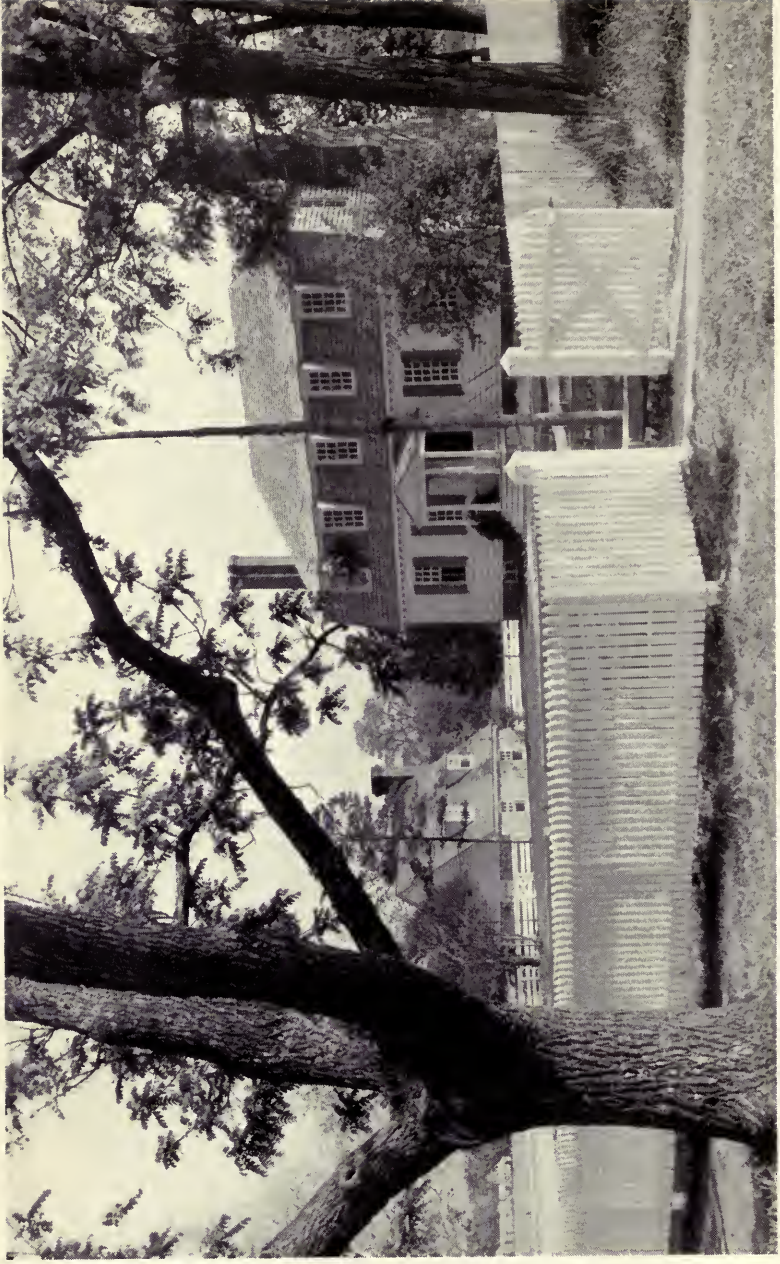
The Chaco Canyon National Monument, New Mexico, comprises eighteen major ruins and innumerable small early sites antedating the classical period of great-house development. According to the tree-ring chronology, the classical period extended approximately from 900 to 1300 A. D. Aztec Ruins National Monument, New Mexico, is one of the great house Chaco type ruins, that was later occupied by Mesa Verde people.

Bandelier National Monument, New Mexico, just westward of Santa Fe, comprises the principal concentration of archeological remains within



Cliff Palace, an excellently preserved cliff dwelling and one of the most important ruins of Mesa Verde National Park

Photograph by George A. Grant  
Courtesy National Park Service



Moore House Group, Colonial National Historical Park, a restoration which interprets the Yorktown Colonial period  
Courtesy National Park Service

the Pajarito Plateau. Tree-ring chronology indicates that limited occupation of structures within these ruins continued up to fifty years subsequent to the advent of the Coronado Expedition in 1540.

Gran Quivira National Monument in the lower Estancia Valley, southward of Santa Fe, in addition to its prehistoric remains, contains the ruins of the Franciscan missions erected there in early historic times.

El Morro National Monument, south and eastward of Gallup, New Mexico, records a sequence of Spanish inscriptions beginning with Onate in 1606, and continuing through a period of more than two centuries. The two large pueblo ruins located on the crest of this mesa show more prominently from the air than any other ruin in the line of T. W. A. transcontinental flights.

Casa Grande National Monument, near Coolidge, Arizona, is headquarters for the administration of the southwestern national monuments. The Casa Grande ruins are splendid examples of the massive classical structures of the Hohokam culture, which predominated in southern Arizona.

Walnut Canyon National Monument, southward of Flagstaff, contains many small cliff ruins.

Wupatki National Monument, northward and eastward of Flagstaff, includes the important ruins at Wupatki, and the Black Falls ruins.

Canyon Du Chelly National Monument, in east-central Arizona, also includes Canyon del Muerto. Together, they constitute one of the most important archeological areas of the Southwest, covering an unbroken sequence of occupation extending from Basketmaker II times through to the modern Navajo Indian, an inclusive period approximating twenty centuries.

Navajo National Monument in northeastern Arizona contains three notable cliff dwellings: Keet Seel, Betatakin, and Inscription House.

Montezuma Castle National Monument, in west-central Arizona, comprises an excellently preserved cliff dwelling, and many minor structures.

In extreme southwestern Colorado, Yucca House National Monument was established to preserve the great massive pueblo of this name.

Hovenweep National Monument, located adjacent to the state line, in southwestern Colorado and southeastern Utah, incorporates many important groups of towers and rimrock ruins in several segregated areas.

More generally in Utah, there are a limited number of cliff dwellings and Basketmaker sites in the Natural Bridges National Monument; also in and adjacent to Zion National Park.

In Nevada there are pueblo ruins in considerable concentration along the Virgin and Moapa rivers, north of the great Mead reservoir on the Colorado River. These constitute the principal archeological remains of pueblo peoples in that State.

The Petrified Forest National Monument contains several large, and

many small pueblo sites, one of which is wholly constructed of small blocks of petrified wood.

Along the eastern slopes of the Guadalupe Mountains of southeastern New Mexico, within and adjacent to Carlsbad Cavern National Park, many archeological sites have been investigated by the Laboratory of Anthropology and by the University of Pennsylvania Museum. In this region, Edgar B. Howard, of the University of Pennsylvania Museum, found artifacts associated only with the Folsom culture, the very early nomadic hunting people of some 12,000 years ago.

In addition to its educational and museum services for public enlightenment in Southwestern National Parks and Monuments, the National Park Service, through its Consulting Archeologist—the speaker in this instance—renders informative and advisory service to all branches of the Department of the Interior, and to scientific and educational institutions contemplating archeological or other scientific investigations on lands under the jurisdiction of the Department, or engaging therein under permits granted by the Secretary. The conditions of scientific permits conform to the Uniform Rules and Regulations described by the Secretaries of the Interior, Agriculture, and War, to carry out the provisions of the “Act for the Preservation of American Antiquities.”

It is a pleasure and a privilege to come back here and tell you something of the work of the National Park Service in the field of southwestern archeology, with which I have been associated for nearly thirty years.

### HISTORICAL METHODS

By B. FLOYD FLICKINGER, Superintendent, Colonial National Monument, Yorktown, Virginia

**A**LTHOUGH many areas and sites, mainly archeological, under the provisions of the American Antiquities Act of 1906, had been made national monuments by the Federal Government, the creation of Colonial National Monument, to include three areas of major national historical importance and significance—Jamestown, Williamsburg, and Yorktown—in 1930, and the addition of professionally trained historians to its staff in 1931, marks very definitely the entrance of the National Park Service to the administration of historic areas as one of its important functions. The consolidation in the summer of 1933 of all historical and archeological areas administered by other departments in the Department of the Interior, to be supervised by the National Park Service, placed our organization in a position of national leadership in this work.

Before attempting any discussion of historical methods in any particular area, two fundamental questions must be considered, because upon the answers will depend not only the methods, but also the nature of the whole development program in our historic areas.

(1) What is the function of historic parks and monuments in a national park system?

(2) Once the objectives of the whole national historical park program are determined, what then are the aims and purposes of each area in the system?

In answer to the first question, the historical program of the National Park Service endeavors to present and to interpret the broad aspects of American life and development by means of a series of significant sites and areas. Our fundamental concern is that of telling the story of American history, or, in other words, interpreting the American scene. We seek to vitalize, to revivify, to revisualize and to make dynamic the main events and trends of development that have made our Nation what it is today. It is then apparent, in answer to the second question, that each area in the system has its own special story to tell as its part of the whole story of American history. This story is not a local or unrelated story. It must be connected with both antecedent and subsequent events and happenings in other places at other times.

Obviously, the major objective, or main function, of Colonial National Monument is, by means of the areas of Jamestown, Williamsburg, and Yorktown, the historic remains in these areas, and such restorations and reconstructions as may be added, to unfold the story of the establishment of the first permanent English settlement, of the development of Colonial life in Tidewater Virginia, and of the culmination of the Colonial life in the Victory at Yorktown. Other areas tell the story of French and Spanish colonization, and still others tell the story of the American Revolution leading up to Yorktown.

In order to attain our objective and properly and adequately to organize our historical studies, it is well to note three distinct phases of our problem. If no other activities were ever contemplated or attempted, our first obligation, in accepting the custody of a historic site, is preservation. However, our program considers preservation as only a means to an end. The second phase is physical development, which seeks a rehabilitation of the site or area by means of restorations and reconstructions. The third and most important phase is interpretation, and preservation and development are valuable in proportion to their contribution to this phase.

The first and fundamental step in organizing the historical program in an area is the determination of a comprehensive and accurate history of the area, and then the selection, in order of importance, of the different parts of the whole story, so that there may be a basis for the selection of objects for physical development. Provision must then be made for a complete program of general research concerning the whole story of the area, and also for special study and research on particular objects and problems.

At Colonial National Monument, our general research program has

included such items as the *Virginia Magazine of History and Biography*, the *William and Mary Quarterly*, *Tyler's Quarterly*, *Hening's Statutes*, and the *Calendar of Virginia State Papers*. Studies of these important Virginia historical materials have been greatly simplified and facilitated by the publication of Dr. Swem's Index. The official records of the Colony, and of the State of Virginia, such as the Journal of the House of Burgesses, have been combed for pertinent data. Bibliographical work on Colonial Virginia in general, and Jamestown and Yorktown in particular, is a continuous process. As each item is examined, a notation is made of the extent, nature, and value of the material. Items of immediate use and importance are copied, placed in our historical files, and then indexed as part of the master index.

At Jamestown Island, which covers over 1,500 acres of low-lying land on the north bank of the James River, our problem is the study of a civilization that has come and has vanished, leaving behind very few visible remains. In order to determine, as far as is humanly possible, the story of Jamestown, we are now busily engaged in an archeological program which is revealing, one by one, the interesting foundations and artifacts of the once important capital of the Colony of Virginia. While the archeologists have been busy with spade and trowel, to determine every evidence and vestige of man's occupation as written in the ground, the historians have been diligently studying the documents relating to Jamestown and constantly searching for new source materials. Last year, extensive research was conducted in seven of the leading libraries in the United States. This study, however, will not be complete until our historians have an opportunity to work in England and Europe. It is earnestly hoped that such provision will be made soon. Special studies, on the Indian background, and on artifacts such as clay pipes, pottery, bottles and bottle-seals, and ironware, are being pursued by the technical staff. The architects are faced with the almost never-ending task of making measured drawings of each foundation and of studying and interpreting these foundations in the light of the data revealed by our research in seventeenth- and eighteenth-century architecture in America, as well as the English background. Jamestown is an outstanding example of the combination of documentary and archeological research, with each method both complementing and supplementing the other. This study, when completed, will reveal the extent and nature of "James City," beginning with the first settlement in 1607, traced through the successive towns built after several destructive fires, and ending with the last town burned in 1698. The data disclosed by this research will be presented in a series of models, depicting the development of the town, which, when incorporated in a museum program properly displaying the artifacts, will tell the story of seventeenth century life as it was lived in Jamestown and the surrounding country.

At Williamsburg, the successor to Jamestown as the capital of



Virginia from 1699 to 1779, and where the flames of the Revolution were kindled by Patrick Henry and his associates in the decade from 1765 to 1775, the development known as the Williamsburg Restoration, sponsored by Mr. John D. Rockefeller, Jr., is now nearing completion. Since the Federal Government has no holdings in the Restoration area, nor has it taken any part in the work there, I shall pass on to the Yorktown Battlefield where the major portion of our activities have been under way for five years. Out of the total authorized area of 4,500 acres, the Government now owns 4,000 acres, half of which has been developed and opened to visitors. It is needless for me to say that the primary interest at Yorktown lies in the very picturesque Siege of 1781 which resulted in the victory for Washington and his Allies, virtually terminating the Revolutionary War and winning for us our independence. In addition to the military history of this area, Yorktown offers a very important story as a Colonial seaport. Superimposed on the Colonial and Revolutionary stories is that of McClellan's Peninsula Campaign in 1862. The Civil War aspects of Yorktown, being part of its historical heritage, are not being overlooked or neglected, but are being treated as of secondary importance.

One of our first research projects at Yorktown was a study of its social and economic background and a determination of the physical appearance of the area from the time of the first settlement in 1631, through the period when it was the leading southern port, and more especially in 1781 when it became one of the most famous and sacred places in American history. Not only the town itself, but near-by sites, such as the magnificent Colonial plantations of Bellefield and Ringfield, have been studied in order to get the full picture of the period we are seeking to commemorate by our Monument. A very extensive program of documentary research has taken us into the priceless York County Court Records, covering the Deeds, Wills, Inventories, and Orders, dating back to 1633. The complete insurance records of the Mutual Assurance Society of Virginia have been thoroughly examined and photostatic copies made of every policy covering houses in Yorktown and vicinity. In addition to many social and personal items, the files of *The Virginia Gazette*, established in Williamsburg in 1736, have yielded much shipping data which have been invaluable in piecing together the commercial background of the town. Our research work has not overlooked such source materials as old letters, diaries, and journals, both privately owned and in public archives, an excellent example being the letter books of William Reynolds, a prominent Yorktown merchant prior to and during the Revolutionary War.

As at Jamestown, the documentary research work is coupled with archeological excavations on many of the town lots to determine their various occupancies. These studies have already resulted in the restoration of two of the remaining twelve original structures and the recon-

struction of six structures on the old foundations. The information and artifacts yielded by the excavations and that revealed by the written records is the basis for our museum program to consist of models, artifacts, charts, and diagrams.

Interesting and absorbing as is the Colonial story of Yorktown, the Siege of 1781 is of major importance, and consequently has received the most attention. Based on diaries and journals, of which there were many kept by American, French, British, and Hessian soldiers, orderly books, letters, official reports, and maps, the full and accurate record of day-by-day happenings has been compiled by our historians. In order to relate this story to the terrain over which the events transpired, so that its successive stages might be unfolded on the ground, many special physical development problems presented themselves. The main battlefield roads, most of which have, for many years, been lost in tangled, wooded areas, have been identified from contemporary military maps and by field studies which revealed traces and remains; some have already been opened and are now being used by our visitors. Old alignments, curvatures, and grades are being very strictly adhered to. No modern road material is being used, the surface treatment being what is locally known as marl. Locations of the various encampments and headquarters have been based on documents, maps, and field study, and these sites are being reclaimed and made accessible to the public. Very simple markers of Colonial design tell the story as our visitors travel over the old battlefield roads or walk along the old trails.

After the successful termination of the siege for the Americans and French, their trenches, batteries, and redoubts were leveled, and the land put back into cultivation, so that when we began our work in 1931, there was very little, if any, evidence remaining of the offensive operations. Following a policy of sample or type restorations, our organization sought to bring back at least one of each fortification and earthwork employed during the Siege. A section of the Grand French Battery and the redoubt garrisoned by the Royal Welsh Fusileers were selected. After studying all of the documentary material in our files, archeological investigations of the sites disclosed their exact locations and such details as gun positions and powder magazines. This information, coupled with data taken from eighteenth-century artillery and siege manuals, has made possible an exact reconstruction of these military objects, as well as of the gun mounts. In conjunction with this work is the reconstruction of the artillery parks located behind the lines.

Without the naval victory of Admiral De Grasse over the British fleet off the Virginia Capes, and the cooperation of the French fleet, the military victory of October 19, 1781, would not have been won. The naval story must be included to complete the picture. The official correspondence of the French and British naval officers and copies of naval maps have made a detailed account of these happenings possible.

Salvage operations by a diver in the sunken British vessels on the bottom of the York River yielded a wealth of naval objects and many pieces of ship structural material. Research in naval architecture has enabled us to incorporate the objects and materials in a reconstruction of a gun deck of a frigate of 1781. In this setting, the naval part of the Siege of Yorktown and the maritime history of the Colonial port is presented.

I trust that I have given you some conception of the absorbing and fascinating work involved in gathering together the fragments that remain of a colorful and significant chapter in our national history, and in piecing them together so that the bygone days will live again. We cherish the hope that Colonial National Monument, as well as all of our historic areas, will serve as a link to bind the past to the present and be a guide and an inspiration for the future.

### ADEQUATE PRESERVATION AND DEVELOPMENT OF AMERICAN BATTLEFIELDS

By BRANCH SPALDING, Superintendent, Fredericksburg and Spotsylvania County  
Battlefields Memorial National Military Park, Fredericksburg, Virginia

THE preservation of battlefields is one of the major problems which the National Park Service has faced in the past three years. In that space of time the Service has been charged with custodianship of twenty-one battlefield areas of national historical importance, representing virtually all the major operations of the War between the States and many of the American Revolution, among them being Antietam, Fredericksburg, Shiloh, Chattanooga, and Petersburg; and King's Mountain, Moore's Creek and Guilford Court House. It has approached the preservation and development of these fields as fundamentally an educational problem, one involving instruction of the American people in their own history. This does not mean that the recreational function of a park is excluded. The teaching of American history to Americans is held as a regnant object in the preservation of battlefields. Memorialization is not overlooked as an important object, but it is believed by the National Park Service that the most effective way to memorialize the epic deeds of our forebears is the way of sound instruction in the how and wherefore of those great events with all of their inspirational quality.

Thus we have the National Park Service engaged in a new public educational experiment: the teaching of military history through the terrain on which it was enacted, rather than through the printed page. Needless to say the first step is a thorough, sound, scholarly research as to the historical events which constitute the *raison d'être* of the park.

The ultimate purpose of a national military park being what it is, all

preservation and development take character accordingly. A field is left open or reforested according to the demand of this narrative or instructional purpose. The purpose is usually served best by preservation—or restoration, as the case may be—of the original scene. In many instances battlefield areas which, at the time of the War between the States, were open fields are today found deep in woods. Where the original features of the terrain acted as a determinant tactical factor in the battle, intelligent grasp of military operations by the average layman demands that such areas be deforested.

An instance in point is the ground in front of the famous Bloody Angle of the Spotsylvania Court House Battlefield where the Federal forces under General Upton stormed and took the Confederate entrenchments in one of the most brilliant assaults of all military history. At that time the terrain in front of the Confederate works presented an open field extending 200 yards toward the Union position and falling off to a shallow wooded ravine. This obviously was a most favorable situation for massing troops for a surprise attack. To Upton's left there was open ground extending all the way to the Federal position, about one mile. Over that area troops, under General Mott, were to advance to the support of Upton. Being in plain view and excellent target for the Confederate artillery, these troops never arrived at their objective. Upton succeeded in his duty and his reputation was made. Mott failed, and the prestige of his name was impaired. Today on Upton's sector the woods reach completely up to the Confederate works, and on Mott's front up to within 100 yards of the Confederate line. For the untrained visitor on the Spotsylvania Court House field to understand adequately that battle—to understand why Upton succeeded and Mott failed—the original scene must be restored, the forest growth removed from these erstwhile open fields, and thus a determinant factor put back.

Again, in other areas reforestation is required. For instance, at the point where General Meade broke the Confederate line in the Battle of Fredericksburg, December 13, 1862, a triangular copse of woods projecting across a railroad track played a critical part in shaping the course of the battle. Today that bit of woods has vanished and should be restored.

Nature's work in the years since the wars has been both good and bad for our purpose. Whereas woods have sprung up to obscure the pages of this book of the terrain in which the American is invited to read the military history of his Nation, these same woods have prevailed in a conflict with one of Nature's destructive forces, erosion. Hence we have many remains of infantry and artillery earthworks which would not otherwise be found lingering on battlefields now to tell with precise accuracy their story of armed struggle in America. The Park Service exercises the greatest care in the treatment of these remains. There is no instrument so valuable as earthwork remains for ascertaining specifi-



The Mansion and Well-House from the rear, showing the entrance road and English boxwood at Wakefield, Virginia,  
the George Washington Birthplace National Monument

Courtesy National Park Service



Wildlife Conservationists are emphasizing the importance of saving our North American aquatic bird-life

Photograph by the Biological Survey  
Courtesy *American Forests*

cally both the where and the how of action. Needless to say, when tree growth or other vegetation is removed from such remains, a thorough job of sodding is done to carry on its preservative function.

On fields where entrenchments played a major part, it is important that the visitor be provided with some aid to understanding their construction and general appearance. It is indeed impossible for any but students of the subject to look at the low running ridge covered with grass or trees, found on a battlefield today as remains of a trench, and to visualize its appearance at the time when men in the blue and the gray grappled for possession of it. The Service is not launching into any sweeping program of restoration to meet this need. That would involve difficulties of maintenance as well as initial cost, artificiality, and incongruity.

On the other hand, a system of sample restoration serves the instructional purpose and does not entail any of these difficulties. On the Petersburg Battlefield a complete earth fort, of the American Civil War type, will be restored; on the Chancellorsville Battlefield one or two emplacements for field artillery will be rebuilt on the spots where they stood during the battle; on the Spotsylvania Court House field sections of two types of infantry entrenchments will be restored in all the highly developed detail of technique of that stage of the war. Since it was on this last field that the intricate modern trench warfare had its beginning, special emphasis is given to earthworks there. Along with sample restorations, other instruments are used to aid the visitor's imagination, such as actual war-time photographs and sketches of the works, contemporary descriptions, and miniature models. In Fort Harrison on the Richmond Battlefields, an 1865 photograph of a case-mate gun position has been mounted by the remains of the emplacement as near as possible to the spot where the photographer stood to take the picture. Thus the visitor may look at the image of the work exactly as it was in battle and at the same time see what it looks like in remains 71 years after. An original photograph has been erected in like manner by one of the trench restorations on Spotsylvania Court House field. There the visitor may see in the picture the precise war-time appearance of the trench and check by it the accuracy of our restoration.

The system of sample restoration enables the visitor to see at one place or another in the park each type of earthwork used in the battles of that area.

The preservation of battlefields also frequently involves the treatment of houses. The names of many houses are as inextricably woven into the tapestry of battles as those of the fields themselves. One thinks of the Dunn House on the Petersburg field, the Garthwright House at Cold Harbor, the Dunker Church at Antietam, the Widow Tapp House on the Wilderness Battlefield, and numerous others. Where such houses

still stand, of course, every precaution is taken to preserve them. Where they have been destroyed the sites are carefully marked; or, funds and the historical instructional purpose permitting, they are restored. These structures are useful as museums or as residences for members of the park staff; and in some instances are charming reminders of architecture of an age that is past.

Since the story of a battle is, in considerable measure, the story of communications, a major aspect of the work of preserving and developing battlefields is the treatment of roads which were in use at the time of the operations. The method of treatment must depend upon the location, original character, importance of the roads to the battle, and other factors—in brief, upon how they will serve the purpose of historical instruction. Some are opened to traffic, while others are simply marked. The Park Service feels that when a historic road is opened to traffic its original character should be retained in so far as this is compatible with the practical purpose.

Old roads have an uncanny way of vanishing. A generation or two of desuetude renders a dirt road through pine woods in Virginia a scarcely perceptible trace. In developing battlefields it is often necessary to conduct exhaustive research, both documentary and field, in order to establish some of the most important lines of communication. Witness the old Furnace Road over which Stonewall Jackson moved his entire corps across Hooker's front on the now famous flank march which resulted in the shattering of the Federal right flank in the Battle of Chancellorsville; or the road through the wilderness that Crawford's Division of the Federal V Corps followed on the morning of May 5, 1864, moving toward Parker's Store. Both of these have been rediscovered now and clearly indicated with narrative markers, and the Jackson Trail has been opened to automobile traffic.

In the ideal development of a battlefield all roads would be historic roads, and thus there would be virtually no introduction of elements not components of the original or historic scene. This, however, like most ideals, is not subject to complete attainment. The preservation and development of a battlefield for educational purposes inevitably involves a paradox. The region must be made accessible, and yet it must be preserved as it was when it achieved historical importance. The contradiction here is readily apparent, since roads in existence before the battle obviously were not designed with the purpose in view of following through the battle. To meet this situation the Park Service has practiced a judicious tempering of ideals with practicality. It has adopted the policy of a minimum road system supplemented by a complete system of foot trails. Such roads as are indispensable in making the highlights of the historical story accessible to motor traffic are constructed; and for the details of the battle or a thorough study of the field, foot trails are built throughout the area. The foot trail skillfully



constructed is an excellent instrument. It does not alter the historical terrain, and does serve the narrative purpose. Its one disadvantage, the most sanguine of us must recognize: the aversion of pampered children of an automobile age to anything smacking of a little sane exertion afoot. For the story of a battle to be read through the terrain, that terrain must be readily accessible in all its reaches. Else it is like a book locked shut; a complete system of communication is essential.

The recreational function of a national military park is also served well by the system of foot trails. And it should be noted that this function is not an unimportant one. It in no sense detracts from the historical-instructional phase of these parks to give ample recognition to the rich recreational possibilities of the areas. Nature has made most battlefields beautiful. The National Park Service, with its able staff of landscape architects working in collaboration with the field historians, has developed systems of foot trails of rare attractiveness which lead the visitor not only to points of importance in the historical narrative but through woodlands and meadows of consummate beauty. Wading pools and well-equipped picnic grounds have been established along these trails and have proved popular.

All of this development is supplemented by a complete system of narrative historical markers; a series of visitors' contact stations, where properly trained historians are posted to render lecture service to the visitor, and a history museum.

With the passing of the War between the States further into distance of time, also passes a chief difficulty in the matter of memorialization. The new generation is not so enthusiastic about erecting monuments as the old, and this is an aid to the end of both historical and artistic authenticity. A few masterfully executed pieces of sculpture well placed on a battlefield may be highly desirable from every standpoint, but there is always a danger of going so far as to alter the scene and overstep the bounds of art. The Park Service makes a practice of submitting all monuments for the approval of the Fine Arts Commission before permitting their erection.

When, about three years ago, the Service entered upon this program of military historical instruction, it did so with some degree of forbearance and apprehension. Here was a challenge of service to a splendid ideal: that of preserving and transmitting to the American citizen of this and future generations the pivotal events of his rich historical heritage with all their lesson-giving faculty, their inspiration to the practice of those fine rugged qualities of courage, sacrifice, and devotion which characterize the best of American citizenship. And yet this might seem a bit visionary and impractical. There was no positive assurance that the American public wanted such service or could use and profit by it. There was no technique or policy established—it was indeed a field where educational pioneering would be required. However, Director

Cammerer had in his staff one with both the pioneer spirit and the ability in the person of Chief Historian Chatelain, and under his leadership the brief years of experiment have produced results which are gratifying. They indicate that the ideal was veritably an attainable one; that this program of teaching may well become an integral part of the public educational system, even as the public schools and universities. They have held some pleasing surprises for one to whom this American public might at times seem blasé and superficial.

It would seem that the proper technique is at least evolving, and with it grows a sound policy. The increasingly great number of Americans visiting these newly opened areas, and expressing both satisfaction and stimulation, stands as the best endorsement of the program.

## Wildlife in National Parks

By GEORGE M. WRIGHT, Chief, Wildlife Division, National Park Service,  
Washington, D. C.

EDITOR'S NOTE.—Mr. Wright died before he had corrected the transcript of his oral remarks. As a contribution of current interest and a permanent record of Mr. Wright's philosophy we present this article, which we have edited sparingly.

ON THE program today I have heard "Wilderness and Wildlife" mentioned many times. I was proud that so many park superintendents, whatever their subject, said something about wildlife.

I am interested in the whole national parks question. I cannot divorce a park from a wilderness or wildlife area. I think none of us can.

There is something coming up in Washington soon which is of great importance to all of us, and it is in my mind tonight. I am thinking of our problems as they are related to the larger fields. Among the more important national resources, perhaps none is more susceptible to the destructive influences of civilization than wildlife. Today its plight is the most miserable of any of our resources, unless it be the soil itself. I am certain that there is no need to weary you with supporting evidence for that statement. An apathetic national consciousness condemned wildlife to walk the plank. If there is to be a reprieve I, for one, firmly believe it is due to the heroic pleadings of our good friend who is a director of the American Planning and Civic Association, Mr. Jay N. Darling. Heretofore, those who have plead for wildlife have enlisted the sympathies of a few outside of those who were already sympathetic nature lovers. Darling's dramatic appeals have made willing listeners of the people of the Nation. Our President, a good conservationist, giving heed to the wakening consciousness—I might say frankly, listening to Mr. Darling—has consented to call a North American Wildlife Conference in this city which will be held in about two weeks, from the third to the seventh of February.

If there should result from this forthcoming conference a true co-ordination of wildlife interests and the formulation of a sound national plan for the preservation and restoration of wildlife resources, the benefits to national park wildlife will be incalculable. If there is a failure to formulate a plan at that meeting, or some plan to bring wildlife interests together, then our most conscientious efforts to save wildlife in our national parks are bound to end in failure. All we can do is to try to forestall that eventuality.

I am not going to dwell on such specific family problems as whether we can count more sheep in a park this year of fewer elks; why coyotes have grown so lazy that they boondoggle rides in rangers' cars and when they run into cars with the rangers refuse to get out of the road.

It is more timely to consider what part our national parks should play in a national wildlife program and how a planned wildlife economy will benefit the parks. The two considerations are inseparable because there is no such thing as a man-made boundary for wildlife. There is a serious proposal that we should fence all our national parks with a coyote game-proof fence. Not even such fencing would establish a boundary for wildlife, for wildlife does not know boundaries.

The evolution of wildlife-protection ideas has grown with the national parks. We freely admit that wildlife ecology was as little thought of thirty years ago in caring for wildlife in or out of parks, as the roundness of the world was taken into consideration by navigators five hundred years ago. Not only were we without means to protect park wildlife against the ravages of poaching, but we were concerned with an immediate crisis. That was the fact that we had in the parks the remnants of the big game of this country, threatened with extinction. It is no wonder that the park superintendent's first thought was of saving the big game, and he turned to the first immediate practical thing he could do. That was to eliminate the enemies of big game. This was done by those men who, after all, had no possible way of looking ahead to the problem of over-grazing which we face today.

What have we accomplished? I can say, I think, that protection from poaching is adequate. This is a pernicious evil that will never be entirely eliminated. I wish that it could be. Then we could devote our rangers' time and funds to other things. So long as we have parks, the problem will remain. We have, in the main, checked it, nevertheless, except in Katmai and Glacier Bay National Monuments, for which we have no funds, and perhaps in Death Valley. The rest of our areas are at least so safe from poaching that only a few species are threatened by what little poaching remains.

We have realized that the presence of large numbers of people in the parks, and the developments necessary for their accommodation, have some unfavorable effects on the wildlife, as well as sometimes on the visitors themselves. Witness the much publicized bear problem.

In some instances, such as the case of rerouting a road to avoid human intrusion on a trumpeter swan's nesting area, which is a rare species, we have been able to solve the problem. In other cases, we have not got so far. We have to meet these problems through education and the increase of a better understanding on the part of the park visitor. It takes time to teach the visitors to our national parks that they are the ones who are short-sighted in feeding candy to a bear. After all, the average citizen expects more intelligence from a bear than he, as an educated person, has any right to expect. He goes on the assumption that if he feeds a bear two sticks of candy and does not want to give it a third, he is the one to say, "No, no." And he believes that the bear is to be accused of an unforgivable breach of etiquette and lack of appreciation for the piece of candy if it takes all the candy out of his hand and takes the hand with it, perhaps.

You have also learned that our parks were subject to adverse influences before they became parks and since, and that they will continue to be so affected for many years to come. It has been said more than once that Yellowstone was the only park that came to us without alteration or defacement by man. Even that is not true. That first great national park had suffered the influences of man before it became a national park.

We have learned that park boundaries are inadequate. You have heard a great deal of what we would like to do about changes there. We know more than that. We know that if we should, in the millennium, be successful in having all the territorial integrity for the national parks that we would like to have, we would still not have boundaries that would protect us against the adverse influences on the outside or conditions operating on the inside.

There has been some argument as to the justification of various administrative measures that we have undertaken in the parks, and I would like to place before you the philosophy of the National Park Service today in handling its wildlife problems. We recognize that only a few existing evils will cure themselves alone, and careful study has proved that we cannot save a park's wildlife by patrolling the boundaries; for wildlife is upset and thrown out of balance by all sorts of things. We are, therefore, justified in taking such artificial steps to offset artificially caused conditions as we may, in good sound judgment, be able to justify. But wildlife management is a virgin field in the United States. There is no one who knows much about it.

If we are faced with an emergency, we are justified in doing whatever is expedient at the moment according to the full species-value to the wilderness, putting the flora and fauna on an equal basis.

Let us take an example in Yosemite Valley. Due to the presence of civilization, the rock squirrels have become unduly abundant and have tended to drive out other forms as well as to become a pest. The

reason for this is largely due to the fact that man's presence makes a more favorable environment for that species. It is also very likely that the presence of so many people in the valley has permanently banished the normal controls of those squirrels. Knowing this, we think we have the problem analyzed and believe we are justified in controlling those squirrels by means of shooting or gassing.

To take an emergency case, I am thinking of the elk of Yellowstone. The job was to save the elk, and it was for the army or somebody or other to eliminate the predators. Elks feed on the devastated plains, so that the erosion problem is probably the greatest one in the northern part of Yellowstone Park. We know the cure—to get the elks back to their normal condition. What would that be? Can we recover the normal balance of predators? We know that wolves are gone and will never be back. If the last cougar has not disappeared, it would still be fifty years before the handful of those remaining could possibly return to numbers where they could play their normal rôle. We know, too, that the elks are wandering all over the range. We have the very practical problem to face. It will take years to return conditions to normal and to restore the elk to the full range of productive capacity.

In the emergency we must arrange for the predators to control the number of elks to the point where the devastation of the range will cease. That is the objective we seek. If it is wrong, I certainly would like to know it, because I think no one appreciates more than the National Park Service that if it undertakes to conserve a game animal which the conservationists have been breaking their necks to perpetuate for the last thirty or forty years, it is indeed taking into its hands something that is very vital, and it does not want to be by any chance mistaken. We have become conscious of our problems and we are trying to meet them.

What part can we in the national parks program play in the conservation and restoration of our wildlife? First of all, I will discuss the most obvious one to you, and that is the providing of resources for the restocking of other ranges. You must have realized what an important part the Service has played in that capacity in the past. We have a sample of it today in the restocking of the Crow Indian Reservation, and I hope that Dr. Toll, when he speaks of Yellowstone and wildlife, will give you a full account of it, so that you may appreciate what contribution the parks can make to the larger problem.

The second part we can play, it seems to me, is a very vital one. The business of wildlife management and wildlife administration is in its infancy. It is difficult to determine what to do in the areas that have been changed, unless we can see what the area was like originally. It may seem inconsistent, since I have just been talking about how unnatural our wildlife parks are. I might say, by contrast, that they are the most natural of the areas we have to deal with. The wildlife in the

rest of the country has been subject to much more adverse influences. The parks will serve as a valuable base experimental field for the whole planning of the wildlife administration.

Thirdly, the parks have very recently emerged in the rôle of performing for this Nation the task of perpetuating adequate samples, that is, preserving several remaining remnants of the rarer large game species in natural habitat. I did not realize we were contributing in that direction until there came along the Everglades National Park and I saw that here is one distinguishing kind of fauna and flora that could be preserved and given the legal protection which national parks can give to all forms of wildlife.

More recently has come Big Bend. There you have the austral fauna of the Mexican territory as it spills over into the United States. We do not have a good deal of it. We know that, with the completion of that park, there will be that type of wildlife represented.

We did the best we could with the trumpeter swans when we got so far as to get a park to preserve a few swans and to make them safe for the Nation; but then came "Ding" Darling, who made a refuge in Red Rock Lakes Mountain nearby; and between the two, I have high hopes that the trumpeter swan will be saved.

Now I shall come back for a moment to something else—the thing that has been going round and round, as the music does, at this meeting—and that is conservation and recreation and recreation and conservation. You have tried six ways to show that they are one and the same thing. I am not sure everybody is convinced yet.

I came out of the West a conservationist. If I were to go back to the West out of the East, I would be a recreationist, older and much more tired. I do not know why it is more exhausting to become a recreationist, but it is.

I can say in my own mind, surely, that it is logical to place under the Federal Government one agency which has the responsibility for recreational resources. I think you all know what we mean. There are commercial resources of the United States. It seems right and proper that one agency should look after commercial resources, and one agency after recreational resources.

Within the recreational scope would come the guiding and assisting of state and local governments in their planning of recreation, stimulating them to action in the providing of national parkways and in the saving of historic and archeological sites and sites of paleontological and geological importance, and especially the great wilderness areas. But we are looking at the thing hypothetically. We have the National Park Service. Is that not the logical agency to be charged with the responsibility for our recreational resources?

## The Wildlife Conference — A Preview

By JAY N. (DING) DARLING, Des Moines, Iowa

EDITOR'S NOTE.—The Wildlife Conference referred to in George Wright's paper took place February 3-7, 1936. Mr. Darling consented to give us this brief account of its accomplishments for insertion in the ANNUAL at this point.

**T**HE first Federal effort to coördinate the popular and official support of Wildlife Conservation was crystallized in the National Wildlife Conservation Congress held in Washington, D. C., February 3 to 7, 1936. The President of the United States, who issued the call for this Conference, was prompted to take this action by the very evident need of a national awakening to the need of coördination among the numerous but desultory agencies interested in Wildlife Conservation. Something over 36,000 leagues, chapters, clubs, societies and government agencies existing in the United States were, by failure to pull together and unite in concerted action, witnessing a rapid destruction of the continent's endowment of wildlife environment, and the rapid depletion of many of the valuable species. The lack of active support was evident to all administrators, both state and Federal, who sought through Government provisions to advance the cause of wildlife restoration.

The voluntary response to the President's call was indicative of the popular appreciation of the continental need for a unity of purpose and a coördinated program. Two thousand representatives attended. Some were officials, some were from organized groups and a great many were private individuals whose enthusiasm prompted their attendance. The Government of Canada and the Republic of Mexico sent official delegations. States were quite generally represented by Governors or their official representatives. Conspicuous among the attendants was a large group of the scientific personnel engaged in wildlife and biological activities in the North American continent. Controversial and local questions were submerged in the effort to accomplish one major objective; namely, a Federation of continental interests which might sponsor and support constructive policies and projects and combat the heretofore unopposed exploitation and waste of our natural wildlife resources.

To this end all conservationists were given equal voice and equal rights on the floor of the convention.

Two major divisions of the program were conceived by the program committee as contributing most directly to the attainment of the one chief objective. The first division included the scientific forums on all technical problems involving wildlife management. These forums sought to bring to the attending representatives a mutual understanding of their fundamental policies, technique and difficulties. (See published report of conference by U. S. Senate Special Committee on Conservation of Wildlife Resources.)

The second division of the program concentrated all its efforts toward

bringing into being a permanent organization, continental in scope, which might unite the conservationists in a powerful momentum to secure better recognition and more ample support of wildlife needs by the existing governmental agencies, including national, state and international departments. Emphasis was placed by nearly all the speakers on the failure in the past to recognize wildlife as a national and valuable resource. Conspicuous evidence was cited in the failure to include biological and ecological technicians or advisers in the national and state planning organizations, or the inclusion of wildlife activities among emergency projects, and failure to consider the biological consequences of the great national development projects undertaken by the Federal Government.

In brief, an effort was put forth so to organize the wildlife conservationists as to enforce the demand that wildlife be given its relative place in the program of national policies.

To this end a temporary organization, called tentatively the General Wildlife Federation, was decided upon to function as a nucleus pending the time when the various States and provinces, having had time to consider and organize state federations, might reconvene in a second convention to which duly elected representatives of the state federations would have authorized power to act. Regional and state committees were chosen in state and regional caucuses held during a recess of the convention. These regional and state committees were made responsible for the formation of state and regional federations. They were urged to return home and carry on the organization of state units under any basis suitable to the conservationist interests in their regions. No attempt was made to dictate the methods or kind of federation, but it was advised that in such organizations an effort be made to include all branches of conservationists, organized or unorganized, and avoid the pitfalls of factional control which had heretofore stalemated all efforts to form a united Wildlife Conservation organization.

(NOTE:—June 1st, 14 States had reported completion of State Federations. Other States were reporting progress and it seems likely from present indications that by November a majority of the States (25) will have organized and make it possible to call the convention for permanent organization of a General Federation.)



## Wilderness and Wildlife Administration in Yellowstone

By ROGER W. TOLL, Superintendent of Yellowstone National Park

EDITOR'S NOTE.—Roger Toll, when he lost his life in a tragic automobile accident on February 25, 1936, left many valuable reports. This excellent paper on Wildlife in the Yellowstone was probably his last public address.

**YELLOWSTONE PARK** was the experimental laboratory—the proving ground—for national parks, not only in the United States, but in the World. It was the first national park, created in 1872, and for eighteen years it was the only national park. It represented the crystallization of a new idea, a new ideal.

In creating the first national park, new objectives were sought, new policies came into being. In many cases these objectives, which were then expressed for the first time, are now the accepted policies of the National Park Service.

It is a notable fact that the basic purposes for which the first national park was created remain unchanged today, after sixty-four years of use. The public approves of national parks and finds that they serve a definite need in the field of recreation and education and that they are becoming increasingly valuable from the standpoint of conservation of primitive areas. The number of national parks has increased in the United States, and park systems have been established by foreign countries.

The two principal objectives of a national park, which were first stated when Yellowstone was created, remain unchanged today. They are that the area shall be administered “for the benefit and enjoyment of the people” and “to preserve its original condition, unchanged, for future generations.”

Both of these objectives are desirable; both are necessary, and yet they conflict with each other! Complete use conflicts with preservation; complete preservation conflicts with use.

If a national park were to be developed so as to secure the greatest possible amount of present use, its primitive condition would be so changed and altered that the values, which the park was established to preserve, might be impaired or destroyed. On the other hand, if preservation were made the sole objective of a national park, then *no* present use should be permitted.

It has been the policy of the National Park Service to strive to keep a proper balance between these two conflicting objectives: to encourage such present use as may be permitted without impairing future value, but to check use before it becomes destructive. This policy is similar to the “sustained yield” policy as applied to forests.

A proper balance between the two conflicting objectives may usually be reached by asking the question, “What is best for the national interest, present and future?” With that basic policy for a guide, and with

average success in weighing values and predicting future needs, the results are likely to prove satisfactory.

Year by year, we are getting a keener appreciation of the value of wilderness and a clearer realization that what we call civilization is steadily advancing into the wilderness, creating new values, destroying old values. The wilderness is constantly shrinking, shrinking, shrinking. Some of it must be retained!

Three hundred years ago there were but few people in this country, and they were struggling, somewhat precariously, to maintain a foothold along the Atlantic Coast. To the west was wilderness, unexplored and unknown. Gradually the frontier was pushed westward, slowly but steadily. One hundred years ago it had reached the Mississippi River, but the country west of the great river was still a land of perilous adventure, known only by the reports of a few trappers, traders, explorers. Then came the discovery of gold in California. With a surge, the pioneers carried the frontier to its geographical limit, the Pacific Ocean.

Since then, all of the most attractive, habitable, productive spots have been occupied, populated, possessed. Some areas have been set aside as national parks, national forests, and other reservations. With these exceptions, all that now remains of the wilderness are the inhospitable areas where man, under present conditions, cannot eke out a living, either from the soil or from any natural resources. They are the waste lands.

Man cannot subsist on the remaining wilderness under present conditions. But conditions are constantly changing. Irrigation brings water to the desert, the streams are harnessed for power, railroads and roads make areas accessible, and accessibility creates values for natural resources. The wilderness is shrinking and will continue to shrink.

A hundred years ago there was too much wilderness. Present indications are that a hundred years from now there will be too little wilderness.

Some of the wilderness should be retained for its value as wilderness. Some tracts should be turned over to future generations, for them to determine in what ways the wilderness can best serve the public interest.

The preservation of the wilderness must be solved in terms of public welfare. Civilization should advance, and will advance, as long as the people, collectively, are benefited by the advance. But the use, and resulting destruction, of the natural resources of the country, though profitable to a few, may strike a blow to national welfare. Natural resources represent national capital. No individual and no nation can continue to expend its capital assets without approaching bankruptcy. A generous measure of natural resources should be preserved for future need. If the public interest is injured by stripping an area of its grass and timber, then these natural resources should be protected. The public owns these resources and should not release them without first making sure that it is to their best interest to do so. The remaining

wilderness has little of present value in natural resources, and some of these areas should be saved for their wilderness value alone, as well as for other possible future values.

It is well to look back, occasionally, over the past and to see if the policies that have heretofore served as guides will also serve for the future.

Suppose Yellowstone Park were today in exactly the same condition that it was when the park was established in 1872. Suppose you are a planning board and that the park's future is entrusted to you. What would you do?

After a thorough study, you would probably conclude that some of the principal outstanding features of the park should be made accessible to motorists and available to the average citizen, who has a limited amount of time and money for travel. That conclusion would call for some roads, but not too many, and for some hotels, lodges, and camps. You would probably conclude that the reasonable needs and desires of visitors should be met; that only those people should be attracted to the park who find an interest in its features and a benefit from a visit; that other people, not especially interested in the park, should not be drawn there by artificial forms of recreation and amusement such as they can obtain equally well in many other places.

The development that you would decide upon as being best for the national welfare probably would not be so very different from the development that has been carried on over the past two generations. You would change something here and something there. In some matters of policy the different members of your board might hold varying views, but the net result would probably be a recommended development along similar lines to that which now exists. It is a tribute to the judgment of those who pointed out the way, that, standing here today and looking back over the results of past years, we would still recommend a similar type of development.

The number of visitors to a national park is one measure of the usefulness of the park, though by no means the only measure. We would like to have as many people of the country visit Yellowstone, for example, as find pleasure and enjoyment in Yellowstone, but we do not want travel to increase to the point where the park would be injured by the travel and its future value decreased.

Three hundred thousand people visited Yellowstone last year. At that rate, during the next fifty years, the Park will have a total of fifteen million visitors. That is a large number; yet it is only one-eighth of the population of the United States. Making a small allowance for those who make repeated trips in a year or in successive years, it is clear that throughout the country less than one person in every ten has seen Yellowstone, or ever will see it. The conditions are similar with regard to other parks. Would it be in the public interest to make the national parks more difficult of access, so that fewer people could see them?

Surely the answer is "No." All who wish may visit the parks, so long as the future value of the parks is retained. The "yield"—in recreation, education, Americanization—should be as high as is consistent with "sustained yield," but the basic values must be preserved. A park should be used, but it must not be destroyed.

Yellowstone Park has 300 miles of roads. Practically all of these roads were in use twenty or twenty-five years ago, before automobiles came to the park. When the park roads were built, they were well built. They represented the best practice of the day. Then automobiles came, and road requirements changed. Today the roads are being rebuilt on what seems to be the best and most suitable standards for park use today. They are being built so that they will serve for the future, so far as we can safely predict future needs. Old routes are being improved; new routes are not being built. The principal features of the Park are now accessible. We do not want more roads. We want to retain the large wilderness areas that have never been penetrated by a road. There have been campaigns for new roads, and pressure from various interests, but the roads have not been built.

We all know that what is called "development" may sometimes mean "over-development" and that a so-called "improvement" may in reality be an impairment.

Motorists may readily reach Old Faithful and the principal geyser basins, the Canyon, the Lake, Mount Washburn, and Mammoth Hot Springs. This is enough. There are other geyser basins, other beautiful lakes, mountains and streams that they cannot reach by automobile. These places are reserved for those who care enough about them to go on horseback or on foot.

Sometimes we are asked, "How much of the park is developed by roads?" A road alters conditions at the roadside and, to a diminishing extent, as one goes farther from the road. Around centers of population the area may be considered as "developed" or "frequented" for perhaps a five-mile radius. Along most roads the conditions are changed for a relatively short distance; on the average, it is surely less than half a mile on each side of the road. Let us assume that a strip a mile wide is "developed" by a road. In the case of Yellowstone with three hundred miles of road, this would mean that about three hundred square miles of country are accessible to motorists. This is less than a tenth of the area of the park. Nine-tenths of the park is in substantially the same condition that it was at the arrival of John Colter, the first white man to enter the park area.

There are seven large areas of roadless wilderness in Yellowstone Park. The smallest of them contains two hundred square miles. The two largest areas each contain over six hundred square miles. One of these areas, together with the adjacent area outside the Park, is one of the three largest roadless areas in the United States. If you enter these

wilderness areas, you must go on horseback or on foot. You will find trails and a few shelter cabins. You may occasionally encounter a ranger or another wilderness lover, or perhaps you will travel day after day in solitude and silence. The wilderness is there. Those who leave their automobile and go in search of the primitive always find it.

*Wildlife Administration.* Yellowstone is the largest game sanctuary in the United States and has an unusual variety of large species, including buffalo, elk, deer, moose, antelope, mountain sheep, grizzly bear, and black bear.

The ideal form of game administration, so far as the National Park Service is concerned, is to protect the animals but to leave them as nearly as possible in their native condition and with no artificial feeding or other assistance, except when it is clearly necessary.

A national park is not a game farm. There is no effort to secure the maximum possible production of animals or birds. Rather, it is an area in which the natural factors are allowed to operate as freely as possible, and the wildlife is permitted to maintain its natural balance.

During the many years that wildlife has been protected in Yellowstone Park a few species have increased to a point where their numbers are abnormal. Control of these species is necessary in order to prevent further increase. Some of the special cases will be mentioned. It should be noted, however, that game "management" is the exception, and not the rule, in a national park.

Buffalo were native in Yellowstone, but the herd was so nearly exterminated that in 1902 some twenty-three head were introduced to supplement a small remaining native herd. They were given full protection and the herd increased. Some ten years ago it reached a thousand head. Under natural conditions the buffalo would have wintered on the plains, but now they must, of necessity, winter in the Park. Because of inadequate winter range and considerable depth of snow, the buffalo must be fed during the winter months. One of the Park's operations is to cut about one thousand tons of hay each year for winter feeding of the buffalo, elk, and other animals. It is not practicable to increase the amount of hay much beyond this figure, so the size of the buffalo herd must be limited. There was a time when it seemed likely that the buffalo (or bison, to give them their correct name) might become extinct. In recent years, however, many buffalo have been shipped from Yellowstone to numerous zoölogical gardens and elsewhere in the United States. Canada has also built up large herds and now has more buffalo than the United States. Altogether there are more than twenty thousand buffalo in North America, and the species is safe from extermination.

Under these conditions, there is no longer any need or justification for maintaining a large herd in Yellowstone. Perhaps a herd of eight hundred would be better than one thousand. The summer range of the buffalo is high and is remote from lines of travel, and the only buffalo

that visitors see are a few that are kept in a fenced pasture during the summer months. There has been little demand in recent years for live shipments of buffalo, and it has been necessary to slaughter most of the surplus. During the past few years this surplus has been used for relief in adjacent States and for shipment to various Indian reservations. The buffalo was of tremendous importance to the Indians. It supplied them with meat, shelter, clothing. To many Indians, life itself depended upon the buffalo.

A little more than a year ago the Crow Indians decided to start a buffalo herd on their reservation. Some eighty buffalo were sent from Yellowstone and some from the Moesse herd in Montana. The Crow Reservation is an ideal place for buffalo, with excellent summer and winter range. This year we gave them the greater part of the annual surplus. The Indians plan to let this herd increase to about a thousand.

There are two large elk herds in the Yellowstone region: the Southern herd, which numbers some 20,000 or 25,000 head, and the Northern herd, which contains about 11,000 head.

During the summer, the Southern herd ranges partly in Yellowstone Park and partly south of the Park. In the winter, the animals drift to Jackson Hole where they are under the administration of the U. S. Biological Survey and the Wyoming Game and Fish Department.

The Northern herd scatters out over a considerable area of the Park during the summer, but during the winter months it is confined to a small area in the northern part of the Park and the adjacent area north of the Park. Summer range is abundant. Winter range is scarce. The herd has increased, but the range has deteriorated on account of overgrazing and several years of less-than-normal precipitation. Range experts have studied the winter range available to this herd and estimate its carrying capacity at six or seven thousand elk. The present herd is about eleven thousand. A reduction of four or five thousand head is desirable. Rather than make this reduction at one time, it is being extended over several years.

The normal calf crop of this herd is about fifteen hundred. Each winter a part of the herd drifts outside the Park and into open hunting territory in Montana. The number of elk that are taken by hunters varies considerably from year to year, but the average has been less than one thousand, or less than the annual increase.

It is desired to decrease this herd to about seven thousand. The most welcome method of reduction would be by live shipments to areas where elk are wanted. The second best method is to have them legally taken by hunters during open season, outside the Park. A third method would be slaughter of surplus. If the herd were not reduced, there would be wholesale starvation during the next hard winter. That is the result that everyone hopes to avoid. We would much rather have a small, healthy herd than a large herd on the verge of starvation.

All requests for live shipments are being filled. The Crow Indians want some elk, and the game departments of western States have been advised that elk can be had for payment of capture and transportation costs. The live shipments will not take care of the excess, so the next best thing is to increase the number of elk taken by hunters, outside the Park. Last year, in coöperation with the Montana State Game and Fish Department, the Forest Service, and others interested, the hunting season was extended until three thousand elk had been taken; then it was closed. A similar plan will be followed this year.

If a net reduction of about fifteen hundred is obtained each year, it will require a year or two, after this year, to bring the herd to the size that the range can support. The range is badly in need of a chance to recuperate from the effects of past over-grazing.

The black bears of Yellowstone are well known. They were high in popular favor until a few years ago, and then they became so numerous, so bold, so destructive, that they thoroughly spoiled the visit to the Park for many campers. The bears tore up many tents, ripped the tops of many automobiles in their search for food, broke into housekeeping cabins, became regular gangsters. Motorists asked if the Park was being run for the bears or for the public. A few years ago there were more bears in Yellowstone than ever before, and considerably too many for the welfare of the public. So we removed the habitual criminals, and each year we dispose of the worst offenders.

Bears are welcome in the Park in their native haunts, or along roads, or at the two feed grounds. Whether or not they are welcome in campgrounds depends upon their manners. If they are harmless, they may stay; if they are destructive or dangerous, out they go. Bears that maintain their independence, hunt their own food, remain natural bears, can live to a ripe old age in Yellowstone. The cubs that are petted and pampered grow up to be mean and vicious. They have lost their fear of man, and they have no respect for him or his property. The campground marauder cannot be tolerated.

The grizzly bears are also steadily increasing. They have no natural enemies. Under natural conditions they would increase as long as an ample food supply was available. We have added somewhat to the food supply and therefore have made it possible for the grizzlies to increase beyond the number that would be natural to the area. Grizzlies are independent, proud and haughty. They will not beg alongside the roads, and they will not ordinarily come to campgrounds. They do come to feed grounds late in the day, toward dusk. The grizzly is powerful and fearless—dangerous to man.

There are now about three hundred grizzlies in Yellowstone, and it seems probable that a reduction will soon be necessary. They are now available for shipment to any zoölogical garden or to any State that may have a suitable place for them.

Once the great and splendid trumpeter swan was fairly abundant in western States. Now there are some left in Canada and in a relatively small area in and around Yellowstone Park. Perhaps there are one hundred individuals left in the United States. When a species gets as near extinction as this, it needs all the help it can get. With "Ding" Darling's enthusiastic support, the U. S. Biological Survey purchased and set aside the Red Rock Lakes, Montana, where a number of pairs nest. In Yellowstone the swans are given every possible protection.

## Wilderness

By BEN H. THOMPSON, Assistant to the Director, National Park Service

THERE seem to be several legitimate meanings to the term "wilderness." It generally means a large area without roads or human habitations. It also means an area in biologically primeval condition. But whatever interpretation you take, the enjoyment of wilderness is probably a form of religion. So, like art and politics, the subject provides the pleasures of endless discussion. Some say there is no wilderness. Some say there are so many acres of it. And some say it is just the bark of hounds which have lost the trail. The latter, of course, are atheists and philistines of the first water.

So, to add my little asterisk to the discussions on wilderness, I should like to tell you what it means to me, personally.

Perhaps I could best define it by saying that it means the presence of nature. In this sense, one might say that there is more wilderness character about the junco which comes to your back doorstep than there is about the canary in its cage in the kitchen. One might say that there is more wilderness character in the morning sunshine than there is in the smudge and roar of the factory. Perhaps one might say that there is more wilderness character in the winding, leafy trail than there is in the scraped and graded trail. Perhaps that is what was meant by Benton MacKaye when he described the Appalachian Trail in these words:

It "is not merely a footpath *through* the wilderness but a footpath *of* the wilderness."

I believe Doctor Joseph Grinnell<sup>1</sup> had the same thoughts when he wrote the following comments:

"My office is a corner room in the second story. Near the corner of the building stands a large live oak, the nearest one of a scattering group which helps make Faculty Glade. This corner oak extends its branches along either side of the building, so closely that at times of lively breeze

<sup>1</sup> Grinnell, Joseph, January, 1927. "Tree Surgery and the Birds"; Univ. of Calif. Chronicle, pp. 104-106.



the twigs scratch my windows. From within, I can look out among the branches of the tree and up to the under surface of the crown of foliage above.

“For eighteen years now, at odd moments day by day, I have watched the birds which visit my corner oak. The total list of species seen, one season and another, has grown to the surprising number of forty-six. Many of these have been only casual or vagrant visitants, of appearance but once or twice. The point of special import now is that I have come to associate each of the regular visitants to this oak with some particular part of the tree: I have become impressed by the instinctive adherence of each kind of bird to trunk, or to larger branches, or to smaller twigs, or to leafage. Indeed, observation here and elsewhere leads me to believe that the presence of a certain kind of perch or particular sort of forage surface is practically essential to the presence of the given kind of bird whose structures and instincts are adapted to it. Moreover, most birds are incapable of quick adjustment to new conditions. Their inherently fixed instincts and structures closely limit them to narrow ranges of conditions. Change unfavorably to even a slight degree the conditions that control their means of subsistence and it becomes impossible for those birds longer to persist in the territory affected.

“For two days now ‘tree surgeons’ have been at work, under directions of a ‘landscape architect,’ upon the trees of Faculty Glade. This morning they reached my corner oak. I have seen the men, with the evident purpose of removing every dead member, and of thinning out the branch-work generally, remove, one after another, particular parts of the tree, parts associated in my memory with the bird-life that has frequented it.

“The decaying stub upon which, last year, the Downy Woodpecker drummed, and into which, in the early spring, it essayed to bore for its nest, has fallen before the saw. The long, slanting and crooked branch, with, it is true, but sparse foliage at its end, yet whose bark was searched again and again from one end to the other by a White-breasted Nuthatch, has now been cut off.

“Another angular branch that was chosen for repeated scrutiny by a vagrant Brown Creeper, the few times I have seen it in the neighborhood, lies on the ground beneath, to be hauled away to the campus trashpile.

“A winter’s southeaster two years ago broke off, but left suspended in the tangle in the crown of the tree, a branch with its leaves. These leaves, pointing downward, dried and yellowed; but their curled edges seemed to house an inexhaustible supply of desirable things from the standpoint of a pair of Plain Titmouses which took in this objective day after day, as one point in their forage beat. Of course, that pendent spray of dead foliage has had to go.

“Just outside the window nearest my desk has been, until today, an

arch-shaped twig, unfortunately part of a dying branch. This twig, shaded in part by the building, in part by the canopy of foliage overhead, was, of all the seemingly available places, regularly chosen for its perch by a little Yellow-bellied Flycatcher. That twig must have met most nearly the specifications instinctively prescribed by the bird as a vantage-point whence it could sally out in customary fashion for passing insects. This strategic perch is now gone.

"My corner tree used to have knotholes. Naturally, when a dead branch breaks off, or even is simply sawed off, decay starts in along the fiber and, proceeding faster than the surrounding bark can heal over the wound, leads to the formation of an open cavity. One such cavity, years ago, furnished the home site for a Screech Owl, and from it each summer issued a brood of young owls. Another knothole, of similar history but lesser dimensions, furnished the nesting place in spring, and the roosting place at all seasons, of a mutually devoted pair of Titmouses. Nowadays, it seems, the tenets of tree surgery require that no such cavities be permitted to remain in any well-cared-for tree. Each and every former and even potential knothole has been gouged out and sealed up, so that only a forbidding wall of cement meets the eye and beak of any prospecting bird.

"Each year, when the campus oaks spring into green leaf, there appears a generation of little green worms. Some years these are few in number, in other years many—so many that the first crop of the green leaves upon which they feed may be conspicuously thinned out. With the appearance of the worms, numerous birds assemble in the leafage, to profit by the food supply newly afforded. The permanently resident kinds of birds are joined at that season by troops of migrating Warblers. These natural checks to the perfectly natural worm crop, must not, however, have been noted by the 'landscape architect'; for the spraying apparatus goes, of recent springs, from tree to tree—and Faculty Glade becomes quickly silent of warbler voices.

"Year by year, in fine, I note the withdrawal from the campus proper of one after another of the more specialized types of birds, not only those that live in trees but also those that find a livelihood in normally growing shrubbery. This local disappearance of our native bird-life, a delight to the eye and ear of him who sees and hears, parallels significantly the establishment of *formality*—the removal of the elements of naturalness—in our campus flora.

"What constitutes attractiveness in human environment all depends upon one's individual point of view."

So much for wilderness as the presence of nature.

When we face the problem of making the wilderness available for people to enjoy, the amount of development is probably less important than the kind. It may not be so important whether or not there are one hundred or three hundred miles of roads and trails in a given area, but

it is quite important what things people shall be able to see along whatever roads or trails they may travel.

Let me illustrate what I mean by a purely hypothetical case. A wilderness area is to be made available to the people. Roads, trails, and accommodations must be built. So far, so good; everybody is happy. The wilderness may have a few scars but they will probably heal. In the meantime thousands of people benefit from the area. But, let it be supposed that after these things are done, the builders continue, and masonry springs up like hot biscuits. The simple ham sandwich is no longer eaten on the simple log by the trail, but feasts are spread on the masonry table and eaten by ladies and gentlemen in masonry chairs. Let it be supposed that next come the cultivators of the forest. A limb is lopped here, a tree is felled there, a mistletoe clump goes into the discard; squirrel dens and coon dens are filled with cement; and the snags—the ghosts of the forests—are cleared out as dangerous pests. Where birds and rabbits once scurried through the brush, the scene is now one of order. Indeed, when order has been brought into the wilderness, order is all that remains.

Even though such activities were limited to roadsides, trailsides, and development centers, leaving the rest of the wilderness untouched, they were of vital importance, for they removed the wilderness character from the only places which the people saw. Each improvement was made for benefits which it was believed would result. But step by step the wilderness which people saw lost character and reality. Bit by bit there was spun around roads, trails, and campgrounds an ever-tightening web through which the wilderness could not penetrate. When a man walked along the trail, he could not feel the presence of nature—it was shut out—and he walked through a guarded and half-real zone which some other man had ordered for his consumption.

Back to our original simile, the junco at the back doorstep had been caught and put in the canary cage.

All of this might happen, for we know that it is, and always will be, human nature to build, tear down, rebuild, and modify the things around us. I have used a hypothetical case because the future is hypothetical, and human nature is ingenious, sometimes even to the point of its own defeat. It is for these very reasons that we have national parks and monuments, with a purpose expressed in standards which should forever protect the reality of their wilderness areas.

## Highlights in National Park Legislation

### KINGS RIVER CANYON QUALIFIES AS A NATIONAL PARK

By ANSEL ADAMS, Sierra Club, San Francisco, Calif.

**I**T IS certainly a pleasure and a privilege to appear here before you today as a delegate of the Sierra Club of California. I am entrusted with conveying my organization's point of view on the establishment of the Kings River National Park. It is a big order. This park, as you know, is in the Sierra Nevadas of California, and I hope that what I say today will give you some conception of the quality, the national park quality, of the Kings River region, and that it will do its part to stimulate concerted action and support of this most worthy project.

First, I want to take a few moments to tell you something about the Sierra Club. I want to do this in Washington for a special reason. A lot of people think that we are something else than what we really are. We have a position in conservation which is much more important than the position we hold as a hiking or outdoor club. We are not a hiking, exploring, or recreational organization as so many people, even in California, believe. While our members enjoy numerous outdoor activities, and while the Club sponsors worthy recreational and social activities, considering them as a definite means of the enlargement of our members' interest and knowledge in the out-of-doors and in the problems of proper administration thereof, I am anxious to stress the fact that we are primarily a conservation organization dedicated to the protection and proper use of the resources of natural beauty and scenic grandeur of America, with special emphasis on those of the Sierra Nevada—"The Range of Light" as John Muir knew it. Our board of directors, our great leaders, our writers and artists, are spokesmen, not only for our membership, but for the thousands and thousands of citizens of our Nation who stand as a united front against unreasonable exploitation, commercialization, and over-development of the areas of the country distinguished for their specific qualities of beauty and grandeur and their vast potential of cultural and esthetic values in relation to the people as a whole. We have no economic or political ax to grind; we gladly support any organization or department of Government that motivates conservational developments based on common sense, good taste, and logical planning projected over an ample span of time.

All of you, officials and members of this Conference, and the vast public which you represent, are undoubtedly aware of the tremendous obligation you and all conservationists have to the future. How many have fully realized the tremendous practical achievements in conservation of the last twenty years? I have often thought that this achievement brings us very close to the saturation point of sensible development, beyond which it may be dangerous to go at this time, without the most precise and logical planning.

The program is fairly well defined.

I think most of you will agree on this: There are four things to do and we have to do them all at once. First, to complete pending developments and set decisive limitations of future developments within areas now established. Second, to complete the acquisition of such areas as are of indisputable national park character. Third, to correlate all governmental agencies towards the more perfect administration of these areas. Fourth, to attack the problem of the proper social function of the national parks in order that their benefits may be fully realized.

That is really, I think, one of the most important things my organization has worked for—interpreting the national parks. The other day I heard someone say that a great many people go to the parks for a vacation and do not realize it is actually a lot more than a vacation. One of the most important functions of the park is that of a social instrument, and I think that is a job that we should all buckle down to.

As a Nation, we are not sensitive to qualities of the more subtle variety such as the mood of the wilderness or the simple unmechanized existence offered us in the high places of the earth. We are practical. We are conquerors in a certain sense. We battle the wilderness, attacking with roads, structures, and other developments. We exact toll of power, lumber, and the wild inhabitants of the natural domain. We are proud of our great campaign against nature; the seeds of development are sown in every corner of the land. Our special problem now is to see that they sprout properly in the sunlight of reason and not in the hot-house of over-ambitious intentions.

The Sierra Club, the American Planning and Civic Association, and all other related organizations are unified in the pursuit of a truly majestic idea. We of the Sierra Club desire to cooperate with you, and we ask you to cooperate with us, in every possible way in the clarification of our mutual problems. We ask the National Park Service and the Forest Service to work with us and to keep us advised of the progress of national conservation. We, on the other end of the continent, will do our part as best we can, remembering we relate to all America.

Pardon my digression. To turn to the subject of the discussion, I would like to say that the Sierra Club stands in the matter of the proposed Kings River National Park just as we stand for the inviolate security of the established parks and their proper function and development in relation to the Nation as a whole. For many years we have labored towards the security of the Kings River region. We worked hard for the enlargement of the Sequoia National Park, and were pleased when the upper Kern and Mount Whitney regions were finally included therein. We realized, nevertheless, that the battle was only half won. To the north of Sequoia National Park lies the magnificent territory of the Kings River Sierra and we will continue our concerted efforts to make this glorious area secure for the future as a national park.

Now, what is this territory? What are its qualifications of entrance to the assembly of the national parks? I will attempt a short description, without burdening you with geologic, biotic, or topographic details.

The region to be known as the Kings River National Park encompasses the watersheds of the South and Middle Fork of the Kings River. Its dominant features may be outlined as follows: two enormous canyons—those of the Middle and South Forks of the Kings River—similar geologically to the Yosemite Valley, yet distinctive in their particular qualities of scale, forest cover, and as yet unspoiled wilderness aspect. These spectacular gorges are cut deeply through the body of the Range and lead back to the crest of the Sierra through great glacier-sculptured uplands jeweled with myriad lakes and streams, meadows and wild gardens of alpine flowers. The summit peaks of the Sierra attain here their greatest magnificence—combining to form a twelve- to fourteen-thousand-foot wall of fantastic stone bearing the white splendor of perpetual snow. To the west of this escarpment lie the expansive alpine shoulders of the range, intricate ridges and divides, hanging valleys, and spacious timberline plateaus. To the east, a sudden breath-taking drop of more than eight thousand feet to the arid Owens Valley and the interminable sea of desert mountains stretching eastward, range upon range, across the borders of California and on into Nevada. In this as yet unspoiled wilderness may be found the very essence of the majesty and beauty of the Sierra Nevadas.

In 1900 Joseph LeConte wrote as follows:

If Yosemite is far superior in its falls, and also in its extensive meadows and the variety of its foliage, Kings River is far superior in its surrounding mountain scenery. Kings River Canyon branches and re-branches, becoming deeper and wider and grander until it deploys and loses itself among the highest peaks and grandest scenery of the Sierra.

The surrounding mountain peaks which guard the two great canyons to the north and south tower imposingly almost two thousand feet higher above their floors than do the corresponding and less impressive points which delimit the Yosemite drainage basin. Paradise Valley, the basin of Woods Creek, Rae Lake and Sixty Lake Basin, the upper South Fork Canyon, Bubbs Creek Basin, Roaring River Basin, are the chief branches of the South Fork.

The Middle Fork watershed comprises some of the most rugged territory of the Range—Grouse Valley, LeConte Canyon, Palisade Basin, Cartridge Creek, and Goddard Creek, and to the west the Tehipite Valley with its incredible Tehipite Dome, rival of any Yosemite landmark. The peaks in this region are too numerous to mention. Mount Goddard, the Palisades, Mount Brewer, Mount Clarence King, and the Peaks of the Kings-Kern Divide are perhaps the best known, but there are scores and hundreds of others, many unnamed, and some unclimbed.

Our parks run in a series: Sequoia, General Grant, Kings River, and



Mount Clarence King in the proposed Kings River Canyon National Park

Photograph by Ansel Adams



Deadman Canyon. Roaring River, proposed Kings River Canyon National Park

Photograph by Ansel Adams



then on up to Yosemite Park, and then from there up to Tahoe. It is a perfectly tremendous area, and what is essential from our point of view is to preserve the predominating part and avoid the inroads of certain commercializations in the area between those parks which destroy the character of them as you go from one to the other. It is a most important, and I think it is a condition peculiar to our region.

The western entrances to this region are typical of most western approaches to the high Sierra. Up from the plains of the San Joaquin Valley through the foothills, and then through the timber belt, then into the uplands under the great summits, one may go, either on the shoulders of the great canyons or through them in part. Lateral passes to the north and south, Muir Pass, Junction, Foresters, Colby, and Elizabeth Passes, admit passage to and from the other high regions of the range. The entrance from the east is more abrupt; climbing steeply from the Owens Valley the proposed park is entered via Bishop, Taboose, Sawmill, and Kearsarge Passes. The John Muir Trail traverses the finest section of this area.

Sawmill Pass is very close to civilization. It shows just how unnecessary it is to build roads into this region for the sake of getting there, because on the other side of the lake are power sites with roads leading into them. We can leave San Francisco and drive in one day to some of these power sites on the east side. I can put on my pack and get right into the highest peaks of the range.

John Muir once said to William E. Colby that as long as anything truly fine exists in the world it will be necessary to fight continuously for its protection and security. The Sierra Club and its great leaders have fought, as I have said before, for the Kings River region as something truly fine and irreplaceable—irreplaceable physically and spiritually, if I may use that term—once the elements of exploitation are permitted to dominate. In 1907, the Sierra Club published a "Report on Kings River Canyon and Vicinity." Except for minor details this report is perfectly related to the problem of today. Permit me to quote from a section of this report titled "Forest Reserve or National Park?":

While we, as members of the Sierra Club, which aided in the establishment of the forests reserves, appreciate to the fullest extent their great value, yet we feel the entire region embraced in the upper drainage basin of the South and Middle Forks of the Kings River . . . should be placed on the same basis as other lands which are embraced within national parks. Whether it should be made a national park in name or whether it should remain a part of the Sierra Forest Reserve is not vital. The only question which can possibly arise in this connection is as to whether the present Forest Reserve system is intended to provide for the situation which confronts us in relation to the Kings River Park. As we understand the reasons for the Forest Reserves, they are to aid in conserving the forests and water and grazing areas of the lands which they include and to supervise their use, having in view the best interests of the public at large . . . in order that the timber may be cut and the water used for power and the grazing land be pastured to the best possible economic ad-

vantage. . . . On the other hand, we feel that in the case of most of the area described in this report the commercial element should be eliminated almost entirely if not absolutely. The scenery of this region described is by far too wonderful and sublime to permit of the destruction or alteration of any of its component parts. . . . In this limited region the æsthetic and scenic features are of paramount importance.

And thus we stand today. The Sierra Club has profound respect for the great achievements of the Forest Service. In the carrying out of its specific function the Forest Service is assured of our unfailing support. The problem which is of vital concern to us is the definition of this specific function, or functions, of the Forest Service and the specific function of the National Park Service.

Frankly, we believe that the National Park Service function should not overlap the U. S. Forest Service function, and vice versa. Each should operate decisively within its specific domain in order that governmental resources should be efficiently utilized. And should not government, after all, be considered as a national resource? It is the concentration of enormous wealth, power and purpose, and should be utilized and allocated to its various fields as directly and as efficiently as possible. The situation which seems to confront us at this moment is confusing and is of great potential danger. We have two important branches of government operating in a specific field without a clear line of demarcation of purpose. The strength of each department in relation to this particular problem can be seriously impaired by a breakdown of respective limitations of fields of observation. I do not see why the National Park Service should be concerned with public buildings in Washington or why the U. S. Forest Service should undertake a large recreational program which rightfully is the responsibility of the National Park Service in areas of unquestionable national park character. Permit me to state as clearly as I can that the Sierra Club is not antagonistic to the U. S. Forest Service or to its recreational program. We feel, however, that in an area such as the proposed Kings River National Park, it is the National Park Service's special responsibility to operate the protective and recreational phases of development, and to relate them to national park standards. Revered leaders of the U. S. Forest Service have accepted this attitude towards the *métier* of the National Park Service. I will quote from statements of two U. S. Forest Service Chiefs to point my argument:

Col. Henry S. Graves, former Chief of the Forest Service, says:

The proposed park, I would like to say in the first place, is one in which I am personally interested. I am in favor of a park which will include the great scenic features of the Mount Whitney region and the region of the Kings and Kern Rivers.

I feel that this area should be set aside for a park in order to develop it, especially for recreation. I think that we should frankly understand that. It is going to take money to develop it. We have got to have roads and trails and improvements, and if we can work out a line which will carry out these

basic principles that I have been advocating I feel that I can support the park and indorse the proposal for enough money to build the necessary roads and trails, fencing, corrals and camp grounds, or any other improvements that the Park Service would have to make.

Those statements are quoted from a hearing held before the Committee on the Public Lands, House of Representatives, Sixty-sixth Congress, on House Resolution 5006, February 24 to 26, 1920.

This is a statement of Col. William B. Greeley, likewise a Chief of the Forest Service:

Mr. Chairman, the main question which the Forest Service has had in mind in approaching this whole subject has been, first, that in our judgment the area as outlined in the entire scope of the bill represents the outstanding region not only in the Sierra Nevadas of California but in the entire backbone extending through the Cascade region of Oregon and Washington that justifies an additional national park. I am quite familiar with this area personally, having been a local forest officer in that section for a number of years. When you consider all that is involved in this tract, the fact that the entire country is above 5,000 feet in elevation, with the exception possibly of a few of the canyon bottoms; that it contains ten peaks with an elevation in excess of 14,000 feet; and that it contains three of the outstanding canyons of the West, the Tehipite on one fork of Kings River, the South Fork of Kings River, and the Kern River Canyon, combined with a wonderful region of lakes and Alpine forests, the combination has fixed this area in my mind for a good many years as one of the places which should be established and administered as a national park. If there is any area in the West that has outstanding national significance and exceptional beauty that justifies an additional national park, in my judgment, it is this area, and the entire area.

That statement is taken from hearings held before the Committee on the Public Lands, House of Representatives, Sixty-eighth Congress, First Session, on House Resolution 4095, February 27 and 28, 1924.

In unity there is strength. We feel that the Kings River National Park should be established not only for itself, but as a most important link in the chain of the great national parks. It rightfully belongs in the fold. To us this matter is one of extreme importance both in its specific and in its general significance. No region of this quality—and there are few others to equal it—should be administered except as a national park.

So much for this phase of the argument. I will turn now to the opposition to the establishment of Kings River National Park. You can surmise that there is quite considerable opposition from the local Forest Service which, naturally, is anxious to support its new recreational policy, and it has projected a rather imposing plan for this particular region. This phase of opposition can be controlled only by the executive decision of the Chief of the U. S. Forest Service and the coöperative understanding of the local officers working in harmony of purpose with the conservationists and the National Park Service. I hope that this fact may suggest to you the necessity of action on your part towards a solution of this particular governmental problem. But let us work on

this problem with tolerance and with full appreciation of the ability and of the achievements of the U. S. Forest Service. Coöperation can never be effected on a belligerent basis.

The private opposition presents a more complicated problem, but one which I am certain can be adjusted with mutual benefit to all concerned. Were it true that the region under discussion contained resources of considerable commercial value, our problem would be difficult. Fortunately, the commercial utilitarian resources of the region are very small. Nevertheless, we are confronted with a selfish front of opposition entirely out of scale with the commercial possibilities of the area; an opposition which has apparently discounted the importance of this project to the Nation as a whole. The elements of the opposition may be briefly stated as follows:

*First*, there is water-power and irrigation: In the past surveys have been made throughout this region for water-storage sites. The canyons of the South and Middle Forks of the Kings and Tehipite Valley were designated as dam sites. An objective study of the problem has convinced leading engineers of the economic fallacy of such projects; the costs of taking the produced power to civilization would be extreme. Only in the face of the direst emergency would such development be economically justified. On the other hand, there are two power and storage sites below the western borders of the proposed park—Pine Creek Flat and Junction—that are entirely feasible, economically and otherwise, and to which we have no objection. In fact, the proper administration of the watersheds above these sites will enhance their value as irrigation and power projects. We are satisfied that this phase of the opposition is manageable through its inherent weaknesses. The combating of this opposition can devolve chiefly upon a clear and fair analysis, presented to the landowners and residents of the affected districts, of the fallacies of the project, and they should also be shown the advantages of the alternatives. Southern California will have a surfeit of power from the Hoover Dam, and they have now no further power interest in the western slope of the Sierra.

As to grazing, the greater part of the Kings River region is economically unsuited for grazing; it requires hundreds of acres per year to keep one cow healthy, and that is not all—the grass is not continuous. Sheep have been restricted in favor of protection of the watersheds—overgrazing is exceedingly dangerous in that regard. The largest grazing interests in the district signified their approval of our national park efforts.

A telegram sent to Mr. Barbour of the House of Representatives on February 26, 1924, from a leading group of Tulare, California, reads:

“We favor Park enlargement and wish you every success in promoting measure. Cattle owners and other minor private interests should not stand in way of this great project.”

Mr. Jesse Agnew, who had one of the largest holdings in the region and ran cattle therein, zealously advocated the park. An excerpt from a telegram he sent to the hearing of House Resolution 10929 of 1919 reads as follows: "Do not leave any stones unturned to get it through the House. Mrs. Zumwalt and I are the largest cattle owners in it, and we are strongly for the park." What opposition exists among grazers and sheepmen now can be discounted as of no importance whatever in relation to the project as a whole.

I am bringing up these things because the position then was more intense than it is now. I would like to show you from the very beginning that these people were really with us in spirit.

Mineral resources are practically non-existent. A small molybdenum mine on the ridge near Elizabeth Pass—immortalized by Stewart Edward White—now worked out, and a valueless copper vein in the South Fork of the Kings are all that I know of. I think there is no possible question that can be raised in this regard because they are not raised with commercial concerns.

As to timber: It must be remembered that the greatest part of this region is either above timberline or is of commercially poor timber area. The small timber sections included in the proposed park are vital as elements of approach. The near-by Sequoia National Park fulfills the requirements of the regional protectorate, esthetically speaking, of the forest area thereabouts. The amount of merchantable timber included within the boundaries of the proposed park is inconsiderable in relation to its importance as a "threshold" to the dominating alpine regions of the area.

Then there is hunting: I feel that hunters—"sportsmen" they are often called—are very active against the proposed park. They live for the deer-hunting season—to gird their loins with instruments of destruction and invade this territory after the innocent quadruped known as the deer. They resent with vitriolic force any proposal to make this region a park. It is, of course, an entirely selfish viewpoint. It is also a very stupid one, for the protection of game afforded in the national park makes the animals more vulnerable when they stray out of it.

There is also fishing. It is inconceivable that some fishermen have opposed the establishment of the park. Under the administration of the Park Service the fishing will be augmented, both in quantity and in quality.

As regards homesteads: One of the most ominous elements of the opposition is still unborn, but certainly expected. It is that of owners of private homesteads which the Forest Service indicates they will make available. Naturally, people interested in homesteads will work against the national park idea. Once homesteads are established in the park area, we will find them difficult to manage if the park development is undertaken. This element alone should stimulate immediate action to

establish the national park. It also serves to indicate the basic difference in policy of the Forest Service and the National Park Service in relation to the use and development of the area.

At present there is a road being built into the area—into the Kings River Canyon, South Fork. The Forest Service has planned a considerable program of development. Here is an immediate and perplexing problem. If the road and its attendant developments are completed before the area becomes a national park, we will have considerable, almost insurmountable, difficulties on our hands. On the other hand, if the Kings River National Park is established before the road is completed the situation is controllable.

Then there are the national park objectionists: There is a certain group of people who object to the national parks only because they—the parks—exhibit authority and control. These people would have been in their rightful element about 1850; they have little understanding of the social responsibilities and conditions of today. There is no answer to this form of the opposition except through education and through the proper promotion of the national park idea.

Thus, you may accept the fact that the opposition, with the exception of homesteads, is of relatively little importance. Yet we cannot be oblivious to the fact that the combined opposition can be a dangerous retarding element to the project. We must take definite steps to clarify the opposition to itself; logically to break down its separate ineffectual parts; to indicate that the various "development" organizations are thoroughly off the track in neglecting to accept the national parks as a dominant commercial advantage to the State.

I am very much amused sometimes at our chambers of commerce and our state organizations who will think of first-hand commercial development when they apparently forget what a great park means to a region, what a park like Yosemite or Sequoia means to the San Joaquin Valley, not only to the valley but the entire West.

The establishment of the park is of vastly greater significance than any phase of the opposition could ever hope to be. Secretary Lane once said, "I do not believe there is any danger of taking from anybody anything of real value by putting this land into a park."

I wish there were time to quote at length from the statements of many public leaders who attended the hearings on park bills in the past. I wish I could describe adequately, and at greater length, the wonders and the beauty of the region we hope to make a national park. I wish I could talk to you on all the beneficial phases of operation resulting from the establishment of this new park; the new experiments in the study of the wildlife problem, of wilderness areas, of recreation—camping, riding, hiking, rock-climbing, winter exploration. I wish I were capable of presenting to you, above all, the most important argument in favor of this project. That is, in brief, the immense social value of the

parks to this great and living civilization which is America; the force for the public good, for education, for physical and spiritual and cultural advancement of the Nation. The Kings River National Park is only one project. Other projects are under consideration, others will be developed in the future. Perhaps we are at this time at the crossroads; under proper plan of administration the national parks and the national forests will progress towards perfection of purpose and function. Under the confusion of the indefinite limitations of authority and purpose it is not difficult to foresee the weakening of two great governmental forces, and the consequent breakdown of a great beneficial conception. Let this not come to pass. Let us reduce formalities to a minimum, bring activities to a maximum, and join hands to aid in the development of one of the great cultural elements of our civilization.

The organization which I represent here today urges the Government of the United States to effect without delay the establishment of the Kings River National Park.

### KINGS RIVER NATIONAL PARK— A GOOD BUSINESS PROJECT

By C. G. THOMSON, Superintendent, Yosemite National Park

**A**FTER that complete exposition of Kings River Canyon problems made by my fellow Californian, my only excuse for speaking is to fill in for you who are not familiar with the place the methods and technique of the oppositions to these movements of ours, and to tell you just a little of the type of opposition encountered by us men in the field.

Every proposed park extension in my experience has been opposed by almost exactly the same methods. It makes one suspect that there is a mechanism at work! A series of buttons is touched, and groups react to each button.

Ten years ago, when I was superintendent at Crater Lake, I was the lone representative of the National Park Service presenting Diamond Lake to the President's committee, and was opposed by seven men from the Forest Service. At each hearing, as though the "buttons" were pressed, strong objections to park status were voiced in succession by the sheep men; then by the cattle men; then by the hunters; the water users; the owners of summer homes, and so on. Three years ago, when the proposed western extension to Yosemite was discussed at Sonora, practically the same groups appeared, and at the Kings River meetings we invariably are opposed by the same interests.

It is important to realize the viewpoint of the opponents. We who contend for this and that addition to the parks, wax so enthusiastic that we become almost proprietary; we even come to believe that the present users of the areas are trespassing. Of course, the reverse is true.

The areas now are in other hands; in fact, we propose usurpation; the burden of proof rests wholly upon us. These areas are not uninhabited wildernesses; they are in actual human use. Within these areas many people reside and make a living, and many others have business interests. The available resources are part of the present and the planned economy of these regions. Residents in surrounding communities have considerable stakes involved; and the threads of ownership and of influence sometimes reach out to considerable distances and to influential men. The San Joaquin council of the State Chamber of Commerce, a powerful institution in the great business of California, is opposed to Kings River park status. A very few men, working for several years from the one viewpoint of opposition, have maneuvered a current, but not widespread, opposition. The matter of park status is not of much importance to the average man locally, so this small but articulate and aggressive group can animate a considerable if rather complacent following.

On the invitation of this group the Forest Service recently presented a twenty-five-year multiple-use program for Kings River, which promptly was endorsed by the Conservation Committee of the local body. This program conceded so much to each group—to the grazers, hunters, summer-home leasers, irrigationists, power interests, wilderness lovers, and so on—as to be satisfactory to each interest involved. I must add, as an aside, that the mention in this program that two hundred summer-home sites probably would be granted by next summer deeply disturbs me, because ten years ago, when the Diamond Lake area was under study by the Coördinating Board, it was the existence of just such summer-home sites that decided the Board against the inclusion of Diamond Lake in Crater Lake National Park.

Further, it is important to remind you that our last recommendation for Kings River National Park unquestionably has stimulated programs and processes which will operate against park status eventually—and soon—by creating conditions inappropriate in such a park.

The opposition is relatively small in numbers but is well organized. We now have the task of advancing patiently and sincerely the complete merit of the proposal. Each of us field men has his own friends in nearly every community, and there is a wide circle of park lovers naturally sympathetic to the Kings River idea. There is the Sierra Club, an invaluable organization; other groups can be interested. Newspapers and radio stations and chains are open to us. The field men's job is first, to dig out the real facts concerning the relatively small economic value of a Kings River exploited, to gather exact data on the potential value of timber that can be logged at going prices, to assess the value of the sheep and cattle ranges, ascertain the average kill of deer per annum so as to state exactly its recreational value to the hunter; set down the facts as to power and irrigation in accurate terms. Get the facts. Surely



Kings River is susceptible to convincing demonstration that only a small money return can be wrested from its granite mountains. And then, go not only to the leaders of the State but to all the people we can reach by voice and radio and by print, and frankly demonstrate that park status means a better economy for the State than does development and exploitation. Set forth the national values involved, of course, but locally we particularly must sell park status as good business.

### HISTORY OF MOUNT OLYMPUS

By THEODORE S. PALMER, Associate in Zoölogy, United States National Museum, Washington, D. C.

**A**FTER listening to the very complete exposition of Kings River Canyon by my fellow Californians, I am somewhat at a loss to know how to present the problem which is put up to us to speak on Mount Olympus.

My colleague, Major Tomlinson, and I had never had the pleasure of meeting until yesterday, but nevertheless I think he agrees with me that this project is important; is interesting; is historic, and has certain values in romance. To me has been assigned the task of sketching in the background and of presenting a picture of the foundation of the present legislation. I shall necessarily have to deal with figures and dates, and I ask your indulgence in following me as closely as you can.

If you stand on the heights back of Seattle on a clear day and look toward the west, you will see a striking scene including a mountain crest. I know of no other comparable sight, unless it be the Tetons from certain points and the east slopes of the Sierra from Owens Valley, or the view of Mount Whitney, that include an area of such unsurpassed scenic beauty, of such great biological interest, and of considerable historical importance.

Did it ever occur to you that of the twenty-five national parks (barring those which include single mountains, like Mount Rainier, Mount McKinley, Mount Lassen, and others), there are almost no national parks that you can see from any distance or even until you get almost on the spot? You can see the Tetons from some little distance if you look from the right angle; you can see Yosemite with a good glass on a clear day from the top of Mount Diablo or Mount Hamilton. The others you cannot see until you approach them, but here stands an area which can be seen up and down the Sound, and this fact alone marks it as an outstanding area.

Turning back to the report cited by the former speaker in the Fifty-eighth Congress—I am going to ask you to indulge your imagination, as we take down from the shelf one of those sheep-bound tomes that people dislike to look at, namely, a report of the House of Representatives, and turn to Report No. 1874, a report prepared by Honorable George Shiras,

III, during the single term in which he was in the House. I want you to read in imagination with me something in this report of four pages.

It reads something like this:

"A report on House Bill 10443 by Mr. Shiras, To set apart certain lands in the State of Washington as a public park, to be known as the Elk National Park, for the purpose of preserving the elk, game, fish, birds, animals, timber, and curiosities therein."

Then it goes on with the usual suggestions for amendments and letters of indorsement. If you read that report in the ordinary way, you will lay it aside and think nothing more of it, but I want to call your attention to the fact that this is an historic document, one replete with interest.

H. R. No. 10443 was introduced by Francis W. Cushman of the Tacoma district of Washington in January, 1904. Mr. Cushman, whom I knew very well, was a native of Iowa, he was a member of the Order of Elks, and he had gone to the State of Washington ten years before. He was serving his first term in Congress when he introduced this bill, and the bill was referred to the Public Lands Committee in the House. The Chairman of that Committee at that time was the Honorable John F. Lacey, also a native of Iowa, father of federal game protection. The bill was reported by the Honorable George Shiras, III, well known as an ardent conservationist, an enthusiastic hunter, an enthusiastic photographer—an enthusiast in everything relating to the out-of-doors. As you read this report you will find an indorsement of the Secretary of the Interior, the Honorable Ethan Allen Hitchcock, one of the ablest men who ever held the portfolio of Secretary of the Interior. He had been Minister to Russia, and during his time of service his title was raised to Ambassador. Mr. Hitchcock was the first Ambassador of the United States to Russia, a man of broad interests and wide experience. He indorsed this bill and transmitted with his indorsement a letter from the Commission of the General Land Office Governor, W. A. Richards, former Governor of Wyoming, who, ten years before, in campaigning for the governorship, had gone into Jackson Hole and the Teton area and made one of the pledges of his campaigns for governor a promise that he would protect the settlers from the inroads of the Indians who came in from Idaho. That campaign developed one of the outstanding cases in conservation in the United States Supreme Court, known as the Race Horse case (*Ward vs. Race Horse*—163 U. S., 504).

Was there ever a bill on conservation introduced in Congress under more favorable circumstances? Every man whose name appears on the report, with the exception of the Secretary of the Interior, had personal knowledge of the elk, or of the situation or of the importance of the legislation.

Following these letters of official indorsement, was one from a chapter of Elks in Tacoma, which reads somewhat as follows: "Where is the

report with regard to the killing of elk?" It was reported to the President, who was then Theodore Roosevelt, and, while he expressed deep interest in this report, he doubted that anything could be done by the Federal Government unless the area were made a national park, though he intimated that he favored the project.

I think I am safe in saying, although I cannot prove it, that the reason this area was named a national park was due to Theodore Roosevelt. The only actual evidence I have is in these words and in the people that I knew at the time. Please remember that this bill was introduced in 1904 and that in the year previous Theodore Roosevelt had journeyed to the Yellowstone Park with "Our John," as he called John Burroughs, had spent two weeks in April, especially watching and studying the elk and following the herds in the Park. He was thoroughly familiar with elk and what they needed. He was thoroughly familiar with what a national park would do for elk, and I think it was this experience that prompted him, in talking with Mr. Cushman, to suggest the words "National Park." I may be wrong, but no one else has disputed it.

Here then is the historic background with which everyone concerned with the report had personal knowledge. It is the only case I know of in which a national park project was suggested by a President of the United States, and yet it was ineffective.

What was the reason? The bill passed the House, came up in the Senate, in the closing days of the session. One of the Senators from Washington asked that the bill go over. He had received a request from the Chamber of Commerce of Seattle to look into the matter, because certain prospectors were afraid that in a national park they could not prospect for copper. In those days copper was more valuable than it is now. We do not hear so much now about copper, but we hear about manganese instead.

It is well to remember that the legislation proposing to set aside Mount Olympus as a park was introduced thirty-two years ago and not merely two or three years ago; that the first project was for a national park, not a game refuge, not a monument; and that after the failure of the first bill, Mr. Cushman's successor, W. E. Humphrey, introduced two bills in an effort to preserve this area as a game refuge, one in 1906 and another in 1908, but both failed.

Perhaps it is well to say something with regard to the elk, because it is one of the species of special interest in this area. My first introduction to the elk on the Olympic Peninsula was forty-seven years ago when I spent three weeks at the town of Aberdeen, which had been founded recently on a tidal flat of Grays Harbor. I saw enough of the elk then that the subject has been one of special interest to me, and I resolved that if at any time I could do anything for the species, it would be a pleasure to do so.

What was the condition of the elk in those early days? There was no

National Park Service; there was no national forest; there was no forest preserve; there was no species described as the Roosevelt elk. There was no state warden service in the State of Washington; there was no provision against killing elk throughout the year, and there was not even a provision against hunting elk with dogs. That was the condition of the elk when I first became interested in them in 1889.

Two years later, Congress passed an act with a proviso authorizing the setting aside of forest reserves. One of the reservations set up under this section was the Olympic Forest Reserve. Six years later, in 1897, occurred another item of interest in the history of the elk. Dr. C. Hart Merriam, who was then my chief in the Biological Survey, had long recognized that the elk of the Northwest was different from the elk in the Rocky Mountain area. He finally secured a specimen, taken on Mount Elaine, which he selected as the type of a new species, a species remarkable on account of its dark color and other characteristics, which he named in honor of the President, Theodore Roosevelt.

Seven years more passed and the bill, to which I have referred, was introduced in 1904, and failed. In the following year, 1905, occurred two things of interest. The forest reserves were transferred to the Department of Agriculture and what had been a forest reserve under the Department of the Interior for some fourteen years now became a national forest under the Department of Agriculture. The State of Washington, trying to do something for the elk, passed a law for the protection of its species for ten years, making it illegal to kill an elk at any time prior to 1915. The protection has been continued up to recent times.

The next year, 1906, marked the passage of the Monuments Act, or the Antiquities Act, as it is officially called. One might not think that this act had any particular connection with the elk in Washington, but it was destined to be otherwise. Mr. Lacey, chairman of the Public Lands Committee, had been working for several years to establish certain national parks but without any success. One of the parks he had in mind was a park on the site of the Petrified Forest in Arizona. Another was near Mesa Verde, New Mexico, and there were others. When he failed for the second time on his bill for the Petrified Forest National Park, he remarked to me one day, "I am going to write in the Antiquities Act a clause 'for objects of scientific interest and for other purposes.'" They amended the Antiquities Act with these words.

The first monument created under the bill was the Devils Tower in Wyoming, and one of the early ones was Mr. Lacey's proposed park for the Petrified Forest, which is now a national monument. Two or three years later, recalling Mr. Lacey's remark and remembering the failures to secure any park legislation for elk in the Olympics, I conceived the idea of making one more effort. I knew there would be opposition, local, general, and industrial, and therefore I kept the plan to myself until a few weeks before the close of the term of President Roosevelt

I mentioned the plan first to a friend of mine, the law officer of the Forest Service, and inquired as to the possibility of creating a monument on this area. He said at once, "It cannot be done," and I replied, "If that is the way you feel about it, please keep hands off." He finally agreed to say nothing about it unless he was officially asked by the Forester, who was then Mr. Pinchot.

There was no hope of doing anything with the General Land Office a couple of weeks before the change of administration, because it was known that Mr. Ballinger of Washington was to be the next Commissioner and nothing affecting the State of Washington would be passed until he took office.

Finally, at the last moment, I laid the plan before Mr. Pinchot and said, "I would like to have the President himself pass on this proposition before he goes out of office."

Mr. Pinchot, after considering it a moment or two, replied, "You will have to secure the indorsement of the Member of Congress from that district."

"Suppose we cannot secure it?" I asked, to which he replied, "You will have to secure it."

I hastened to the Capitol and called Mr. Humphrey from the floor of the House. I said, "Mr. Humphrey, do you remember introducing a bill for a game preserve in the Olympic Mountains?"

"Yes, what of it?"

"What would you say if I suggested a way in which your object can be carried out before President Roosevelt goes out of office?"

"How can you do it?" he asked.

I replied, "A national monument requires only a proclamation of the President, no action by Congress, but requires your indorsement. Would you favor it?"

He was so enthusiastic about it that he rushed to the White House, and, after consulting the President, wired Seattle that night that it had been done!

Can you imagine a more embarrassing situation?

It was a case of publicity run wild. Only two or three people knew of the project, no proclamation had been drawn, no map prepared, no investigation made on the ground, and the Seattle papers had already announced Mr. Humphrey's activity in carrying out this project of five-years' standing.

The Chairman has read the introductory paragraph of the proclamation. You will find it in 35 Statutes, page 2,247, and I would like you to look at it, for it is an historic document showing how some things are done.

We had perhaps a week to get the proclamation through. The Geological Survey in those days prepared the maps for the Forest Service. Mr. Henry Garnett was the one in charge of preparing the map.

He had, fortunately, considerable information in his office about the peninsula, but it took him some time to put it in shape. The President became enthusiastic again, as apparently he did on a previous occasion, and called on the Secretary of the Interior to send him the proclamation forthwith, as he wanted to sign it. We had no proclamation, but finally I took the introductory paragraph to the Secretary of Agriculture, as he was leaving for lunch one day, and asked him if he would approve this draft setting aside the national monument. The draft had a title but no head or tail and no map. He looked somewhat confused and remarked, "I do not know what you are trying to build out there, but if you and Mr. Pinchot say it is all right, I'll sign it."

I assured him we were not trying to build anything but merely trying to operate under the Antiquities Act to create a national monument and set aside an area for the preservation of elk. The Secretary of Agriculture then signed the letter of transmittal to the President recommending the monument.

Finally, the map was received from the Geological Survey, attached to the proclamation and rushed to the White House, and then it was lost! We could not learn anything about its fate, and it was the 3d of March. The President was to retire the next day. Congress was in a turmoil; Mr. Humphrey was nearly beside himself for he had notified the press in his own State that he had done it, but he could not produce the proof. He telephoned the White House but could get no satisfaction. They telephoned the Forest Service and could get no satisfaction. Mr. Pinchot telephoned the White House. Finally, late in the afternoon of the 3d, just a few hours before the close of the administration, news came from one of the secretaries of the White House that the bill had been signed on the day previous, March 2. We breathed a sigh of relief. That in brief is the story of the sheep-bound tome, 35 Statutes, page 2,247, and how the monument came into existence.

Let us go back just a moment to a few statistics. Under the Elk Park Bill of 1904, the area to be set aside as the National Park included a little less than 400,000 acres or about 650 square miles. The area under the original monument proclamation of 1909 included a little more than 620,000 acres. The Olympic Forest Reserve in those days included approximately 400,000 acres; in other words, the Elk Park Bill called for the reservation of a little less than a third, possibly not more than a fourth, of the Forest Reserve. And President Roosevelt had the satisfaction of knowing before he left office that the project that had failed in 1904 had become a national monument with his approval to insure the preservation of the species named in his honor.

Just a word as to what happened since 1909. Shortly after the creation of the monument, some homesteader on the western boundary of the monument wanted his property cut out, and so the first modification of the boundaries was made, and then later came the protests outside

which resulted in cutting the monument in two. The area was cut from 620,000 to about 300,000 acres, and this reduction in the area brought about the same condition that we have in the Yellowstone National Park, namely, elimination of nearly all of the winter range.

In the present bill it is hoped to add some of the lands that were cut out, which will make it a more symmetrical and more rounded reservation than it was possible to do in the old days when the map had to be made in a week.

Things went on for years, and in 1933 two more important events happened: The State Game Commission for various reasons decided there were too many elk in various parts of Washington and declared a short open season some time in September of the same year. By Executive Order the President transferred back to the Department of the Interior the Mount Olympus National Monument which for twenty years had been under the jurisdiction of the Forest Service in the Department of Agriculture. My first knowledge of this action came at a dinner when our chairman leaned over and said, "You will be interested in knowing that the order transferring Mount Olympus Monument has been signed."

"That is good news for me and bad news for you," I replied.

"What do you mean?" he asked.

I called his attention to the fact that an open season had been decreed by the State Game Commission of Washington and said, "That means that tomorrow you will send telegrams to the State Game Commission, to your officers in the national monument, and to other persons interested that there will be no hunting on the National Monument, because there is no hunting allowed in national parks or monuments."

The telegrams went out the next morning and soon there was gathered together the greatest number of wardens the residents had ever seen in that area, and more interest was aroused in protection of the elk than ever before. From that day to this there have been practically no elk killed in the monument and the old state law still holds, the season is still closed, and the monument is still there.

If I have been rather personal in this matter, it is because I was asked to tell you something of the background of the legislation affecting the Mount Olympus National Monument.

### PROPOSED MOUNT OLYMPUS NATIONAL PARK

By JOHN B. YEON, Portland, Oreg., Chairman Oregon Chapter, American Planning and Civic Association, Chairman Recreation Section, Advisory Research Council, Oregon State Planning Board

**T**HE Mount Olympus National Monument, like an old world kingdom, has had a volatile history of fluctuating boundaries and changing administrations. It was established in 1909, reduced to ap-

proximately half its size by successive executive orders, and transferred by executive order from the Forest Service to the Park Service in 1933. Now a well-advanced movement intends to secure by Act of Congress the establishment of the Mount Olympus National Park. This proposal includes what is left of the original monument plus suitable adjacent lands which in the aggregate will restore the extent of the first reservation. The original boundaries cannot now be duplicated, for in the interval since their reduction the use of these deleted lands has rendered them valueless for park purposes.

No one expected that this movement would glide smoothly through to easy consummation. No one has been agreeably surprised. Now with success yet to be attained a few comments and observations on the strategy of the situation might be of interest and possibly of value. For in case anyone here has not heard rumors, all is not quiet on the western front.

Of the many notable campaigns which have marked the establishment and gradual expansion of the National Park System, this present issue is by no means the least. Special difficulties are here involved which require full recognition. The most serious of these is the fact that this park must be created out of lands which are not by any means economically worthless. Next perhaps is the fact that the area is located in the Pacific Northwest, where conservation is notoriously difficult, although opportunity is abundant and the need urgent. Also there is present the unfortunate situation produced by having conservation activities in two different governmental departments which are naturally interested in maintaining the integrity of their domains.

As to the fact that the necessary additions to the monument contain timber of merchantable value, there can be no denial and there should be no apology. There is, of course, no constant ratio between the commercial and recreational value of various areas. It may be a ratio of inverse or direct proportion. Certainly the existence of commercial values coincident with high park values does not in any way diminish the intrinsic worth of the latter. It may present obstacles and may entail sacrifices and definitely requires careful analysis, but neither, by the circumstance of its existence, invalidates the other.

However, the Olympic proposal is often branded as heretic because of its presumption to concern a region that has both values. It is heresy, it seems, to consider saving anything except what nobody wants or for which no other use can be found. It was heresy, it seems, to save the Redwoods, and sheer mass insanity for people all over the country to pay cold cash for what was cashable in order to save what had no market value at all. But those trees were preserved, not in specimens only, or in groups, but in the multiplicity of forests and by the methods which most surely test the depth and urgency of public desire. Here on the Olympic Peninsula is another great forest of a different latitude, already





Seven Lakes Basin, near head of Soleduck River, revealing the dense primitive forests of the Olympic Mountains

*Courtesy American Forests*



The Alpine beauty of the higher elevations of the Olympic Range

Courtesy *American Forests*

owned by the people, who have manifested time and time again that they are willing to sacrifice for what is not gratuitous if it so happens that what they cherish can also be weighed in merchants' scales. But, as is so often the situation which frequently prevents the national evaluation of the best use of national lands, local communities and interests feel that by the happenstance of their proximity to a Federal reservation, they have a proprietary control over the resources of these lands. The Federal Government can, if in its benevolence it sees fit, hold, patrol and protect these areas, at no added cost to the immediate vicinity, yet these same vicinities expect and attempt to demand exclusive benefit from a type of utilization they alone shall determine.

This presumption leads to hopes which the Olympic Park proposal is bound to shatter. Yet the fault lies in the presumption and not in the proposal. But for this unhappy condition the proposal can offer more than condolences. It can, for instance, substitute a substantial revenue from tourist travel which is likely to be more constant and increasing than the uncertain and diminishing returns of logging in recent years.

But here again another special obstacle confronts the park proposal. Ordinarily a community in the timber belt could, if it cared to realize what was before it, foresee that the boom days of logging operations were both a flourish and a symptom of the end. Throughout the region and even elsewhere on the Olympic Peninsula are abandoned sawmills, homes and communities surrounded by the gaunt expanses of exhausted operations. This district might well have been apprehensive of its future and willing to sacrifice the gorging of the moment for sustenance in the years to come. But here in this case a new faith in eternal life is engendered by the magic words, "sustained yield." Whether illusion or reality, it removes all interest in a substitute income.

However, "sustained yield" is not yet adopted even though it is now avowedly desired. A radical revision of local tax legislation is needed as well as the enactment of special Federal laws. Consolidation of private ownerships is also a prerequisite. And should these and other obstacles be overcome, certain sacrifices must then be accepted. Timber cropping, instead of timber mining, does not permit a rapid rate of cutting, and the annual revenue will be reduced to the degree that operations must be curtailed.

Even if granted that the existence of a park would substitute a local income which would be equal or greater than what could be obtained through "sustained yield" logging on the reduced scale which is part of its program, it is regrettable that a park proposal must interfere with any "sustained yield" attempt anywhere. The eminent desirability of its adoption must be recognized by everyone as something needed since the beginning of commercial forestry and now long overdue. But the emergency which has forced at last its long-delayed consideration is an emergency in many ways. Unwise methods of timber cutting have

shrunken the old growth coastal forests until the fragments which remain are rare. The practices which have proved economically fallacious have also desolated the environment of man. Wherever logging has occurred by the short-sighted methods which now even threaten logging, the extensive spheres of operations have become the ugliest sights under the sun.

It is time to cry halt to havoc and save those remnants of fair places which the world can now ill afford to spare. "Sustained yield" is needed, and needed urgently, emphatically—a sustained yield of the natural beauty of the land.

It should be remembered that as far as conservation for other than commercial survival is concerned, "sustained yield" forestry means nothing at all. The term has the deluding implication that one can cut the trees and have the forest. In the Pacific Slope timber where the terrain is rugged, it does not mean selective cutting by any process of thinning the stand. It means clear cutting by area with the same methods employed in the past. The schedule is merely arranged so that when the last area is cut the first will be ready to cut again. It is not a new practice in the woods but a different state of mind in the office. Its inevitable consequences upon a primeval forest may be somewhat retarded but not ameliorated in any way.

I believe it is safe to say that the most important part of the park will be the great forest, now outside the boundary of the monument and causing much of the difficulty in establishing the park. The high mountains with their jagged peaks, glaciers and incredibly fair timberline regions are certainly worthy enough, but it is the forest of the lower altitudes, the like of which will exist in no other national park, which gives to this area the significance which makes it of national interest. There are other alpine regions within and without park boundaries, even in the State of Washington, which are in some respects truly successful rivals of the high country of the Olympics. But the Olympic Forest as an example of its type, if it can be saved, will always be supreme.

Even this forest, however, is not of the magnificence which once prevailed on other portions of the peninsula. But these forests are now derelict and can never be seen again. It is also true that to the west of the proposed park, in an area acquired by the State from the Forest Service in exchange for state lands interspersed with forest lands elsewhere, a splendid forest exists, in places as fine as that within the proposed park. But this area is unavailable by reason of the exchange. Also in other parts of the Northwest, notably along the Oregon coast, remarkable forests are to be found, sometimes in conjunction with a wild and rugged coast-line of great recreational value. But these areas, almost without exception, are privately owned and in a comparatively short time will be stripped of their timber and become a forest boneyard. So the best of what man has left and the best of what is available by vir-

tue of public ownership, if not truly the best that nature once produced, exists within the proposed park.

This stand is of a size and continuity which permits the saving of a forest landscape and not merely examples of trees. A whole environment of growth, the impressive surge of plant-life, the staggering infinity of the phenomena are the attributes of aggregation which cannot be conveyed by segregated piecemeal remnants salvaged from a decimated stand. The expanse of the forest mantle is still on a scale commensurate with the mountains it covers and with the giant individual specimens it contains.

The forested valleys and canyons in conjunction with the alpine regions result in a combination which enhances the interest of all features beyond what the component parts would, if isolated, possess in themselves.

The area is surrounded on three sides at a short distance from the boundaries by salt water. It is almost an island, a miniature continent in itself. Here, within the boundaries, rivers have their source and major being before their confluence with the ocean. The circuit of moisture, lifted from the sea, detained in glaciers, and flowing through streams and rivers back to the sea, is complete, like a diagrammatic functioning model of the workings of earth forces, and almost within the range of observation from a single vantage point.

The verdure, like the geology of the area, changes as the terrain rises in elevation, from the luxuriant sea-level species in the lower altitudes to the dwarf alpine growth of the summit regions. Also the wildlife represents a similarly interesting and diversified range. And these conditions are unique features of this specific area, for here is the only place in the United States where glaciers crown the coastal mountains and add to the characteristics of these mountains the alpine phenomena of interior ranges.

It is the enviable good fortune of the Pacific Northwest that it possesses a concentrated abundance of nature's choicer manifestations, but it is not always the good fortune of the Nation that this is so. Nowhere else in America perhaps is an effective interest in conservation at the low ebb which here prevails. The exigencies of a recent pioneer development have left only to chance survival those features of the land which require deliberate action to save. The conservation of natural conditions has been traditionally the antithesis of regional advancement. Progress is still measured in accomplishment by what has been altered and in failure by what remains unchanged.

Especially is it difficult to enlist interest in the saving of a forest where logging has long been a major industry. The destruction of trees has prevalently become indiscriminately synonymous with progress, a symbol of employment, prosperity and gain.

But out of this customary apathy there has arisen a local support for

the Olympic Park proposal which is encouraging beyond expectations and has no precedent in local conservation affairs. Within my experience I can say that the most substantial support can largely be attributed to one specific provision of the Wallgren Bill. This provision stipulates that the wilderness characteristics of the area are to receive prior consideration in the development of park plans.

When the park proposal first became known in a general way in the vicinity it concerned, it was sincerely felt by many conservationists that the area was safer in certain important respects under its present status of "Primitive Area" than as a national park. There was fear that a change would permit the construction of undesired roads. Even though the boundaries were known to be inadequate, the exclusion of what was felt to be inappropriate was a provision too cherished to be surrendered. But when the details of the Wallgren Bill became known and simultaneously an ambitious road-development program for the area under its present administration was discovered, allegiance shifted rapidly and has been accumulative ever since. Here was a chance to give through congressional action a safeguard which mere classification was proving unable to assure.

Unquestionably one of the great distinctive features of the area, as remarkable as its natural endowments, is the fact that it has miraculously survived to this late date any serious modification of its primeval conditions. It has been girdled, and frayed at the edges, but the core is still intact.

The area is so composed that the penetration of roads into the interior will never be needed to make accessible to the motoring public any features which cannot be adequately sampled near the outer limits of the park. The large lakes just within the boundaries will always be available for heavy concentrations of people and the spur roads which are now constructed will display typical aspects of the park. The forests and even the high country extend in various places to the boundary so that if what development is needed is restricted to the border regions, a diversified and representative selection of areas will be available to accommodate this use. Presumably some of the present roads should be rebuilt according to park standards and this can be done without extending their mileage. Accommodations too can be constructed at or near places already accessible by highway so that now unmodified regions need never be disturbed.

Thus the handsome lands of the interior may retain that precious wilderness which human endeavor could never conjure up but which human activity can so easily destroy. The establishment of the park under the mandates of the Wallgren Bill will keep its wild heart beating through all the years to come.

## STATUS OF THE TETON ADDITION

By HILLORY A. TOLSON, Assistant Director in Charge of Branch of Operations,  
National Park Service

I SHALL try to explain to you where the Jackson Hole country lies, so that we can be oriented. The Tetons lie south of Yellowstone National Park. The actual mountain slopes, with the chain of glacial lakes at their bases, are now a national park, but the valley immediately contiguous remains in the ownership of Mr. Rockefeller.

Mr. Albright has given us the history of this project. He and Mr. Mather saw the beauties of the lakes and mountains of the Jackson Hole country, and confirmed the reports which had been made in 1898 by Charles D. Walcott, the then Director of the Geological Survey, and later Secretary of the Smithsonian Institution, that the Jackson Hole country and the Teton Mountains should be brought into the National Park System.

I shall not go into the hardships and the difficulties Mr. Mather and Mr. Albright experienced in getting a bill introduced in the Congress. They were many. However, in 1929, the Grand Teton National Park, comprising approximately 96,000 acres, was established. Senator Kendrick of Wyoming was the principal sponsor of the project. The present Grand Teton National Park includes only the Teton mountain range. It does not include all that the National Park Service feels should be in the complete picture, that is, a proper approach to the Teton Mountains and an area sufficient to provide a means of preserving the elk and other wildlife of the region. I am not a wildlife expert, but have acquired some knowledge of it through my association with members of our Wildlife Division and reading about it since becoming a member of the National Park Service. We know, however, that the elk spend the summers in the southeastern part of Yellowstone National Park and in the Thoroughfare country just south of Yellowstone, and that, during the winter, they drift down into the lower part of Jackson Hole.

In 1926, Mr. John D. Rockefeller, Jr., visited the Yellowstone and Teton National Park areas. Going down the road toward the town of Jackson he saw things which destroyed the beauty of the valley and the marvelous mountain scenery—hot-dog stands, billboards, run-down ranch houses, improperly located telephone lines, and other eyesores. It was then that he began to take an interest in the Jackson Hole country. He organized a land-purchasing agency, the Snake River Land Company, to purchase the privately owned land in that region with a view of donating it to the Government for park purposes.

It seems strange to us that a man should acquire land of little agricultural or commercial value, and then have a difficult time giving it to the Government for a beneficial public purpose! However, that is the situation in this particular case. He was even subjected to a senatorial investigation! Resolution 226 was introduced in the Senate for the

purpose of determining what methods, if any, had been employed by the National Park Service to discourage persons from making entry and settlement on public land and on forest reserves in the Jackson Hole region so that the boundaries of Yellowstone and Grand Teton Parks might be conveniently extended; to determine the efforts made by the National Park Service to secure the cooperation of the other bureaus and departments of the Government in discouraging entry or residence on public lands and in national forests; and what methods, if any, had been employed by the Snake River Company, or any of its agents, affecting residents and settlers on public lands and forests in the Jackson Hole region in connection with its activities in acquiring land or otherwise promoting the project to enlarge the Yellowstone and Teton Park boundaries.

The senatorial investigation, held at Jackson, Wyoming, in August, 1933, resulted in a complete vindication of the National Park Service and the Snake River Land Company, Mr. Rockefeller's land-purchasing agency.

Mr. Albright, former Director of the National Park Service, does not, as you know, believe in doing anything by halves. I came into the Park Service in September, 1932. Mr. Albright, apparently, wanted me to be inducted properly into the difficulties of national park extension; so he sent me, as the Service's observer, to the senatorial investigation at Jackson, Wyoming. It was one of the most thrilling and interesting experiences I ever expect to have. Miss James attended that hearing and she can confirm what I tell you.

Another interesting feature of the Jackson Hole extension problem is that Senator Carey of Wyoming, who introduced Senate Resolution 226, called numerous conferences with representatives of Mr. Rockefeller and of the National Park Service subsequent to the investigation and discussed the problem with them. As a result, he introduced S. 3705 on May 28, 1934, to extend the boundaries of Grand Teton National Park. That bill provided for extending the boundaries to include the area lying south of the Gros Ventre River and north and east of the town of Jackson, Wyoming, now in a Biological Survey purchase area and the Jackson, Emma Matilda, and Two Ocean Lakes area lying north and east of the present eastern boundary of Grand Teton Park. S. 3705 passed the Senate on June 6, 1934, but died in the House when the Congress adjourned on June 18, 1934.

During the next session of the Congress, Senators Carey and O'Mahoney introduced S. 2972, to take the place of S. 3705. That bill, contrary to National Park Service desires, did not include the Jackson, Emma Matilda, and Two Ocean Lakes area. It did contain provisions relating to the establishment of the Jackson Hole National Game Refuge out of the area lying south of the Gros Ventre River.



Section 5 of S. 3705 provided that no provision of the Act should become effective until provision had been made for the satisfaction or compensation of Teton County from sources, other than Federal sources, by reason of any transfer of property to the United States for park purposes. It was only by the inclusion of such a provision that it was possible to clear S. 3705 and S. 2972 through the Bureau of the Budget. S. 2972 did not pass either house.

Section 301 of S. 2972 stated that none of its provisions authorizing the acceptance, in behalf of the United States, of donations of privately owned lands within the limits of the said Grand Teton National Park should become effective, until such time as provision was made for the satisfaction or compensation to Teton County for loss of taxes resulting from donations that may be made to the United States of privately owned lands within the Grand Teton National Park, as extended.

A bill has not been introduced by a member of the Wyoming delegation during the current session of the Congress providing for the extension of the Grand Teton National Park boundary to include the Jackson Hole region. However, we understand that Senator Carey is now working on a bill which he proposes to introduce for that purpose.

The real stumbling-block in the way of extending the Grand Teton National Park is the provision, insisted upon by a number of the local residents, relating to the compensation of Teton County resulting from the loss of taxes through donations of privately owned land within that county to the United States for inclusion within the park. Efforts are now being made by Senator Carey to draft a provision which will be satisfactory to the local people, the Bureau of the Budget, and the Congress. Such provision probably will provide that no privately owned lands within the extension area shall be accepted by the United States, by donation or otherwise, unless such lands, or any sufficient part thereof, shall be and remain under lease or permit for a period of five years from the date of acceptance, requiring payments to be made therefor to Teton County totaling a sum which, together with any payments required to be made to the said County under leases or permits for the use of lands of the United States, aggregate annually not less than \$12,000; and, after the expiration of the five-year period, for payments of considerations derived from leases and permits granted within the extension area to Teton County of not to exceed \$16,000 annually. Whether such a provision will be feasible is yet to be determined.

The Snake River Land Company, Mr. Rockefeller's land-purchasing agency, owns approximately 40,000 acres of land in the Jackson Hole area, acquired at an approximate cost of \$1,600,000, which Mr. Rockefeller is prepared to donate to the United States for national park purposes.

S. 2972, introduced during the first session of the Seventy-fourth Congress, provided for the inclusion of about 146,000 acres of additional

land to Grand Teton National Park. By the inclusion of Jackson, Emma Matilda, and Two Ocean Lakes and surrounding area, which the National Park Service believes must not be left out of the extension area, notwithstanding the contention of the so-called purists of Park Service standards, and the selfish desire of certain people to reserve those beautiful lake shores for summer-home sites for the benefit of a few, the total acreage involved, including the lake area, is approximately 216,000 acres. The lake area involved comprises about 31,640 acres. About 12,000 acres of privately owned lands remain in the extension area north of the Gros Ventre River. There are also 95,960 acres of national forest lands, and 46,640 acres of public domain within the area.

Perhaps we are wrong. Perhaps we of the National Park Service live too close to such things as the Grand Teton National Park extension. However, it seems short-sighted for a group of local people, perhaps spurred on by certain selfish individuals or some greedy governmental bureau, to oppose the establishment of a national park, or in the case of an existing park, an extension to give it a proper boundary, when such establishment or extension, in the long run, will bring increased economic benefits to them through the increased number of visitors. The so-called "tourist crop" yields a rich harvest to those who will develop it properly. The extension of the Grand Teton Park will permit its proper development and, no doubt, will bring prosperity to the near-by towns and cattle ranches. The little town of Jackson is located at the extreme southern tip of the proposed Grand Teton extension area. It is the only town of any size in that country, having approximately three or four hundred residents.

It is to be hoped that the citizens of Wyoming will see the opportunities open to them in advocating the Grand Teton Park extension, and that its accomplishment will bring economic benefits to themselves; improved wildlife conditions, particularly for the elk; and inspirational and recreational benefits to those of our Nation who want the glorious Teton Mountains and the near-by beautiful lake and desert country of Jackson Hole combined in a real Grand Teton National Park!

### HISTORY OF THE TETON ADDITION

By HORACE M. ALBRIGHT, New York City, Vice-President, American Planning and Civic Association

**S**OMEONE has said that the Teton Addition is one project I stayed with in season and out for a great many years, and there is no doubt in the world that that project gave me about as much punishment as any project ever gave any government officer.

When the Park Service was first established, as Colonel Thomson pointed out yesterday, we were immediately confronted with the coming of the automobile, with new roads, many automobiles, with the Gypsy

spirit sweeping over the land. The Jackson Hole was regarded as the last of the old West, completely surrounded by mountains, inaccessible in winter, sparsely settled, a cattle country. Years ago it had become a resort for discriminating people of the East who wanted to get away from civilization. It was one of the two or three dude ranch areas. We of the Park Service were overwhelmed by this demand for roads. In working out possibilities for roads in different sections of the country we found that the thing that interested people everywhere was the question, "What are you going to build for us? What are you going to do for us in the way of roads?"

It is natural that a park man, unfamiliar with the sentiment of a place like the Jackson Hole, would mention roads, and on my first trip into the Jackson Hole, I mentioned the possibility of improved roads, and you can imagine my surprise when I found that that was exactly what they did not want. They did not want to be civilized; they did not want any roads in there, and they gave me such a trouncing at the first hearing there that the old farmer who took me home to sleep said, this coming right after the Dempsey-Willard fight, when I got in the automobile, "I feel like I was taking Jess Willard home."

I got to thinking about the matter. We were just in the beginning of park policy. We were feeling our way. There were very few of us in the Service. I realized that what they wanted was right by my own heartbeats, my own spirit. I did not want roads, anyway. I wanted to go on the trails, to hike or to ride horseback.

Within a year I had reached the conclusion that there was no need of civilization in Jackson Hole, no need of roads there. I gave the reports to the Director on that point. I came to their viewpoint, and so we began to plan what the facilities of Jackson Hole should be.

That viewpoint took me into dude ranches, and men like Drake, writing for the *Saturday Evening Post*, and others, featured it. We planned for a restoration of Jackson Hole as a frontier post. Most of the buildings were of log. They wanted to keep them of log and not allow anything but log houses to be built there. They said, "Do not build a fine road through the country. Find a way of buying up the homesteads that had been settled in the upper part of the country, get the park extended down, keep the ranches out, protect the sage grouse, and the moose." This is one place in the country where one can always see moose and grouse. We have been talking about the sheep, the deer, and other animals indigenous to the West. Here we have the old West, even frontier towns at the entrance, with the wild flowers and the things that Roosevelt loved. It was part of the picture.

By the time we got the plan worked out, before the ink was dry on the program, they were raising some money to send some old-timers east with us. We had some ranchers with us who tried to sell the program. Then the new people turned on us, the townspeople. The gasoline sta-

tions got in there, the store-keepers, and I woke up one spring morning and found myself face to face with a demand for roads and supplies for Jackson Hole, a demand exactly opposite to that of two years earlier.

We had the support of the dude ranchers and the amity of the far larger part of the population, the villagers. Before you could even think about it, dance halls were built, gasoline stations came in, and one man built what he called the "Hollywood Cowboys Home" right along the main road. We raised two thousand dollars and sent two men east, trying to interest wealthy men who had hunted there.

Roosevelt hunted there in 1901. He wrote it up in 1904, and mentioned in many of his works this section of the country, and almost always included the Tetons.

In 1929, it looked as though the country were lost. The homesteading had continued. It seemed impossible to get a withdrawal to stop the homesteading.

Next the department opposed the plan, this plan of coördinating, because of the lakes on which there were cottages and summer homes; and in that swirl of opposition we practically admitted defeat.

Then I had the fortune of having Mr. and Mrs. Rockefeller come out with their boys. We took them down—they particularly wanted to see the moose. I took them up on Jackson Lake and we saw seven moose that first day. The next day we drove down through Jackson Hole and Mr. Rockefeller was terribly shocked by the conditions. Here were the Tetons before him, the most magnificent range in the country. Here were the beautiful glacial lakes. A telephone line had been built between the main road and the mountains. There was a gasoline station, there were dance halls—everything was a mess. A Los Angeles man put in a two-story picture house and covered it with tar paper.

Mr. Rockefeller asked what it would cost to buy this land that all these things were on. He said, "I wish you would give me a program of what it would cost to purchase this, and send me a map."

Late in the afternoon, as the sun was setting in the valley, the shadows of the peaks were stretching almost across. I took him on a hill where he could see the upper part of the hills and the whole glory of the valley spread out before us, and I told him all this dream we had a few years ago and what we wished could have been done. I did not ask him for anything; in fact, I left him with the idea that it was just a dream that had vanished.

That winter, in response to his request, I took a map showing this tract of land on the west side of the river where this construction was taking place and laid it before him, and estimated that a quarter of a million dollars would clear up that particular section.

He said, "Mr. Albright, that is not the plan I wanted."

I said, "Why, yes, it is, Mr. Rockefeller. You asked me to get a plan showing this land and estimate what it would cost to acquire it."

He said, "No, that is not the plan I wanted. Let me recall to your mind. You and Mrs. Rockefeller were there by that dance hall that was so obnoxious. In the afternoon you took me up on a hill where you could show me the whole valley, the beauty spots of the whole valley."

I said, "That was necessary in order to preserve the wilderness and charm of the scene."

He said, "That is the plan I want. I cannot be interested in anything but the ideal."

I told him I did not know what it would cost.

Then in a few months I managed to get another program to him. That one he approved and started in buying.

Well, double-dealing and blackmail and many other propositions were put up during the buying of that land. The land cost upwards of five million dollars—five and a half million dollars, I think it was. The County said that Mr. Rockefeller could not have the land because the County wanted the taxes. Of course, there were many other items of opposition. Here was the problem: Back in 1894, in the first place, the land should not have been homesteaded. It should not have been privately owned. When Yellowstone was set aside, if only somebody could have realized that we needed more than Yellowstone to preserve Yellowstone, that we needed the Jackson Hole, we should not be facing these problems today. When Dr. Walcott went there to make a study of the country it should have been preserved then. The central part of it was largely virgin country.

When Stephen Mather took it over in 1916 it should have been acquired then. In 1926, the chance to buy the land was on a cheaper basis.

The plan is now ready to put through. It can be done. The Forest Service is ready to cooperate. Apparently not all the local opposition is out of the way, but whether it is done now or later, it will be done. It is a great project, a most important project.

I have said every once in a while to Mr. Rockefeller, "I am sorry I got you in this mess," but he always says, "Don't worry about it. It is one of the finest things I have done. I am willing to pay taxes on it and later, if I pass off the scene, I have five boys all of whom love that country and they will finish the project."

## Federal Parkways

By A. E. DEMARAY, Associate Director, National Park Service

EDITOR'S NOTE.—A paper presented before the National Park Council of the American Planning and Civic Association, held on January 22, 1936, in connection with the Conference on the National Park Service.

**T**HE first reference to Federal parkway legislation is found, indirectly, in the Act of May 23, 1928, providing for the Mount Vernon Memorial Highway. The Act authorizes a highway and includes provision "for the planting of shade trees and shrubbery and for other landscape

treatment, parking and ornamental structures," and a right-of-way of such minimum width as the Commission shall determine.

The next legislative reference is the Act of May 29, 1930, for the acquisition, establishment, and development of the George Washington Memorial Parkway.

On July 30, 1930, the Act of Congress establishing Colonial National Monument included Jamestown Island, parts of the city of Williamsburg and the Yorktown Battlefield, and areas for a highway of not to exceed 500 feet in width to connect said island, city, and battlefield. The Act provided for the condemnation of rights-of-way not exceeding 200 feet in width through the city of Williamsburg to connect with highways or parkways leading from Williamsburg to Jamestown and to Yorktown.

Further legislative expression was contained in the National Industrial Recovery Act approved June 16, 1933. In Title II Public Works and Construction Projects, it was provided that the Administrator shall prepare a comprehensive program of public works, which shall include among other things the following: construction, repair, and improvement of public highways and parkways, etc.

The Act of May 21, 1934, provided for a survey of the Old Indian Trail known as the Natchez Trace, for the purpose of constructing a national road on this route to be known as the *Natchez Trace Parkway*.

Public Resolution No. 19, 74th Congress (S. J. Res. 43), approved May 20, 1935, authorizes the establishment of a commission for the construction of a "Washington-Lincoln Memorial Gettysburg Boulevard," connecting the Lincoln Memorial with the battlefield of Gettysburg. This resolution does not specify right-of-way widths, but presumably a boulevard of parkway quality will be recommended.

H. R. 10104 authorizes and directs "the National Park Service to make a comprehensive study, other than on lands under the jurisdiction of the Department of Agriculture, of the public park, parkway, and recreational-area programs of the United States, and of the several States and political subdivisions thereof, and of the lands throughout the United States which are or may be chiefly valuable as such areas."

The first active step toward parkway construction under the National Industrial Recovery Act was taken on November 18, 1933. On that date Secretary Ickes informed the Director of the National Park Service that the President had approved the proposed scenic parkway connecting the Shenandoah and Great Smoky Mountains National Parks and asked him to arrange with Mr. Thomas H. MacDonald, Chief of the Bureau of Public Roads, to have the work initiated at the earliest possible date. December 19, 1933, Mr. E. K. Burlew, Administrative Assistant and Budget Officer, notified the Director that "in accordance with the provisions of the National Industrial Recovery Act of 1933, an allotment of \$4,000,000" had been made for the highway to connect the Shenandoah and Great Smoky Mountains National Parks.

On November 23, 1933, Mr. Burlew informed the Director that "in accordance with the provisions of the National Industrial Recovery Act of 1933, an allotment of \$50,000 has been made to the National Parks, Roads and Trails, for survey of the Green Mountain Parkway, in the State of Vermont."

The National Park Service was originally instructed that the States would be required to donate a right-of-way in fee simple 200 feet in width as a prerequisite for parkway construction. After preliminary surveys, we reached the conclusion that adequate and appropriate parkway design could not be secured within such narrow limitations.

Our first Federal parkway regulations approved by the Secretary, August 29, 1934, required a right-of-way 1,000 feet wide except, where it proved impracticable to secure that width, a width of at least 200 feet was required with satisfactory easements of control for the balance of the 1,000 feet.

Even these regulations proved insufficient and they were, therefore, superseded by detailed regulations entitled "Regulations and Procedure to Govern the Acquisition of Rights-of-Way for National Parkways," which were approved by the Secretary, February 8, 1935. In order to give an idea of the scope of these regulations, I shall abstract them.

These regulations define a parkway as a development of the highway, but differentiate a parkway from the usual highway as follows:

A parkway is designed for passenger car traffic and is largely for recreational use. It aims to avoid developments which mar the ordinary highway.

A parkway is built within a wider right-of-way which acts as an insulating strip of park land between the roadway and the abutting private property.

A parkway is preferably located through undeveloped areas of scenic beauty and interest and avoids communities and intensive farmlands.

A parkway makes the best scenery accessible even at the sacrifice of shortness of route.

Grade crossings between the parkway and main intersecting highways and railroads are eliminated.

Points of entrance and exit on a parkway are widely spaced to reduce traffic interruptions and a secondary road is often provided to carry local traffic.

Scenic easements are introduced to secure a maximum of protection without increasing the land to be acquired in fee simple.

Under these regulations a parkway *right-of-way* is defined as a strip of land acquired in fee simple to provide the area for the construction of the roadway and an insulating area to protect the natural values.

A *scenic easement* for a parkway permits the land to remain in private ownership for its normal use, but controls any future use detrimental to the parkway.

*Access* is the term applied to private or public rights and facilities to enter and leave a public road or thoroughfare.

*Frontage* is the term applied to the landowner's right to use the public highway on which his property abuts for entering or leaving at any place where his land is bounded by the road or street.

*Right-of-Way Regulations:*

(1) The right-of-way shall be acquired by the State in fee simple with scenic easements on additional areas, according to preliminary property maps, required before completion of the project.

(2) Right-of-way acquisition shall be undertaken in units of sufficient length to justify placing such units under contract for construction as soon as acquired by the State.

(3) Units of the parkway for which the right-of-way has been acquired shall be certified to the Secretary of the Interior from time to time by the State for consideration with a view to construction, and the method of certification is explained.

(4) A right-of-way of 100 acres per mile in fee simple, plus 50 acres per mile under scenic easement control, shall be provided for the gross length of the parkway in the State, but at no point shall the right-of-way be less than 200 feet wide. One hundred acres per mile is approximately equal to a width of 800 feet.

*Scenic Easements:*

Scenic easements on national parkways allow the land to continue in its present agricultural or residential use, but provide that:

No building, pole line or structure shall be erected on such lands, except that farm buildings may be erected or altered with the consent of the grantee.

No road or private drive shall be constructed on such lands to the parkway motor-road.

No tree, plant, or shrub shall be removed or destroyed on such lands, except that the grantee has the right at all times to remove and trim trees, plants, and shrubbery, and to set out and plant trees, plants, and shrubbery.

No dump of ashes, trash, sawdust, etc., shall be placed on such land.

No sign, billboard, or advertisement shall be displayed or placed on such land, except one sign not more than 18 by 24 inches advertising the sale of property or products raised thereon.

*Access and Frontage Rights:*

The State is required to furnish means of ingress and egress other than onto the parkway to a tract of land isolated by the acquisition of right-of-way. The State is also required to furnish rights-of-way to relocate existing public roads when the parkway right-of-way occupies such public roads or parts of them and to furnish owners having frontage



rights thereon a means of ingress and egress other than onto the parkway, with exceptions to be determined by the National Park Service. The use of existing private roads crossing the parkway is restricted to the owners and those having business with the owners, and the private roads shall be enclosed by gates at the right-of-way line.

*Right-of-Way Procedure:*

The National Park Service through the Bureau of Public Roads will prepare and furnish to the State preliminary property maps showing the required right-of-way. The State will then acquire right-of-way and the Secretary will authorize construction when the state officials certify that the rights-of-way have been secured. Deeds for the right-of-way must be executed and delivered to the Department of the Interior before completion of the project.

In the transfer of the right-of-way to the United States, deeds must be accompanied by complete abstracts of title, showing fee simple title, together with property maps prepared by the State according to specifications.

The National Park Service may require the State to take options on additional desirable land for future acquisition.

*State Legislation:*

When new state legislation is necessary for authority to acquire parkway rights-of-way and to provide funds therefor, the following provisions should be included:

Authority to enter the lands and take possession prior to condemnation proceedings and prior to the payment of money for the property.

Authority to condemn scenic easements.

Authority to condemn parkway rights-of-way of sufficient width to conform with these regulations.

Authority to guarantee to hold the United States free and harmless from all claims if construction work is undertaken by the United States.

*Parkways under Consideration, Being Surveyed, or under Construction:*

(A) Appalachian System.

(1) Shenandoah-Great Smoky Mountains National Parkway.

(2) Skyline Drive.

(3) Connecting line to the Potomac River from Shenandoah Park (Front Royal).

(4) Hudson Potomac Section:

(a) Washington to Boston Parkway.

(1) Mountain line.

(2) Metropolitan line.

(5) Berkshire Hills Section:

(a) Mountain line.

(b) Metropolitan line to Worcester.

(6) Green Mountain Parkway.

(Spur to New Hampshire and Maine.)

(B) Natchez Trace Parkway.

(C) Colonial Parkway.

(D) Mount Vernon Memorial Parkway:

(1) Extension to Wakefield, Virginia.

(2) Northern Potomac River extension (also listed as the Potomac River—Antietam Line under E).

(E) Gettysburg Parkway Studies:

(1) Direct route.

(2) Monocacy River route (also considered a valley alternate to the mountain line of the Appalachian System).

(3) Potomac River—Antietam route.

(4) Realignment of existing highways (interesting because showing practical impossibility of raising existing highways to the standards of parkway established by the National Park Service).

**THE FEDERAL CITY**



# Regional Park System of Washington

EDITOR'S NOTE.—The following papers on The Regional Park System of Washington were presented at the Conference on the National Park Service held in Washington, January 22-24, 1936.

## CHAIRMAN'S INTRODUCTION

MR. FREDERIC A. DELANO: When Senator McMillan set up what has often been called the McMillan-Burnham Commission in 1901, on the occasion of the one hundredth anniversary of the founding of the District, there was set up about that time a committee of about a hundred who kept a sort of watchful eye on what was being done.

By the time I came to Washington in 1914 that committee had pretty well gone out of existence. At a meeting of the American Civic Association in 1923, Mr. Charles Moore, then, as now, the chairman of the Commission of Fine Arts, suggested that the American Civic Association take an active part in trying to revive interest in the McMillan-Burnham report of 1901 of the Commission, and you remember the work of the Commission was very largely to revive interest in the original longed-for plan of the founders. At the time of that meeting Dr. J. Horace McFarland, of Harrisburg, was president. I was asked as a member of the Civic Association and resident here to act as chairman of the committee, and when I looked into the matter it seemed to me that the first thing that I wished to do was to revive the Committee of One Hundred, so in 1923 we undertook that work and presented a report which that committee made early in 1924.

We had no funds with which to operate. The American Civic Association had no funds to give us, and so the Association suggested that it was a great honor to be on that committee and to serve the city and the districts and in appreciation of that honor we should each chip in ten dollars. We did it. That made a fund of a thousand dollars, and that fund of a thousand dollars paid for our meetings and the publication of the report. We divided the men and women who served on the Federal City Committee into ten subcommittees.

There was a subcommittee on Architecture and its Relation to the National Capital, of which Mr. Horace W. Peaslee was chairman.

There was a subcommittee on Forest and Park Reservations, of which Mr. Charles F. Consaul of Washington was the chairman.

There was a subcommittee on School Sites and Playgrounds, of which Mr. Evan H. Tucker was chairman.

There was a subcommittee on Housing and Reservations for Future Housing, of which Mr. John Ihlder was chairman.

There was a subcommittee on Zoning, of which Mr. Harry Blake was chairman.

There was a subcommittee on Streets, Highways, and Transit Problems, of which Colonel Alvin B. Barber was chairman.

There was a subcommittee on Extensions of Metropolitan Washington Beyond the District Line, of which Mr. William T. S. Curtis was chairman.

There was a subcommittee on Waterfront Development, of which Mr. Frank P. Leech was chairman.

There was a subcommittee on Industrial Development and Limitations, of which Mr. Edwin C. Graham was chairman.

There was a subcommittee on Contact and Future Relations with existing organizations, of which Mr. Claude W. Owen was the chairman.

Now, these ten subcommittees prepared their reports. The report was turned in with a foreword which I prepared, and it is interesting to see how far we have advanced since that time. The immediate outgrowth of this report was that Congress, in 1924, authorized by act the setting up of an ex-officio committee of seven, called the National Capital Park Commission. That Commission was authorized to buy property with such funds as Congress might appropriate. Nothing was said about planning and that was not given attention, not because we were ignorant of the importance of that subject, but because we thought we had better start with what we were sure of. The Committee of One Hundred, having been set up in order to arouse interest in a plan which had been made in 1901 and published in 1903, simply assumed that the park commission to be set up would follow the lines made in 1901 by the Commission.

Two years later, after two years of experience by this Commission, the existing National Capital Park and Planning Commission was set up, and that Commission had, besides the seven ex-officio officials of the Government and District Government, four private citizens. Except for the fact that the offices of two of the officials of Government were merged into one, making six ex-officio members plus four private citizens, the Commission stands today as when it was created in 1926.

I am not going to take any more of your time except to urge some of you, if you still have those reports of 1924, to run your eye over them, because they are of interest not only for what was said, but as indicating the marked advance that we have made.

This morning we are going to hear from speakers on the subject of what has been done in Washington. We will hear first from Mr. John Nolen, Jr., Director of Planning of the National Capital Park and Planning Commission, who will tell you of the plan.



Black-tail Deer in the sanctuary of Glacier National Park  
enjoying protection from its enemies

*Courtesy American Forests*



Regional Plan, Washington and Environs, developed by the  
National Capital Park and Planning Commission



## THE PLAN

By JOHN NOLEN, Jr., Director of Planning, National Capital Park and Planning Commission, Washington, D. C.

THIS is rather a unique occasion which the Chairman has outlined. In this room are many persons who not only know a great deal about the plan of Washington but who during the last few decades have made notable contributions to the work which the National Capital Park and Planning Commission has been engaged upon in its ten years of existence.

The point that has been emphasized, which runs through all of the planning for Washington, is that what has been accomplished and what will be accomplished cannot be the work of any one or two or three individuals alone. It must be a combination of effort, including that of a group of citizens such as the Committee of One Hundred, which will give support to whatever governmental authority is set up to do the job.

I will endeavor to review briefly the historical background for the park plan of Washington and its constantly expanding environs, present the principal features and character of the plan, give its present status and outline the program and needs for the future.

What does the Regional Park Plan comprehend? For the purpose of this presentation, it includes all the major features of the park system serving the region within 20 miles of the Capitol as it is proposed to be at some future time irrespective of the location or the jurisdictions within which specific parts of the system may lie. It includes, therefore, what exists and what is proposed, combined into a comprehensive whole without respect to the time of realization. In the development of a broad plan the time element is not necessarily important so long as during the period of realization a consistent plan is continuously maintained that is reasonably capable of accomplishment.

*Historical Background.* In Washington the historical background is unusually important. The area planned by L'Enfant for the future Federal City is the heart of the Washington Region of today and is the guiding influence throughout an area which is expanding both as to its size and its needs. What was a region in L'Enfant's time is virtually downtown Washington today. Whereas his plan covered an area of only 10 square miles, the present region surrounding the National Capital includes some 1,500 square miles, and a population nearing three quarters of a million people.

It is interesting to recall that L'Enfant's plan consisted of two major elements, one a plan of streets, and the other a plan of public reservations. Through these two coördinated plans the physical pattern of the future city was controlled. In addition to this, the adequacy or spaciousness of the plan was one of the most important provisions of significance today. Over sixty per cent of the area of the original city was set aside for streets and public reservations.

The very adequacy of the original plan, however, resulted in a complete lack of any new planning for over 100 years from 1791 to 1893. In fact, during this period many things were done to upset what planning had been done. Moreover the Capital, as originally laid out, sufficed only to the close of the Civil War. L'Enfant visioned a city of 100,000 people, which was the population reached by 1865. Thirty or forty years of sad experience followed, for the city grew beyond the limits of the original plan and no new plan was made for the rest of the District.

In 1901, to celebrate the centennial of the movement of the Federal establishment to Washington, the McMillan Commission was set up to do something about future plans for the Federal City. That Commission had, of course, the mistakes of the past to correct and a vision for the future to create. The four ablest professional leaders of the country were enlisted and they produced two memorable plans: (1) A Central Area Plan for the grouping of public buildings about the White House and the Capitol, and including a plan for the Mall which had long been forgotten; and (2) a park plan for the entire District of Columbia. This was the first time that a park plan had been made since the original city was laid out, covering only one tenth of the ten-mile square. The 1901 park plan extended only to the District boundaries, but the report made several recommendations for projects in the region surrounding the Capital City. It renewed, for example, the proposal for the Mt. Vernon Highway, which was carefully surveyed as far back as 1879, and advanced a specific proposal for a National Park at Great Falls and a parkway along the river between Washington and Great Falls.

*Basis for Adoption of Regional Park Plan.* For over two decades the 1901 plan lay dormant and static because no agency was charged with the responsibility to carry it into effect or even to keep it up to date. Finally when it was seen that because of this lack of responsibility the opportunities of carrying out any park plan at all were being rapidly lost, the National Capital Park Commission was formed in 1924. That Commission was given specific authority to provide for the comprehensive and continuous development of a park, parkway and playground system for the District of Columbia and adjacent areas in Maryland and Virginia.

In 1926, the creation of the present Park and Planning Commission came about. The duties of the original Park Commission were broadened and the new Commission was directed to develop a city and regional plan, and later in 1930 given definite authorization to proceed with certain park projects outside of the District.

The 1901 plan was the basis for the regional park plan that the reorganized Commission adopted in 1927. After twenty-five years it was found, of course, that many of the proposals of the 1901 plan were incapable of being realized and that certain changes were necessary to meet modern needs. Two of these needs were quite different from any-

thing that could have been conceived in 1901. The matter of parkways is one. The automobile had hardly been heard of in 1901. The 1927 plans materially altered and extended the conception of the parkway proposals.

The other need that was new was that of facilities for active and supervised recreation. About the turn of the century the first city playground was established through private subscription, but legislative recognition of the need for a Playground Department did not come until 1912. Even then little progress was made in the acquisition of sites, which was a responsibility of the Commissioners of the District of Columbia. The new plan, therefore, included definite provision for areas on which to conduct an active recreational program.

The situation and problems that faced the National Capital Park and Planning Commission in the early days and which have been the background for the action taken since 1926, may be summarized as follows:

(1) The 1901 Park Plan was out of date. Many of its important proposals were impossible of accomplishment by reason of urban development, which had been accelerated by the increase of population during and after the World War.

(2) The pressure of this same urban development was threatening what few parks were in existence in the outlying areas, such as Rock Creek Park. Many of the areas proposed for acquisition in 1901 were being subdivided and despoiled.

(3) No provision was being made for playgrounds and other active recreational needs of a population that was rapidly massing in a compact urban pattern of development.

(4) No provision was being made for the parkway type of circulation that was becoming recognized as a necessary adjunct of any modern city plan.

(5) No provision was being made for regional parks, and the preservation of natural scenery and resources in the undeveloped areas outside of the District.

The Commission's responsibility was to meet these deficiencies and provide for future needs in one comprehensive plan. It made extensive studies of land-use, of the highway system, of the trends of population growth, of the historical aspects and notable geologic, botanic, and other natural features which would affect the choice of areas for park and recreational purposes. It realized that a park plan for the District would be incomplete unless it were coördinated with a regional park plan covering the entire area of urban influence. The plan developed, therefore, recognized the growing metropolitan character of the National Capital.

*Principal Features of the Plan.* In the formulation of a park plan, the natural features, of course, present the opportunities, particularly for parks of regional significance. Washington being situated at the junction of the Potomac and Anacostia Rivers and at the head of navigation, the waterfront parks such as East and West Potomac Parks and Anacostia Park are outstanding and unique. The fact that the Government owned the tidal portions of these two rivers favored the reclamation of more than a thousand acres of marsh and underwater areas for park

use. The upland tributary valleys like Rock Creek, on the other hand, with wooded and rugged slopes too steep for subdivision, furnished an entirely different type of opportunity. Between these valleys the line of hills which were the sites for the defenses of Washington during the Civil War were an ideal nucleus for a system of outlying neighborhood parks serving the rapidly developing suburbs outside the L'Enfant City.

These valleys and hills in turn suggested two separate parkway systems, the one in or along the stream valleys radiating from the Potomac and Anacostia Rivers, and the other connecting parkways between the uplands and valleys. Of the latter type, the proposal for the Fort Drive, a twenty-three-mile scenic route encircling the city, was the most significant because it provided the one essential link needed to tie individual park and neighbor recreation areas into a single unified system.

Within the District of Columbia a recreation-system plan was developed and woven into the park system proper and coordinated with school facilities, with resultant large savings in the cost of land acquisitions and subsequent administration. Instead of a series of isolated units serving local areas, the entire system is proposed to be organized about twenty-six major recreation centers which serve general neighborhood needs and which are supplemented by a series of smaller playgrounds within a quarter of a mile of every child.

In the area outside of the District, the principal feature of the Regional Park Plan is the George Washington Memorial Parkway, extending along both banks of the Potomac River from Great Falls on the north to Mt. Vernon and Fort Washington on the south. It includes many of the larger parks within the District such as East and West Potomac Park, part of Anacostia Park, and the Shepherd Parkway. From Georgetown northwestward, the Potomac Palisades Park will provide the route for a bluff drive overlooking the river as far as the District line, which is nearly halfway to Great Falls. Across the River in Arlington County there is the possibility of a shore road at the foot of the bluffs. Thus the plan comprehends thirty miles of river front parkway, fifteen miles south from the Arlington Memorial Bridge through the broad expanse of the lower Potomac Valley, and fifteen miles north through the narrower Potomac Gorge to Great Falls, which Lord Bryce said, "You will, of course, always preserve."

The Memorial Parkway will include the acquisition of the C. & O. Canal and its restoration as a recreational waterway from Georgetown to at least Great Falls. The Canal and towpath present unusually fine opportunities for canoeing, hiking, riding and passive enjoyment. Moreover, its preservation as a National Monument would be warranted entirely aside from its fitness as a key area in the Parkway. Historically, it marks an important era in the expansion of the country westward.

The legislation authorizing the George Washington Memorial Park-

way in 1930 also provided for the extension of certain District parks of regional importance into suburban Maryland under agreements with the Maryland-National Capital Park and Planning Commission. The plans subsequently agreed upon and now in part carried out propose the extension of Rock Creek Park about 10 miles beyond the District Line, the extension of the Anacostia Park System up the valley of the Anacostia River, Indian Creek, the Northwest Branch, and Sligo Creek, and the extension of the George Washington Memorial Parkway up the valley of Cabin John Creek. Plans now being studied with the Maryland authorities propose a Baltimore-Washington Parkway as a logical extension of the plan already authorized for the Anacostia River and Indian Creek. This forty-mile intercity parkway would pass through the Agricultural Research Center at Beltsville and provide a fitting and safe approach to the National Capital for the hundreds of thousands of visitors who now are forced to parade by mile after mile of billboards, hot-dog stands, and gas stations.

In addition to the specific proposals for regional parks, the Commission has considered that many of the major public open spaces in the region have possibilities of being developed and used much as though they were actual park areas. The Agricultural Research Center being developed at Beltsville is a typical example, where nearly eight thousand acres have been acquired, part of which is ideally situated for the route of the Baltimore-Washington Parkway. Another area which presents possibilities is the Fort Belvoir Military Reservation below Mt. Vernon. The Washington region is particularly rich in the extent and diversity of such areas acquired for a variety of governmental purposes.

*Progress on the Plan.* Although there has been a regional park plan for nearly ten years, actual accomplishment on the major features of that plan outside of the District of Columbia has been limited to the past five years. Nevertheless, considering that only limited funds were available during the depression period, material progress has been made. The Mt. Vernon Highway section of the George Washington Memorial Parkway was completed in 1932 for the Bicentennial Celebration, and is now being extended to Key Bridge in coöperation with Virginia. On the Upper Potomac nearly two hundred acres have been acquired, including a mile and a quarter of waterfront, and within the District more than three fourths of the areas along the river included within the Parkway route are now in public ownership. Taken as a whole, the plan is about one-half realized, although the parts of the project outside of the District authorized in 1930 are hardly begun.

In suburban Maryland, Rock Creek Park has been extended nearly four miles to Connecticut Avenue and Sligo Creek northwest from the Montgomery County line, about three miles. The first unit of Cabin John Creek Park has been started. Very little progress has been made in Prince Georges County.

Within the District, the Park System as a whole now comprises about 5,600 acres, of which more than 1,800 have been acquired in the last ten years. During this same period the recreation system has been augmented by about 175 acres, so that it now comprises nearly 1,000 acres, a large part of which is integral with the park system. The acquisitions under the recreation system plan are about two-thirds complete. The Fort Drive Parkway encircling the city and tying in with many of the regional proposals is nearly eighty per cent complete as to the land required. Several short sections have been built and nearly fifteen miles are ready for construction.

*Program for the Future.* During the last ten years the Commission's land-purchasing activity has been principally directed towards the completion of projects within the District of Columbia where building development and rising land costs have been the urge to action. As previously indicated, during the latter part of this period legislation for the principal regional parks was obtained authorizing the expenditure of \$7,500,000 for the George Washington Memorial Parkway and \$1,500,000 for the stream valley parks in suburban Maryland. Less than \$200,000 has been expended for land on the George Washington Memorial Parkway and about \$800,000 has been advanced or contributed to the Maryland Commission for suburban parks, so that the authorized program for carrying out these major features of the Regional Park Plan has only just been started.

In the next few years the Commission proposes to concentrate its activities in three directions: first, toward the completion of projects that have already been started in the last ten years, most of which are in fact well advanced and average over seventy-five per cent complete as to area; second, the provision of recreational facilities for the population in the congested areas; third, the provision for regional parks in the areas outside the District of Columbia as rapidly as possible, before the areas in the Commission's plans are destroyed for park purposes or become too expensive by reason of private development.

This latter situation is growing acute. Along the Potomac River between Washington and Great Falls, subdivision of acreage tracts has been renewed under the impulse of the building boom now so evident within the city. Gradually large land holdings particularly on the Virginia shore are being broken up and on the Maryland side additional summer cottages and shacks are being constructed along the C. & O. Canal right-of-way. The canal itself and the locks, meanwhile, are rapidly going to pieces since the water was let out two years ago. Occasional floods have torn out the banks, which have not been restored.

The Commission's plans have been based on a probable growth of Washington to a city about fifty per cent in excess of its present population, although it is generally recognized that the population of the country as a whole may increase only another fifteen or twenty per cent.

In the light of the rapidly renewed building activity in the city since the depression, this estimated fifty per cent increase seems conservative. It is quite probable that the part of the region outside of the District will more than double its population. With this outlook, the least that the present generation can do is to try to plan as wisely as L'Enfant did for the future needs of the Federal City.

### THE PARKS

By C. MARSHALL FINNAN, Superintendent, National Capital Parks,  
Washington, D. C.

I WOULD like to take this opportunity to express my very deep appreciation for the assistance that has been given the Park Service, particularly by the American Civic Association, and its successor, the American Planning and Civic Association. I know when I first came back to Washington, when I was transferred from Colorado, perhaps there was no more confused and uncertain individual than myself. I ran into a labyrinth of parks. I think I found some 680-odd parks under my jurisdiction. I know one of the first things that happened was a very delightful luncheon that was given by the Committee of One Hundred on the Federal City at the Cosmos Club. More points of vital concern were told to me in that hour of luncheon than I have learned in any week since. The spirit of coöperation they extended to me was appreciated so deeply that I can never say in appropriate words how grateful and thankful I am.

Briefly, I think you should know that our function is that of putting those plans, as approved by the Fine Arts Commission, into effect. Last night you heard Mr. Albright, Mr. Cammerer, two Secretaries of the Cabinet, and others, especially Mr. Albright and Director Cammerer, speak of the legislation of the Park Service.

Our department is unique in that our records go back in more detail than any other Government bureau; in fact, in our files we have papers made out by George Washington in 1790. Now that the capital parks are back in the Interior Department, because they were there during the Civil War, we have really the oldest parks in the Service.

It came about through an act in June, 1790. Congress empowered George Washington to acquire this capital city. The President was given the right to acquire streets from the abutting property owners. When it was necessary to acquire park lands and other lands, they had to be acquired by purchase.

So by the Act of 1790 there were acquired the Capitol grounds, and what we now call the Mall, and thus this national park was at least under national control. Since they were acquired by the President in the latter years of the eighteenth century, so we do, then, have by precedent and by actual adaptation the oldest national parks in existence.

If the parks of Washington were not apparently national in character and in use, they would have no place in the family of the National Park Service. We cannot afford and should not, under any circumstances, be burdened with inferiors that will not in every sense of the word be truly national in character and in use.

You will recall that last night there was mentioned the Act of August 25, 1916, which, among other things, had established the National Park Service. That Act in part said that the National Park Service would be responsible for the conservation of the scenery, the natural and historical objects therein, and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations.

So far as the parks of Washington are concerned, let me point out that there is no park in any city in our country that has finer scenery than Rock Creek Park. There are areas in that park that are as rugged and natural as may be found in our most primitive part of the West. It is truly a national park and it is more striking when we realize that it has been carved out, virtually, from the center of a great city.

As far as the historical values are concerned, Fort Stevens is the only place in the United States where a President has been under fire of guns. The George Washington Highway has great historical value. The Lee Mansion just across the river, and even the Washington Monument, are gaining that true value which comes from age, which we call historical.

It is rather interesting to note that the words which Congress used in establishing Rock Creek Park are identical with the words that were used in establishing Yellowstone; in other words, Rock Creek Park was set apart for the benefit of the people without regard to any group or any class.

I do not want to say anything at all that might hurt my good friend, Colonel Thomson, or Roger Toll, or the superintendents of some of the larger parks in the West. As a matter of fact, I am not offering this as a boast, but if we count Americans from every State in the Union and every province in our outlying possessions, and the foreigners who visit the national parks in the course of a year, the total number of visitors here would almost double the total attendance in all national parks and monuments put together. Much has been said about the economic value of the park.

I went to the Department of Commerce the other day. The reason I am going to tell you this is that I am going to state in a few minutes some of the progress we have made in the last several years, especially in the last three, in our park system. During the time of Pericles, Athens had the greatest development. Napoleon spent \$50,000,000 for the beautification of Paris. It is interesting to see in one of the reports of the McMillan Commission, Mr. Burnham's clever comment that Paris during the year 1902 had in dollars and cents received from visitors



more than \$100,000,000. Those visitors were going to see, primarily, the beauties of Paris; so if that is not a clever investment, then I do not think I can find one.

Look what has happened in the travel statistics in foreign countries. These are only approximate. We have no way of getting accurate estimates.

Paris, in 1929, had 1,700,000 visitors. They spent an amount which, in dollars and cents today, is \$225,000,000. In Paris, in 1934, there were 800,000 visitors, who spent \$120,000,000.

Now, let us take Rome. You know that during the last twelve or fourteen years Mussolini has been conducting a great reconstruction program in which they have been restoring some of their splendid buildings in the old Roman Empire. In 1930, Rome had approximately 2,000,000 tourists or visitors, who spent \$140,000,000.

In 1935, Rome had 3,300,000 visitors, who spent a total of \$231,000,000. During that same year, Mussolini, in his reconstruction program of the capital, attracted 12,200,000 visitors. I think those figures are significant and give us some idea of the value of civic improvements.

Now, we come to the actual work that is going on in our capital parks now in accordance with the plan of 1901, later revised and amended by the National Capital Park and Planning Commission. Our greatest civic improvement in Washington, of course, has taken place in the last quarter of a century, which has been the development of such things as the Arlington Memorial Bridge, the gateway to the mountain parks, the cemetery, and many other things. I would like to point out very briefly some of the things we have undertaken in the last three years, or since 1933.

When the Park Service was given authority, by order of June 10, 1933, we were enabled to bring to the national capital architects and landscape architects who were experienced and well versed in park planning and park development, and since that time we have had almost \$2,000,000 worth of construction.

One of the most important projects, as Mr. Nolen pointed out, was the Mall, which is the central axis of the city. We are now completing a park which calls for the expenditure of \$780,000 in improvement work. The plan for the Mall was suspended from about 1800 to about 1850, and then at the beginning of the middle of the century the improvements were in direct opposition to that great plan of L'Enfant.

Then there was revival of L'Enfant's plan which was rescued by the Commission of 1901. However, nothing was done until 1933, when a Public Works project was made available.

We have now a great vista that extends from the Capitol to the Washington Monument.

Another important project that has been undertaken with Public Works funds is the completion of the Arlington Memorial Drive, which

extends from the terminus of the Arlington Memorial Bridge to the Arlington Memorial.

We also had a project which will permit the rehabilitation of these older parts in the downtown section of the city. I think that is vitally important because, if we do not keep our national city attractive and always at the fore, naturally many of our friends are going to be sorely disappointed.

Under the Civil Works Administration we have been able to construct many recreation centers, which is part of the plan Mr. Nolen has very ably outlined. We have in Fort du Pont Park, an area some three or four hundred acres in extent, which has been under development for some years. We are developing that with a CCC company. It is one of the finest projects I have been permitted to see that has been developed by CCC labor.

We are also developing another project with Civilian Conservation labor at Roosevelt Island. That island has had a number of names. It was recently purchased as a memorial to Theodore Roosevelt. It is being developed as a timber park and woodland. At the present time no structures are being erected on the island. There is a bridge connecting the island with the mainland.

I would like to call your attention to several very important factors. One is that all parks, especially city parks, are in constant danger of serious encroachments by enterprises. Mr. Nolen has pointed out the problems that face us. It would be simple to put large parkways in our woodland parks. We know perfectly well that we could go into Rock Creek Park and cover it with a highway of concrete extending from northwest Washington down into the Government section of the city.

An organization such as this must give its support to prevent anything of that sort, because we do not know ultimately what arrangement will be made for handling the very serious traffic problem we have in the city at the present time.

Another thing that has to be fought at all times is the undesirable development on grounds contiguous to the road. Mt. Vernon Boulevard is a very good example of that. The right-of-way was purchased. The road was constructed by the highest type of landscape architects and engineers. It draws, of course, millions of tourists annually. Subsequently we have had lunch rooms, coffee and eating places, and so on, come in on the highway. How we can control it, I do not know. We cannot go out and buy land for hundreds of feet back. In the future, certainly the Commission is going to make it clear that we shall have to acquire adequate highway rights-of-way so that we can keep out such undesirable developments.

As to the future of Washington parks, I think you should all know, intimately, if you can, the Great Falls of the Potomac, which is one of

the outstanding wonders of this country. This great cataract on the Eastern Seaboard is surpassed only by the Niagara. It should be preserved as a natural park for the people.

The Mall must be carried on to completion at the earliest possible date. There are a few temporary buildings which we hope to have removed so that the trees can be planted and roadways constructed. I hope that it is not too much to dream that some day we shall drive along the George Washington Memorial Parkway from Mt. Vernon to Great Falls.

### THE SERVICE TO THE DISTRICT OF COLUMBIA

By MELVIN C. HAZEN, President, Board of Commissioners, District of Columbia, Washington, D. C.

I CANNOT let this opportunity pass without saying a word about your chairman. I know that this will not be challenged when I say that no man in the District of Columbia has done more for the District of Columbia in promoting its parks than has your chairman.

Mr. Chairman, you asked me to talk about the benefits or the service which the District of Columbia derives from the development of the regional park system of Washington. That is a difficult problem. Mr. Nolen has very ably presented the regional plan to you and Mr. Finnan has given you a very interesting talk on the matter of parks. These gentlemen are authorities in their line and have done much to benefit and beautify the Nation's Capital. I will endeavor briefly to cite some of the advantages which have accrued and will accrue to the District of Columbia through the development of the regional park system.

The demand for more and wider open spaces is a natural result of the present methods of transportation. I can remember when land in the suburban districts which were not easily accessible to street-car and railway transportation, was of little value for building up an attractive community. It has only been a comparatively few years back when the territory lying in the northern section of the District between Georgia Avenue and Sixteenth Street was country property, with no public conveniences whatever, and the only method of access was by way of paths and dirt wagon-roads. A walk through this section, for that was then the principal mode of travel, would bring one only to small settlements. But the coming of the automobile has changed all of this. Now property away from the principal thoroughfares and boulevards is considered most desirable, and these neglected sections have been built up with attractive homes with improved roadway facilities and convenient public utilities.

The public demand suits itself to the trend of the times, and brings about the demand for larger and more elaborate recreational areas. When the city was first laid out, that is, what is known as the Federal City, which was bounded by Florida Avenue, and which was designed

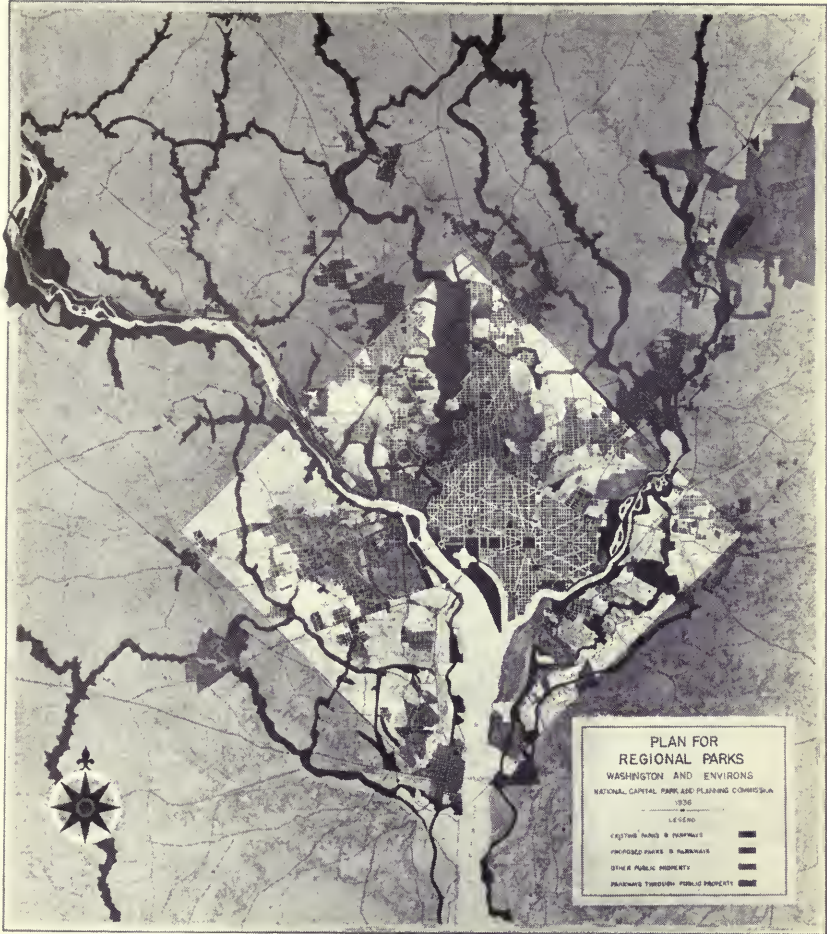
by the French engineer L'Enfant, parks were indeed provided, but these were mostly small, square and triangular areas, easily accessible to those residing close by. Now we require larger spaces for our enjoyment and recreation, and this is being accomplished by the extension of our larger park system, known as the regional park plan. The development of this plan in the outlying sections of the city has created a demand for new subdivisions and extensive building operations. Values of real estate have increased, particularly those in close proximity to the park areas, and numerous subdivisions have been improved by dwellings because of the benefits which prospective home-owners would derive from the recreational facilities provided by these large park areas. One of the great advantages, in my opinion, in regional parks, is that they will attract home-owners from the congested areas of our cities and thereby relief will be afforded in traffic and health conditions. And that should be the ambition of all city planners.

The major park areas, such as the Anacostia Park, the Rock Creek and Potomac Parkway, the Potomac Palisades Parkway, and the George Washington Memorial Parkway, are so ideally situated that they afford an excellent recreational value and service to our people from all sections of the city.

Due to the modern methods of transportation, these areas are quickly reached, and on account of the preservation of the natural topography, visitors, as well as our own residents, are furnished with healthful and beautiful natural areas for recreation and enjoyment. The development and construction of park roads through these areas enables us to secure access to the main highways in the neighboring States of Virginia and Maryland, traveling by way of the most beautiful scenic routes, and at the same time eliminating many traffic difficulties which result in annoyance to the motorist.

There is no question in my mind that the development of the regional park system of Washington has increased, and will continue to increase, the influx of visitors to the National Capital. As more and more of our people from all over the country have the privilege of going through these beautiful park areas, and availing themselves of their benefits on visits to our city, the District of Columbia will certainly materially profit from it in the way of an increase in prosperity and business.

Washington is becoming increasingly a convention city, and I believe that the development of our park system, with its many advantages, has very largely contributed to bring this about. At various conventions which it has been my privilege to attend, during my term as Commissioner, I have heard many favorable comments concerning the beauty of the George Washington Memorial Highway to Mt. Vernon, leading to the most sacred shrine in all America—the home of the Father of our Country. Before the construction of this beautiful drive it was necessary in order to reach the shrine of George Washington, to make the trip



Plan for Regional Parks for the National Capital



Old Lock on the old Potowmack Canal in the Great Falls area of the George Washington Memorial Parkway

down the Potomac on boat or go over a very heavily traveled state highway. The development of the Memorial Highway not only made a visit to this popular home of our First President more enjoyable from a scenic and recreational standpoint, but has greatly reduced the length of time necessary to reach it. It is hoped that before many years have passed, the scenic drive along the Potomac River to Great Falls will be completed, giving the people a similar thoroughfare to reach this marvelous gift of nature. As more and more people throughout the country become familiar with or visit the extensive park system of Washington, the number of visitors will increase by an influx of others who have not already had an opportunity to avail themselves of this privilege.

From an engineering standpoint, I would like to mention the benefits the District of Columbia derives from the development of the regional park system. The preservation of the Rock Creek valley, through which the stream of Rock Creek flows, has enabled the District of Columbia to utilize this stream for an extensive storm-water disposal. The entire storm-water drainage of a large territory in the northwest section utilizes this area to carry surface water to the Potomac River. In dollars and cents a large amount has been saved through this drainage system, as storm-water sewers would have had to be constructed to carry the surface water to the river.

I have already mentioned the advantages which the citizens of the District enjoy through the use of the extension of the park system to the neighboring States, and I further believe that the traffic situation in Washington will be materially relieved by the use of these park roads by Maryland residents located in the adjacent sections along our northeast and northwest boundaries. It will be possible when the entire regional park system is completed and developed, for Maryland residents to reach the downtown section of Washington by way of Anacostia Park and the Rock Creek and Potomac Parkway; and their route will at the same time take them through a most attractive area of woodland and water scenery. It can easily be appreciated that as the ultimate use of these park drives is extended, a large amount of traffic will be diverted from our already congested main highways leading into the city.

I cannot too strongly commend the National Capital Park and Planning Commission and the office of the Superintendent of National Capital Parks for their contribution to the National Capital in the development of the regional park system of Washington.

This, I might say, is only the beginning of regional parks. I have in mind the extension of these regional parks. Today traffic has changed from what it was when I was a barefooted boy. We want to go distances now. I would like to see the Anacostia Park extended to Baltimore and to Annapolis. I would like to see a magnificent memorial park here extending from Memorial Bridge to grand Shenandoah National Park.

Mr. Delano and I have to serve on a committee to select a route called the Washington and Lincoln Memorial Highway, from here to Gettysburg. My hope will be that that highway will reach from up the Potomac River and connect with the magnificent Skyline Drive and the Smoky Mountains to the south, all the way up, connecting with the Skyline Drive in Shenandoah Park, across the Potomac River, somewhere near Harpers Ferry, carrying on and across the Hudson River somewhere along West Point into the White Mountains, connecting with the highways that lead into Canada, the leading cities of Canada. This has been a dream of our administration and has been the dream of the people for some time. All of you who have traveled upon the Skyline Drive know the beauty of that drive. It should be extended from Stone Mountain in the South all the way to our northern border. And I have hoped for a number of years to have a beautiful memorial highway connecting the Nation's Capital with the Confederate Capital, connecting with the same historic shrines of Virginia because, after all, I am a Virginian, and I think there is no more sacred land in America than many of our shrines in Virginia, and this memorial highway, connecting Richmond with Washington, connecting with the sacred spots of Virginia, would be something that all the world would enjoy, and for that memorial highway I would suggest the name "The Blue and Gray Memorial Highway."

## Planning and Park Development in the Maryland-Washington Metropolitan District

By IRVING C. ROOT, Chief Engineer, Maryland-National Capital Park and Planning Commission, Silver Spring, Md.

**A**N ACT adopted by the General Assembly of Maryland in 1927 is destined to have a far-reaching effect upon the future development of a large portion of the Washington Region. This Act, known technically as "Chapter 448," established and incorporated the Maryland-Washington Metropolitan District and created a commission with broad planning powers.

The Metropolitan District, including several boundary extensions, now includes some 130 square miles of area in Montgomery and Prince Georges Counties bordering the National Capital. Although the major portion of the District is agricultural, there are some 20 or more incorporated towns, villages, and special taxing areas. The population is growing rapidly and is now estimated at over 60,000. The property valuation for taxation purposes is \$104,000,000, an increase of \$46,000,000 during the last nine years.



Jurisdiction over park and planning matters within the Metropolitan District is vested in the Maryland-National Capital Park and Planning Commission. This Commission consists of six members appointed for overlapping terms of four years, thus assuring continuity of policy and administration.

The authority of the Commission, as established by the enabling act, includes such planning activities as the preparation and adoption of a Master Plan, the preparation and administration of zoning ordinances to be enacted by the respective county governments, subdivision control, establishment of grades for street improvements and underground utilities, building inspection in Prince Georges County, and the development of a comprehensive park system.

The work of the Commission is adequately financed by a tax levy on all of the assessable property within the Metropolitan District. A three-cent tax on each 100 dollars of property valuation is levied for the administration of the Commission. Approximately \$31,000 will be available for this purpose in 1936.

In Montgomery County there is an additional levy of seven cents for park-land purchases, development, and maintenance. During 1936, approximately \$45,000 will be available from this source for park purposes.

The Master Plan was prepared in cooperation with the National Capital Park and Planning Commission of Washington, D. C., as the Metropolitan District falls within the boundaries of the Washington Regional Plan.

A comprehensive system of highways is shown by the Master Plan with by-pass routes for north and south traffic around Washington. Highways specifically indicated on the Plan are planned to have rights-of-way 80 to 120 feet wide. To date, many miles of dedications for these main highways have been secured in new subdivisions and at no expense to the public.

The Master Plan also indicates a park system, with an ultimate estimated area of 10,000 acres. In general, the park areas follow main stream valleys. In the case of the Anacostia River, Rock Creek, and Cabin John Creek, the parks are extensions of the park system of the District of Columbia.

The major portion of the ultimate park system will be secured by the dedication of parkways and stream valleys in the natural course of real-estate development.

The first major task of the Commission was the preparation of zoning ordinances and maps for the portions of Montgomery and Prince Georges Counties within the Metropolitan District. These ordinances were enacted by the respective county governments about nine months after the appointment of the Commission, and are practically identical as to text.

The zoning ordinances establish separate districts for single-family, two-family, and apartment dwellings and also commercial and industrial uses. Nuisance industries are permitted only upon the issuance of a special permit after public notice and hearing.

Fortunately no congested areas exist within the Metropolitan District so that relatively high standards could be adopted to guide future land-use. Minimum dimensions are established for residential lots at a width of 50 feet and 5,000 square feet in area. Also a minimum front building line of 25 feet, side yards of 7 feet, and a rear yard of 20 feet are required for each single-family dwelling.

Height and area requirements limit the maximum apartment zone density to 69 families per acre of gross lot area. This density is further reduced by open yard space requirements which increase with the building height.

During the eight years of zoning administration there have been 337 applications for use zone changes of which 294 were granted. There have been 164 zoning appeal cases. Of this number 142 cases were granted, usually with reservations looking to the public interest.

Residential subdivision development has been extremely active in the Metropolitan District during the past three years. However, due to strict subdivision and building code regulations, a creditable character of development has been maintained.

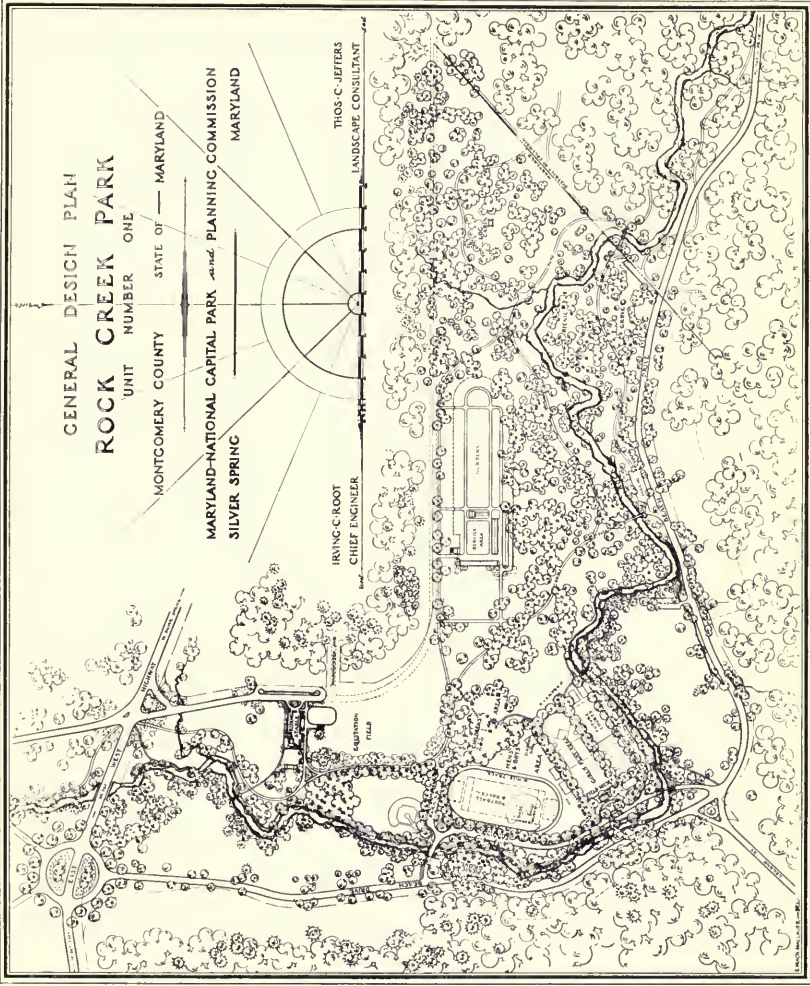
An act of the Maryland Legislature of 1933, preventing the sale of property for development by "metes and bounds" descriptions, greatly increased the effectiveness of subdivision control and compelled the presentation of subdivision plats for approval and record.

Since the creation of this Commission in 1927, there have been 350 subdivision plats approved for record. The great majority of these subdivisions were platted and developed by responsible real-estate operators for home construction. The absence of speculative buying of vacant lots has been most gratifying. However, should lot speculation appear, this evil may readily be controlled through the requirement that street and utility improvements be installed prior to lot sale.

Authority for the establishment of street grades before final grading, street improvement, or utility installation rests with the Commission. Thus, the utility companies are assured of the proper street grades when underground service is installed. Pavement is laid to proper grade for surface drainage and home builders are able to ascertain in advance the relation of their yard elevation and building construction to the street grade and sewer service.

The saving to the public through prevention of mistakes in street improvement and the attendant inconvenience amounts to many thousand dollars each year and certainly justifies this form of planning control.

When the Commission was established there was no effective building code or building inspection for the Metropolitan portion of Prince



General Design Plan, Rock Creek Park, Maryland, developed by the Maryland-National Capital Park and Planning Commission



Rock Creek Equitation Grounds, showing Captain of the Chilean Team competing in the International Horse Show

Georges County. Seeing the urgent need for such regulation, enabling legislation was secured during the 1931 session of the Maryland Legislature. A building code, following the general requirements of the code in the District of Columbia, was then adopted and a branch office of the Commission established at Hyattsville for the issuance of building permits.

When the Commission was established, the State of Maryland contributed \$100,000 for park-land purchase, one half for each County. However, it was not until 1930, when the Capper-Cramton Act was adopted by the 71st Congress, that park development actively began. By the provisions of this Act the Federal Government, through the National Capital Park and Planning Commission, was authorized to advance not to exceed \$2,000,000 to the Maryland Commission for park-land purchase. Of the funds so advanced the Maryland Commission agreed to repay to the Federal Government two thirds at the end of eight years. Thus, the Federal Government makes a one-third contribution for the purchase of park land in locations designated by the Capper-Cramton Act.

The title to park land purchased under this Act in the Metropolitan District is vested in the State of Maryland. Park-land purchase, development, and maintenance is under the jurisdiction of the Maryland Commission subject to approval of plans by the National Capital Park and Planning Commission. Thus, the Federal investment in Maryland parks is protected and the Commission is able to secure the benefit of the advice and experience of the National Commission for the extension of the Washington park system into Maryland.

In the Maryland-Washington Metropolitan District there are now about 800 acres of parks and playgrounds. This area, excepting some 50 acres received by gift, was purchased for \$750,000.

Rock Creek Park in Maryland is a continuation of the famous park by that name in Washington. This park has been extended a distance of over three miles and is made accessible by 2.5 miles of park drives and additional paralleling state roads. Within the park there are several picnic areas with outdoor fireplaces, tables and benches, a park shelter, foot bridges, and developed springs.

In answer to an insistent demand, special facilities have been provided for equestrians. There are ten miles of bridle paths and an attractive riding stable which is operated as a concession. In connection with the stable there are two horse show grounds, one for local benefit entertainment and the other a carefully planned field with twelve different and interesting jumps for tournament competition.

A recreation area including four tennis courts, athletic fields, and a children's playground with appropriate apparatus are now under construction and will be completed during 1936.

An attractive parkway along Sligo Creek, extending for three miles

through the thickly populated suburbs of Takoma Park and Silver Spring, is nearing completion. This parkway is made accessible by park drives, bridle paths, walks, and foot bridges. Four tennis courts, an athletic field, and two playgrounds with apparatus are now available. An attractive log cabin, located in a pine grove and near a spring, has become very popular for overnight Scouting parties and community picnics.

Cabin John Creek Parkway, an area of rugged natural beauty tributary to the proposed Potomac River Parkway, has been started with the acquisition of some 60 acres of land. Present development consists of picnic areas, two tennis courts, and a playground. For many years this locality has been popular for hiking and picnic parties and these facilities have been materially extended by recent development work.

Our most popular park is Jesup Blair Memorial Park, a gift to the people by Mrs. Violet Blair Janin in memory of her brother. Although only 13 acres in extent, this park is located in a thickly populated portion of Silver Spring and receives very heavy use.

Jesup Blair Park is shaded by a grove of venerable white oaks. In the center of the grove is located the historic Blair homestead, linked by stirring incidents with the raid of General Jubal Early during the Civil War.

The old homestead has been thoroughly modernized and provides attractive quarters for the Silver Spring Public Library. There are also several rooms arranged for meetings of local civic groups. Reservations for the use of the meeting rooms or grounds average more than one for each day throughout the year.

There are now available in this park five tennis courts, an outdoor stage for amateur theatricals, a Scouts' ceremonial ring with fireplace and log seats, children's playground, open picnic and play areas, walks, and automobile parking spaces.

Jesup Blair Park is located on land so valuable that its purchase would never have been made from public funds. With the passing of the years there will come a greater appreciation of the esthetic and social value of this truly inspiring park. A more lasting or more beautiful memorial than Jesup Blair Park could hardly be devised!

Local neighborhood playgrounds have been developed at Takoma Park, Kensington, and Garrett Park on land provided by those communities.

The Commission has developed a nursery where many thousands of trees and shrubs have been propagated for planting in the parks. Particular attention has been given in landscape plantings to the use of trees and shrubs bearing edible fruits and nuts for their value in attracting birds and other wildlife. The United States Bureau of Plant Industry has aided in this work by furnishing several hundred blight-resistant chestnut trees and seeds of many other nut-bearing trees.

Planning and zoning administration and park development in an unspoiled and rapidly growing suburban area is a great responsibility. This fact is thoroughly appreciated by the Commission and staff. Frequently it is necessary to make decisions, apparently contrary to individual interests, in order that the greater public interest may be protected.

## Accomplishments of The Alley Dwelling Authority

AS OF JUNE 24, 1936

By JOHN IHLDER, Executive Officer, Alley Dwelling Authority, Washington, D. C.

**AUTHOR'S NOTE.**—The Alley Dwelling Authority is an independent agency of the Federal Government. It was created pursuant to the terms of the District of Columbia Alley Dwelling Act. This Act was first drafted in 1929, and was sponsored in the Senate by Senator Arthur Capper, of Kansas. In the House of Representatives, the sponsor was Representative Mary T. Norton, Chairman of the House Committee on the District of Columbia. The Act became law on June 12, 1934.

On October 9, 1934, in fulfilment of the terms of the Act, the President designated as members of The Alley Dwelling Authority, the President of the Board of Commissioners of the District of Columbia, the Executive Officer of the National Capital Park and Planning Commission, and the Director of Housing of the Federal Emergency Administration of Public Works.

The necessity for a public agency to deal constructively and effectively with the inhabited alley problem had been recognized more than half a century by legislators and by persons interested in the social and economic betterment of the Nation's Capital. In December, 1904, President Theodore Roosevelt, in a message to Congress, warned of the dangers to the community from the alley slums of Washington.

Prior to that message and in the years that followed, Congress, the Commissioners, and private agencies tried various means of eliminating the inhabited alleys.

In reporting the Alley Dwelling Act to the Senate in 1933, Senator Capper called attention to the high death rate among the alley population and the bad record of the alleys in local crime statistics.

**T**HE purpose of The Alley Dwelling Authority is to rid Washington of its inhabited alleys. In other words, it is a slum reclamation agency. To achieve its purpose the Authority must find another use, socially and economically desirable, for the present slum, and it must assure rehousing of those whose dwellings it demolishes. So far as private enterprise will contribute to this work, it is welcomed. So far as private enterprise will provide housing for the lowest income families, the Authority is relieved of responsibility.

The Authority divided its program into short-term and long-term projects. The former are those where the redevelopment affects directly only one square and where coördination of the Authority's work with that of other Government agencies is not required. Such coördination takes time, for there must be agreement on the plan of redevelopment and then the cost must be included in the budget of a following year. The long-term projects include those that involve such coördination or that may involve some modification of the city plan.

Actual purchasing of property began about a year ago (May, 1935). Since then the Authority has purchased the properties requisite for redevelopment in ten squares and is negotiating for properties in two other squares. In twelve squares, after it had begun negotiations, it found that owners were demanding too high a price or that other obstacles would cause serious delay. These projects were, therefore, temporarily set aside in favor of others that promised better and more prompt results. In this connection it must be remembered that the Authority is confined in its operations to the "old" city, *i. e.*, the built-up part of the city, and that many of the properties it must acquire are dormant, are in the hands of estates, or are of doubtful ownership. Some of them have been tax-delinquent for many years. Clear title can be secured in some cases only by a condemnation suit, which may take several months.

- On the properties it has acquired, the Authority has
  - built an automobile repair garage
    - (Rupperts Court, S.E., between Pennsylvania Avenue and C, 2nd and 3rd Streets)
  - built two groups of storage garages
    - (Stanton Court, N.W., L and M, 23rd and 24th Streets)
    - (Browns Court, S.E., A and B, 6th and 7th Streets)
  - made an automobile parking lot
    - (O'Brien Court, N.W., E and F, 20th and 21st Streets)
  - begun the erection of two groups of row houses
    - (London Court, S.E., between K and L, 12th and 13th Streets)
  - begun the reconditioning of two other small groups of row houses in the same square
    - (London Court, S.E., between K and L, 12th and 13th Streets)
  - contracted for the erection of a group of storage garages that will be sold as a unit to the home-owners on the surrounding streets
    - (Douglas Court, N.E., between A and B, 3rd and 4th Streets)
  - drafted the plans for a low-rental apartment house that is to be sold to a limited-dividend corporation
  - begun the drafting of plans for another low-rental apartment house
  - sold a site for the erection of a hotel for Negroes
  - sold a site for the use of a non-profit corporation
  - is negotiating for the sale of another site to a Negro boys' club.

In three instances the Authority took steps toward condemnation because of price demanded by owners. In two cases the owners finally met the Authority's offer. In the third case, the suit was carried through and the jury gave an award much under the amount demanded by the owners.

This work involves the use of all the money appropriated or allocated to the Authority except for a balance of \$12,000. Returns are beginning to come in, however, so during the fiscal year beginning July 1, 1936,





Beach Drive, in Rock Creek Park, Maryland, a continuation of the famous park by that name in the National Capital



Part of the Alley Dwelling Authority's first low-rental housing project. Group of new houses in the foreground, reconitioned dwellings in the rear. Group to be painted white, on completion

Courtesy Alley\_Dwelling Authority

there should be available from sales, leases, and other sources at least \$250,000.

By the terms of the Act, the Authority must secure the formal approval of the District of Columbia Commissioners and of the National Capital Park and Planning Commission for certain phases of its projects,<sup>1</sup> it conforms to the District Building and Zoning Codes, and it must consult with other District and Federal agencies when its projects involve action on their part. It must submit certificates of title to the Attorney General for approval and must secure the approval of the Comptroller General for expenditures. Its system of accounting was set up with the aid and advice of the General Accounting Office.

The Alley Dwelling Authority was assigned a temporary office in the District Building and began work there on November 10, 1934. It had to assemble a staff under civil service requirements, secure equipment, formulate its program, secure from the Attorney General and the Comptroller General interpretations of sections of the Alley Dwelling Act.

Because of this preliminary work the Authority has had to retrace only two steps; on receiving a ruling from the Comptroller General it discarded the options received from real-estate men except as these were able to become the agents of owners and in that capacity submit offers which the Authority found acceptable, and to return preliminary plans by architects and employ an architect as a member of its staff.

In acquiring property the Authority is limited to paying not more than 30 per cent above the assessed value. Its average to date has been 112.25 per cent. In Washington, overcrowded and busy as it has been during recent years, values have not receded as they have in other cities, and the City Assessor has earned a high reputation for accurate estimates of value. The Authority, therefore, accepted assessed values as approximating real values. It has always sought to acquire at the lowest price obtainable and some of its purchases have been much under the assessed value.

There are somewhat under 200 squares in the city that contain inhabited alleys. The Authority is given until July 1, 1944, to reclaim these squares. The estimated value of the property occupied by alley dwellings alone is some nine million dollars. The Authority was given half a million dollars with which to begin its work. In December, 1935, it was allocated an additional \$200,000 from the WPA funds. Of this sum \$9,806 has been refunded.

<sup>1</sup>Plans for replatting and for method of condemnation.



IN THE STATES



## STATE PLANNING





# State Planning as an Established Procedure

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EDITOR'S NOTE.—This paper, prepared for the American City Planning Institute Meeting held in Richmond, Va., on May 3, 1936, is presented here by permission of the American City Planning Institute and Mr. Black, in the belief that it will be of interest to lay citizens as well as professional planners.

OUT of state planning, threatens the raising of a Tower of Babel. With foundation scarcely laid there comes an incipient multitude of diverse vocabularies. Already, the time has come to devise an Esperanto mutually intelligible among at least those actively engaged in this new planning field.

The author suffers no complete illusion. He does not expect this paper or the Institute, today or this year, to produce either a fully accepted common language or a Magna Charta of State Planning. But the need for an immediate move toward these objectives is obvious, and from whom but the American City Planning Institute should both effort and results be expected? Upon Institute members has fallen a very considerable part of state planning leadership. Upon them also has fallen, inadvertently, the obligation to evolve and to clarify the nature and the proper scope and function of state planning. If, after two years and more of intensive thought and effort in the matter of state planning, a reasonable degree of clarification of the job is beyond our powers, then I come reluctantly to the conclusion that, severally and collectively, the present usurpers of state planning responsibilities should shift their burden to broader shoulders. Thus goaded, I set about my self-appointed task of starting again the ponderous wheels of state planning discussion, this time to turn more sharply, I hope, upon what state planning can and should be as opposed to what is being forced upon us by expediency. First, I would attempt to remove two or three basic confusions.

State planning is widely regarded as an experiment—as a new venture in the art and science of planning. As an operative arm of government, state planning as we think of it is undeniably new. But the basic principles are old and well tried. The problem of grafting this new procedure on old and already over-branched state government may require much new experimentation. But the planning technician is confronted only with the broader application of an old art. Certainly he is confronted with many imponderables growing largely out of the insufficiencies of the human mind, but these are not new. Whether or not the planner has been aware of them, the same imponderables have always stood as obstacles to fully effective city planning. The state plan administrator runs into the barriers and entanglements of ignorance, politics, private property rights, economy leagues, and human inertia.

Some say state planning is a phantom, non-existent as a special branch of planning because States are not social and economic entities

and because, therefore, state lines have no meaning as fixing the boundaries of a planning operation. Such a point of view, to me, lacks realism. Its logical conclusions are that not only States but cities and counties are also non-existent as objects for individual planning effort and that there can be no planning except by regions. What, pray, is a region? Where, in this age, may be found an area around which we can build a planning-fence and say: "This is a region.—Through, under, or over this fence no planning problem may extend"? By what criterion or criteria shall such a fence be placed? Are drainage divides or the utmost perimeters of a metropolitan spread inviolable against interloping planning problems? This may seem specious argument. I hold no brief for existing city, county, and state lines. For the most part, and particularly to a planner, they resemble a blind man's effort to pin a paper tail upon a paper donkey. What could be a happier planner's dream than being handed a map of these United States cleared of all political boundary lines and the assignment of reëstablishing these lines around concentrations of community interests?

Good planners are dreamers but, to be effective, they may not always live and act in their dreams. Dreaming will not remove state lines as primary factors in operative planning, except in degree, during this generation or the next. So long as highways and parks are built and laws are made and enforced by States, there will be need for planning by States.

While recognizing the inadequacies of state determinations and while recognizing also the frequent necessity of regional and national plan and action, I am not inclined yet to fret too much about the restrictions of state lines. I venture that there exists in every State a wide range of intra-state problems which can and must be approached and solved internally. Interstate problems can be approached through the National Government, by coöperation between States and, in proper instances, by the formation of special-purpose districts. Insufficient as the State may be, it, by its very extent and inclusiveness, offers the planner by far the widest latitude he has ever known. As already going concerns, state governments, individually and in guided unison, offer the most hopeful means planners have yet had to apply some of the broader planning principles which have so long lain dormant.

State planning is in two parts, conception and operation. The first is clearly the job of the planning technician. The other, circumstances may force upon him. Procedures in state plan conception—getting and analyzing the facts and evolving the master plan—are identical with those for any other large-scale planning project whether it be regional or national. Operation of state plan—infiltration of plan and planning procedures into state administration and preservation of the integrity of state plan—presents its own problems individual not only to state government but, in varying degree, to all government.

State plan conception is much more than coördination. Coördination of state development and conservation activities is certainly a proper function of the state planning board, but it comes more properly in the field of operation than in the act of conception. Coördination is an operative activity properly to be conducted with the background of a preconceived master plan. Only in the sense that departmental and sectional plans are given proper weight and consideration in the composition of master plan can master-plan making be regarded as a process of coördination. The mere whipping together of many existing plans prepared with diverse background and objectives, no matter how skillfully done, will not achieve the best that may be in state plan.

Procedures in large-scale plan conception should not require detailed delineation before this Institute. If they do, then more than one paper and more than one meeting will be necessary to that purpose. Perforce, I will confine myself to a few generalities to reassure myself that we are thinking along at least approximately parallel lines. I shall speak of state planning as it seems to me it might be done if properly established and adequately financed and not as dictated by expediency because of either limitations of available staffs, or lack of money, or the necessities of lifting state planning into position by whatever toe-holds may be most readily accessible. I shall attempt first to bring the field within bounds by listing as follows a few activities which to my mind are not state planning.

(1) *Fact gathering, with the primary objective of setting up the state planning board office as an information clearing house or central statistical bureau.* Facts are a tool and not an end in themselves. Their dispensation is an incidental service and not state planning. Fact-finding surveys and fact-compilations should be culled by the criterion—perceptible applicability to state-planning requirements and determinations.

(2) *The making of specific project plans or recommendations before the broader picture has been achieved.* This is merely departmental planning over again under the auspices of an agency probably even less qualified than the specializing department.

(3) *The making of local plans, city or county.* This is as inappropriate to state activity as the making of local street plans and no longer has the justification in the United States of providing demonstrations.

(4) *The expression of policies and the making of reports comprised of the unassimilated and uncoördinated statements and individual reports of an assemblage of experts and department heads.* Mere placing of oil and water in juxtaposition will not produce an emulsion. It is both desirable and essential that these many points of view and these many proposals be assembled but they should be regarded as materials for plan-making rather than the plan.

(5) *The making of public works programs through the process of assembling the project and work programs of individual departments.* This amounts merely to the lumping of the evils and errors of uncoördinated planning and of departmental ambitions.

(6) *The framing of social security and old-age pension legislation, the formulation of policies as to collective bargaining and the soldiers' bonus, et cetera—in short, jousting at every social and economic windmill of evil or deficiency that may*

*appear upon the horizon of state and national affairs because other challengers are not upon the field.*

There are other tempting by-ways which I will not attempt to enumerate. Probably in individual circumstances, such departures from the straight and narrow path may be entirely justified. I realize that the first job of the state planning board and of the planning technician is to gain effective recognition. I presume that the end in view justifies any legitimate means and that at times best progress forward is made by taking a few steps backward. It may be that hiding under the useful cloak of an information bureau, of the framer of odds and ends of legislation, and of an "out-of-your-hat" builder of long-range public works programs will produce much-needed state-planning legislation and working funds. When so, why, God bless the planner and the planning board that get results that way. Let them not forget, however, that in addition to the job of selling real state planning they have ahead of them a nice little self-imposed task of dissembling. The important thing is not to be deluded into thinking that the side-show belongs in the main tent.

All of us, I presume, with considerable man power at our disposal, capable of making surveys and tabulating facts but little else, have gone about gathering vast stores of information which we can only hope will have at least some remote bearing upon the ultimate job of planning. This is not a time for too critical scrutiny of what has been done in the name of state planning. Few States, if any, have yet gotten down to the real job of planning. Few, if any, have been or are yet in position to do so. My purpose in talking along these lines, therefore, is not so much one of criticism of what has been and is being done as the setting forth of those procedures and objectives toward which, under favorable circumstances, we may best direct our efforts.

An item of special concern is the interrelationship of so-called social and economic planning and physical planning. This subject is to be specifically discussed in a subsequent paper but it is of so much importance to my own theme that I cannot pass it by without some mention.

To my mind, state planning is primarily *physical planning*—not physical planning divorced from social and economic considerations but physical planning as distinguished from such social and economic reform as to be imposed or effected by legislation and general education and as represented by social security and old-age pension laws, banking laws, quarantine laws, tax reform, dictatorship *versus* communism *versus* democracy, *et cetera*. These are to be accomplished by planning of a sort, but do we want to and can we include them within the definition of our new state planning? Are they not, for the most part even, to be accomplished by Federal rather than state action? I appreciate that I am on debatable ground. I question not the need but the means.

For the past twenty years and more, with increasing vividness, a handwriting on the wall has pointed the need for many social and

economic adjustments if the human race is to survive with reasonable satisfaction to itself. Many of these adjustments are exceedingly important to certainty and rapidity of planned accomplishment. But what has the certainty of our plans being carried out or the ease with which they may be accomplished to do with the kind of plans we make? Is the sort of living environment essential to healthful and productive living altered by variation in the economic security of the individual? Is the submarginality of agricultural lands changed by legislative recalcitrance in taking such lands into public ownership? What of social and economic change, short of complete reversal of present land-economics policies and of present taxation principles, will greatly alter the surge of metropolitan flow either in force or direction?

It is not my contention that any sharp line may be drawn between either the spheres of influence or the realms of activity of planning for physical well-being and for social and economic betterment. They are too inextricably interwoven. Neither do I wish to launch any hen-and-the-egg argument as to which is the more immediate or important. I do believe, however, that the two efforts may proceed effectively with a considerable degree of functional separation, each contributing much to the other.

To those who contend that physical planning is more or less hopeless until large social and economic advance has been achieved, may I point out that physical planning itself may be and has been a large factor in indicating social and economic necessities and limitations. Physical planning is basic to the extent that it provides a technique and pattern for accomplishment from which pattern may be read many of the possibilities and desirabilities as well as the blind alleys of social and economic planning. Here, many of the mistakes of the past as well as many of the hopes of the future show most clearly upon a background of utmost significance since, after all, man must live on earth within the limitations of earth's resources.

This is a long way around to making the simple point that the requirements of good living and working environment vary slightly with the brightness of prospects for perfect and quick accomplishment and that facilities for meeting these requirements may be planned independently of reform effort, and further, that such reform effort may as well and perhaps more logically be performed by some agency other than the state planning board. Should I be wrong in this contention I am afraid that the present organization of state planning from top to bottom, including board personnel, advisers, and staff, is generally quite sadly mistaken and inadequate.

This is no brief for dead plans. I am not talking about pictures on the clouds but about basic practicable plans for the use of land and natural resources, for highways, parks, railroads, aviation fields, waterways, water-supplies, flood and low-water control dams, power distribu-

tion and all those other things and conditions that are in or are placed upon the land for human use, pleasure, and convenience. It seems to me that it is only the manner in which these things are used, the degree of satisfaction that people get out of them and the rapidity with which they are accomplished, and very little their character, form and location, that are affected by social and economic evolution or devolution. In other words, the pattern of the correct physical plan remains much the same no matter what may be the difficulties and slowness of its accomplishment.

If then we may assume "physical planning" of social and economic validity to be a feasible and primary function of state planning, it follows that the basic state-planning study is that of the future use of land. This study becomes the fundamental basis for master-plan making. Until the future use-of-land study is well advanced there can be no comprehensive state planning. Until both future use-of-land plan and comprehensive master plan are well in hand there can be no really intelligent long-range programming of public works. This principle I believe to be the essence of state planning by central planning boards as opposed to state planning, old-style, by individual administrative departments and agencies.

Into future use-of-land plan preparation must go a thousand and one considerations, including: local and national population, social, economic, and industrial trends; soil potentialities—absolute and in relation to the national agricultural economy; character and extent of other natural resources—again, both absolute and in relation to national extent and condition of these resources; existing public services and service deficiencies; topographic and climatic conditions; and many similar factors.

The result will be charted guesswork to be sure, but guesswork founded upon a maximum breadth of present knowledge, a guesswork molded into reasonable expectancy by the converging forces of all major determinants so far as they are now measurable. However mistaken the future use-of-land plan may ultimately prove to be, it is the best and only considerable foundation for determination of the extent, location, and character of future public-service facilities and future public areas, such as are to comprise the mapped master plan.

There are three primary reservoirs of information essential to efficient and effective state planning as defined above—a topographic map, an air-map, and a soils map. These three things, coupled with knowledge of national and local social and economic policies and trends, national and local wealth in natural resources, and national and local population and industrial trends, are worth more than all the tons of other facts that may be compiled by all the WPA workers in the country.

I offer that master-plan making, no matter what the method employed, is the first primary function of the state-planning operation. This comprises very largely the functional category, conception, men-

tioned at the beginning of this paper. Most other planning board functions and procedures fall within the field of operation—gaining recognition, laying the groundwork for plan acceptance and protection, seeing that the plan is carried out. I can summarize my ideas as to what a state planning board should be and do, no better than I have in the following statement prepared for and adopted by the New Jersey State Planning Board:

A state planning board should be a fact-gathering, fact-analyzing, coördinating, planning and programming agency, operating as a permanent arm of the state administration, offering advisory service to the governor and legislature, and rendering continuous service to the several state departments and to the political subdivisions of the State.

Its proper functions and duties include: the formation of a broad information base for planning; the preparation of a dynamic master state plan to serve as a guide in future development of the State and in use and conservation of its natural resources; the coördination of state departmental development activities (to be accomplished in part through review of and report upon all major development projects initiated by individual departments or by the legislature); participation in the making of long-range capital improvement programs and budgets; coöperation with neighboring States and Federal departments in the solution of regional and national problems; the giving of general assistance and guidance to county and municipal planning activities; and the conduct of general education in the need for and general objectives of planning.

Certainly until it has demonstrated its capacity, the state planning board should be given little, if any, veto power. It should not employ strong arm methods in its dealings with other departments. The comprehensive state plan, long-range capital improvement programs and budget and all products of like character should be developed in closest coöperation with all departments and agencies concerned and with the benefit of all the assistance and information available from these departments and agencies.

The planning board, further, should formulate opinion and policy with respect to state-wide social and economic problems of major concern to the people and to the political subdivisions of the State and should *assist* in the formulation and advancement of constructive and remedial legislation.

At least the technical, as opposed to the public-relation and purely administrative aspects of the state planning board job as outlined above, should be under the direction of what I choose to call a state planner. This planner, if to be effective, must be much more than a consultant to a non-planning-experienced director. He is or should be *the* architect of the state structure. As the architect of a great cathedral need not have the personal knowledge or the skill to carve every last gargyle or to execute rose windows, the state planner need not be versed in all the technicalities of all the aspects of state development. He must know broad principles. He must obtain and must be willing to use and know how to use the products of many minds expert in their several fields. This state planner may be one person or perhaps three or four. He cannot be half a hundred.

State planning as we are beginning to think of it is distinctive from state planning, old-style, only in its greater breadth and depth and in

its one-headedness as opposed to the unbalanced and Medusa-like characteristics of older procedures. Many minds and many points of view can and must contribute toward the making of a state plan, but from one mind or from a very small group of minds only can there be evolved any real coherence or unity of plan. The required mental action is a dual one of coördination and original conception. The state planner, whether he be one or three people, is the melting pot of multitudinous conceptions and ideas. The many contributors may, by some stretch of the imagination, also be called state planners. So also may the designer of a sewer system be called a city planner and the designer of stained glass windows be called an architect. This is but a matter of definition. But for the purposes of this paper I am thinking of state planners as the handlers of the melting pot. Such state planners must know the principles underlying the many factors of state development, individually and in their interrelationships, but they can perform effectively in ignorance of mathematical formulæ.

This is said not in support of our present jobs nor to advance what might be called a profession of state planning, as agreeable under certain conditions as these things might be to many of us, but because such concentration of planning responsibility and leadership seems to me essential to any large advance in the art and science of state development. Are there no planners capable of carrying such responsibility and leadership? Then the planning of States is only a dream. To say that state planning can be done only as a symposiac performance of as many experts as there are state development problems is to say there can be no state planning, new-style, that the problem of centralized approach has passed, in magnitude and complexity, the power of the human mind to encompass. This I am not yet willing to concede.

## The Field of State Planning

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EDITOR'S NOTE.—For other papers on State Planning, see: Part II, Section on THE STATE, pages 81-102.

*The Planning Process.* Planning is merely the process of thinking ahead and predetermining ways and means for bringing about a desired result. Thus, there are many kinds and degrees of planning depending upon the agency doing the planning, the area and number of people to be affected, the materials and tools used in the plan, the nature and scope of the desired objectives, the procedure for their attainment, and finally, the motive behind the objectives.

Planning implies three fundamentals: a motive, an objective, and a means for its accomplishment, namely, the plan. Forethought and



selection are the essentials of planning, which implies a conscious choice from among various alternatives.

Since we are now engaged in a particular kind of planning, which we call "national planning" and "state planning," it may be worth while, for a moment, to take a panoramic view of the broad realm of governmental planning to identify, if possible, the place and range our planning occupies therein. This is not an attempt to "compartmentalize" state planning or to circumscribe its functions by rigid definitions, but rather to clarify and strengthen our concepts through a broader understanding of the whole functional field.

Governmental planning is planning by a government agency under governmental authority. It is directed toward the same objectives as government itself—the welfare of the people as a whole. Other institutions and organizations also plan—some for public benefit and some to advance the interests of particular groups. In the atmosphere of conflicting pressures arising from opposing interests there is obviously great need for unbiased technical study of the complex problems facing the people. Planning is a technical aid to government, providing, for the guidance of legislators and administrators, a dispassionate analysis of problems affecting policies and activities of governmental bodies.

*Governmental Levels.* Planning is carried on in some degree by every level of government. In the international sphere, technical commissions and other experts have been appointed to work out programs for concerted action among nations. Agencies such as the International Labor Office represent a step toward permanent planning on the international level. Until recently national planning has not been the function of any particular agency, although nearly every department and bureau of the Federal Government is normally engaged in some kind of planning. The creation of the National Resources Committee is a recognition of the need for closer coördination of national planning efforts and for consideration of long-range policies for conservation and development of our natural resources. Practically all States have now established state planning agencies whose functional range we shall presently explore. Beneath the level of state government there are district, county, and city planning agencies, the principal provinces of which so far have been establishment of land-use areas and programming of local public works.

This classification merely indicates the planning agency and the area and people concerned. The type of planning and the extent to which each agency actually plans depends, of course, upon the powers given to the political division and the authority delegated to its planning body. The words "state planning" do not yet convey a clear picture of the kind of planning implied.

*Technical Divisions.* Next, we may classify planning according to the things or objects directly acted upon and the tools or facilities used in the plan. Thus, we have planning which deals with land, with water,

with minerals, with transportation, with commerce and industry, with public services, and even with government itself. For example, land-use planning means benefiting people through making the land more useful.

This classification corresponds to the planning divisions which we have visualized and tentatively established in our state and regional planning organizations. They are not truly functional divisions, although we sometimes think of them as functional. Instead, they are more logically "technical divisions," having somewhat the same relation to each other that civil engineering has to mining engineering. And, as the field of the civil engineer dovetails with that of the mining engineer, so do these arbitrary technical divisions become integrated in cooperative over-all planning. They are not rigid classifications marked off by sharp lines—in a certain portion of a plan, the control and use of water may predominate; in another portion, the development of minerals may require greater consideration.

These technical divisions, of course, may be further classified into innumerable, more specific subdivisions. For example, flood control, irrigation, hydroelectric power, stream purification, etc., may be cited as technical subdivisions under water resources.

*Functional Fields.* Now we come to the nature and scope of planning objectives, the ways and means for their accomplishment, the manner in which people are to be benefited, and the motives actuating the planning. This is the functional field—the field which determines the purpose to be served and the kind of planning to be employed. Functional differences arise from differences in motives, goals, and technique.

This is highly debatable ground. Here we are faced with different kinds of planning rather than with agencies, areas, number of people, or things and tools used in the process. David Cushman Coyle, in an article in *Harper's Magazine* for October, 1935, points out that planning for the improvement of social and economic conditions is of a different kind and a higher order than that employed, for instance, in designing a highway bridge. The bridge, of course, is designed for human use and betterment, but the difficulties to be solved in its construction are of a different nature and its social effects are much more restricted than, for example, those involved in determining a monetary policy or trade agreement.

In all forms of planning we are dealing with both people and things. In the simplest and most precise form, such as the design of a bridge, we are planning the construction of a tangible object, using physical materials and tools. The arrangement and placing of materials are all important and the economic, social and esthetic aspects of the problem are given only incidental consideration. In planning for social and economic advancement, we are trying to produce, through the medium of both physical improvements and governmental policies and controls, intangible benefits affecting the lives and welfare of the people.

As we go farther in the functional field, we broaden our horizons and enlarge our objectives—we become more and more concerned with ultimate effects upon the whole people and less concerned with the things and means used in achieving results. We deal more with dynamics—with changing trends and variable data—and less with static conditions and calculable forces. The number of relevant considerations constantly becomes greater, their characteristics more obscure and their interrelationships more complex. The time dimension lengthens and becomes a lesser determinant; the three fundamentals—motive, objective, and plan—become indistinguishable as we approach our higher goals and aspirations.

As a crude attempt to differentiate functional types of planning we may visualize the entire field as a series of levels rising from the simplest and most precise form of engineering planning to the highest choice of indeterminate moral and social values. Strictly speaking, those functional types are not truly levels, one above another. The mental processes involved in various kinds of planning are similar—one is not higher than another, but merely different, or derived from a wider viewpoint. The major over-all considerations permeate and influence the more specific determinations. Conversely, physical and social environment profoundly affect our broadest ideals and aims.

National and state constitutions, laws and administrative policies are skeleton plans for social and economic advancement. Through their legally authorized representatives, the people have planned and will continue to plan in all these functional fields. The coördinating and advisory services rendered by national and state planning boards are merely technical improvements—not changes in the basic purposes or procedure of democratic government.

The spirit of the American people is the unconscious motivating force guiding the progress and changing patterns of American life. Should a complete collapse of our economic, social, financial and political structure ever occur, the residual homogeneous spirit of the people would be the foundation upon which a new order would arise. All governmental planning must recognize and respect the ideals and aims underlying American traditions and patterns of life. The hopes and aspirations of the people unquestionably permeate all planning, providing direction and guidance for policies and programs.

Coöperative advisory planning, as now practiced by state planning boards, is a relatively new departure. It is a form of collective self-planning through the voluntary coöperation of citizen organizations with governmental agencies in determining needs of the people and opportunities for better use of resources. It is based on purely voluntary coöperation by the public—first, through the services of representative citizens on planning boards and their technical committees; second, through support by the general public in the actual carrying out of

planning recommendations. It also includes reconciliation of divergent interests through open discussion of knotty problems and analysis of mutual dependencies leading to the realization that coöperative action will produce greater collective benefits than conflicting individuals or group actions.

The differences between coöperative advisory planning and social and economic planning lie largely in the kind of coöperation and degree of control. In social and economic planning the advisory function is more closely allied with administrative authority—coördination and unified action are effected through some degree of compulsion; plans or their enforcement may be superimposed to some extent by governmental authority—for example, traffic laws and regulation of railroad tariffs and electric power rates.

*Field of State Planning.* State planning cannot be adequately identified by stating that it involves research, fact-finding and analysis. A knowledge of relevant facts and a comprehension of their interrelationships is implicit in all forms of planning. Classification of facts and assembly of data have somewhat the same relation to state planning that the professional education and training of the engineer have to the actual practice of engineering. Assembly and analysis of data alone are not planning—planning means using our knowledge of facts.

Likewise, the scope of state planning cannot be delimited by pointing out that it is based on correlation and coördination—these are essential in all effective plans and programs.

The duties, powers, functions and responsibilities of a state planning board are usually prescribed in the legislative act creating the board. The legislature does not delegate to its planning board full powers of final selection but establishes certain functional limitations. The legislature functions as a planning agency in a wider bracket than a state planning board.

At present state planning deals primarily with the conservation and use of natural resources; secondarily, with the effects that development of resources and construction of physical improvements have upon the people. On the other hand, social and economic planning is more directly concerned with the social effects of broad policies and programs and only indirectly concerned with improvement projects. The technical divisions listed on the chart and others not mentioned are therefore logically included within state planning.

State planning may well include plans for improvements in the mechanics of state and local governmental structures and for increasing the efficiency of and benefits from public facilities and services. In general, recommendations of state planning boards should logically be kept within the present constitutional limits of public activities; that is, within the recognized field of public administration and public enterprise. Proposals for constitutional amendments affecting the organic structure

and functions of state government preferably belong to a larger functional field.

However, the solution of the many complex problems involved in planning for the conservation and development of natural resources and the effects of these developments upon the State requires careful consideration of the social and economic aspects of laws and governmental policies. State planning therefore requires research in the field of social and economic planning, but because of implied or statutory limitations, it should not attempt to cover this whole field. State planning boards may well point out to the people the destructive results of uneconomic conditions and trends and the probable ultimate social effects of alternate courses of action, leaving to the people and their elected officials the final solution of the problem and selection of the plan to be followed. The solution of many state problems will depend upon policies and programs formulated on higher functional as well as on higher governmental levels.

State planning boards are primarily advisory and coördinating aids to state government. They should not usurp or infringe upon the planning functions of other state departments, but through their broader perspective should endeavor to correlate departmental policies and programs and bring about closer coördination by voluntary interdepartmental coöperation. Hence, state planning should not be directly concerned with engineering planning of specific projects—this should be left to the proper administrative departments after broad development programs have been formulated.

State planning requires some consideration of over-all planning for specific improvements although it should not attempt to cover entirely this somewhat specialized field; for instance, the state highway department is responsible for establishing its future highway program. The planning board should consider this program in its relationship to the larger factors of population trends, land-use adjustments, conservation of resources, community stabilization and similar considerations.

State planning requires coördination of activities of many individuals, groups and agencies over a broad range. The effectiveness of state planning depends to a large extent upon the degree of coördination and coöperation achieved. Coördination through voluntary coöperation becomes increasingly difficult and less complete as we go farther in the functional field. Social and economic planning, and to some extent state planning, aim at complementary indirect social effects through the flexible administration of broad policies and programs—these effects being manifest in varying degrees on different individuals and groups.

We are thus attempting a new kind of synthesis with which we have had little experience. As our technique improves, the present concept of planning coördination may be modified and expanded. For the present, state planning should not attempt to cover too wide a range, but should be limited to the field in which it can be most definitely useful.

As a preliminary assumption, the lower limit of state planning may be placed partly in the field of over-all planning for specific improvements with the upper limit entering the field of social and economic planning. The range of state planning cannot be more specifically identified until there is a clearer understanding of its particular objectives and legitimate functions. These are influenced largely by the desires and opinions of the majority of the people and will continue to grow and expand with increased public understanding and enlightenment.

## ROADSIDE IMPROVEMENT





# A Program for Roadside Improvement

By FLAVEL SHURTLEFF, New York City, Counsel, American Planning and Civic Association

ALL roads should be useful, safe and attractive. These three qualities are equally important and should be equally the concern of the State and Nation. Attractiveness is no longer the orphan child. This is sound economics as well as elementary esthetics and plain justice to the users of the roads who pay most of the bill.

Some roads may be naturally uninteresting, even ugly, but most of our state highways rank high in natural attractiveness and the less traveled ways are usually delightful. Ugliness has been added,—the scars of the roads left by the builders and the blight of the roadsides permitted by the landowners. Scars will be healed by time and the enlightened efforts of the highway commissions. There is no better example of achievement than the work of the Bureau of Roadside Development in Connecticut which has supervision and maintenance of everything from the gutter of the traveled highway to the edge of the right-of-way. The work includes mowing, removal of trees, maintenance of slopes and embankments, and the care of roadside rests and highway gardens.

The roadside blight is beyond the boundaries of the highway. Is it then beyond the power of the State to control? Certainly the State owes a duty to the taxpayers to conserve the huge investment in highways estimated at over \$1,000,000,000 a year of which about one-half comes from gasoline taxes and motor license fees. The State is primarily interested in encouraging the considerable and rapidly growing tourist or recreation business, the annual value of which, for the Nation, is estimated at \$140,000,000. Above all, the State must protect the user of the highway from all hazards of travel. Fatigue is one of the principal causes of accidents. An uncluttered rural scene never produces fatigue.

The interest of the State in representing all its citizens is paramount to the interest of any landowner. The same principle which is the legal justification of zoning should establish the right of the State to control the private use of highway frontage. Reasonability is one of the final tests of zoning and so it should be in the regulation of the use of highway land.

Even in normal times the Nation has been a heavy contributor to state highway funds. For other state activities the Nation insists on certain policies and certain performances before it makes its contribution. More recently it has insisted that one-half of one per cent of Federal funds apportioned to state highway purposes shall be spent on roadside improvement. These are the moneys that help to heal the scars of the road. Why should the Nation not further insist that the State adopt a

policy which includes some measure of control over the use of land abutting the highway?

Some methods of control have been tested by experience. The freeway is the latest thing in highways. Its author and advocate, Mr. Edward M. Bassett of New York City, defines it as "a public roadway over which abutting owners have no right of light, air and access." The "no access" principle, which has so greatly contributed to the charm and safety of Westchester County parkways, is thus extended to the commercial highway. With no access there can be no frontage on freeways. With a generous width for freeways there is room enough to plant out undesirable uses of private land. The freeway automatically controls the use of abutting private land. The state highway commissions should be given the right to build freeways as parts of the state highway system, but because of the land cost, the use of the freeway principle will by necessity be limited to new rights-of-way in sparsely developed sections.

There has been in several States a trend toward a policy of wider rights-of-way for all new routes and for existing routes wherever practical. A right-of-way of at least one hundred and fifty feet will, in most cases, provide enough room for the planting-out process but this method of control is less effective than the freeway because access over the highway from private property is still permitted.

The acquisition of easements or rights in land abutting the highway is permitted in many highway codes. Building lines are the most familiar examples of such easements, by which the State acquires the right to have the land between the highway and the building line kept free from all structures. A combination of wider rights-of-way and an easement which gives the State control over a strip of private land is second only to the freeway as a control measure.

All these methods, however, can be used to most advantage only on new rights-of-way. For existing highways the tested methods of control are (a) local and, more recently, county zoning, and (b) the regulation of outdoor advertising.

Zoning cannot yet be classed as an effective method of controlling roadside development. The laws of all the States permit local zoning, but in only five States<sup>1</sup> has there been anything approaching a general adoption of the right. Rural townships of large areas which are principally involved in highway control have been slowest to zone. Moreover, many localities which have adopted zoning have promptly zoned all the land abutting the state highway for commercial purposes, and opened the entire highway frontage for commercial development of the shabbiest kind.

Thirty-five States have statutes which regulate to some extent outdoor advertising on private land. None of these statutes has had any appreciable effect on curbing the billboard nuisance. A few have tended

<sup>1</sup>New York, New Jersey, California, Illinois and Massachusetts.

to limit the increase in number of advertising signs and the misuse of scenic spots for their locations. Getting any law passed, keeping it on the statute books and insisting on its enforcement means a bitter and continuous struggle with the well-entrenched outdoor advertising industry. The struggle has been worthwhile if for nothing else than the judicial pronouncements which first put advertising along the highways in a class by itself and finally branded it as an outcast in these words of the Massachusetts Supreme Court:

Even if the rules and regulations of billboard and other advertising devices did not rest upon the safety of public travel and the promotion of the comfort of travelers by exclusion of undesired intrusion, we think that the preservation of scenic beauty and premises of historic interest would be a sufficient support for them.

In spite of their limitations as control measures, both zoning and billboard regulations are steps in the right direction and valuable helps in public education. Local zoning ordinances, including county zoning ordinances wherever the county is an effective governmental unit, should be universally adopted. Much more rigorous billboard statutes embodying the rules laid down by the Massachusetts Supreme Court should be passed by all the States.

Comprehensive regulation of the use of highway frontage by the State has never been tried. It is submitted that such regulation is within the power of the State, if for no other reason than because it reduces the hazard of highway travel. A speed of forty-five miles an hour, often permitted in rural sections of the highway, may be reasonably safe if there is no use of the abutting land inconsistent with high speed. Any commercial use which induces cars to stop or slow down or which diverts the attention of drivers is inconsistent in high-speed areas. Consequently all commercial uses of land along the highway should be concentrated in "compact sections" or in business areas and should be completely excluded from rural areas. Definitions of compact areas are to be found in the Motor Vehicle Laws of several States. A rural district might be defined as any area in which at least sixty per cent of the land abutting the highway is devoted to one or more of the following purposes: land used for residential or lodging purposes; undeveloped or open land; land used for farming, for the raising of livestock, for horticulture, floriculture or plantations including the sale thereon of its own products; forests or woodlots; parks, reservations or recreation areas; cemeteries, schools and churches. The limits of the rural district and the extent of highway frontage within it could be left to the determination of the highway commission or other state department.

This method of highway control is far short of state zoning of the highway and yet should be as effective. Of course it will be violently opposed, as will any act which proposes to regulate the outdoor advertising industry and to curtail the rights of individual landowners.

## Roadside Improvement in Michigan

By JOHN M. GRIES, Conover, Ohio

EDITOR'S NOTE.—In the autumn of 1935 Dr. Gries made a survey of Roadsides in Michigan, including certain aspects of state and city planning in the State. The chapter on the Roadsides is presented here. The planning information, with supporting data, is available for consultation at the headquarters office.

*Pleasing roadside and scenery.* No matter whether we go to Michigan to fish, to hunt, to avoid hay fever, to swim or boat, or to rest, the scenic beauty of the State appeals in varying degrees to all. The average driver of an automobile does not see as much of the scenery as do the other passengers. He does see the pavement and the roadside. The paved highway becomes monotonous to say the least, so it would seem that the driver is entitled to a pleasing roadside.

*Width of trunk-line highways.* Effective roadside improvement depends very largely upon the width of the highway. Relatively little can be done with a forty-foot road, or even with a sixty-foot road where frequent cuts and fills are required. With a minimum width of one hundred feet for Michigan trunk-line highways, and with much wider rights-of-way in the heavy snow area, it is possible for the state highway department to make some worthwhile roadside improvements.

*Special allotment of funds.* The Federal Government in some of its later allotments of funds for the construction of new highways specified that 1½ per cent of the amount so allotted must be used for roadside improvements. This has enabled the state highway department to do some very interesting work, and it has stimulated an interest in the roadsides. The roadside improvements on older roads must still be financed out of a relatively small highway maintenance fund, so that very little can be done to improve the roadsides along the old highways, no matter how willing officials may be to improve the right-of-way along such roads.

*Trees and native shrubs.* With the wide rights-of-way it is possible to have trees and shrubs along the roadside. Trees standing along the right-of-way have been left undisturbed to a large extent. Where the highways have been widened from ten to twenty feet on each side, the highway department has preserved many of the trees found in the old fence-rows, and in narrow strips of woodlots adjoining the highway, but included in the wider right-of-way. In some places the second-growth trees have been left standing on this narrow strip the full length of the woodlot. In some places the farmers had planted trees along the highway, and many of these trees are now standing in rows well within the highway right-of-way. The State also attempted to encourage the planting of ornamental, nut-bearing, and food-producing trees along the highways by adjoining property owners and by municipalities. (See Act 36—Public Acts of 1919.) Some of the native shrubs and bushes have been left in place, adding much to the attractiveness of the roadside.

In recent years small trees have been set out along some of the highways, especially where there was a dearth of shade. Some shrubbery has also been set out. The planting has been in good taste and has not been overdone, nor has the landscape work been of a character to require excessive care and attention. While Michigan has made a good start, it is to be hoped that she will soon employ a few more landscape architects to further extend and improve the planting along her highways.

*Special projects involving landscape work.* With limited funds it is not possible to landscape all roadsides for the present. The state highway department has, however, undertaken a few special projects. While "Welcome Centers" are contemplated on all major highways leading into Michigan from the south, one such station has been built on U. S. 12, one and one-half miles north of the Indiana-Michigan line. It includes a well-landscaped lot in front of a natural grove, with a small building which houses a comfort station, lounge and information office in charge of a trained attendant. At the information office the tourist may obtain such information as he may desire regarding Michigan.

Another project may be seen along U. S. 31, between Muskegon and North Muskegon. It is referred to as the Muskegon Lake causeway project. Through the initiative and coöperation of local organizations and interested citizens, the highway department has been able to make the approach to either of the two cities more attractive. Much more work can be done to improve the principal approaches to many cities if business and civic organizations and clubs will promote and assist in such projects. Other landscaping projects may be observed between Lansing and East Lansing, and in the neighborhood of Alpena, Saginaw and St. Ignace in the Upper Peninsula.

*Truck-weighing depots.* The landscape work done at truck-weighing depots shows what can be done by governmental agencies on their own property. The design of the depot also makes or mars the picture. One of these depots may be seen on U. S. 12 a little north of New Buffalo; and another may be seen on U. S. 16 near the junction of this highway with M. 14.

*Roadside tables.* Approximately 500 roadside tables have been provided, and well placed under the shade of trees along the highways. Only with wide rights-of-way is it possible to place the tables far enough from the pavement to make it comfortable for those who stop for a rest or for something to eat. Near these tables are large refuse cans, painted green, into which papers and other waste matter may be deposited.

A neat sign along the roadside calls public attention to the roadside tables a few hundred feet beyond.

*Roadside springs.* There are also a considerable number of springs near the highways. A neat sign along the roadside calls public attention to these springs, from which safe drinking water may be obtained. The surroundings of some of these springs have also been made attractive.

*Scars along the roadside.* Where there are cuts and fills there are apt to be scars along the roadside, but in Michigan there are very few such scars along the major highways. In most places where cuts have been made in establishing the grade, the banks have been covered with sod, seeded, or covered with some suitable growth. Sod is usually transplanted on the steeper slopes, while the flat surfaces are seeded. In most cuts the contour is finished in recessive curve, thus eliminating the customary ridge at the brow.

*Protection to trees.* Trees standing along the roadside, within the highway right-of-way, may not be cut down or trimmed without a permit from the state highway department. In some States public utility companies have unnecessarily destroyed trees to accommodate their wires, and in other cases have so trimmed trees that they have an ill-shaped and unsightly appearance. But in this State a request for a permit to cut or trim such trees comes to the landscape division of the state highway department. Since the highway department has discretionary power, public opinion should support the department in protecting the trees, or insist upon greater care if its policy be lax.

*Sod-covered roadsides and absence of weeds.* In those parts of Michigan where blue grass thrives, the roadsides are usually well covered with grass. The roadsides along trunk-line highways are surprisingly free from weeds. While some would have weeds along the highways to provide cover for wildlife, sufficient cover can be provided elsewhere than along trunk-line highways where wildlife is not very safe at best. While all highways are not equally well kept, there are miles of roadside where the weeds and grass have been cut and kept clean. That weeds did grow, or would grow along the roadside, witness a regular hedge of tall weeds on the farm side of some fences. But there were a few spots where the farmers had cleaner fence-rows than the highway.

While as a general rule the trunk-line highways have wide, clean rights-of-way, there are exceptions. For example U. S. 23 from Milan to the Michigan-Ohio line near Toledo, has not to date been improved as have some of the other roads.

*Observation parking areas.* Along the trunk-line highways of Michigan there are probably more than 100 elevations in the highways from which one can see magnificent scenery. One may see a different picture from each elevation. From some we may see villages or cities, forests, the placid waters of inland lakes, or maybe the turbulent waters of one of the Great Lakes, rocks, dunes, or some other natural scenery. There are vistas of pastoral scenes well worth seeing, but too often we get a mere "peek," then find our view cut off by some billboard.

How can the public enjoy the scenery? In heavy traffic it is unsafe to slow up suddenly; we are not permitted to park on the pavement, and should not be allowed to do so. In the interest of safety and the enjoyment of travelers, an observation parking area, adjoining the highway,



Strip sodding and seeding to control slope erosion on a  
Federal-aid Highway in Oxford County, Maine  
Courtesy Bureau of Public Roads



Ditch checks prevent erosion on one of Florida's highways  
Courtesy Bureau of Public Roads



Natural sodding of the slopes merges Wisconsin's highways into the surroundings with beauty as well as lowered maintenance cost

Photograph Wisconsin State Highway Commission  
Courtesy Bureau of Public Roads



and sufficient to accommodate five or six cars, would add to the traveler's favorable impression of Michigan. Lookout points, with space for parking, are to be provided at particularly fine scenic points along some of the new highways laid out along waterfronts with special effort being made to keep the water in sight at least half the time. One such lookout has been established near Petoskey.

Merely as another illustration, an observation parking space has been provided a little south of the city of Cadillac, from which one can look down from an elevation of 1,448 feet, and see the city, Lake Cadillac and Lake Mitchell, as well as some of the remnants of forests. At this spot parking space is provided, but it is devoid of planting and other improvements sometimes found. A little to the south of this spot one may see rows of evergreen trees planted along the roadside. These may become a very attractive substitute for some of our snow fences.

*Public utility poles and wires.* With wide rights-of-way, the poles and wires are not so close to the paved highway as is the custom along narrow roads. In the rural sections of the State relatively few automobiles run into poles along trunk-line highways for they are set back a considerable distance from the pavement. In some States many poles are located on the highway right-of-way very close to the pavement.

With wide roads, and with trees and shrubs along the highway, many of the poles and wires are partially concealed, and should it ever be a state policy, proper planting could easily screen from view many of the most unsightly of the poles.

*What the traveler sees from our highways.* Thus far we have discussed matters relating almost exclusively to the highway right-of-way, over which the State should have jurisdiction. Various governmental agencies especially the state highway department, can control in large part the roadside within the right-of-way. These agencies can also reach farther when public safety is involved. The state highway department has done some very creditable work in beautifying the roadside, and will probably do as much as public sentiment desires, especially if it insists upon improvements.

As soon as we step beyond the highway right-of-way, the State's jurisdiction over matters offensive to the eye is very limited. With the exception of the state's power to locate highways so as to make the scenic beauty of the State visible to travelers, the State has little power to clear up spots offensive to the eye or to clear the way for beautiful vistas.

The traveler as he drives along the highways sees among other things outside the highway limits: (1) farmsteads, with their buildings, grain-fields, orchards and vineyards; (2) villages; (3) filling stations; (4) roadside markets; (5) junk yards and automobile wrecking yards; (6) billboards and signs; (7) churches and schools; (8) parks and cemeteries; (9) tourist camps; (10) lakes, rivers and various waterfronts; and (11) vistas or distant scenes.

*Farmsteads.* The State has little, if any, and probably should not have, jurisdiction over the appearance of homesteads abutting the highway, especially in rural territory.

There are a few slovenly, unkept homesteads along the highways that are sore spots to the eyes of the traveler. These homesteads fairly accurately reveal the type of people who live in the houses. The general appearance of homesteads depends more upon the neatness, orderliness, and cleanliness of the occupants, than it does upon their finances. Taste and refinement come first, for there are literally thousands of modest little houses along the trunk lines of Michigan that are neat and clean. The flowers, shrubs, well-kept lawn, and maybe a little lattice work testify to the fact that a very modest homestead may be very attractive. There are many expensive farm buildings where all is neat and attractive, made more so by the expenditure of money. But there are also a considerable number of farms on which there are well-constructed buildings, many without paint, and enough weather-exposed, rusty, old farm equipment between the highway and barn or out in the field to bankrupt the farmer. With the family tin-can dump in sight of the highway, and dilapidated fences surrounded by tall weeds, the good work of the highway department is largely offset.

As regards the appearance of the homestead, legislation is not the solution today. It is education, not law, that is needed. Public opinion can do much. Women's clubs, garden clubs, and organizations of businessmen and farmers can be very effective. In States where both men and women through their respective organizations decided that a certain through highway is to be made the most attractive drive through the States, the effect has been most striking. It seemed that nearly every family that lived along the highway tried to help by cleaning up its own premises.

As a rule, where large signs are painted on barns or outbuildings, the general appearance of the homestead is that of a run-down farm. It is rare that you see such signs on a well-kept farm. When you find extremely poor upkeep of farm property, covering several miles of roadside, it is apt to mean marginal agricultural land more than slovenly people.

If more people would adopt the philosophy of a friend of mine, there would be a very noticeable improvement in the appearance of many homesteads. Although in modest circumstances he has made his yard and garden a beauty spot along a national highway. When asked why he spent so much time beautifying his house and yard, he replied that he owed that much to the thousands of people who pass his house daily.

*Villages.* There are villages in Michigan which are attractive, and give the passer-by a favorable impression. Flowers, trees, shrubbery, lawns, neat houses, and clean streets do much to stamp a village. The schoolhouse and churches with their surrounding yards may add to one's favorable impression of the village if the buildings and yards are

well kept. There are also villages which have little to commend them to the tourist or prospective settler, and there is no desire to stop to make even a small purchase. Villages may plan to grow in an orderly fashion if the citizens so desire, for according to Act 285 of the Public Acts of 1931, villages as well as cities may have a planning commission with power.

*Filling stations.* There was a time when the design and general appearance of many filling stations were most objectionable, but during the last fifteen years there has been marked improvement in the design of the structures, although in some cases the color scheme may be more nauseating. In the main the larger companies led the way toward more artistic design, but even with improved design, the lack of good taste on the part of some operators may still leave the station as a blot on the landscape, for some seem to take pride in hanging up signs and placards of every conceivable size, shape and color, calling attention to each and every article for sale on the premises. While the architecture may be totally out of place in some locations, the improvement along Michigan highways has been marked. Public opinion can do more than laws to bring about improvements in our filling stations.

*Roadside markets.* Michigan has her roadside markets, ranging from some of the best in the country to some of the worst and most unsightly. The wide right-of-way of most trunk-line highways results in less hazard to traffic than in States where narrow roads prevail. There is more space for automobiles to turn out and permit the free flow of traffic on the pavement. On the ground of public safety alone it might be well to require a certain set-back for roadside markets which seem to be encroaching on the public highway's right-of-way. The signs calling attention to roadside markets are mainly crude. Few are neat and informative.

*Billboards and signs.* The great outdoors of Michigan, in so far as nature is concerned, provides the visitors with beautiful scenes different from those he sees at home. Not so with most billboards, for in the main he sees the same advertising on the billboards in Michigan that he saw in Chicago, in Toledo, or along the highways of Indiana leading into Michigan. There probably never was a tourist who came to Michigan to see the billboards.

Under section five of Act 108 of the Public Acts of 1925, authority was given "to regulate the erecting and maintaining of signs, guide posts, markers and advertising devices on or along public highways." Act 136 of the Public Acts of 1935 amends section five. It now reads:

No person, firm or corporation shall erect or cause to be erected on or along any highway any sign, guide post, marker or advertising device without the approval of the commissioner or commissioners having jurisdiction over such highway; and no sign, marker or advertising device shall be painted upon, attached to, or made to form a part of any fence, building, rock or other surface that marks, or is on the line of, the highway right-of-way, except to advertise a business conducted upon the property abutting on the highway at the place

where the advertisement is situated: Provided, No sign, marker or advertising device containing any reflector buttons, reflex reflector or any similar device, and which depends for its effectiveness wholly or in part upon the action of the headlight beam spread of a motor vehicle, except official signs and guide posts erected by the proper highway authorities, shall be erected or maintained on or along any highway or within two hundred feet of the center line thereof.

The erection and maintenance of private signs on the highway right-of-way are prohibited except as approved by the commissioner having jurisdiction. This does not apply to private signs of a business erected on the premises where the business is located. With a fairly strict policy on the part of the state highway commissioner, and with the wide rights-of-way, there remains a fairly wide strip along both sides of the pavement that is free from billboards in the rural parts of Michigan. In some of the cities, however, the private signs at the places of business, and the likeness of billboards painted on the sides of buildings where the business is conducted present a "messy" appearance.

According to Public Act 136, previously quoted, no signs shall be painted upon or made a part of any fence, building, rock or other surface that marks, or is on the line of, the highway right-of-way, except to advertise a business conducted on the premises where the advertisement is located. This is a step in advance of some States where even beautiful rocks on the right-of-way and near dangerous curves have large signs painted upon them.

The state highway commissioner, on page 80 of the Fifteenth Biennial Report, says, "Statutory provisions prohibit the use of advertising signs on the trunk-line right-of-way or on private property within 500 feet of railroad crossings or crossroad intersections. The Maintenance Division removes signs that are illegally placed if the owner, after notification, does not remove them himself."

Michigan has attempted to eliminate billboards from *private* property within 500 feet of railroad crossings or crossroad intersections, and to have barred the reflector type being used by private parties within a distance of 200 feet from the center of the pavement. By specifying 200 feet, the State closely exercises jurisdiction over some private property along the right-of-way in so far as billboards are concerned.

House Bill No. 387, introduced by Mr. Burr, March 20, 1935, at the regular session of the legislature, concerns itself with billboards. This bill is designed:

To regulate billboards and other structures used for outdoor advertising; to require licenses of persons, firms and corporations engaged in the construction, maintenance and use of billboards and/or other structures for outdoor advertising; to give to the state highway commissioner powers and duties in relation to billboards and similar structures; and to provide penalties for the violation of this act.

This or a similar bill will probably be introduced at the next session of the legislature. The outdoor advertisers seem to know more about the

import of this bill than do many of its advocates outside the legislature. Someone should analyze this bill carefully in the light of the experience of other States having somewhat similar legislation.

While the State has made progress in eliminating billboards and signs from the highway right-of-way, and from fence or structure forming or on the line of the highway right-of-way, in rural Michigan, little or no improvement seems to have taken place in most cities, or on private property in the country.

On two automobile trips over trunk-line highways, one in the eastern part, and the other in the western part of the Lower Peninsula, 1,312 large billboards were seen, and classified according to the products advertised. So many large billboards were grouped together a short distance outside the city limits, and then within the city limits, that it was frequently necessary to stop the automobile in order to classify them. The average automobile passes a group of five or six billboards grouped together so quickly that no definite desire is created to buy anything.

The following table shows the number of billboards seen along certain trunk-line highways, classified according to the products advertised:

	Number	Percentage of all Nationals	Percentage of all Nationals and Locals
(1) Gas and oil . . . . .	257	25.7	19.6
(2) Automobiles . . . . .	151	15.1	11.5
(3) Miscellaneous—national and state-wide	129	12.9	9.8
(4) Beer, whiskey and gin . . . . .	99	9.9	7.6
(5) Cigarettes . . . . .	88	8.8	6.7
(6) Chewing gum . . . . .	78	7.8	5.9
(7) Candy . . . . .	32	3.2	2.4
(8) Food products . . . . .	32	3.2	2.4
(9) Auto insurance, etc. . . . .	29	2.9	2.2
(10) Pay Your Taxes . . . . .	29	2.9	2.2
(11) Theaters, shows . . . . .	26	2.6	2.0
(12) Bread . . . . .	21	2.1	1.6
(13) Dairy products . . . . .	15	1.5	1.2
(14) Spark plugs . . . . .	14	1.4	1.1
	1000	100.0	
Local, miscellaneous . . . . .	274		20.9
Blanks . . . . .	38		2.9
	1312		100.0

- (a) The following: (1) gas and oil; (2) automobiles; (4) beer, etc.; (5) cigarettes; and (6) chewing gum, constitute 51.3 per cent of all national, state-wide, and local large billboards, and 67.3 per cent of all national billboards.
- (b) Beer and whiskey more than four times all dairy products and soft drinks.
- (c) Cigarettes more than four times bread and crackers.
- (d) Chewing gum exceeds by more than 12 per cent all nationally advertised food products, dairy products, and bread.

*Junk yards and automobile wrecking yards.* There are relatively few junk yards or automobile wrecking yards in sight of trunk-line highways in this State. Although the highways may not be typical of the two States, I saw fewer junk yards and automobile wrecking yards in traveling more than 2,000 miles in Michigan than I saw in driving 100 miles in Ohio. There is a law in Michigan (Act 34—Public Acts, 1935) permitting township boards to license and regulate junk yards. This Act amends one of the Public Acts of 1929. While the statute is enacted primarily for the purpose of aiding in the apprehension of automobile thieves, it is possible for such township boards to discourage the location of such yards at exposed points along much traveled highways.

Under the new county-township zoning law (Act 44—Public Acts, 1935), further control might be exercised over the location of junk yards, although the general direction that this legislation will take is still to be determined.

The general objective of the billboard educational campaign seems to be: "Buy an automobile, keep it in gas and oil, then Drink, Smoke, and Chew."

*Churches and schools.* The traveler sees not only farmsteads, filling stations, and roadside markets, but he also sees churches and schools. Most of the rural churches are small and the upkeep poor. Many of them do not even carry the name of the church organization. This is very different from what is found in some sections of the United States, and more particularly in Europe. The grounds about most rural churches have received little or no attention. The city and village churches are usually neat and attractive. There is a little touch of landscape work about most city and village churches.

Michigan may still be classed as a one-room school State in so far as the rural area is concerned. Thousands of our consolidated or centralized schools in the United States are surrounded by large playgrounds, and effective landscaping has been done about the building and yard. Trees, shrubs and flowers give portions of the grounds a park-like appearance. Michigan also has some very attractive centralized schools, with attractive buildings and grounds. It would cost relatively little to improve the appearance of the yards about some of the bleak little one-room buildings. While many of the state's one-room school buildings are located where evergreen trees are indigenous, hundreds of yards are as desolate as are the yards of schools in the arid sections of the West. No wonder some children do not like to go to school. The little folks are missing a chance to be trained in neatness, cleanliness, and a taste for order and beauty. Some organizations such as school boards, women's clubs, garden clubs, or some of the businessmen's clubs which undertake special projects each year, might well help to beautify the grounds of some of these little training grounds.

*Parks and cemeteries.* From the highways we may see some of the

state parks, a few county parks, and some city or village parks which add to the attractiveness of the surroundings. There are a few parks along the major highways in the outskirts of cities and villages which have improved the approach to these cities and villages very much. No attempt will be made to discuss state parks, for most of them are not visible from trunk-line highways. An increase in the number of parkways and parks along some of the principal approaches to cities would not only do away with some of the more unsightly spots but would provide a pleasing approach.

In approaching most cities and villages over major highways you will pass a cemetery. In appraising the cemeteries seen from the highways you will find that they range from some of the most beautiful down to the neglected burial ground given over to wildlife. But most cemeteries seen from the trunk-line highways are well kept and neat. If the surroundings of the homes of the living in Michigan were as neat and well kept as are the cemeteries and graves of the dead, tourists the world over would come to Michigan to see the neat, beautiful homes of this State. While we are not especially fond of cemeteries, we do get a feeling of neatness, orderliness and peace from some of the best maintained.

*Tourist camps.* There are several hundred tourist camps in Michigan, usually located along the trunk-line highways, and often not far from a city or village. They can be picturesque as well as practical. They may present the appearance of a neat little village, or they may be messy, besmeared with signs, and a blot on the landscape. Some of the cabins are very well designed and have an artistic appearance, while others resemble second-class dog kennels.

*Lakes, rivers, and various waterfronts.* Few States have as many miles of waterfront along lakes and rivers as has Michigan. The State boasts of approximately 3,000 miles of waterfront along the Great Lakes, Lake St. Clair, and the Detroit, St. Mary's, and St. Clair rivers. Besides this waterfront, there are more than 5,000 inland lakes. This is a wonderful heritage. Some of the waterfronts have been improved, others remain undisturbed, but others have been despoiled. Too little of this waterfront can be seen from the main highways.

While reasons may be assigned for the location of many of the highways, scenery has been given little consideration until recent years. This is as one would expect, but from now on more attention will be given to scenery in the location of highways. In following U. S. 12 and U. S. 31 from the Indiana-Michigan state line to Traverse City, one obtains but very few good views of Lake Michigan. The policy in recent years seems to indicate a tendency to establish roads nearer the waters of the Great Lakes. In locating some of the newer highways along waterfronts it seems that special effort has been made to keep the water in sight at least half of the time. There is as much difference in the scenic value of various sectors of the shore line of the Great Lakes as there is

difference in the fertility of the soil of the farms in the State. The tourist might be interested in an evaluation of the shore line, and in an appraisal of the inland lakes that would include the color of the water. Some of the inland lakes show beautiful color, while others are dark and muddy.

*Some impressions.* Having been in each of the 48 States, one is still impressed with the clean, wide highways of the trunk-line system of Michigan. The trees and shrubs left along the widened highways, together with recent planting, give much promise for beautiful roadsides. The control over trees vested in the state highway department may assure their safety and care if backed by an increasing public sentiment in favor of trees and plants. The wide rights-of-way, together with the prohibition of signs and billboards on such rights-of-way, or on the fences along the road, remove objectionable signs from the roadside near the pavement. Billboards, however, are no more beautiful in Michigan than elsewhere, and there seems to be no decrease noticeable to one who has been in the State on and off for the last third of a century. There is some high-grade permissive legislation directly or indirectly affecting the highways and roadsides of the State, but sound permissive legislation requires a continuing educational program to develop public sentiment to the point of action.

The highways in the rural sections have been given most consideration in the discussion. In some of the cities it would seem that the governmental agencies of the State were either without authority, or had abdicated completely when the city limits were reached. In some cities the wide rights-of-way seem to have shrunk, and the control over the roadside or street outside the paved area seems to be but slight in the outer fringes of the city. The billboards and signs have so besmeared the fronts and sides of buildings and places of business that one is reminded of a child's first effort to paint. Some of the Michigan cities are a credit to the State in their general appearance, yet there are a few so unsightly on the trunk-line highway streets that tourists should be provided with a "by-pass highway" so that they would not have their favorable impression of Michigan spoiled.

## Some Views on Highway Design

By GILMORE D. CLARKE, Pelham, N. Y., Fellow, American Society of Landscape Architects, Member, American Society of Civil Engineers

EDITOR'S NOTE.—This paper was presented before the Association of Highway Officials of the North Atlantic States at Atlantic City, N. J., February 13, 1936.

**W**HAT I have to say to you today is not new. In particular, it concerns the design of motor-ways, which includes highways; however, I do not want to limit these few remarks to the highway as we understand it, because I believe that the time has arrived when we must seriously consider whether or not the so-called "highway" is





Careful grading, appropriate design of structures and restrained planting will cause the freeway to appear a part of the surrounding countryside

Courtesy Westchester County Park Commission



Four-lane Bronx Parkway, located with careful consideration  
of the topography  
Courtesy Westchester County Park Commission

satisfactory for the needs of this motorized age. For ordinary city and village streets, for town and county roads and the like, the highway is still sufficiently effective, but for main arteries between large centers of population it is out of date, dangerous, and in many instances extremely ugly; it is responsible, to a very large degree, for the depreciation of property values, and is relatively short lived.

It seems to me that we should think rather of the motor-way as a more important factor in the development of the region, State; and Nation than heretofore. Most highway engineers have gone along, pretty much satisfied with the methods of the past. True, you have paid first attention to water ratio of concrete, to steel reinforcing, to proper curing of the road slab; but how many of you are thoroughly familiar with the factors which make the highway pleasant in its visible aspects for those who ride upon it? How many give first attention to the esthetic factors? Is it not true that you consider this problem of esthetics effeminate? Have you ever realized that the basic esthetic elements in motor-way design will result in better, more efficient, and often more economical highways? The old idea of "the shortest distance between two points" still seems to be the slogan with many highway engineers and results, in the rugged terrain of the North Atlantic States, in unduly expensive, ugly, short-lived roads. The public is tolerant of much bad work that has been done. But because some few good things have been accomplished, John Public has had a taste of these better things and you are not going to be able to serve up the ordinary garden variety of highway much longer.

Recently, I drove over a new Virginia state highway, constructed for the greater part of a distance of about sixty miles, which traversed the rolling hills in exceedingly long tangents giving a roller-coaster effect. This made driving exceedingly unpleasant and monotonous, besides providing many sharp vertical curves with danger lurking at the top of each, and all because no thought whatever had been given to a study of the terrain over a wider area than the right-of-way of the old road, with a view toward obtaining a more pleasing, more efficient, and more lasting location. This same highway passed along the principal street of every tiny hamlet and since the right-of-way was narrow, the houses and stores were almost up along the edge of the pavement. The answer you will give for not doing anything else is that the county refused to buy a new right-of-way, the storekeepers in the little hamlets refused to have the road by-pass the shops, and a dozen other reasons, no one of which carries any weight.

Let us examine what the New Jersey State Highway Department did in the approaches to the George Washington Bridge connecting New Jersey with New York City. When they studied their problem there was plenty of established precedent for building roads on wide rights-of-way so as to prevent the abutting owners from fronting upon the

highway. Why did these officials not go to the legislature and demand enabling legislation?

The new roads carved through New Jersey are wide, efficient in the first instant, and I expect costly; but by reason of being just highways they are becoming uglier daily because of billboards, gas stations, and hot-dog emporiums. Worse than that, they are becoming less efficient as time goes on by reason of real-estate development along the sides—development of a local nature which in time will clutter up those arterial routes with local traffic and thereby reduce the effectiveness of these arteries for the purpose for which they were intended.

I recall a rather recently constructed "by-pass" of a village along the Hudson River in New York State. The old road dropped down into the village via steep grades and emerged again via still steeper ones, passing through the main street which was narrow and congested. The State Highway Department built a by-pass past the village on easy grades in a more direct route. For a time this road functioned well. Farmland bordered both sides of the right-of-way and those who used the road either forgot, or never knew, that the village of Wappinger Falls was below to the west under the hill.

But what happened? Within a few months this delightful stretch of road was lined with billboards, hot-dog stands, and gas stations, which screened the farmland from view, decreased the efficiency of the road, introduced points of danger at each one of the new developments, and has made it imperative, some time in the future, to build still another "by-pass."

Let me give you still another example. In the county of Erie in New York, which includes the city of Buffalo, is a township which is uniquely situated. It is a large island, called Grand Island, in the Niagara River, about six miles long and a mile wide. By constructing two bridges over the east branch of the Niagara River and a road across the island to connect these two structures, Grand Island was made readily accessible and Niagara Falls brought six miles nearer to Buffalo. I became interested in the project because there are two important state parks and a parkway on Grand Island which the Niagara Frontier State Park Commission called upon me to design. The island presented, and to a degree still does present, an excellent opportunity for an outstanding development by reason of the fact that the entire area is unspoiled. As insurance against having the borders of the highway across the island between the two bridges deteriorate into a so-called "ribbon development" (a double row of signboards, hot-dog stands, garages, and gas stations), I urged upon a committee of the Board of Supervisors of Erie County that, in the absence of specific enabling legislation, they appropriate moneys for the right-of-way to the County Park Commission for parkway purposes and permit that body to buy the land and in turn to give the highway department a permanent easement over the central part

of this parkway for highway purposes. (There is adequate precedent for this procedure in Westchester County.) In this way a park strip would have been preserved along each side of the road so as to prevent unrestricted access by the adjoining owners of land. Easements for access at specific points could have been provided as outlets for the abutting property, and restrictive clauses to prevent the erection of billboards within 500 feet of the right-of-way could have been included in the deed of sale. But this idea was too novel to have been accepted by my friends in the northwestern part of the State. The land would have cost a little more, of course, but the value of the property bordering the highway, and for considerable distances back on each side, would ultimately have been much greater by reason of a resultant better class of development. Greater land values would have meant higher taxes for the town and county and in the long run everyone would have benefited.

What happened? The supervisors directed that the land be purchased in the usual way for highway purposes through the office of the County Attorney. The road was built and, as I had previously predicted, within two or three months after the opening of the road, six or seven requests for the erection of gas stations and hot-dog stands on land zoned against these uses were presented to the town board. The present all-year-round population is small and nearly every resident is related in some way or another to at least one member of the town board. You can readily visualize what is going to happen. Here is an unspoiled area now destined for development in a manner similar to many other types we are familiar with along state highways near large cities—a continuous row of shacks and shanties covered with gaudy signs, the backgrounds for multicolored gas pumps, the spaces between these structures usually filled with billboards. This shoestring of sordidness is an open sore; its roots become well established and will send off shoots to the areas back of the edges to cause a wide blighted district, which spells defeat for any reasonably decent type of development adjacent thereto. History repeats itself.

Such a procedure as I have outlined results in economic losses too large to be estimated. It causes esthetic losses and those to me are greater, because the loss of beauty and in its place the development of ugliness, spells economic loss. Highway engineers must give attention to these matters; they must give attention to matters beyond "getting the farmer out of the mud."

For years I have heard about "roadside beautification" and I am not interested. I am not a bit intrigued with the job of making a highway "beautiful" by planting a few bushes and trees after the average engineer gets through with it. That is merely a palliative. I am only interested in the basic principles which underlie a logical procedure in motor-way development to the end that they may be more efficient, less costly, and more attractive. If we can build our main arterial roads

upon sufficiently wide rights-of-way so as to prevent unlimited access to the pavements through the enactment of appropriate new legislation, then and then only are we going to have safe, effective, attractive, and lasting highways.

Now, specifically, what can we do about it? As a matter of fact the officials of several States are giving this matter careful consideration at the present moment. They have realized that many of our highways are unsafe and that radical changes must be made to reduce the increasing number of automobile accidents. There seems to be to me but one really satisfactory solution and that is to provide enabling legislation to permit the state highway departments to construct "freeways" instead of highways. The freeway is a term coined by Mr. E. M. Bassett, a lawyer interested in planning progress, some six or seven years ago when he defined it as a "strip of land dedicated to *movement* over which the owner has no right of light, air, or access." The idea developed after the construction of the first parkway, which he defined as a "strip of land dedicated to *recreation* over which the owner has no right of light, air, or access." The freeway is, therefore, in effect, a parkway type of motor-way designed for all classes of vehicular traffic.

The Governor of New York, in his recent message to the legislature, recommended that attention be directed to the elimination of structures along roadsides which destroy the appearance of the countryside, reduce the efficiency of the road, and are contributory causes of accidents. Therefore the New York State Planning Council has interested itself in this problem and believes that the construction of freeways instead of highways is the best means of carrying out the Governor's recommendation. Zoning as a means of control of lands adjacent to the highway is not positive. It may be a means to reclaim, in time, old highways, but new roads must be developed upon broader and more comprehensive lines. The Council therefore developed a little more comprehensive definition for "freeway": "A freeway is a strip of land upon which a highway is constructed especially designed to serve all types of vehicular traffic and over which the abutting owners have no right of light, air, or access, except where easements for such access at specific points have been reserved or acquired."

I believe that New Jersey is considering the enactment of legislation to make it possible to build freeways. Only last Saturday in my capacity as Consultant to the Maryland Planning Commission, I recommended that consideration be given by the proper authorities to the preparation of an act making it possible for the Highway Department to construct "freeways." I had particularly in mind the construction of such an artery between Baltimore and Washington to relieve U. S. Route Number One, a typical highway lined with all of the various kinds of structures which make for "ribbon development." This is the main approach to the capital of the United States from the north, an approach as ugly



Slope plantings of meadow roses prevent erosion along this Iowa road

Photograph by Iowa State Highway Commission



Highway Safety Posters Add to Danger  
Courtesy *Roadside Bulletin*



Billboards on an abrupt crest provide an unnecessary distraction  
to the driver  
Courtesy *Roadside Bulletin*



as that to any large city in the United States. To build another highway would only result in having two "ribbon developments" instead of one, so that it is recommended building a "freeway" and, supplementing it, a parkway to serve as connections between Baltimore and Washington, a recommendation which resulted only after a careful study of the regional area between these centers.

Freeways should not be located without first giving careful consideration to the topography to the end that it should fit the terrain in a logical manner. It seems desirable now to construct two separate roads, one for traffic in each direction. A four-lane freeway might consist of two 24-foot roadways (two 12-foot lanes) and a six-lane freeway, of two 34-foot roadways (each outside lane 12 feet wide and a center lane 10 feet). In certain cases it might be advantageous to construct these two drives at different levels or varying differences in elevation and at varying distances apart so as to fit the terrain more suitably. Further refinements include the careful spiraling of curves, the elimination of tangents between curves in the same direction, widening the pavement at curves, the careful grading of slopes to cause the roadways to fit comfortably into the newly graded right-of-way, the appropriate design of bridge structures with the aid of an architect who possesses a sympathetic point of view, attention to the artistic design of guard-rails, signs, etc., and last, the planting of slopes and other areas in an exceedingly restrained manner so as to cause the freeway to appear to be a part of, and in character with, the surrounding countryside; not a heavily planted green belt through a country which may be open pastures. All these factors are important matters for your careful consideration and your minds must become saturated with the idea that the motor-way of the future will be measured by its esthetic value and to its significance economically as related to the value of lands adjacent thereto, in addition to its structural efficiency, a factor with which you are past masters.

Your profession is not stereotyped and not in any way limited in scope if you will only realize that the problems which confront you are related to the larger phases of planning, and therefore must be co-ordinated with other activities in this field. And further, beauty should always be a factor in your work; it goes hand in hand with economy and will repay you if you will only allow beauty to serve you. If your training is inadequate for the demands of beauty, be big enough to call in someone else to collaborate with you.

# A Résumé of Progress in Roadside Improvement

By the Division of Design, U. S. Bureau of Public Roads, Washington, D. C.

**S**TREET tree planting as a public function began in 1871 in the Nation's Capital when the District of Columbia Division of Trees and Parking was created. Public appreciation of the value of tree planting on city streets spread its influence during the next twenty years beyond the limits of the municipalities. Massachusetts was the first State to enact legislation (1890) for the purpose of caring for shade trees on public highways.

Tree planting began to develop on a wider scale during the turn of the century (1890-1902) when several other States enacted laws for this purpose. In the East, the New Jersey Shade Tree Statute was enacted in 1893. In the West, similar laws were enacted the same year in California. In the North, state legislation of this character was passed in Minnesota in 1895, while in the South, Florida legislated for a like purpose in 1901. Then in rapid succession, the State of Pennsylvania also in 1901, and the States of New Hampshire, Connecticut, and Ohio in 1902.

The earliest efforts for shade tree plantings logically developed in the populated centers where the loss of natural countryside vegetation resulting from man's "civilizing" process was most felt. People began to think of tree planting on a larger scale, however, as towns and roads expanded and the influence of the motor vehicle gradually widened. Massachusetts again appears to have been the first State to pioneer in roadside activities as a state function and responsibility, for it began work in 1912. Then Connecticut and a few other States soon followed in early efforts of this kind until roadside work became really national in scope as the result of Federal interest and legislation.

Section 2 of the amendment to the Federal Highway Act of May 21, 1928, permitted the planting of shade trees as a part of Federal-aid improvement, "In every case in which, in the judgment of the Secretary of Agriculture and the highway department of the State in question, it shall be practicable to plant and maintain shade trees along the highways authorized by said act of November 8, 1921, and by this act, the planting of such trees shall be included in the specifications provided in section 8 of said act of November 9, 1921." Little was accomplished under this legislation, however, because it was provided that "the payments which the Secretary of Agriculture may make from any sums appropriated under the provisions of this act . . . shall not exceed \$15,000 per mile, exclusive of the cost of bridges of more than twenty feet of clear span." This limitation precluded the planting of trees along highways as a general policy because the cost of highway construction normally used up all the available funds before planting could be considered.

In 1933, however, a real impetus was furnished roadside planting possibilities when the National Industrial Recovery Act "authorized (the President) to make grants to the highway departments of the several States in an amount not less than \$400,000,000, to be expended by such departments in accordance with the provisions of the Federal Highway Act, approved November 9, 1921, as amended and supplemented, except as provided in this Title, . . . for the purpose of providing for emergency construction of public highways and related projects." Section 6 of the Rules and Regulations for carrying out the provisions of Section 204, Title II, of this Act included "the appropriate landscaping of parkways or roadsides on a reasonably extensive mileage," and the state highway departments were notified by the Bureau that in the selection of projects to be included in the programs of proposed construction, not less than one-half of one per cent must be reserved and expended for such purposes. This minimum requirement was increased to one per cent the following year, and this one per cent minimum now obtains upon all Federal highway funds, including regular Federal-aid appropriations to the States, excepting Grade Separation Highway funds.

In the period of nearly three years, the total program—completed, under improvement, and planned—has approximated an expenditure of \$4,200,000 and includes 814 roadside improvement projects. Nearly 2,900 miles of highways have been, or are to be, improved, at an average estimated cost of about \$1,500 per mile. The roadside demonstrations are well distributed over the several States, with the majority of improvements located on main arteries of travel at the approaches to the more important centers of population. The average length of an improvement is slightly over 3.5 miles, and the average cost is approximately \$5,400.

The roadside improvement program has demonstrated that the highway and its surroundings have a functional relationship and for this reason should be treated as far as possible as a single unit. It is more and more evident that, when properly conceived and designed, the roadside development and control of highways can improve the value of our national investment in transportation facilities with increased pleasure and safety to the motorist, and at the same time furnish considerable employment in the localities of the landscape work. An improved technical approach to the various roadside problems is growing within the organizations of the state highway departments, and more effective methods for handling the work are being used as experience in the work is accumulated. The era of so-called "beautification" is rapidly passing as a better appreciation of the need for the coördinated organization and integration of roadside work in connection with regular highway construction programs is developed.

It has been demonstrated that the most effective roadside work requires a series of systematic operations, leading up to the final plant-

ing. First, there is the problem of removing abrupt and artificial changes in the ground surface usually found on highways constructed by old methods. Second, there is the problem of restoring top soil and preparing the soil areas for the subsequent seeding, sodding, or planting. Upon these preliminary measures the success of the final landscape work must depend. Without this foundation work, the main purpose of roadside improvement—the fitting of the highway into its landscape surroundings—cannot be successful. For the sake of economy, it has proved desirable for landscape considerations to be analyzed as far as possible *before* highway locations are made rather than *after* construction is completed. Under this arrangement, it has been demonstrated that many pleasing landscape features may be worked into the design and construction of a highway at little if any additional cost.

The practical benefits of the roadside improvement program are now being realized. Control of soil erosion, the planting of natural snow fences, the elimination of “eyesores,” the development of roadside areas, and the “greenway” covering by seeding and sodding, all contribute to the restful appearance of highways, and highways should be restful to the driver to be safe.

There are numerous indications that certain basic features of landscape work have come to the attention of the state highway authorities as the result of the object-lesson roadside projects, and are now being incorporated in plans for improvement where there is no special provision of funds for roadside improvement. Greater widths of right-of-way are being acquired because it has been demonstrated that room is essential for safety. State highway departments are giving more attention to the protection of trees and other desirable volunteer growth along the way. Excavations along the roadside to obtain earth for fills are now carefully planned to avoid unsightly appearance. Earth slopes in cuts and fills are being made less steep and they are well rounded at the top and bottom. Side ditches are being widened and reduced to a shallow depth to make them less hazardous. Seeding and sodding to reduce soil erosion are more generally practiced, and the appearance of structure is receiving more attention.

Pronounced progress is being made in acquainting the public with the engineering and legal problems involved in roadside improvement and in enlisting support in solving these problems. Public approval and support of the legislation necessary to meet the requirements of greater safety, money-saving maintenance, and more attractive conditions and general amenities along highways appear to be the key to the satisfactory quality of future highway planning and development.

# Recent Roadside Studies by the National Roadside Council

By ELIZABETH B. LAWTON, Chairman, National Roadside Council, New York City

*Pennsylvania Roadsides.* Roadside improvement, difficult enough in any State, confronts more than the usual obstacles in the State of Pennsylvania. Paradoxical as it seems, the beautiful mountain ranges, the very asset which gives to the State its great natural beauty, may easily be the means of destroying that beauty along the roadsides. With the insistent mania for speed which governs our highway construction today, curves must be straightened and grades leveled in response to public demand. The day is yet to come when the public will choose beauty rather than speed if one must be sacrificed. Straight roads through mountain country mean cuts and fills with their inevitable ugliness, and these abound in Pennsylvania.

The State Highway Department is doing its utmost to heal these scars with a covering of green, but the slopes are too steep to hold and frequent "slides" destroy much of the planting, leaving a raw and ragged appearance. Moreover, the number of cuts is already too vast to cope with and more are constantly created as roads are "improved." It is impossible to grade these slopes sufficiently to blend the highway with the landscape. To flatten them even to a stable grade would involve tremendous cost and is quite out of the question with the present narrow rights-of-way. The original grant for a highway in Pennsylvania provided for room for two ox teams to pass, and most of the State's rights-of-way are still of that width. Very few roads have sufficient width to allow a proper grading of slopes or to provide room for setting the poles back from the pavement.

This pole problem is another serious menace to beauty in Pennsylvania. Most of the highways are flanked by poles on both sides and close to the pavement. The constitution of the State requires that the poles be given a place on the right-of-way if it is requested. The discretion which should rest with the State Highway Department, as it does in most States, is not provided.

Manufacturing towns, which seldom add to the beauty of any highway, are thick in most sections of Pennsylvania and there are few by-passes. The mining and oil industries add their inescapable ugliness to the highways of certain districts. And last but far from least in the causes which threaten the natural beauty of the State are the billboards. A mountain region with its constant highway curves is heaven to the billboard man, and a motor trip across the Pennsylvania ranges today leaves one with the impression that every curve is marked by a huge sign.

The State Highway Department is awake to the situation. A trained Forester with twelve assistant Foresters head the able Department

which is doing its best to overcome the difficulties. A large amount of bank planting is under way as well as considerable tree planting, but the road mileage is vast and the problem is tremendous. Until wider rights-of-way are secured and until the flattening and planting of slopes is included in each highway construction contract, it is difficult to see how the State can get ahead of the present situation.

Wider rights-of-way, flatter slopes well planted, poles pushed back from the pavement and a rigid control of billboards and other roadside enterprises are the outstanding needs, so far as the appearance of the roads is concerned.

These needs must be met for safety as well as for beauty. Motoring in Pennsylvania is extremely hazardous on the present highways. Two-lane roads with constant curves and steep grades, carrying a very heavy commercial traffic as well as pleasure traffic, present a serious situation. One is constantly overtaking a truck already trailed by a string of cars each vainly seeking a chance to pass with safety. Eventually some driver's patience is exhausted and he makes the reckless dash which too often results in an accident. The dual type of road with traffic divided by a parked strip is certainly called for through the mountains of Pennsylvania. One can almost count on the fingers of one hand the dual roads which now exist in the State, and none have the parked strip, although in some cases the opposing lanes are separated by a strip of contrasting pavement. Freeways and parkways are also conspicuous for their absence.

Freeways with their limited access to the highway would do much to control the number of roadside stands and stations, but it must be remembered that access to the highway is not needed by the billboards and upon these the freeway would have but little effect. Those who fondly believe that the billboard can be obliterated by a planted roadside strip are doomed to disillusionment. Nothing short of a solid hedge will banish the billboard, and who wishes to see our highways hemmed in by continuous hedges?

Highway zoning if enacted soon could still save much of the beauty of the Lincoln Highway and Pennsylvania's other mountain roads. Already most of the "crests" so carefully named and marked by the State are occupied by stands, "Bill's Filling Station," "Pete's Dance Hall," and the like, with their usual litter of signs, out-houses, monkey cages, etc.

*Safety Billboards in Pennsylvania.* A motor trip in Pennsylvania today leaves no impression more vivid than that of the "safety billboards" so plentifully scattered over the entire State and most often located on the sharpest curves.

It is not difficult to understand how a manufacturer may be persuaded, if his competitors are on the billboards, that he too must blazon his name along the highways. It is incredible, however, that the most

expert salesman should be able to persuade a state department that lurid pictures of automobile accidents and catchy phrases on safe driving when painted on billboards along the highways to attract the attention of drivers, can possibly promote safety.

The idea originated of course with the billboard industry, which gladly donates free space if the State will pay for the lithographed posters or the painting of the signs. The billboard industry in return gets the much coveted endorsement of the State for its medium, since each billboard bears the prominent signature of the Governor's Highway Safety Council.

To make sure that the safety billboard will focus and hold the attention of the driver, some one has devised a variety of catchy phrases which, once the eye lights upon them, will insist upon being read to the end. When on some sharp left curve a safety billboard lures your eyes to the right to read, "DON'T TAKE YOUR HALF OF THE ROAD OUT OF THE MIDDLE," you will be lucky indeed if some reckless driver does not swing around that curve on your side of the road and take his half out of you!

*Arkansas Roadsides.* Recent work of the National Roadside Council has included a brief observation and lecture tour in Arkansas. A much newer State than Pennsylvania so far as its highway development is concerned, Arkansas yet has the same outstanding needs. Wider rights-of-way and flatter slopes are imperative. Erosion is extremely severe in Arkansas and her narrow highways with badly eroded banks give a ragged and unkempt appearance to a naturally lovely State. The highway department is striving to flatten and plant the slopes but is forced to rely upon easements from property owners for the necessary width.

Arkansas has one advantage when it comes to roadside control. The few highways yet paved through the Ozarks are so new that serious defacement has not yet taken place. Highway zoning and state billboard regulations if enacted now would protect the outstanding scenery of the Ozarks and the quieter but no less lovely country of the lower sections.

The Arkansas Highway Department has recently reported "material changes in the designs of our roads now under construction eliminating deep ditches, flattening slopes and including in our contracts planting to prevent erosion."

# Highway and Roadside Treatment

By ALBIN GRIES, Landscape Engineer, Illinois Division of Highways

THREE years ago, when highway planting made its beginning in Illinois, not many of us knew very much about highway landscaping. We began with the old idea that trees, preferably elms, must be planted in rows, and that we should transplant our parks and gardens to the highways as a sort of decoration.

We thought that we were making a great step forward when we graduated to the use of design which called for an irregular, instead of a formal, arrangement of trees.

This method of planting, which so far seems to be the conventional plan for highway landscaping, has a major defect—dull monotony. Today, we are getting away from the park or estate design possibly as a result of three years' association with those realists, the highway engineers, who traditionally are intolerant of decoration, and whose chief concern after the road is built is, "How much will it cost to maintain?" We have heard a great deal about roadside planting from many other sources, the best of which tell us to look to the old country road for inspiration.

Our country roads are still naturally attractive. Unscarred by the necessities of modern highway construction, the trees and the undergrowth of the woodlands, and the grass and the wild flowers of the prairies, extend into the right-of-way, and the road is a part of the surrounding landscape. As such it meets all of the requirements of beauty, and from the point of view of the maintenance engineer, it is almost ideal. Its slopes matted with ground cover, there is no soil-erosion to combat; and everywhere covered with native grasses and wild flowers, there is no necessity for mowing.

The modern highway with its raw clay banks resulting from its tenacity to a nearly level grade, and the consequent destruction of native vegetation, does not now resemble this country road. But it is to this road that we can look for our objective in highway planning, that is, the restoration to the right-of-way of the natural growth existing there before the road was cut through. Such restoration of the natural vegetation to the roadsides of the modern highways will not only by its beauty give pleasure to the motorist, and by its stability bring peace to the highway engineers, but by its being add to the prosperity of the farmers. Trees which help to break up the hot drying winds and ground cover which holds the rains to a slow run-off, growing on an area of over 100,000 acres, which is the extent of the highway system, are sure to have an appreciable effect for the good of agriculture. Soil-erosion, making its foothold in the disturbed surface of the roadsides, is beginning to make a serious threat against farmlands.

In response to an invitation by the Soil Conservation Service of the





Dangerous grade crossing and right-angle turn—four attempts to compel attention away from the road

*Courtesy Roadside Bulletin*



Safety Billboards at a danger point defeat their purpose

*Courtesy Roadside Bulletin*



Herbert Johnson presents his point of view on the use of billboards to promote safety

Courtesy *Roadside Bulletin*

Department of Agriculture, the State has indicated its desire to coöperate in a soil-erosion control project covering 1,150 miles of its highways, to save a large acreage of farmland against a possible eventual destruction.

With the completion of the Spring, 1936, planting program, 2,100 miles of roadside have been planted to native shade and flowering trees. I purposely do not say that they have been landscaped, for the intent of the program from the beginning was to establish only a skeleton planting of trees as quickly as possible, and to return later to add the finishing touches. This limitation imposed on the planters by the Department was perhaps an accidental foresight, but it has been amply justified. Now it will be possible, in the light of experience of actual highway planting, to return to them, not to add the finishing touches of park or estate landscape methods, but to complete their planting with the more defined principles and purpose of highway landscape design in mind. This fall, we plan to add such a planting to a route 77 miles long which was given its original planting in the Spring of 1934.

We shall continue to confine our planting to highways that are eighty feet wide or wider. Trees planted on a right-of-way of lesser width cannot be placed at a safe distance from the pavement unless they are eventually to come in conflict with the overhead wires of the utility companies. On wide rights-of-way, we reserve a strip eleven feet wide, running parallel and adjacent to the two property lines, on which only low-growing trees and underbrush are planted. Outside of this strip tall-growing trees may be planted so they will need practically no trimming by the linemen who must keep their wires clear. The Division of Highways has a program of acquiring additional width for the narrower highways, so that eventually all of the rights-of-way will have provision for added safety and future widening of pavement, and incidentally have room to accommodate both the overhead wires and trees.

Ground cover, for the present, will be planted only on those banks which present the greatest problem of maintenance against their washing and sliding during rainfall, and those whose slopes already extend to the property line and which cannot be flattened. Other banks whose slopes can be made flatter, with rounded contours to blend the roadside with the roll of the adjacent land, will be planted after such corrective grading is done.

In addition to the planting of new material, we are very much concerned with the preservation of existing trees and shrubs. In this effort our greatest activity is in the control of the trimming by the utility companies of trees which happen to be growing too near their wires. Permits are issued to do this trimming, only after the contemplated work has been investigated in the field by a representative of the landscape engineer who later passes on the manner in which it was done. In this way, we are gradually putting an end to the methods by which

many of our large trees have been disfigured. On the whole, the officials and linemen of the utility companies have been coöperative, and anxious to know better pruning methods which will permit trees to grow more nearly in their natural form, and at the same time keep them more permanently clear of their wires. It is a process of education, and perhaps the results will not be apparent as soon as we could wish.

Another responsibility is the maintenance which young trees require for two years after they have been planted. They must be watered, and the soil around them must be kept mulched during the dry season. They are constantly watched for attacks by insect pests which must be combated with spray the moment they appear. We are equipped to do this, and every year we have been able to decrease our death rate to a point very near the normal expectancy.

Included in the program of highway planting is the planting of grade separations and triangles formed at wye intersections; the appropriate landscaping of historical markers, the development of picnic areas with their small parking spaces off the highway proper, and their campfire stoves and tables. So far, 135 intersections and grade separations have been planted, and 36 picnic areas established.

To carry out the work of preparing planting plans, to inspect the plant material in the nurseries before delivery and on the planting sites after delivery, to supervise its planting and maintenance, an organization was planned which would become an integral part of the existing organization of the Division of Highways. Each of the ten highway districts in the State is assigned a trained landscape architect who works in close coöperation with the district design, construction, and maintenance engineer. In addition, each district has a permanent complement of landscape foremen to assist the district landscape engineer. At headquarters in the State Capitol a landscape engineer and an assistant correlate and supervise the whole.

It is this organization which, after three years of trial and error, of collaboration with the highway engineers, and of counsel from conservationists and specialists in other fields, begins its fourth year with a hope and a prayer that it may add to our modern, efficient highways of Illinois, the beauty and economy of the old country road.

STATE PARKS



# Administration and Maintenance of State Parks

By RICHARD LIEBER, Indianapolis, Ind., President, National Conference  
on State Parks

EDITOR'S NOTE.—Col. Lieber first prepared this paper for the Regional State Park Conference held in Minnesota. It was delivered in Minneapolis September 26, 1935, and again at Anniston, Alabama, April 2, 1936. It has already been widely circulated in mimeographed form and continues to be in demand by state park officials.

THREE months ago the annual conference on State Parks was held at Skyland, Virginia. At that time we discussed the meaning of State Parks. We defined their character and quality and—like their bigger brothers, the National Parks—set them aside from other outdoor media of recreation or relaxation.

Our object today is to investigate the subject of "Administration and Maintenance" of State Parks.

*Preservation of Property.* According to our definition of what constitutes a state park, we shun the word "development." There is, however, a word of importance and significance to the conservator, and that is "preservation." So it is by arbitrary preference that I shall talk to you on the subject of "The Preservation of a State Park."

To me, the word "development" connotes a man-designed attempt on the improvement of Nature's wonderful handiwork, if the term is used in connection with a conservation project. Such an accomplishment being wholly impossible, you may, therefore, understand why my philosophy and creed on conservation abhors artificiality or the mechanical in the making of a state park.

Of course, we should have a bit of the modern, but in a state park we should confine this to a small portion of the park project and call it a "service area." Even here we must not encourage gross commercialism, and must only build and operate our hotels and conveniences for the modest comfort of our park visitors.

I am forced to repeat that the purpose of a state park as we have defined it is to keep intact for all generations to come a part of Nature's original domain.

The organization of a state park area for use of visitors is entirely subservient to the above definition. It is immediately evident that there must be some compromise between the basic policy and the necessity of handling crowds in such an area.

The first consideration is that of circulation. Visitors must find it convenient to get to and into the park and once there, the many points of interest must be made accessible. It must be the policy in state parks to build only such automobile roads as are essential and which have a definite objective. Roads built entirely with the idea that the park must be seen from an automobile are of tremendous cost, cause much mutilation of scenic beauty and really do not serve as the best means of

seeing the area. We find that having landed the visitor in the park proper, the best transportation medium from then on is on foot, over trails that are easily and cheaply constructed, do not mar the scenery and furnish an ideal method of really seeing a natural preserve. It is only on foot that one will take the time properly to value the landscape.

Each park may have one or more service areas, the principal service area to be that provided for the parking of machines, camping grounds, picnic grounds, shelter houses, bath-houses, and refectories. Usually there is some space in the park which will logically fall into this classification both by location and topography. The principal auto road will lead directly to this and many foot trails will center at this point.

A secondary service area is also essential to contain the inn and its attendant buildings. The policy in state parks should be to provide overnight facilities in the shape of state park inns in the belief that these areas be made available for vacation purposes. The keynote of these inns must be simplicity and wholesomeness. They should in no sense be luxurious resorts; the service should be limited, the furniture throughout of the plainest and entirely informal. They should be built with the idea in mind of furnishing comfortable sleeping rooms and simple, well-cooked food at the lowest possible cost, so that they may be available to practically anyone. There need be no menu in the dining-room but may be what is popularly called the "family dinner."

The majority of the products may either be raised in the hotel garden or secured from the surrounding country. Every precaution must be taken to have well-cooked food and the kitchens should be held to a high degree of sanitation.

Keeping in mind that state parks are undoubtedly a permanent institution and will be in existence many years to come, it is apparent that no construction other than that which is permanent is advisable. The state park inns are then planned for simplicity of service with ruggedness in construction and with the view that they shall fit into the landscape in so far as possible.

In practically every locality where a state park is found there is some prevailing early type of architecture, which may be adhered to. Where this is not true, then a type which easily adapts itself to that environment should be found. Wherever possible, native materials such as stone and timber may be used. As an example, shelter houses are usually constructed of pillars of rough hewn or sawn timber from down trees on the park which support a hip roof covered with cedar shingles. The entire structure may be treated with creosote stain to a medium brown. It is utterly simple, straightforward, serves its purpose admirably and with a background of trees is amazingly inconspicuous. The necessity for long-lived construction with minimum maintenance practically precludes the use of rustic or log type buildings. At the pres-



ent time they are expensive in the use of materials and almost impossible to maintain for a very long period.

The state park inns must be let to carefully chosen concessionaires, on a rental basis of say eight to ten per cent of the capital outlay. The leases should provide that the department shall have complete control of the prices to be charged. They should also reserve the right of criticism of service when inadequate.

It is apparent that the principle of letting concessions to highest bidders is unsatisfactory. The experience of letting concessions in city parks to high bidders has been sad. The bidder often pays more for his concession than it is really worth and the public is bound to suffer for the concessionaire would resort to gouging both as to prices and to service.

The service area is the logical field of the park concessionaire. The purpose of the concession so far as it concerns the State is the satisfactory rendering of a needed service to those that want it and pay for it without additional expense to the taxpayer.

My experience in Indiana proved that the licensing of conditional concessions, under the circumstances, is the practical method of solving the special accommodation problem.

Of course, the State enters into the granting of concessions with great care and some concern. The terms of the license are and should be such as to permit the state authority to regulate the accommodations and the prices, but the personal ambition and initiative of the concessionaire should be encouraged to raise the standard of this type of service. The key to successful concession operation is in the selection of the right concessionaire. The field is limited; the type of contract, safeguarding as it must the interest of the government and the visitors, makes it impossible to interest the professional hotel-keeper and refreshment-stand operator. Naturally, the cautious public official will guard against subjecting himself to possible criticism on the grounds of playing favoritism or being charged with irregularities in the awarding of these contracts, and will, therefore, insist that the term comply with all state government regulations and legal restrictions.

Clearly, the park executive should grant an exclusive concession precluding the possibility of cut-throat competition or divided profits, so that he can assure the concessionaire of volume business to compensate for the regulated price. It is obvious also that the State should see to it that the concessionaire is enabled to make a fair profit.

Altogether a well-defined service area serving as it does as a place of congregation and redistribution, handles a large number of people with comparative ease. To it leads an unavoidable parkway. From it radiate trails through woods and by shores. It serves, so to speak, as a filter. But, above all, it saves the landscape from ruin. It leaves this protected for the nature lover, student, artist, dreamer, and other impractical but socially highly important people.

*Make Your Parks Self-Supporting.* The visitor who uses a particular park and gets the immediate benefit from it should contribute towards the cost of its operation and preservation. State parks ought to be made as nearly self-supporting as possible or else the cost will have to be put on the tax duplicate.

It has always been true that those things which are furnished to the general public free of charge are ill-used, abused and unappreciated. The State of Indiana committed itself to a policy of making each park pay all or most of its expenses. From May to November all visitors, except children under eight years of age, coming into the parks, are charged ten cents. This charge is made only during the uninterrupted stay of the visitor and he may come and go on errands out of the park without any further charge. This charge is made for its psychological effect of inducing appreciation on the part of the visitor as much as of aiding materially in furnishing funds for maintenance.

Responsibility for the preservation of a primitive landscape is large. Since all the areas are heavily wooded, the great hazard is forest fires. Visitors must be repeatedly cautioned to be careful of cigar and cigarette butts, and the use of cooking and campfires should be greatly restricted. Such fires should be permitted only in the picnic and camping areas. Regulations also should be enforced to prevent the picking of flowers and the mutilating of shrubs and trees, defacement of rocks, buildings or signs.

The use of firearms should be prohibited. With these simple regulations it will be found possible to keep all areas in excellent shape and to find them in better condition from year to year. There should be no unnecessary prohibitions or regulations. Each visitor should be encouraged to use the park in every way possible for his own benefit. It is apparent that organized sport such as baseball, golf, and the like should not be permitted, since this would require the destruction of large areas of natural landscape. Likewise, so-called amusement devices such as merry-go-rounds, derby-racers, and the like should not be permitted. The natural sports such as hiking, swimming, horseback riding, fishing and nature study, on the other hand, should be encouraged.

The real problem of state park management is the intelligent utilization of the areas for service to the public. In Indiana where state parks are of comparatively small acreage—1,200 to 1,500 acres—the situation becomes particularly acute. Any plan which is evolved for the use of the parks by the visitors must be subordinate to the policy governing their establishment and development, namely, the preservation of a portion of the state's original domain in its primitive condition now and forever.

*Classifying Visitors.* Millions visit state parks each year; individuals, families, and parties. It is amazing how very adaptable are natural areas to the demands—to the many types and desires. The indoor man



Turkey Run Inn, Turkey Run State Park, Indiana



Bathing Pool, Turkey Run, Indiana

comes for the air and quiet; the athletically inclined for the sports; the nature student for the museum; the teacher and the preacher for inspiration and knowledge; the mother for relaxation from the family grind where her flock may be turned loose, and the dweller in rural districts can here find the crowds with which he wishes to mingle. Each one finds that which he seeks and enjoyment therein.

The visitors to the state parks from the standpoint of provisions for their care fall naturally into four classifications:

The *first* is that group forming the greatest percentage of attendance who come for picnicking and outing for the day. The greater number appear on Sunday, but there is a steady flow throughout the week from May to November. This sudden inflow may involve a very considerable expense in driving wells, pumping water long distances, and maintaining a purification system, but a safe water supply must be provided. From the standpoint of state control there must be no question as to the purity of the product. In case of rain, storms or the like there should be shelter houses under which a normal crowd may gather.

*Park Inn Guests.* The *second* classification in point of numbers consists in vacationists who desire food and shelter furnished them. For these, build state park inns, to which cabins may be added whenever necessary. Sleeping quarters with good beds, running water in the rooms, electric lights, small writing tables, a couple of chairs, rag rugs on the floor, and bathrooms and toilets conveniently nearby are desirable. The lobbies of inns should be large, because contrary to the city hotels in the evenings, they form the meeting place of all the guests.

In Indiana at the present time the average dining-room seats about 300. The Department furnishes the lobby, dining-room and porches; the concessionaire, all kitchen, dining-room and bedroom equipment. The rate is \$2.50 to \$3.50 a day, American plan. The purpose of these inns is to provide vacation facilities at the lowest possible rate commensurate with adequacy and wholesomeness.

*Campers.* The *third* classification, in point of numbers, is the campers who come bringing their own equipment, tents, bedding, utensils, and the like. This type of park visitor, formerly numerous, is slowly on the wane. Certain areas with water, sanitary conveniences, wood, outdoor stoves and the source of supply close by must be set apart for the campers' use.

The *fourth* classification is the number of people who allegedly prefer to rent a small cabin for light housekeeping. We hear much these days of a recommendation for housekeeping cabins of a simple construction. We believe this demand cannot come from expert park men but rather from well-meaning enthusiasts. In Brown County State Park where such cabins were built, the arrangement so far as general service is concerned proved impractical. Little housekeeping use was made of the unit of twenty cabins surrounding the Abe Martin Lodge because the people occupying them would not even bring their own linen and would

prefer eating at the lodge. The cabins, therefore, have reverted to the form of a scattered park inn, of which the upkeep is found to be more costly than the regular park inn where all housekeeping is done under one roof.

If the above are the classifications, what about the hitherto unclassified? How can state park service be extended to wider use? How can we let fresh air and sunshine into the soul and body of those who most need it and who have so little means of gratifying that wish? How can it be done, away from dole or charity, in order to help them maintain their self respect?

State Parks are a power for elevating the spirit. Their standards are much higher than the average visitor's mental or physical requirements and so, incidentally, are public libraries, galleries or concert organizations. Their purpose is not merely to satisfy but to uplift.

For that reason any plan which is evolved for the use of the parks by the visitors must be subordinate to the policy governing their establishment and maintenance; namely, the preservation of a portion of the state's original domain in its primitive condition—now and forever.

Thanks to the far-sighted policy of the government—through its epochal ECW labors—the State Parks have been vastly extended.

So far, the States have been in the receiving line. What has been given them will not automatically maintain itself. Thought must be given and adequate provisions must now be made by the States to safeguard the investment (a) by much-needed initial appropriations and (b) by providing income in order ultimately to make them self-supporting.

The National Park Service, Branch of Planning and State Coöperation, has built up and is perfecting a corps of park executives whose service will be at the call of the States awaiting it.

*Summary.* To a State developing a new state park system, I would submit the following list of "Do's" and "Don'ts." It is a brief but safe program for administration.

- (1) Provide a well-planned service area.
- (2) Provide a safe and ample water supply.
- (3) Check its quality regularly in season by analysis.
- (4) Provide for sanitary sewage- and garbage-disposal.
- (5) Regulate quality and cost of foodstuffs and lodging.
- (6) Furnish fireplaces and free cookwood to campers.
- (7) Stop the vandalism of picking or digging flowers and ferns, etc.  
(Best accomplished by appeals to the public.)
- (8) Keep a close watch for fires.
- (9) Avoid all artificial "improvements" in park proper.
- (10) Limit automobile drives to barest needs.
- (11) Construct easy and pleasant paths through woods and along water's edge.
- (12) Maintain service of Nature Study guides.
- (13) Make small charge for parking and camping to assure proper maintenance.
- (14) Collect a small admission charge to park.

In connection with these rules, let us look at the set-up of service areas.

*Service Areas.* One purpose of the service area is to maintain park property and to protect it against improper use, the other to serve the following visitors:

- (1) Camper.
- (2) Picnicker.
- (3) Inn or cabin guests.
- (4) Group camps, such as Boy and Girl Scouts, denominational camps, orphans, and other groups of communal service.
- (5) 4H clubs, providing for agricultural youth.
- (6) University study groups.

Equipment and service provided to maintain:

- (1) Gate and driveway to main service area.
- (2) Automobile parking space and garages.
- (3) Park roads.
- (4) Network of trails including bridle paths.
- (5) Nature guide service.
- (6) Park inn.
- (7) Cabins and community center.
- (8) Custodian's dwelling and offices.
- (9) Help's quarters.
- (10) Workshops.
- (11) Stables for saddle horses.
- (12) Bathing-beaches and swimming-pools.
- (13) Life-saving corps.
- (14) Fire-towers for fire protection.
- (15) Shelter houses.
- (16) Camp fireplaces.
- (17) Park benches and picnic tables.
- (18) Refreshment stands.
- (19) Sanitary water supply, wells, and water-works.
- (20) Toilets.
- (21) Sewage-disposal.

*Conclusion.* No, our parks and preserves are not mere picnicking places. They are rich storehouses of memories and reveries. They are guides and counsels to the weary and faltering in spirit. They are bearers of wonderful tales to him who will listen; a solace to the aged and an inspiration to the young.

And if all of that is true of the present, what will it not be of the future? When the congestion of an ever-increasing population in those days has changed everything but these primitive places, our state parks will be one of the most priceless possessions of our people.

When that time comes, I hope that we and our successors will have met and properly solved the problems of park management so that the generations of that day will see that our own has not been without vision but filled with a true devotion to the welfare of our beloved country.

## From Des Moines to Hartford

By J. HORACE McFARLAND, Harrisburg, Pa., former President of the American Civic Association, and now Chairman of National Parks, American Planning and Civic Association

EDITOR'S NOTE.—An informal luncheon talk given at the Sixteenth National Conference on State Parks, Hartford, Conn., June 1-3, 1936.

**T**HE first meeting which started orderly consideration of national parks was by no means uninteresting. There was, as there continues to be, some little confusion of mind as to where the state park begins, both in relation to the municipal park and to the national park, but the confusion was much diminished by the wise statements made, based largely on experiences in New York, in Indiana, and in the other States which really had state parks in those times.

To me the picturesque quality was added by the presence of a bright young farmer who came to protest against further interference with the plan to dam Yellowstone Lake so that more water could be supplied for irrigation. He was inveigled into a room with four or five hard-boiled park men, and examined with much care through searching questions. It came out finally that so far as he knew, but twenty-seven farms would be benefited by the increased flow of the Yellowstone River which would thus be obtainable, and he had one of them. His opposition to preventing the spoliation of the Yellowstone at the end of this distinctly interesting session was not as vociferous and vigorous as it was when he began.

Somewhat regretfully I admit that I have not been constant in my attendance on these Conferences, though it does seem as if I ought to have a paid-up policy on conference attendance after more than thirty years of it! But there was a real highlight in the Conference held in Skyland, when Shenandoah National Park was in active consideration and when the state park people, all devoted national park folks, did their level best to promote the establishment of the Shenandoah National Park (which was dedicated July 3, 1936, under Presidential auspices). The wisdom of the state park gatherings was well shown in the things said and done at this Conference, reacting in a major fashion on the National Park System. A notable feature of this Conference was the presence of Mrs. W. L. Lawton, who had made great sacrifices to get there with a billboard statement. Due to the pressure of various addresses and to the extended length of some of them, Mrs. Lawton's time was confined to but five minutes. She used that five minutes more effectively than many a man has used sixty minutes, but sitting beside her I must admit that she was in tears when she concluded. She has protected state parks and all parks and all America better than any other one person from the extended intrusions of billboard selfishness.

Another important highlight was when the State Park Conference met in Gettysburg, with that grand man John Barton Payne, then Secretary of the Interior, presiding. Always the tone of these conferences



has been high, but it seemed just a little higher than high under Judge Payne, and in that place of memory where the tide of rebellion had been rolled back in 1863.

To me, the presence here in Hartford of many men and women who now accept state parks not as a compromise, not as a rather foolish state frill, but as a vital necessity, is both satisfactory and significant. It does seem that we are coming into a broad and fine conception of the park idea in general, and that the outcome of all these conferences is very much for the advancement of mankind in the United States of America, where only, I think, such conferences have ever been held.

## As to Standards

By ALBERT M. TURNER, Hartford, Conn., Field Secretary, Connecticut State Park and Forest Commission

EDITOR'S NOTE.—These remarks of Mr. Turner's were made extemporaneously at the National Conference on State Parks, held in Hartford, Conn., June 1-3, 1936.

IT IS reported that the National Park Service finds it desirable to consider in a serious way the subject of Standards for State Parks for good and sufficient reasons.

And that is well, and as it should be. The purpose is excellent and the need no doubt urgent, and I'm all for Standards myself, but as commonly happens with me, it seems advisable to make certain reservations.

This Simian Race has long debated the subject of Standards, and while undoubtedly progress has been made, it has been difficult to reach any general agreement for any length of time.

At some undated period of that Great Debate it seems there was a party called Procrustes, who set up a Standard for his guests in the form of a bed, establishing a proper length for guests. The short ones were stretched out and the long ones were sawed off, and the protests, if any, seem to have been ineffective, and are now lost in the mists of time.

It is even rumored that this early Standardizer had two beds, a long bed for the short ones and a short bed for the long ones, and whether that version be true or not, the basic idea has never been entirely abandoned.

In any case, Procrustes eventually became unpopular as a host, and they finally ganged up on him, put him on the short bed, with his feet on the pillow, and trimmed off the other end.

And that, as they used to say, was that.

Somewhat later there was another party called Abraham, or Uncle Abe, and curiously enough he was once consulted on the same identical question; how long should a man's legs be?

And he merely ventured an opinion, expressed, however, with some conviction, that a man's legs ought to be just about long enough to reach the ground.

Now this party, it seems, was shot.

So what? Well, first we can hardly escape the feeling that the setting up of Standards for others, or even the holding of a firm opinion on such matters, is a ticklish business, attended by real hazards; and second, in spite of the somewhat similar endings, it may have been noted that there was a certain difference in the kind of Standards advocated by these two parties.

Now I suspect it is just this trifling difference which still keeps alive the Great Debate, and before making any definite commitment on the particular subject of Standards for State Parks, I would mildly propose a more general discussion of a Standard for Standards.

## Planning a State Park System

By KENN ETH B. SIMMONS, Deputy Assistant Director, National Park Service, Washington, D. C.

IT IS assumed that the group of parks administered by the Central Park Board, or by what we in the Branch of Planning and State Coöperation of the National Park Service call the "Park Authority," will not be limited to those areas which must come within the strictest classification of "State Parks," as defined by the National Resources Committee.

However, before going further into that phase of the subject, I wish to review some of the highlights pertaining to state parks, and to mention a few of the earlier outstanding planning events. These things are not new to you, but their significance justifies repetition.

The state park movement began about 60 or 70 years ago about the time of the War Between the States—or what some of you would call the Civil War. It gained but little momentum until the past 15 years, but some of our finer areas were set aside in those earlier times. The most notable example is, of course, the Yosemite Valley which now is a part of the Yosemite National Park. Another is the well-known Niagara Falls Reservation. Fifty years ago in the State of New York about two million acres of land were set aside as Forest (Park) Preserves, thus giving that State the distinction of being the first in the Union officially to recognize the need for conservation of its natural resources. This event was the forerunner of the state parks movement in that State.

These earlier activities were concerned primarily with the establishment of individual and usually unrelated areas; to the conservation of natural resources; and to the preservation of unusual scenic and scientific pieces of nature. It appears that little attention was given to arranging these natural wonder spots into an organized system.

In 1890 there began a movement for the preservation of scenic and historic sites; and about that time Charles Eliot is credited with having laid the foundation for comprehensive planning of state park systems.

The Trustees of Public Reservations in Massachusetts and the American Scenic and Historic Preservation Society in New York were among the first organizations to promote some of the areas we now call state parks.

In 1909, John Nolen, the well-known planner, made, for the State of Wisconsin, one of the first—if not the first—planning studies for state parks. It is stated that his report is remarkable for the foresight shown pointing to the need of such parks, and of bringing them into an organized system. The well-known report of Frederick Law Olmsted on his Survey of California State Parks in 1928 has been the basis for planning and enlarging the system in that State for a number of years. The Iowa Conservation plan, and studies made in Indiana, Illinois and other States, have also given emphasis to the need of comprehensive planning for state-wide systems.

The state park movement has gained so much momentum and the number of areas has increased so rapidly during the past few years, since the inception of the CCC, that almost every State in the Union can lay claim to a number of parks. However, in thinking of the fully planned park and the well-coördinated system, it could be said that only a few States can boast of a real state-wide system. Nevertheless, a number of States are accomplishing much toward this end, as the result of comprehensive planning.

The need of comprehensive planning is indicated by the failure of the haphazard, catch-as-catch-can method. Therefore, in looking at the problem of planning a state park system, we must cease to consider the individual unrelated area as of primary importance, no matter what may be its particular scenic, scientific, historic, or recreational values. Properly it must be considered as it relates to the state-wide system.

In referring to *state planning*, the Oklahoma State Planning Board report indicates that, "The *object* of planning is not a 'planned economy' but is an attempt to anticipate future physical requirements and to plan intelligently for them, in order to prevent a repetition of the numerous costly mistakes of the past which have resulted from short-sighted, piecemeal, and unrelated development"; and, "The *broad aim* of planning is to adjust physical environments to the best human use." These statements refer to *state planning* but they could well apply to *state park planning* if amplified to include, among the objectives, the spiritual as well as the physical requirements.

With these objectives, we find that the well-balanced state park system should include several different types of areas, the individual areas in each type being selected according to uniformly high standards of physical characteristics and use-potentialities. Within the state park system we might have scenic parks, the recreational reserves or parks, the historic areas, the demonstration projects, waysides, and special sites unique to the State in which they are located.

The National Resources Committee defines *state parks* as being of two

general types. *First* are those areas of considerable extent in which are confined superlative scenic characteristics and a fairly varied and extensive opportunity for active recreation. *Second* are those areas of distinctive scenic character and exceptional opportunity for active recreation. This report states further that "essential to the character of any state park is the preservation of the native landscape and of native fauna, to the extent that provision and enjoyment of active recreation use-facilities shall not be permitted to destroy or materially to impair landscape features or to injure wildlife or its natural habitat, and to the further important extent that all its natural resources shall be withheld from commercial utilization."

While, admittedly, the scenic areas form the foundation of the system, they should be supplemented by others established primarily for extensive recreation. Such areas might be developed on lands which have been unprofitable to the former uses, as mining, forestry or agriculture. While they should be naturally scenic and attractive, they need not be outstanding in these characteristics, since the primary object is extensive active recreation, not passive recreation or education.

While some might say that to include areas of this kind in the state park system would tend to lower the standards, let down the gates, and make any kind of land eligible to be included in the system, I would ask the questions:

Are we going to plan our state park systems with recreation always in the background, always secondary to esthetic principles?

Are we going to re-make our rapidly diminishing, few remaining, undisturbed outstanding natural scenic areas to meet the increasing demands of extensive recreational uses?

Are we going to ignore these demands for extensive recreational areas and force the people to look elsewhere?

Or, are we going to include areas for active recreation within our state park system, as they properly should be included?

To classify these areas more definitely, I refer to the definition given by the National Resources Committee for *state recreational reserves* as: "Those areas which, lacking scenic distinction, supply such opportunity for active recreation as entitles them to be considered a part of the state responsibility." If we accept this as a fact, we must acknowledge the value and position of such areas in the state park system, or recognize a separate and duplicating organization competing with the Park Authority in administering them.

There are the historic sites, the archæological and the geological areas which properly belong in the comprehensive state park system. Called state monuments, they are defined as being "those holdings established for public use wholly or dominantly because of their historic, archæological or scientific interest and on which even the simplest types of active recreation, if permitted at all, are subordinated to the primary

purpose for which such monuments are established." The historic areas might portray the local or state-wide political and economic history as well as biotic history. The archaeological and scientific areas afford opportunities to provide educational exhibits for the monument or park visitors; but again, active recreation is only a "by-product" and has no great right of its own. There is virtue in this, however, and that is in the strengthened justification for the well-planned correlated park system, embracing areas of different types for varied uses, from passive recreation to historic and scientific study, and to active recreation.

There are the Federal *Recreational Demonstration Projects*, likened somewhat to the state recreation reserves. They are being developed under the supervision of the National Park Service by CCC and WPA labor, on land purchased by the Resettlement Administration, land usually not being put to the highest use. Thus they involve the rehabilitation of land and of people, and are good examples of what can be attained by comprehensive planning. As the name implies, they provide actual demonstrations of extensive recreational developments, including camps for the under privileged, and for organized groups such as Boy Scouts, Girl Scouts and the 4H Clubs. The environments provided by them are such that will tend toward the improvement of social conditions, and stimulate the use and appreciation of the more strictly defined state parks. They are not competitors to state parks, instead they are highly important adjuncts to the system—providing facilities that perhaps, admittedly, would not be included elsewhere in the system.

It is provided that at least some of these Recreational Demonstration Projects will be operated by agencies administering state parks. Their scenic, historic and scientific characteristics are often equal, sometimes superior, to those of state parks; and their developments usually are based upon equally high, although different, standards. Certainly if they are not included in the broader conception of the state park system, they must be definitely and closely related to it.

There are other kinds of areas, such as *waysides*, that deserve positions in the comprehensively planned state-wide system. In distinguishing *waysides* from extensions of highway rights-of-way they are defined as "those small areas situated along or close to highways, designed to provide the traveler with places where he may stop to rest and to picnic. They may vary from one acre to many. They may contain outstanding scenic beauties, or they may be better-than-ordinary examples of scenery so treated to provide amply the rest facilities for which they are established." Whether waysides are operated by the park administrative agency, by the highway department, or by some other agency, their selection and development should, if properly planned, be the result of close coöperation among the state agencies concerned with conservation and recreation.

In fact, comprehensive and economical planning can only be effected

by coöperating with other agencies or organizations interested in recreation, conservation of natural resources, and in the preservation and development of the same or similar types of areas and facilities. This coöperative planning should involve the study and survey of park and recreational areas in municipal, county, and metropolitan systems; the study and evaluation of facilities provided by other state-wide agencies, such as forest, fish and game commissions and other conservation or preservation agencies. It should give recognition to similar studies in adjoining and near-by States; and to studies of regional and sectional park systems, especially where certain areas, although located wholly within one State, have definite regional or sectional values.

Further, the state park system should be planned in relation to the national system of parks and forests, especially where there may be conflicting interests or unnecessary duplication. It would be unwise to provide a state park adjoining a well-established city or metropolitan park which amply meets the same needs. Similarly it would be equally unwise to duplicate the same kind of scenic, scientific, or historic display in competition with a national park. This does not imply that it would be out of order to have a scenic and scientific area near a city or metropolitan sports center or recreational park. Neither does it mean that we should not provide a state recreational park near a scenic or scientific park.

The well-rounded, comprehensively planned and properly administered state park system should embrace a sufficiently wide range of high-type areas so treated to meet the outdoor educational and active recreational requirements of the numerous classes and groups of people using it; or, it should be so planned and coördinated with other systems of related areas that the needs not satisfied within the system are amply met in reasonably accessible areas administered by other agencies.

## The Relation of State Parks to a National System of Parks

By HORACE M. ALBRIGHT, New York City, former Director, National Park Service, and a Director of the National Conference on State Parks

**T**HIS discussion of the relation of state parks to a national system of parks will proceed both from the standpoint of the national parks themselves and the National Park Service which protects, manages and operates the national park system.

Let us first define the terms "state parks" and "national system of parks" for the purposes of this paper. State parks must be regarded as parks owned and administered by the several States and such county, regional and metropolitan park and recreation areas as state authorities have agreed to develop in coöperation with the National Park Service whether or not state funds are contributed to such local park projects.

There must also be added the local recreational demonstration projects now being built through funds supplied by the Resettlement Administration.

The national system of parks includes the great scenic parks such as Yellowstone, Yosemite, and Grand Canyon National Parks, twenty-five already established, and four authorized but not completed; about seventy national monuments, established by Presidential proclamation under the Act of Congress of June 8, 1906, and including areas of scientific and historic importance to the Nation, ranging from the glaciers of Glacier Bay in Alaska to George Washington's Birthplace in Virginia; a group of national military parks including the principal battlefields of the Civil War; Colonial and Morristown National Historical Parks in Virginia and New Jersey, respectively, new parks in a new category; several historic sites and national cemeteries; and, of course, the parks, parkways and recreational areas of the District of Columbia.

A relationship between state parks and such a far-flung system of national parks is not very obvious. Indeed, as I see it, there is not a close relationship at all. Getting right down to cases, state parks mean less demand for national parks and lessen the danger of the establishment of sub-standard national parks and monuments, and, as they are closer to the people of most States than the national areas, they stimulate interest and appreciation of scenery and historic objects that prepare visitors for the enjoyment of the Federal park system. In rare instances, a state park may be a stage in the development of a national park. I mean by this that a very fine area worthy of national park status may first be rescued from commercial exploitation and set apart as a state park and held in this category until Congress is disposed to authorize its elevation to the rank of national park. The Royal Palms State Park in Florida and the Big Bend country in Texas are examples of state park areas which some day will be included in national parks.

On the other hand, theoretically at least, there are some national park lands which should be transferred to the States as state or local parks, but it is doubtful whether this transfer will ever take place because as long as they are well managed and amply provided for by the Federal Government, the States will naturally permit the present classification to stand; in fact, will insist on the maintenance of the *status quo*.

In other words, the relationship between state and national parks lies mainly in the twin ideas that state parks mean less demand for national parks that would not be of importance or interest to the people of the United States as a whole, and, in rare cases, state parks may be a step in bringing an area possessing national park features to its final status as a full-fledged member of the national park system, while national park lands, set apart from the public domain, may temporarily hold in safe hands an area that ultimately should be taken over by local authorities because not of national interest or importance.

This brings me to a more obvious relationship that may be discussed here, the relationship of the National Park Service to the state parks.

Aside from the gift of Yosemite Valley and the Mariposa Grove of Big Trees to California in 1865, and Mackinac Island to Michigan about 1880, the Federal Government never indicated any interest in state parks until recent years, and the same is true of local parks, except the obligation to establish parks in the District of Columbia was always recognized by Congress, although indifferently fulfilled until well after the beginning of the twentieth century.

Even establishment of national parks was a haphazard activity of Congress until Franklin K. Lane became Secretary of the Interior in 1913. He found that he was nominally the head of a wholly unrelated group of a dozen national parks, some protected by men reporting directly to him, some under the Army, others only paper parks with no adequate supervision; heads of most parks were local politicians with no qualifications for their positions; no supervision or care of the national monuments. The American Civic Association and its vigorous President, Dr. J. Horace McFarland, for years had been fighting for a bureau to manage the national parks, but up to 1913 had not been able to get the requisite authority of Congress for such a central authority in the Interior Department.

Secretary Lane called his old college mate, Stephen T. Mather, to Washington in 1915, and together they persuaded a reluctant Congress to establish the National Park Service, just twenty years ago. Mr. Mather became the first director. The fortunate selection of this fine man to head and direct national park coördination, planning and development came just as the good roads movement began to be effective, and just as automobile touring far from home began as a national pastime. Mr. Mather, a former newspaper man, had a wonderful flair for publicity, and by the end of the War had everybody in the United States reading and talking about national parks. His management of the parks was popular, and there grew very fast an almost overwhelming demand for more and more parks. Every community possessing what seemed to be a natural feature of unusual importance locally wanted that feature made a national park. Congressman Victor Berger of Milwaukee introduced a bill authorizing at least one national park in every State. There were scores of bills for individual national park projects. There was only a local utilitarian interest in parks at that time. People wanted national parks to draw tourists and to secure the wide advertising of travel by rail in the hope of rich harvests of tourist dollars.

The pressure for new parks, regardless of standards, became very strong as touring on a national scale grew to huge proportions in the years immediately following the end of the War.

Director Mather, while traveling in the West in 1920, conceived the idea of promoting state parks in order to relieve the demand for national



parks. He discussed his plan at length with me in the Yellowstone, and he selected the Yellowstone publicity director, Mr. Oze Van Wyck, to organize the first National Conference on State Parks which was held in Des Moines in January, 1921.

The conference was a huge success and it has continued through the years to be a constructive force in stimulating interest in state parks, in setting high standards for park establishment and in evolving equally effective guiding policy in management and protection of park areas.

As for the National Park Service, the state park movement did relax the pressure for national parks. The late Congressman Berger's bill never passed the Congress, nor even emerged from Committee. A hundred similar but less comprehensive measures also died in Committee. Only one passed both houses of Congress, the Ouachita National Park Bill introduced by Senator Robinson, and this President Coolidge gave a pocket veto.

Many years passed after the Des Moines conference. Each year, there was a fine gathering of State Park officers and their friends. Stephen T. Mather was stricken with paralysis in 1928, and died in 1930. He was buried near here in Connecticut ground—at Darien. I was selected to succeed him. I was content to attend the State Park Conferences and to help where I could in carrying out the objectives of our organization.

Came 1933 and the New Deal. Congress passed the Emergency Conservation Work Act soon after President Roosevelt was inaugurated. It was obvious from the beginning of this large-scale relief enterprise that state parks and forests would have to be considered for camp sites and work projects because the center of CCC enrollees was in the East in Ohio, and the center of work projects on Federal Lands in the far West in Nevada.

It was plainly the obligation of the National Park Service to assume the duties of planning and directing state park conservation work in cooperation with state authorities. We organized a State Park Division in the National Park Service under Assistant Director Conrad L. Wirth, and took over the little staff of the National Conference on State Parks headed by Herbert Evison. We employed a large Washington and field staff of highly intelligent and experienced executives, engineers, landscape architects and architects. I am not very well qualified to speak on the present situation, but there were no politics in the First and Second CCC enrollment and work periods. The only questions asked were regarding the applicants' need for employment and their technical and administrative qualifications. With the exception of those who have found permanent employment outside of the Government Service, the men and women originally employed on the basis of merit are still in the ECW organization, but I fear that in making new appointments there has not always been the same adherence to just the same two

principal classes of inquiries that we in the beginning propounded in building up our organization.

CCC camps were allocated first to national parks and monuments, then to existing state parks, and, in States where such parks were not already established, conservationists hurried to secure donations of land by public-spirited individuals, or to buy park lands with available state funds. Many new state parks were established and old parks were enlarged. The opportunity to secure CCC camps tremendously stimulated the expansion of state park systems.

Since 1933, over 500,000 acres have been added to these state park systems. Some very fine areas have been secured and so far very few tracts of land below reasonable standards of scenic and historic importance have been accepted.

Today, there are over 3,500,000 acres of state park lands. Three hundred and forty CCC camps and hundreds of technicians and foremen are at work in the state parks in forty-seven States.

The National Park Service, through its State Park Division, continues to supervise this ECW program. It advises with state authorities on the designation of park sites, and the selection and acquisition of lands. It prescribes standards of structures and other developments. Its technicians prepare and execute plans. The parks themselves are always under the administrative jurisdiction of the State, and when the improvement work is completed and the CCC camps are withdrawn, maintenance and protection of the areas are assumed by the State. This is as it should be. The National Park Service or other Federal authority should not accept an obligation to maintain, protect or manage any but strictly national parks and monuments. States, on the other hand, should not create and develop any more state parks than they can reasonably afford to care for. I am afraid there is an inclination in some States to take over too many park areas on the theory that in some way or other Federal aid in development and upkeep will be continued indefinitely. Federal aid in development and maintenance should continue only as long as ECW is authorized and is available, and maintenance of parks should not be continued even by the CCC after construction and development activities have ceased.

As to advising state authorities on park standards and policies, and cooperating in the planning of state parks, this is a proper function of the National Park Service, now happily authorized specifically in the Robinson Act just enacted by Congress. Under this statute, the state park authorities may avail themselves of Federal cooperation in planning parks, parkways and recreation areas, in developing standards and formulating policies which the States may adopt and follow or reject as they see fit. The CCC as long as it is a part of the Federal establishment, will not be detailed to parks where jointly established policies and standards are not followed. This is fundamentally right, because if Federal

funds are to be expended on state parks, parkways and recreational areas, through the CCC or other emergency establishment, there is a Federal responsibility to see that satisfactory results are obtained, and these can only be secured through following policies which meet the approval of the Director of the National Park Service and the Secretary of the Interior.

Of course, this coöperation under the Robinson Act in planning and establishing state and local parks will be extended in accordance with the broad policies of the National Resources Committee and its regional subsidiaries with which the National Park Service is always in touch.

There is one other form of support now being accorded to States and their political subdivisions. This is extended through the Resettlement Administration, but is planned and executed by the National Park Service through state and local authorities. It is the purchase of lands, generally marginal farmlands, and their development for organized camping. Several large sites have been acquired not far from such great cities as Philadelphia, Providence, Atlanta and Washington. On May 21, I was fortunate in being invited to a meeting of executives of the State Park Division of the National Park Service, and heard discussions of plans and standards and policies to govern the construction and equipping of these experimental recreational areas.

These recreational parklands are to be developed as yardsticks and from the serious discussions I heard in the conference two weeks ago they are to be real yardsticks to be carefully built, then turned over to local authorities to manage. I was glad to hear it stated by several of the National Park Service officials attending this meeting that already agreements for the operation of several of these campgrounds have been executed and others are in course of negotiation. Local authorities will operate some of the new establishments this summer.

The word "yardstick" seems to have been somewhat overworked in recent years, and has come to be regarded with much suspicion in some quarters. The National Park Service will contribute something worthwhile in restoring this useful term to accepted respectability if it will really turn over to local authorities these great experimental recreational sites together with plans and policies for their extension and upkeep, then withdraw completely except perhaps to see that the lands bought with United States funds are not used for any other purposes than those to which they have been dedicated.

There remains to be discussed the matter of continuing the ECW program and the CCC which executes it. Having had the honor of assisting in the organization of this conservation feature of the relief program, I am naturally proud of its good work under the able leadership of Director Robert Fechner.

However, I am not sure that it can be continued indefinitely. Certainly, it cannot be operated much longer on its present scale. If it can

be reduced in size and cost, to fit into the inevitable budget of the future, if it can be taken completely out of politics, and if its competent officers and technicians can be placed under the Civil Service, if its work can be confined to constructive effort in developing parks, parkways, forests, recreational areas, in soil-erosion control and other conservation activities and not engaged in minor and incidental activities of maintenance and upkeep of projects both state and national which should be assumed by the old Government bureaus of the United States and by the state and local authorities, I believe the CCC can continue to be an important force in park and forest work for some time to come.

Unfortunately, at the present time, the CCC is in politics in two important respects. Its personnel contains many political appointees, particularly foremen. And many camps are being retained on projects after their constructive effort has been completed, because powerful local forces, both business and political, demand (and you know this demand is usually bi-partisan) the retention of the camps because of the benefit of spendings of the camps in their immediate neighborhoods.

There are possibilities of ruining good state parks by too much CCC work undertaken just to keep a camp from being moved elsewhere. No vested interests in CCC camps should be permitted.

My final point is one much emphasized by Director Cammerer and Assistant Director Wirth. These National Park Service officers are training in the State Park Division a splendid corps of executives and technicians who are becoming the Nation's experts in state and local park selection, development and management. They compose an invaluable reservoir of park and recreation directors from which may be drawn the state, regional and local park executives of the future. State legislatures and city councils should take all park and recreation positions out of politics and accord them a protected Civil Service status and thereafter authorize appointments and promotions solely on merit. It would be a pity not to build the strongest kind of non-political conservation and recreation organizations all over the country out of this State Park Division reservoir in the National Park Service and the CCC.

In closing, may I briefly summarize my views on the relation of state parks to a national system of parks by listing the following points:

(1) National park officers, especially leaders, should always be interested in state and local parks and recreational areas, and conversely officers of state and local parks should be interested in the national parks and should ever be ready to fight for their protection from every type of commercial exploitation.

(2) There should be continued unofficial participation in the work of the National Conference on State Parks by officers of the National Park Service. This should be a permanent activity of the National Park Service leaders.

(3) Under the act of Congress just approved, the National Park

Service is authorized to advise and assist the States and local subdivision authorities in planning park and recreational areas. This service should be rendered only when officially required in accordance with the new statute.

(4) This advisory service should always be coordinated with the work of the National Resources Committee and its regional subsidiaries.

(5) The National Park Service should continue the work of developing state parks and a reasonable number of campgrounds for large-scale organized camping, employing CCC camps, but upon the termination of the Emergency Conservation Work it should discontinue active construction and development work, leaving these activities entirely to local authorities.

(6) If the CCC is continued, it should be on a smaller scale, organized under Civil Service rules and regulations, and the camps should be assigned without regard to local pressure to projects involving construction and improvement work, all upkeep of parks and their operation to be paid for with local funds.

(7) Make state and local park organizations non-political, and draw experts and executives as needed from the experienced personnel of the State Park Division of the National Park Service and the CCC.

(8) Lands owned by the United States not needed for its conservation activities should be made available to the States and their local subdivisions for park and recreational objectives, and in most cases I would rather the lands be given outright to the States than be assigned on something like a leased basis which would involve much Federal inspection of local activities and court action from time to time to compel adherence to lease agreements.

(9) National park lands, except perhaps in the case of two or three national parks and a few national monuments containing features not quite up to the standards of sublimity and uniqueness of such national areas as prescribed in Federal law and policy, should not be turned over to the States. Conversely, state parks lands, except certain outstanding areas such as the Bull Creek Redwoods in California, the Royal Palms State Park in Florida, the Big Bend in Texas and the Saratoga Battlefield in New York, should not be transferred to national park status.

(10) The Federal Government's activity in the park and recreational field should be very strictly limited to its own outstanding areas of scenic distinctiveness and splendor and historic preëminence, except in advisory service when requested by the States. It is not possible permanently to direct from Washington the building of local parks and recreational areas or supervise their use. Certainly recreation remains a purely state or local responsibility.

## The Uses of State Parks

By ELLWOOD B. CHAPMAN, Philadelphia, Pa., President, Pennsylvania Parks Association

PENNSYLVANIA assumed many years ago the leadership in reforestation, and has long been acclaimed a veritable paradise for the hunter and the fisherman. In earlier years, however, attention was centered in the commercial growing of trees and little thought was given to the popular use of our state forests; as a result of this policy, their recreational use began without any well-defined plan.

The State is probably unexcelled in its variety of scenery, wooded mountains, picturesque valleys and ravines, magnificent rivers, wonderful panoramic views, caves and other interesting formations. One by one these have been set aside from the forests, some as state parks, some as camping grounds, others to preserve notable stands of timber or areas in which Nature has been lavish in her gifts of beauty.

There are notable exceptions to this statement. Valley Forge, enshrined in the Nation's heart as the camping ground of Washington's troops during that memorable winter, has been designated as a historic park, and liberally provided for by the state Legislature. Washington's Crossing, on the Delaware, remembered as the point of embarkation of his troops before the eventful battle of Trenton, has been similarly treated, as well as several less notable historic sites.

Cook Forest, too, a magnificent stand of virgin timber, was purchased specifically for public use, but many of the smaller areas were developed in a more or less hit-or-miss manner.

Recently, however, there has been a notable change: the present administration of our Department of Forests and Waters has been not only sympathetic with the recreational program, but enthusiastic. Dr. Bogardus, the Secretary, is far-visioned and realizes the necessity of long-distance planning for the future.

With this in mind, and with the coöperation of Governor Earle's recently appointed State Parks Commission, a comprehensive survey of all parks and park possibilities is now being made, with a view to their best utilization.

Have you ever taken a group of boys into the heart of a magnificent forest and waited expectantly for their exclamations of awe and amazement, only to be met with the query, "How are we going to play baseball with all these trees around?"

Disheartening! Isn't it? But all these things have their proper place, and under the new régime, an earnest attempt is being made to reclassify them. A typical forest park is one in which we find Nature at her best, and here she should be left as nearly as possible undisturbed. Here the baseball diamond and the golf course have no place.

Pennsylvania has one mountainside under study on which two streams course down its slopes, finally joining to make a creek of considerable

size: they traverse a distance of four miles, dropping nearly eight hundred feet; there are twenty-seven waterfalls of exceedingly great beauty, one nearly one hundred feet in height. Magnificent hemlock trees have grown, matured, fallen and decayed, untouched for a hundred years. Such a spot is ideal; days may be spent in exploration, and there is little need for other recreation, except possibly an attempt to lure the wary trout; or, in the warmer months, a dip in the cooling waters. Cabins may well be provided for the vacationist who delights in these primitive surroundings.

In other places, along our main highways, and particularly within access of our larger centers of population, more latitude may be allowed, camping facilities again, but ample provision for games; lakes, too, for canoeing and aquatic sports; winter pastimes as well.

Then, too, there will be the huge one-day crowd of picnickers for whom facilities must be provided.

The Federal Government is planning this well in its demonstration project at French Creek.

Occasionally it may not be amiss to imitate New York's example, and at suitable locations to establish undisguised Amusement Parks like the one so well conducted at Rye.

In our historic parks, such as Valley Forge, it is felt that there should be a feeling of veneration for the shrine of past events, and it is generally conceded that sports and amusement features are entirely out of place; there can be no serious objection, though, to providing in appropriate locations facilities for eating luncheons or obtaining refreshments.

Under the present plan, it is proposed to end the nondescript use of public grounds and to reclassify them according to the use for which they are best adapted, setting aside many tracts as recreational areas pure and simple, distinct from the true state parks.

## Organized Camps in State Parks

By JULIAN HARRIS SALOMON, Recreation Specialist on Camping,  
National Park Service, Washington, D. C.

EDITOR'S NOTE.—A paper read at the Sixteenth National Conference on State Parks, Hartford, Conn., June 1-3, 1936.

**C**AMPING has become one of the most important forms of outdoor recreation in our country. It has grown in popularity at a rapid pace and now has taken on many different forms. All camps can, however, be divided into two general types which I prefer to call organized and independent. Independent camps are those in which individuals plan their own activities and provide for their general welfare. An organized camp, on the other hand, is one where the camp, as a corporate entity, assumes full responsibility for the camper. It is to the latter type of camp that I wish to limit my discussion today.

The independent camper has been fairly well taken care of in state parks, forests and other public lands where trail shelters, cabins and auto tent camps have been provided for his use. The organized camper, on the other hand, has been provided for only in a few scattered instances and there are those who challenge his right to any place on public lands.

There are, I believe, some sound reasons why organized camping is a legitimate use of state parks and public lands. Organized camps provide for one of the most intensive uses to which such lands can be put, for the campers are in the park 24 hours a day, seven days of the week. Major Welch, who pioneered the idea of organized camping in state parks, has reduced this to some interesting figures. On a camp site of 5 acres, which accommodates 100 campers, he finds there are 168,000 hours of recreational use in a ten-week season. We can hardly hope to better such a record with our other facilities. When it is taken into consideration that organized camps are conducted by a great variety of urban groups as well as by such rural organizations as 4H Clubs and the Future Farmers, it can be seen that this type of park use can be made available to all classes of our population.

Large numbers of children and adults who could reach our parks in no other way, are brought into them by organizations operating camps. These organizations also provide leadership for the campers so that their stay in the park may be made of the greatest possible benefit to them. Campers, in a properly conducted camp, are educated to live comfortably and interestingly out-of-doors. Thus, through training children to enjoy their leisure in the open, we are raising up generations of people who will have an appreciation for the proper use of parks and who will become the park users of tomorrow.

Another reason for organized camps is that they can be provided at a low cost per camper. The camping organizations can pay the cost of maintaining the facilities and at the same time make them available at costs any child can meet.

Camps should also be provided because they are badly needed. Many organizations exist that aim to give the great benefits of a camping experience to large numbers of children and adults at a low cost. They are able to do this because funds for the purpose are contributed by the general public. While they are able to raise funds for camp operating expenses, they often find it difficult and sometimes impossible to secure amounts sufficient for the capital expenditure necessary when a camp site is purchased and the necessary buildings constructed. In many cases such organizations are compelled to get along with inadequate sites and makeshift structures. This need on the part of the camping organizations is one we are justified in meeting when the recreational and educational values of camping to the State are considered. Public agencies, such as schools and city recreation departments, are operating camps at present, and there is a strong and steady trend toward more



camps of this kind. It is natural that such camps should seek sites on public lands and that we should provide for them.

While I would absolutely limit camps on public lands to those operated by non-profit organizations, I would not exclude the camp that charges part, or all, of its operating costs to the camper. It has long been recognized that money should not be an insurmountable barrier to the joys of camping and that children should not have to be charity cases in order to participate in subsidized camps. The organization camp that charges a low fee provides for that large class of our population that cannot afford to send its children to private camps and which, at the same time, scorns to accept that to which it cannot contribute its fair share. The organization camp is also able at times to provide better camping at less cost than is the camp operated by a municipal or other public agency. This is due to the fact that the public camp is often compelled to charge its full operating cost to the camper whereas the organization camp is able to use its privately contributed funds to supplement what the camper pays. In this way, it is able to reduce its fee to the camper or to provide for extra leadership which the public camp cannot afford.

Camps should also be given a place in our parks because they can use sites which are best suited to their purpose but which otherwise would have little or no use. They require, above all, isolation and seclusion so that outlying areas, not readily accessible to the general public, can best be put to this use.

I recognize, of course, that all of our parks are not suited to use for organized camping. However, we should study existing areas to see what possibilities for providing this type of facility exist. It is possible that camps can be built on lands bordering a scenic park without in any way detracting from the values for which such a park was created.

Our views as to the purposes of parks have sometimes conflicted between those who hold that their sole purpose is to preserve a bit of natural domain intact and those who contend that parks should be entirely developed for intensive recreational use. I believe that both views are correct and that areas for both purposes should be set aside by the State. These need not always be separate areas, for where a park is large enough, both purposes may be achieved without interfering with one another. Parks should be planned for use as well as for conservation. Areas for use, as I have pointed out, may be selected without destroying scenic beauty or wilderness areas. The latter, of course, are not without their special use, for as Col. Lieber has so well pointed out, they must be protected "for the nature lover, student, artist, dreamer and other impractical but socially, highly important people." What use a park receives will depend on what facilities are provided and whether or not people are educated to use them.

Just any piece of land will not do for a camp site. Camps, as I have

said, need privacy and isolation, so we do not want to crowd them onto a hotel or picnic ground which will interfere with their normal activities and make it impossible for them to achieve the objectives for which they were established. Neither do we want to crowd camps upon one another for the same reason. Better one good camp in an area than three poor ones.

Next to privacy, camps require safe and adequate water and sanitary facilities, and as swimming is such an important camp activity, a lake or pool is needed almost as much as these fundamental services. There are other factors, of course, to be considered in selecting a camp site that we cannot discuss in detail here.

Whether organized camps should or should not be located on a park area can be decided only after a careful study has been made and each section of the area has been allocated to the use for which it is best fitted.

At present, there exists a great deficiency in camp facilities on public lands. To remedy this situation to some extent, the National Park Service and the Resettlement Administration are developing what are known as Recreational Demonstration Projects. These are areas planned primarily to provide organized camp facilities. By establishing sound policies of administration and by demanding high standards of operation, it is hoped to demonstrate to the community at large the values of organized camping and to stimulate state and local authorities to develop similar facilities. These areas will meet but a small fraction of the existing need for organized camp sites and structures. We should, therefore, see what we can do to supplement them on public lands already owned, and by additions to parks and other public areas that will be purchased with this specific use in mind. If these areas are carefully chosen to meet local camping needs and then properly developed, they will receive use ample enough to justify fully their acquisition.

After we have acquired these sites, it is necessary, as I have said, that we develop them properly. Organized camping has gone a long way from the days when it was considered necessary only to herd a mass of children out into the woods where it was thought that fresh air and sunlight would do the rest. Camping now has definite educational as well as recreational objectives which can be achieved only under trained leadership operating in a proper environment. A great fund of knowledge on camping has been built up as a result of years of experience and we should not neglect to use it in carrying out our developments. Standards of camp construction and operation have been developed, based on practices that have been found desirable, and new camp developments should be planned to meet them. We should build these camps in the best way we know how and not be content with furnishing bare essentials or sub-standard camps. If there is any justification for providing camps on public lands, it seems to me that the State has an obligation to build them well.

Organized camps, in the early days, continued to grow in size until,

as one writer put it, "they became huge orphan asylums turned loose in the woods." The many disadvantages of massing a large number of campers in a comparatively small area led to the development of what is known as the unit layout. Under this plan, the camp is divided into a number of small units which are located out of sight and hearing of each other. As an example, a camp of one hundred campers may be divided into four units of twenty-four campers each and an administrative center. In the latter are located the dining and recreation halls, the infirmary, staff quarters, hot shower house and other buildings necessary to the central administration. Outlying from this, perhaps like the spokes of a wheel, are the units which are composed of sleeping cabins for campers and leaders, a wash-house, a unit lodge, which is an assembly and recreation hall for the unit, and an outdoor kitchen. Such an arrangement makes it possible for the units to be operated as independent camps, if desirable or necessary. On the Recreational Demonstration Projects, the unit lodges are planned for winter as well as summer use to meet the growing trend toward winter camping.

To serve its purpose successfully, a unit should be designed to house 16, 24 or at a maximum, 32 campers. Small units make it possible to group children according to their ages, interests and abilities. Such grouping also permits a high degree of personal attention on the part of the counselors, whereas large groups exhaust the leaders. In small groups the child has a chance to find himself and to adapt himself easily to camp living conditions. Children in large groups become overstimulated, and the possibilities for fatigue are greatly increased when a large number of children eat, sleep and generally live in too close quarters. Noises and disturbances and problems of discipline all increase proportionately to the size of the group that is housed together.

In addition to these reasons, there are also sound health reasons why large groups should not live together in camps. Communicable diseases are not so likely to spread and can be more easily controlled where the groups are kept small.

All of these reasons for dividing the camp in small groups apply equally to the planning of campers' sleeping cabins. Wherever possible, not more than four campers should be housed in a cabin.

Cabins are recommended for use as sleeping quarters for camps on public lands instead of tents, because they have a lower maintenance cost and because they are always ready for use.

It is not possible in the time I have here to go into detail as to the requirements for camp structures. The National Park Service has collected considerable material on this subject which is fully available to any park authority that may care to make use of it.

Camps on public lands should not be planned to meet the specific needs of any one organization. The aim should be to provide camps of standard capacities such as 25, 50 or 100 campers. The exact sizes of

the camps you build should, of course, be determined by a study of local camping needs. Camps of over 100 capacity are expensive to operate and are subject to the disadvantages cited that come with large numbers. An organization can provide a better program in two camps than in one, if its campers number over one hundred.

Organized camps in state parks may be of either the long-term or short-term type. A long-term camp is generally operated by an organization whose camping program runs from 8 to 10 weeks in the summer and which also operates the camp for school vacation and week-end groups throughout the winter. A short-term camp is one operated by a number of different organizations for a week or two weeks at a time.

In addition to these two types of camps there is need for a third. I do not know just what to call it, but for want of better term, I might christen it a group cabin. This cabin would be planned for summer or winter use and would be built to accommodate organized groups of from 10 to 25 campers and their leaders. Such cabins are badly needed near all large centers of population. Like the camps, they would not be rented to individuals but to organizations for annual or short-term use.

Cabins of this type might also be operated by the park authorities as trail lodges. The trail lodge would contain living quarters for a park employee, in addition to the quarters for campers. The use of these facilities would be open to all organized groups that had first registered with the park authorities. Such organizations would pay an annual registration fee to help cover maintenance costs, and their members, actually using the lodge, would pay a small fee in addition. This registration fee would also limit the use of the lodge to groups having responsible adult leadership. As you all readily realize, this is merely a suggestion for adapting the youth hostel idea to American conditions and to suggest a way in which such facilities may be provided without limiting their use to members of a single organization.

This also brings us to the question of what fees should be charged for the use of organized camps in state parks. As I stated in the beginning, one of the reasons why organized camps should be provided in parks is that only in this way can many organizations secure adequate sites and structures. If we then proceed to charge the cost of building these facilities to the organizations, we are doing them little service. It is my feeling that the State should bear the cost of constructing the camps and that the camping organization should pay the cost of maintaining the buildings and the sanitary systems, including garbage removal. If we attempt to make our rentals pay for the camps we either provide camps that are inadequately equipped and that will not meet recognized camp standards, or we get our rentals so high that organizations have to pay the greater part of their funds out in rentals and so are forced to skimp on leadership which, after all, is the most important factor in carrying out a successful camping program. Certainly I do not believe that camps

should be furnished to organizations rent free, no matter how worthy their purpose. It is a good old American custom not to appreciate what we get for nothing and camping organizations are no exceptions to this rule. In the same way, I believe that every camper should pay something as a camp fee even though it be only a few cents.

Another disadvantage of trying to base rentals on building costs is that the costs of constructing camps of the same size will vary according to their locality and the difficulty of providing roads, sanitation, and water supply. The camps when completed have the same capacity and one is worth as much as the other to the camping organizations, but the rent on one, if honestly based on costs, will be greater than that on the other. This hardly seems fair.

In addition to supplying the buildings, the State should plan to furnish without cost to campers the same fundamental services of police, health, and fire protection that it gives to all other types of park users. Campers should not be considered as enjoying special privileges if camping is a legitimate park use, for parks were not created to confer special privileges but for the enjoyment and use of all the people.

Like all other park fees the rentals charged for camps should be definitely set and these rates should be made public.

In the past when camping facilities have been made available to organizations they have been allocated on the basis of first come, first served. We believe there is a better way of doing this. In many communities, studies have been made of the local camping situation. These studies have shown that in some cases, needed types of camps were not being provided while there was a duplication in others. We should be guided by such studies in allocating camp facilities and where studies have not been made we should appoint local committees of social workers to do this job for us. Committees of this kind serving in an advisory capacity can help us in many ways to make our work in this specialized field of organized camping fully effective.

Organizations that are given the privilege of using facilities in state parks should be required to observe high standards of camp operation. It is not enough merely to require that camping organizations observe park regulations and pay the rent. There is a lot more to good camp operation than this. Standards covering leadership, health and sanitation, safety, insurance, food and records should be set and maintained. Such a set of standards has been prepared for use on the Recreational Demonstration Projects and copies are available to any who may be interested in securing them.

In addition to providing camping and other recreational facilities it is our feeling that the park authorities have a duty to educate people how to use them. In all areas where the number of organized camps is sufficient to warrant it, the park should employ a person as director of camping who has had a sufficient professional background of training

and experience for this important phase of park work. Such a person could raise the standards and the general quality of camping in the park so that the camps would achieve the results which they are capable of attaining.

Camping offers tremendous possibilities for character building and for general education in ways to make life better. We need to carry on the good work in this field that has been begun by private organizations, by some state parks such as those in New York and Indiana, and by the municipal family camps on the Pacific Coast.

In camping, as I see it, lies the solution of the problem of providing park use for the great mass of people who need the benefits of outdoor living with its fresh air, sunshine, appreciation of beauty and all of the other fine things of life that our parks have to contribute to the lives of all of the people.

## Winter Sports

By EDWARD BROOKS BALLARD, Associate Landscape Architect, Branch of Planning and State Coöperation, National Park Service, Boston, Mass.

EDITOR'S NOTE.—A paper read at the Sixteenth National Conference on State Parks, Hartford, Conn., June 1-3, 1936.

I HAVE just returned from the Magnolia State of Mississippi, where snow is a rarity and winter sports unheard of. A month of travel in the South has brought home to me the fact that winter sports, as we know them in New England, can be enjoyed only in the northern and mountainous sections of the country.

The phenomenal increase of public interest in winter sports during the past few years has brought a growing demand, however, for winter sports facilities closer to our seacoast cities and farther south. In trying to meet this demand, we should make careful studies of snow and temperature conditions in each area of proposed development, and determine whether the probable amount of use of special winter sports facilities in a short season will warrant the expense of providing them. As a general rule, it will not be feasible to provide them in areas where snow does not remain on the ground to a depth of at least six inches, and the temperature does not stay below freezing, for more than thirty separate—though not necessarily consecutive—days during the winter. In those few fortunate regions where it is possible to enjoy both summer and winter sports the year round there will obviously be less demand for the latter.

If time permitted, I would like to expatiate on the acceleration of winter sports activity, especially skiing, as I have watched and participated in it in New England since 1931. In January of that year the first "ski train" left Boston's North Station with less than 200 passengers for Mt. Kearsarge, New Hampshire. During the past season "snow trains" have carried more than 40,000 passengers from many of our larger cities, including New York, into snow-covered sections of New

England for skiing, snowshoeing and tobogganing. Thousands more have motored over our ploughed highways to hotels, inns and numerous farm-houses for winter week-ends or longer vacations. Hillsides near countless communities have been dotted with youthful skiers, while dozens of new skating-rinks and toboggan-slides have appeared on public playgrounds.

In order to realize fully the extent to which participation in downhill ski running, as opposed to ski jumping, has gripped the public fancy, you should see the forest of skis in Boston's North Station about 8:30 of a winter Sunday morning, or witness the pilgrimage of skiers on a holiday week-end to New England's skiing Mecca on Mt. Washington, where a thousand persons have climbed two and a half miles on more than one occasion to ski in Tuckerman Ravine!

This acceleration in skiing activity has induced, and at the same time been encouraged by, a sudden and in some sections almost mushroom-like growth of facilities for downhill ski running. During the past three years the work of the Civilian Conservation Corps in building ski trails on public areas has greatly accentuated this activity. A year ago it became apparent that further development of skiing facilities on public areas called for greater coördination by public planning agencies to give it wise control in the public interest.

The National Park Service is coöperating with State Park Authorities and winter sports organizations to carry out a well-rounded program of winter sports development with CCC labor on New England State Parks, Forests and Reservations.

In order to determine what a well-rounded program of winter sports development may involve on any public area, it will be helpful to classify winter sports activities and their facility requirements according to use areas. It goes without saying, perhaps, that winter sports activities—as different forms of outdoor recreation in a cold climate—depend on different conditions of snow and ice. On the basis of these conditions we may divide winter sports areas into two major groups: those for intensive or concentrated use, and those for extensive use. We may further subdivide the intensive-use areas into (1) those requiring a restricted ice surface, (2) those requiring a comparatively flat snow surface, (3) those requiring snow slopes with special structures, and (4) those requiring snow slopes without structures. We may subdivide extensive-use areas into (1) those requiring a large ice surface, (2) those requiring large snow-covered areas either flat or gently rolling, and (3) those requiring large, snow-covered, hilly areas. For the purposes of this discussion I shall merely enumerate the activities which fall into each group, and touch briefly upon the facility requirements of each.

For intensive-use areas, those activities requiring a restricted ice surface are speed and figure skating, ice hockey, curling, ice shuffleboard and ice bicycling.

It is common knowledge that all these forms of ice sports require a

smooth surface to be thoroughly enjoyed, and that both ice hockey and curling require rinks of special dimensions. To give maximum use, the proper maintenance of ice for these activities requires a great deal more attention than most persons realize. A regular crew should be on call to keep the ice cleared of snow with plow, scoops and brooms or a rotary power brush. An ice scraper should be used at certain times and an adequate water supply should be made available for flooding the surface. Accompanying facilities should include a heated shelter and refreshment building with wooden runway to the ice, sanitary facilities, supply of drinking water, and flood-lighting of the area for night use. Benches and possibly picnic facilities may be added, and adequate space for auto parking should be close at hand.

Activities requiring a comparatively flat snow surface are such games and races as ski tilting, ski obstacle racing, ski joring with horses or humans for pulling (like aquaplaning on the water), and snowshoe racing. They require merely an open area with several inches of soft snow over hard base snow.

Activities requiring snow slopes with special structures are coasting (where there are no natural slopes for sled runs), tobogganing, ski jumping. Small structures are sometimes erected for sliding on flat playgrounds.

Toboggan-slides may be built with snow banks, but they are not completely safe and satisfactory without a specially constructed wooden chute, slightly wider than a toboggan, on the slope and preferably on the level runout. They may be built singly or in tandems of two or more. (I know at least one instance where you may slide down one chute and part way back on another.) The amount of use they receive will be greatly increased by night lighting.

Ski jumping is a specialized form of the sport comparable to high diving. Although small, so-called "natural jumps" may be used, the safest course is over a specially constructed jump with scientifically accurate proportions between the length of the in-run, the height and width of the take-off, and slope of the landing hill.

Both toboggan-slides and ski jumps require constant attention to keep them properly iced or packed with snow. Careful control of the crowds which use the one and watch the other is essential for public safety and convenience.

Activities requiring snow slopes without structures are coasting and downhill ski running.

Where city streets are not closed and barricaded by special ordinance for coasting during the winter months, it will be desirable to set aside special hills for sliding on straight sleds, flexible fliers and "double-runners," as we used to call them.

Downhill ski running on small intensive-use areas will ordinarily be limited to open and semi-open ski practice slopes, which should be separated from all other use areas for maximum safety and convenience.



These are sometimes called "nursery slopes" (meaning not a place where young trees grow straight, but one where "dub, sub-dub and rubby-dub-dub" skiers—to quote a well-known winter sports enthusiast—learn the rudiments of the sport, and leave many a *sitz-platz* in the process). Practice slopes may be provided with ski tows or other mechanical means of uphill conveyance having an endless cable and some form of motive power. Such equipment may be portable, so that it can be removed at the end of the season. Ski practice slopes may be flood-lighted to advantage for night use and portable carbide lamps used for this purpose.

In a concentrated-use area for skiing, which is at all remote from human habitation, it will be desirable to have a heated and lighted skiers' lodge with a supply of drinking water, sanitary facilities, and emergency outfit with first-aid kit and either sheet metal or wooden toboggan. Picnic facilities may be desirable, and ploughed auto roads should give easy access to near-by parking space.

We now come to extensive-use areas for winter sports. Activities in this major group which require a large ice surface are skate sailing and ice boating. The former may be enjoyed on a prepared rink of sufficient size, but the latter requires a large pond or lake under naturally smooth ice conditions and has a limited appeal.

Activities requiring large snow-covered areas, either flat or rolling, are ski-touring, snowshoeing, dog-sledding, and horse-sleighing.

Ski-touring is not to be confused with cross-country racing over various kinds of prescribed courses (*langlauf* and *langrend* in other languages), but refers to uphill and downdale skiing over open terrain or on cross-country trails through wooded terrain at a pleasurable pace. Snowshoeing is in the same category. For those who enjoy winter camping a series of cabins may be strategically located for week-end or vacation use by cross-country skiers and snowshoers. Many foot trails will provide suitable travel ways, except where steep grades require more winding, alternate sections for downhill skiing.

Dog-sledding is another form of winter sport with a rather limited appeal, but one need not own a team of Eskimo dogs or "huskies" to enter a dog-sled "derby."

With more and more auto roads ploughed clear of snow all winter it becomes increasingly difficult to find good roads for sleighing. This is a congenial form of winter sport for persons of all ages to enjoy, and means should be provided for it wherever possible.

Finally, the activities which require a large, snow-covered, hilly terrain are downhill ski running on trails and mountain slopes and bob-sledding.

Intermediate between open practice slopes for downhill ski running and ski trails come what we may call "natural slalom" areas. The term "slalom," which applies to a zig-zag downhill race course between flags, has been borrowed to designate a semi-open slope sufficiently clear for

skiing between clumps of trees or through a stand of large trees whose branches meet to form an overhead canopy.

Without becoming too involved in the controversial subject of ski trail design, we may say that downhill ski trails are of three types: (1) narrow and gently winding trails with easy gradients, for novices or ordinarily competent skiers; (2) wider, sharply turning trails with many angles up to 90 degrees or over and steeper gradients, for intermediate or third-class skiers, and (3) less sharply turning trails of similar width with angles less than 90 degrees, though not straight enough to be run without checking, and steepest of all, for expert or second-class skiers.

Several novice trails should be laid out near the "natural slalom" area, at least two intermediate trails in the vicinity to prevent overcrowding, and for a few of the most suitable areas in the region an expert down-mountain trail, primarily for racing, with the standard vertical descent of at least one-thousand-foot drop in a mile of length.

Accompanying facilities for downhill skiing areas will include closed shelters at the bottom of all trails and also at the top of those over half a mile in length, emergency outfits with first-aid kit and toboggan in each shelter, sanitary facilities and if possible a supply of drinking water. There should be access over ploughed roads to auto parking space as close as can be to the beginning of all trails.

Bob-sledding is really in a class by itself. I have left it until last, because it requires a combination of extensive hilly terrain and special structural facilities. A bob-sled track should be scientifically laid out on carefully selected terrain according to engineering specifications. It should have control points at fairly frequent intervals and a telephone line for quick communication. Only experienced drivers should be allowed to steer the sleds in general public use.

It can readily be seen from the foregoing classification of winter sports activities, according to intensive- and extensive-use areas, that most of them should be concentrated in centers of development. The health, safety and convenience of the public, economical and efficient use of the facilities, and last but not least the preservation of the natural surroundings call for such concentration. In general I believe these centers should be developed in municipal parks with primary emphasis on intensive-use areas, in metropolitan parks or state parks near large cities with equal emphasis on intensive- and extensive-use areas, and on state or Federal parks with primary emphasis on extensive-use areas.

The increasing trek of skiers and other winter sports enthusiasts by auto, "snow train" and "snow bus" to suitable terrain brings the need of developing such centers near winter sports resorts. It is perhaps needless to say that they should be coordinated with the year-round recreational development of the region, and facilities combined wherever feasible for both summer and winter use.

Many winter sports, like all those which require the combination of

speed, skill and stamina, become competitive; and, in proportion to the degree of speed, skill and stamina attained, they become spectacular. However encouraging it is to note that a large percentage of the spectators at any winter sports event are also participants in some form of that sport, we must remember that crowds will always congregate at ski meets, snow fests, winter frolics and carnivals, and make adequate provision for handling them on these special occasions.

New facilities for winter sports use should not be built until provision is made for their proper maintenance and supervision. When they have been laid out in the most suitable locations, according to snow conditions, terrain, exposure and accessibility, adequate publicity should be given them for maximum public use and enjoyment.

Walter Prichard Eaton pointed out in the *New York Herald Tribune* of December 18, 1932, that "for a thoroughgoing development of winter sport interest in northeastern America, we need ski trails of varying difficulties, and we need them in public parks or reservations so they can be properly maintained and made easily accessible from all our cities." Skiers themselves are beginning to realize that winter recreational use of private land in the East is limited and uncertain, that they need the provision, regulation, maintenance and supervision of winter sports facilities by cooperating public agencies.

With proper planning of winter sports development, to prevent its undesirable intrusion within areas of natural beauty and wildlife refuges where preservation is of paramount importance, we can provide plenty of opportunities for outdoor winter recreation. The increasing demand for winter sports facilities offers us the opportunity to provide for the year-round recreational use of public parks in northern climates.

Thousands of our people are beginning to learn that winter is no longer a necessary evil to be merely tolerated, but a part of our natural existence in cold climates to be enjoyed as much as other seasons out-of-doors. They are quick to refute the somewhat exaggerated contention of our friends from the sunny southland that we should give the frigid northland, especially New England, back to the Eskimos!

## Remarks on Recreation

By AL TURNER et al.

**A**T THE Sixteenth National Conference on State Parks, the program announced two well-known speakers on Parks and Forests and Recreation in New England, neither of whom could be present, and the unhappy wretch selected to carry this double burden was duly warned and cautioned that there was "dynamite in them thar hills," ('N th' Gobble-Uns'll git you ef you Don't Watch Out.)

With fear and trembling he sidestepped this horrid bugaboo and proclaimed a crusade against the nearest bystander, Recreation.

In saner moments, under the guidance of ordinary prudence, he might well have hesitated to attack Goliath single-handed, but in the face of great danger even a scared rabbit marches boldly forward, or at least, so they say.

And as luck would have it, that kind Providence which watches over fools and drunkards attended him so that no physical violence was offered, and somewhat later he was given leave to assemble his rambling remarks for the record, with this well-meant but dubious result.

In 1913 the General Assembly of Connecticut established a State Park Commission, with specified powers and duties, chief of which appeared to be to "acquire, make available and maintain open spaces for public recreation." And they called it a day and went home, leaving seven good men and true to struggle with that weasel word Recreation.

After due deliberation they employed a putative civil engineer, classified as a Field Secretary under ruling of the temporary emergency Civil Service Commission enthroned by the same Assembly, and instructed him to investigate and report to a later meeting.

After twenty-two years of diligent research and wide-spread inquiry, Recreation, the Thing, still remains shrouded in doubt, and if anything, as the years roll on, the fog thickens.

Meanwhile, Recreation, the Word, evolved by the Master Philologists, under the ministrations of its soothsayers and magicians, has acquired such an odor of sanctity that in its name any crime, from Arson to Manslaughter, may now be committed with comparative impunity.

It was not always thus; a hundred years ago there was in Hartford a Congregational minister who did a little thinking all by himself, and whose name, for good and sufficient reasons, was finally attached to Bushnell Park, in that city.

In August, 1848, Saint Horace delivered before the Phi Beta Kappa Society of Harvard an oration on "Work and Play," and so far as the evidence goes he had never heard anything about Recreation.

Horace noted first that both work and play are manifest to an observer only as activity of some sort, and may be distinguished only by a study of the actor's motives; and he concluded that a true philosophical distinction may be drawn as follows:

Work is activity as a means to an end;  
Play is activity as an end in itself.

If we accept these definitions we may be able to clear up some of the haze about Recreation, for we must admit that Work may and should be organized, supervised and planned to accomplish the desired end; and we must admit that Play, being an end in itself, may and should be free and spontaneous, though through habit, tradition or mutual agreement it need not be solitary or unsocial.

We are agreed that outdoor recreation builds up the body and fits it for



Picnicking at Waterson's Point, St. Lawrence Reservation, N. Y.  
Courtesy New York Conservation Commission



Motor Boating, Paradise Bay, Lake George, N. Y.  
Courtesy New York Conservation Commission

more and better work, mental or physical; in that faith we plan parks and raise our ballyhoo, but if the actors themselves are made too conscious of that ulterior purpose they are suddenly back at work, instead of at play.

And if we in our enthusiasm go on to organize and supervise outdoor recreation, we shall probably make heavy work of it, and effectually destroy the spirit of free play.

Yet our more efficient organizers and supervisors are of late beginning to talk openly of the proper use of leisure time, the leisure time, that is, of others. In England, alas, they have even imagined a new phrase, "Recreative Work,"—intended, of course, for children. But they think not what they say, and should perhaps be forgiven, though not forgotten.

A somewhat similar relation exists between Science, which loudly demands classification and organization, solidly based upon painstaking observation and careful reasoning, and Art, which requires judgment, taste, and all the emotional imponderables.

The architects, well-grounded in an ancient tradition, have always understood this, but the engineers, of more recent origin or more rapid growth, have not yet learned it, and seem to think because so much of their work is mathematical that it can all be reduced to a science, with rules in a book for everything. That is to say, if one may still know a tree by its fruit, one may so conclude.

And furthermore, since Horace's time, we have pretty thoroughly organized both Work and Play, and the fruit of that tree, as viewed by a friendly observer, falls somewhat short of his ideal, as indicated by his findings.

A living witness, Stephen Leacock, speaking (from *Wet Wit and Dry Humor*, Dodd, Mead & Co., 1931):

"THE AMERICANS ARE A QUEER PEOPLE: THEY CAN'T PLAY.

Americans rush to work as soon as they get up.

They want their work as soon as they wake.

It's a stimulant, the only one they're not afraid of.

They used to open their offices at 10 o'clock: then at 9: then at 8: then at 7:

Now they never shut them. Every business in America is turning into an open-all-day-and-night business.

They eat all night, dance all night, build buildings all night, run cars all night, make a noise all night.

They can't play. They try to, but they can't.

They turn football into a fight, baseball into a lawsuit, and yachting into machinery.

They can't play. The little children can't play: they use mechanical toys instead: toy cranes hoisting toy loads: toy machinery spreading a toy industrial depression of infantile dulness.

The grown-up people can't play: they use a mechanical gymnasium and a clock-work horse.

They can't swim: they use a float.

They can't run: they use a car.

They can't laugh: they hire a comedian and watch him laugh."

## Some Thoughts on Trails

By HERBERT EVISON, Regional Officer, Region I, Branch of Planning and State Coöperation, National Park Service, Richmond, Va.

EDITOR'S NOTE.—Expanded from informal remarks at the Regional State Park Conference, Anniston, Ala., April 1-3, 1936.

IN THE "natural" type of park, whatever its classification—national, state, county, metropolitan, even city—its "true inwardness" is revealed to him who enjoys what it has to offer in leisurely fashion. For a few of us, that may occasionally mean on horseback; for most of us, most of the time, it means that we place ourselves temporarily in the pedestrian class. Of course, it is a sad fact that, of all the millions who visit the national parks and national forests and the state parks and state forests, and actually get out of their cars, only a very small percentage really walk. By walking, I mean covering enough distance with enough vigor and pep to cause a quickening of the heartbeat of a seventy-five-year-old grandmother.

Mostly they stroll—and this is a form of recreation that has its place in the out-of-doors just as much as the more vigorous exercise of walking. (Maybe somebody sometime will explain to me how walking became hiking; also why.)

The stroller is seldom really by himself in the typical park, but, even so, he can get much out of it. In almost any properly laid out park, it requires only a short stroll to get away from the real crowds and into places of loveliness and charm that are well worth seeing. It means much to the city dweller accustomed through much of the year to the confinement of office, store or factory to be where green things grow and waters, placid or turbulent, are flowing, even though he has company in the enjoyment of it. It is astonishing how few steps it requires, even in the most heavily patronized parks, to find genuine and unmolested solitude.

The stroller's rewards are easy to attain. He can see real and relatively unspoiled natural beauty. He can get the feel of naked earth under his feet, unarmored by concrete. He can get away from the stench of half-consumed gasoline. He can get away from people in the mass. He can breathe fresh air—and God knows that is an inestimable privilege to the city dweller. Park development has got to recognize the stroller, and the fact that there are a lot of him and of her; it is even legitimate for it to recognize that a lot of her wear high-heeled shoes that were perhaps made for some purpose, but not for walking.

That is, as a matter of fact, the basic justification for the kind of trail that we may expect to find in the immediate vicinity of those points of concentration of human beings—those service areas—the existence of which may be counted on to save the character, the face, of the park itself. This kind of trail is, in general, one of such sophistication that it hardly deserves the name any more than does the Mohawk Trail or the Yellowstone Trail. It is laid out along careful grades; it is carefully



graded, ditched and drained; it is frequently improved with gravel or something else that supplies a better and, principally, a drier surface; it runs much to foot bridges where the terrain is somewhat rugged; it inclines to be elaborately guard railed; and it is freed of all obstructions on which even the wearer of high heels might conceivably turn an ankle.

Such trails are admittedly a necessity in the typical natural park. Not only should they exist, but they should lead somewhere worth going; they should possess an objective that will abundantly reward the comparatively slight physical effort involved in their use. It may be only a glimpse or two of a broad river or a rushing stream or a waterfall, or a view out over a stretch of landscape of variety and charm; it may, however, go to the loveliest or most spectacular thing the park contains.

Admittedly also such trails should not be long. While opinion will differ on the point, my own conviction is that the ideal stroller's trail—path is the better word—is a circuit that is not more than a mile long, and that may, as a matter of fact, be somewhat shorter. Two or three of these loops may be combined to offer somewhat greater length, or a bit of variety for successive days of strolling. Trails of the same type may legitimately and wisely be supplied to extend from stopping points on a park road to close-by features that are well worth looking at—an infinitely better procedure than to intrude the road itself on such features.

The bridle trail—written on scores of ECW blue prints as “bridal trail”—naturally runs more to length, but has no need of sophistication. The old woods road, it seems to me, is the ideal bridle trail; and when the old woods road is not to be found in a park, the closer we stick to its essential characteristics in providing routes for the equestrian, the more successful and satisfactory our effort will be. The woods road, in its essence, is simply a cleared route supplemented occasionally—very occasionally—by a bridge. Sharp curves are not to be feared, nor, except as they may offer a starting point for gulying, are steep grades. Their surface is the natural earth, which may sometimes be muddy, but within reasonable limits the horse won't mind that and the rider shouldn't. The woods road was often the easiest-made route to a given point; on that principle it went around the biggest trees instead of requiring that they be cut down; and this practice, justified for its economy of effort in most cases, is even better justified as a means of saving fine trees in a natural park. Also most woods roads were designed for wagons, with high clearances, and not much attention was paid to fairly large rocks or low stumps that intruded themselves between the wheel tracks. Where a bridle trail is also to be used as a protection truck trail, of course, a somewhat greater degree of improvement as to grade, surface and alignment is necessary, but it can easily be overdone.

Taking our natural parks as a whole, the typical trail is, and should be, something quite different from the stroller's path or the bridle trail.

It has been said that a good method of constructing a real park trail is this:

Determine where you want the trail to go and the route it is to follow; walk a whole CCC Company over it, then back over it again, and call it done.

Possibly that is a bit extreme, but those who advocate this method are simply voicing a protest against extending to all parts of a park the kind of trail that is required for the stroller. That practice assumes a volume and kind of use of all foot trails comparable to that of the paths near points of human concentration, an assumption that is not borne out by experience. We know that only a minor fraction of park visitors really take walks. From any viewpoint we are not justified in building elaborate trails for this comparatively slight degree of use. They form needless scars on the natural landscape; their cost of maintenance is beyond the means of almost all park agencies; they are frequently promoters of gullying and other erosive action. And it is, I think, just to assume that those who use them will, with microscopic exceptions, not expect or desire such trails; that they will prefer something more primitive—something of the sort that they might expect to find in really wild country simply because game passed back and forth through it.

The keynote of park trail construction, it seems to me, is to expend on it not one particle more of effort than is necessary. If a trail proves greatly popular, the mere volume of use that it gets will gradually widen it as much as it needs to be widened. The blasting of rocks or the cutting of any but very small trees or the clearing away of shrubbery beside it has, with but rare exceptions, no place in its construction, even if one of its important functions is for protection and the carrying, on horse or mule-back, of six-foot-wide burdens.

The ideal trail is, perhaps, one that works gradually to a scenic climax. Perhaps also, it is one which requires no retracing of steps in order to return to a starting point, though I am sure it is the experience of many that returning over a trail—or a road—frequently reveals things not perceived on the outward trip.

Just a few words about trails that climb. On these, it is frequently necessary that they turn upon themselves to form switchbacks. The point I wish to make is that these should be few and long. The most tiresome trail I have ever been over was one that consisted of perhaps a score of switchbacks that averaged in length less than fifty yards. The slope on which it was built was a broad one where perhaps four, or even fewer, of several times that length, could have been built, completely avoiding the monotony that characterized the one actually constructed. One almost inevitable result of providing too short and too numerous switchbacks is that those who are descending, seeing a section directly below them as they turn, cut "across lots," creating a new trail and a new scar and, all too frequently, starting the gullying process.

One final thought. Even if the trails themselves are properly laid out and constructed, it is easy—particularly if plenty of man-power is available—to build too many of them. I can think of several parks where I feel that trail building has been overdone. A comforting thought is that some of these will be so infrequently used and so little maintained that time and the process of nature will gradually eliminate them and they will exist only on maps.

## Contribution of State Planning Boards to State Parks in New England

By JOSEPH T. WOODRUFF, Longmeadow, Mass., Consultant, New England Regional Planning Commission, National Resources Committee

EDITOR'S NOTE.—A paper read at the Sixteenth National Conference on State Parks, Hartford, Conn., June 1-3, 1936.

STATE Planning Boards are brand, spanking new, though there is one in every New England State. The Massachusetts State Planning Board has been in operation since September, 1935, while New Hampshire, the oldest board, was organized on December 3, 1933.

It may be asking a good deal to expect a two-year-old to contribute much to a family, but a child seldom comes into a home without contributing something. In this case, this two-year-old has done much for New England already. State planning has begun to state the problem and we all know that a problem well stated is well on the road to solution.

In the first place, this two-year-old has helped focus attention on the family and revive interest in the family *versus* the individual department. State planning boards have taken inventory of desirable areas for preservation and conservation, as well as those of historic, scenic and scientific interest.

In the objectives of the several state planning boards stated at the request of the New England Council on November 21, 1935, every New England State listed the development of recreation features.

The New England Regional Planning Commission on the same date prepared the following statement which summarizes its part in this program:

The purpose of a plan is, not to encourage more spending and development of improvements prematurely, but rather to serve as a guide to insure that any and all development, when, as, and if it takes place, will proceed in an economical and orderly manner.

### EIGHT NEW ENGLAND OBJECTIVES

To make a statement of the needs, opportunities, and objectives of the New England region, a commercial, industrial, agricultural and economic inventory is essential. We must have the basic facts of actual conditions before we can point out our opportunities.

New England's outstanding need is for adequate machinery with which to

collect this information, to present the case of each state in its relation to the New England region, and to point the way toward a solution of its difficulties. The numerous existing official and unofficial agencies such as governmental departments, colleges and universities, and research organizations, should coöperate through the New England Council and the New England Regional Planning Commission to meet this need.

In addition to the tremendously vital job of collecting the necessary data and solving some of the intricate social and economic problems on which the entire future of New England rests, there is the need for setting forth as nearly as possible a preliminary and constantly adjustable plan for physical New England, a thing which is valuable and necessary, no matter what her future may be. Such a plan is, in any event, a necessity as a protection against unwise construction and public expenditure.

In order to make possible the assembly and study of these data and the preparation of this plan as a coöperative New England program, there must be:

*The Organization Comprising:*

- (A) Continuously active official state planning boards in every New England State, supported by adequate funds and legislation, and coöperating with public and private agencies.

Our present state boards should be given continued support and their programs coördinated through the regional agency.

- (B) A background of active, local, official planning boards in every community, coöperating with the state planning board.

There are about 200 local planning boards in New England today. Few of them are active.

- (C) An official Regional Planning Commission, composed of representatives of each State, which will operate as a coördinating medium through which a New England plan for physical improvements may be assembled, and New England studies of economic and social problems may be made and distributed.

The present Commission is active in the study of New England problems and the preparation of coördinated plans.

The outstanding objectives of a New England Plan will be attained through the medium of:

*The Program:*

- (1) A plan for a broad New England system of through highways designed for safety, convenience and beauty. There is no agreed-upon New England highway plan today. The saving to each State of having such a plan will be large.

With the rapid development of New England as a leading recreational area, it is extremely important that we make New England more accessible to the vacationists as well as to the resident.

The heavy toll of accident and death on our highways must stop. Congested areas must be freed of through-traffic burdens. A New England program will provide economies in interstate construction.

- (2) A program for the gradual improvement of byroads which will make accessible for all-year living and enjoyment the whole of New England countryside.

The network of byroads should constitute a carefully coördinated feeder system to the through highways.

- (3) A plan for a New England system of parks and reservations designed to preserve areas of outstanding scenic, historic, and recreational interest, and providing for adequate recreation accessible to existing and potential population.

New England's \$500,000,000 industry—recreation—is developing without a plan. Good business practice demands a guide for this potential billion-dollar source of income.

- (4) A broad coördinated program (actively carried forward by each State and municipality for the gradual elimination of harmful pollution from New England's water bodies, within the limits of economic possibility, and with due regard for industrial necessity.

Most of our water bodies are polluted—some to a degree dangerous to health, and many to a degree destructive to fish and shell-fish life. Studies made by the New England Regional Planning Commission show where this pollution exists, and to what degree. The sincere attention of the States to this problem is vital to the future of our region.

- (5) A study of existing conditions and needs for the development of interstate river valleys, especially the Connecticut, Blackstone and Merrimac Rivers, to prevent floods and soil erosion, to provide pure water supply, to harness water power, and to secure their greatest usefulness for industry and recreation.

Through the Water Resources Committee of the New England Regional Planning Commission the existing data on which to proceed with these studies have been prepared.

- (6) A coördinated program for New England airways, airports, beacons and radio apparatus as a guide in the development of New England air transportation, and an insurance against wasteful expenditure in this fast-developing field.

Data on this study have been prepared; maps and studies of needs have been indicated; and the material is being studied by the Airways Committee of the New England Regional Planning Commission.

- (7) A broad study of present and potential land-use in New England and the adoption by the New England States of definite land policies, covering such subjects as public ownership of land, forest taxation, agricultural practices, retirement of land unsuited to agricultural purposes and rural zoning.
- (8) An intensive, coöperative New England effort to assemble adequate data on the conditions of New England industry, commerce and transportation, and through study of these data to point the way toward the sound and progressive development of manufacturing and distribution.

Connecticut's survey of areas of Scenic and Historic Interest by Edgar L. Heermance certainly was a contribution of state planning to state park information. Connecticut is a hard State to beat in the state park and forest game. There the State Planning Board is assembling facts and material on the recreational needs of Connecticut through their Recreational Committee. That will be a valuable contribution to the work of the State Park and Forest Commission. The highways, parks, health, water and other state departments have had the opportunity, through the State Planning Board, to sit down and work together.

The answer to the question implied in the title of this discourse is not expressible in terms of square miles or acres, or dirt moved. There has not been state money to spend for land or for much development in the last few years, and, furthermore, there are no finished state plans yet and there will not be for some time.

If, however, New England state park work deals with the ear-marking of areas of outstanding significance for the education, inspiration, and enjoyment of present and future population, plus the provision of recreational areas on land already owned or to be purchased, accessible to resident people, and the provision of more areas for the new seasonal recreation business that New England is only on the threshold of developing, then state planning in New England has made a significant contribution.

There are three phases of any problem:

- (1) What do we have?
- (2) What do we want?
- (3) How can we get it?

New England, through the efforts of state and regional planning agencies, has a better knowledge of what the Region has than ever before. Certainly, we all have a better understanding of population distribution and trends than we've ever had, and we know better than ever before what the lands are being used for and what they should best be used for. Certainly the two-year-old has brought more harmony into the official family. In some instances the highway department is getting

actually "clubby" with the state parks authority. It is also true that the perpetual inventory of outstanding historic, scientific and scenic areas, plus areas for preservation and conservation that the state planning boards are taking and keeping up-to-date, will help state park planning. This is accomplishment—this is a contribution.

The inducement that the whole planning movement has given to all state departments to plan ahead rather than administer what was already at hand has been widely felt.

The state forestry departments of the States have made outstanding contributions to state planning, stepping out with an uncramped broad outlook that one would expect from their profession. State planning has brought them closer to state parks people. The conservation people have learned to speak more in terms of recreation and making old areas useful to new people. Massachusetts has opened up long-held areas for thousands of new users who never knew the beauty at their doors.

Of course it is true that any great awakening, any new impetus, has with it a period of general "hooray boys, hi everyone" before the pace gets settled down. The hooray boys stage is pretty far advanced and nearly over. We are about ready for the steady pace. Someone not long ago said that there are 57 agencies in New England interested more or less in conservation, preservation and recreation, which probably accounts for the pickle we're in.

This new family, however, should all be able to help us take account of stock. We should have been readily answered.

*Now, how about: "What do we want?"*

If our first job has been well done, we should be able to answer the second question—we want three things:

- (1) Preservation and conservation of outstanding and typical natural, scenic, and historic areas and buildings.
- (2) Adequate recreational areas of varied type accessible to present and potential population with due regard for—
- (3) The development under proper safeguard and regulation of privately owned and operated recreational facilities for the tourist and vacationist all-seasonal use. A newly organized industry assuming billion-dollar proportions.

*Considering State, Federal and Semi-Public Lands*

Maine has . . . . .	98 acres per thousand population
New Hampshire has . . . . .	1200 acres per thousand population
Vermont has . . . . .	350 acres per thousand population
Massachusetts has . . . . .	46 acres per thousand population
Rhode Island has . . . . .	29 acres per thousand population
Connecticut has . . . . .	57 acres per thousand population
Southern New England has . . . .	47 acres per thousand population
Northern New England has . . . .	474 acres per thousand population

New England as a whole has 47 acres per thousand people of state-owned public lands suitable for recreation, and 1,080,000 acres of state, Federal and semi-public lands, or 132 acres per thousand population.

Taken from a purely statistical angle and measured in terms of a 20-acre-per-thousand minimum, New England has made a great step toward maximum ownership of forest, park, and conservational areas. The ways and means for the development of these and supplementary areas is one that all of you have directed your attention to for years. Our New England population is densely distributed along the eastern seaboard, up the Connecticut Valley and at Boston, Providence and Portland metropolitan areas.

Inland areas within 30 miles of the shore population, though correctly balanced with the population in acres per thousand, would be little used in favor of an even less adequate shore park for which there is demand. The vast flow of tourist travel awaits private and public provision for their recreational enjoyment.

The problem is a regional one since many factors in its make-up exert regional influences. Flood control on the Connecticut effects recreation and farming lands in Vermont and New Hampshire. Pollution in river, lake and shore waters destroys fish, yet its elimination must be approached with due regard for industrial necessity and economic possibility.

Since present publicly owned lands are well balanced with total population, a study of the distribution and types and potentialities of these lands in terms of needs of the population is essential. The Boston population area easily influences New Hampshire and Rhode Island.

Highway planning has become much more than pavement programming. It can become much more of a real science than it has today. In several New England States, little has been done by the highway planners to know the problems of those who controlled the conservation and recreation picture. The state planning boards have provided the medium through which department heads may discuss mutual problems and plan together instead of plan to do as they each may please.

So much for what we want and need—it is possible to state this and put it down on paper in written or diagrammatic form. How are we going to get it? Through the awakening of public interest—in one State by the State Forester, in another by the Governor, in another by a private association, in another by a manufacturer who sees it is good business—through some citizen or official who really cares more about the good of his country than he does for politics. This awakening will be gradual, the plan will change as we know more. It will be accomplished little by little, paid for, I hope, as we go and by those who go and much of it given by those who see the almost sacred perpetuity of a generous gift to the public.

The picture is something like this then.



We are better informed on what we have and that means existing and potential areas for public recreation, and conservation and protection for areas of scenic, historic, natural and scientific interest, plus all the related factors of population trend and need, land-uses and soil that are needed to come to logical decisions.

We know more what we want and need and that means we are gradually getting a balanced plan for a region instead of a haphazard opportunistic grabbing by a multitude of Federal, state and other agencies.

We are perfecting the machinery for the necessary coöperation among state, local and Federal agencies that can put this regional plan into effect.

The child is but two years old. It is doing its part well and has been a fine influence in the official family. Has state and regional planning contributed to state parks and forests in New England? Have state and Federal and regional and local departments of parks and forests and conservation and water supply and highways and health and agriculture and others contributed to the well-being of the New England States through the medium of the two-year-old state and regional planning agencies? That is the question and the answer is in the better spirit of coöperative planning, the newly formed state and local official agencies, the miles of new trails, the acres of newly accessible recreational lands, the reclaimed and redesigned beach areas and above all the new appreciation that planning is a long-term regional coöperative effort and that a plan is not to encourage more spending and development of improvements prematurely, but is rather to serve as a guide to insure that any and all development, when, as, and if it takes place, will proceed in an economical and orderly manner.

Is that a hopeful development? I believe it is!

## The CCC in State Parks

By ROBERT FECHNER, Director Emergency Conservation Work, Washington, D. C.

EDITOR'S NOTE.—Mr. Fechner has given several excellent talks before State Park Conferences, of which, unfortunately, no records were kept. He consented to put in writing this composite of his remarks.

**W**HILE every phase of conservation work has benefited during the past three years as a result of the work accomplished by our CCC camps, it appears to me that probably the development of an adequate state park system in most of our States has been the most outstanding feature of this work.

A number of States had already begun the development of a state park system prior to 1933, but there were many States in which no state park existed and where very little or no consideration had been given by the citizens of the State to the necessity or desirability of such recreational areas.

The action of President Franklin D. Roosevelt in recommending to Congress that a new organization be set up as a part of the national relief program immediately presented to all States an unexpected opportunity to accomplish results that in most cases had hardly been dreamed of. It was encouraging to note the immediate response made by practically all of the States just as soon as information was spread around that the development of state parks would be a major feature of CCC camp work. States, through their legislatures, or as a result of generous gifts on the part of individual citizens and groups, quickly placed themselves in line to apply for and receive these camps.

Due to the serious unemployment that had affected all of the provisions, we were able to secure an adequate number of properly trained and experienced technical and non-technical supervisors properly to direct the work of the enrollees in the camps. It is a matter of record that this work has measured up to the high standards insisted upon by the National Park Service and the state park authorities cooperating in this work. This activity quickly attracted the attention and aroused the interest of the citizens generally and especially in localities where state parks were a novelty to the citizens, and intense personal interest developed in watching the progress of the work.

Friendly rivalry developed among localities and between States to see which one could gain the greatest personal benefit from this work. The enrollees, as well as the trained supervision, also developed a keen personal interest in their part of the work, and this has generally contributed toward making this one of the most popular activities of the Federal Government. It is generally recognized now that the great mass of our population is going to have more leisure time than was anticipated just a few years ago. It is proper that our Nation and the several States should realize their responsibility in making available adequate recreational areas where a man and his family can spend a pleasant evening, a delightful week-end or a more extended period, in healthful relaxation and in the enjoyment of beauties which nature has provided.

Mention has been made of the interest developed by the enrollees in this work. To an overwhelming majority of the young men in our CCC camps this work was their first regular employment. It was undoubtedly an entirely new type of work but it did not take long for them to grasp the importance of the work and to develop a pride in the part that they were being permitted to play in carrying out the park plans. I am confident that most of these boys will look back on the months that they spent in a CCC camp and on the work that they accomplished in the state parks with pleasant memories and with a full realization of the importance of the work to which they have contributed in such a substantial manner.

The Federal Government, through the CCC camps, is turning over

to the various States practically without expense to them, a state park system that under ordinary circumstances would not have been created within our generation. In accepting this contribution from the Federal Government the States must realize that they also accept a grave responsibility. It will be their duty to maintain and continue to improve these beautiful areas that the Federal Government has assisted in creating. It would be most unfortunate if any State failed to realize its obligation and to make the necessary provision for meeting it.

I have no doubt through such organizations as the National Conference on State Parks, and as a result of the personal interest of individual citizens who appreciate the importance of these recreational areas, the necessary action will be taken to preserve the parks, not only for the pleasure and health of the present generation but for all generations that will follow us.

## The Okefenokee Swamp

By CHARLES N. ELLIOTT, Associate Forester, District E, Region I, Branch of Planning and State Coöperation, National Park Service, Atlanta, Georgia

EDITOR'S NOTE.—This talk was given at the Regional Conference on State Parks held at Fort McClellan, Alabama, April 2-4, 1936, and is included here because of its interest to State Park people, though the area is to be administered by the U. S. Biological Survey as a wildlife refuge.

**R**ECENTLY the newspapers carried an item that the U. S. Biological Survey had purchased the Okefenokee Swamp, and would set it aside as a wildlife refuge. The announcement was welcomed by every naturalist and scientist on the North American continent, and by every person acquainted with the great swamp.

If you are not familiar with the name Okefenokee, a few facts might be of interest. It is the largest fresh-water swamp on the face of the earth. It is approximately fifty miles in length and its share of the earth's surface measures some six or seven hundred thousand acres. The water surface itself, purchased by the Biological Survey, and covering almost five hundred square miles, is contained in a huge basin, which is higher than the surrounding country and over thirty feet above sea-level.

Two rivers form an outlet for this expansive area. The St. Marys River flows out of the eastern edge and moves in a stately manner one hundred and twenty-five miles to the Atlantic Ocean. The famous Suwanee River pours over the southern rim and races madly to the Gulf of Mexico, six hundred miles away by watery trail.

Now consult your map of the United States. This vast sweep of sodden wilderness lies on the boundary of Georgia and Florida, directly south of Waycross and northeast of Lake City. It covers a large portion of Clinch, Ware and Charlton counties, and is approximately one-fiftieth as large as the entire State of Georgia.

Okefenokee, an Indian word which means "Trembling Earth," is a veritable masterpiece of the southland. Its expansive forests, hung with tapestries of gray Spanish moss, might well have been one of the hot tropical forests which covered the earth in the dawn of creation. Its floating islands, its dimly lighted hallways, must be as they were at the beginning of time. There are probably many spots of this hinterland which man has never seen. I have found stray corners and bits of land with which the natives were entirely unfamiliar.

I well remember my first visit into the swamp. In those days it was not well known, and was thought to contain every type and kind of fever and disease known to the tropics. Its black water was described as "stagnant" and "stinking," and it was said to harbor man-eating alligators, bears and panthers. One who ventured beyond its first border of vegetation took his life in his hands.

The season was summer, and the interior of the swamp on a hot summer night is a place no one could ever forget. We spent the night on Minnie Island, which, because of its inaccessibility, few persons had seen. The darkness was cloudy and of stygian proportions. Our only light came from the flicker of a tiny cooking fire.

Steve, my camp mate, had cleaned fish for our supper and had thrown the refuse into a near-by, deep water hole which was the home of an alligator. We were making preparations for a meal of crisp bannock, fish and black coffee, when we were interrupted by a noise in the alligator hole at the edge of camp. Steve left his frying pan, heaped up with sizzling pieces of trout and stepped to the border of the pool. He turned his spot-light into the black water, searching its edges and depths. Presently he called to me.

"Look!"

His light had picked up two glows which might have been living coals of fire or rubies of enormous size.

"A big 'gator!" he exclaimed.

I threw a stick at the head of the reptile and the eyes disappeared.

That night we sat by our tiny campfire in the bowels of the swamp. Fragrant blue streamers of smoke drifted upward from our briers. We were silent, realizing that we sat alone in a wilderness that had breadth and depth and magnitude. We could not have been more isolated in the foothills of Pacariana or on Porcupine River, north of Yukon Flats.

A tiny mouse suddenly appeared out of the leaves at our feet and sat up, looking at us out of bright, black eyes. I moved a hand and he was gone again, as quickly as he had come. Now and then an old alligator, prowling around his home in some hidden recess of the swamp, bellowed, as his first ancestor must have bellowed in the ages when man was depending on his biceps and nasalis rather than on his brain to keep him alive and eating.

Occasionally we heard a near-by heron cackle his insane laughter into

the night and once we were startled when a gray barred owl floated into the clearing and swung on silent wings to his perch in one of the towering cypress trees overhead. At times we caught ourselves tense, vibrant, watching for some climax in that dimly lighted theatre. We might have been the first two men of creation, squatting on our haunches, staring into the unknown. That night was one of the most impressive I have ever experienced.

How vastly different was my last extended trip into the Okefenokee! In January, 1935, I camped for a week with a party of four on the edge of Big Water Lake. All the way to Lem Griffis' camp, the bottom of our automobile dragged over roads which had been cut to pieces by trucks hauling out crossties. Many crosstie camps were scattered over the three hundred thousand acres of pine land, and an estimate that five hundred men were working day in and day out, cutting down trees and converting them into crossties, would be conservative.

Lem Griffis, buyer for one of the big fur houses, had a supply house full of hides of raccoon, otter and alligator. He also had a few bear skins. He said that each season he usually buys some \$8,000 worth of furs, which are caught in the swamp. At the beginning of our trip on Billie Lake, we saw a dozen people fishing. A large section on the edge of Billie Lake, in the heart of the swamp, had been burned by forest fire and more than ninety per cent of the large trees totally destroyed. Many times, on the fifteen-mile trip to Big Water Lake, our passage was blocked by cypress logs left from the lumbering operation of a few years ago, and in several places we had to push our way between piling, on which tracks were once laid and a logging train ran. That was more than twenty years ago, at which time a railroad was built to Billie Island, and branch roads constructed on heavy piling into the thick timber of the area. Huge forests of virgin cypress timber were logged and millions of board feet of lumber taken out. Today, only a small section of the Okefenokee can boast original stands of cypress. But the railroad has gone; grass and bushes have covered the piling and nature is reclaiming her own.

We camped for a week on Big Water Lake, in the wildest and least traveled portion of the Okefenokee. Here we were at a veritable outpost of civilization, and yet the first thing we noticed on our arrival there was the absence of birds and other wildlife.

We wondered about this at the time, and received our answer a few days later, when we met three native hunters—brothers—who had a permanent "camp" on Big Water Lake. We learned that they had lived there for the past five years. They went "outside" only to secure salt, flour, and gun shells, and to dispose of their furs, legally and illegally caught.

With their guns, they secured food in the form of hawks, owls, woodpeckers, and even the smaller birds, as sparrows and wrens. In the spring and summer they lived on young birds and fresh eggs taken at the enormous rookeries in the swamp. Now and then they caught a few fish for

their wilderness table. They lived literally on the "fat of the land." We met and talked with them, collectively and individually. We found their camp strewn with feathers and skeletons of birds and animals.

Next to the wonderful stands of cypress, perhaps the most tragic depletion of any one species was of the alligator. Even now, in riding or walking through the swamp, one occasionally stumbles on the home of an alligator, an open, black water hole from ten to fifty feet in diameter. These alligator holes, which once boasted reptilian inhabitants, are now deserted. During the past few years, when alligator hides were valued at two to six dollars each, native hunters combed the swamp in their narrow boats, hunting the reptiles by day and night. By day they shot them as they lay sunning on fallen tree-trunks or in the edge of the prairies. By night they hunted with lights, shining the 'gator's eyes.

Sometimes the hunter would kill as many as a dozen alligators in the course of a night, and in this manner thousands of the saurian monsters were taken out of the Okefenokee. Now only a few are left, hidden back in the impenetrable portion of the swamp. Even these, with hides valued at less than a dollar each, were in danger of complete extermination. In low water, the hunter would leave his boat to comb the mud flats and prairies, carrying a long pole with a hook attached to its end. He would find the den, prod into the mud until the alligator was located, then jab the barb into the reptile's back and drag him from the water on the end of the hook.

Nor is the alligator the only form of life being wiped out by the unscrupulous hunter. The Okefenokee Swamp was once a refuge for thousands of ducks, geese and other migratory wild fowl. One could flush wood ducks, mallards and black ducks from behind the grassy clumps and out of hidden pools. Sandhill cranes and wood ibises, or, to use a more familiar term, the American storks, were there in abundance. Even as late as last winter, the swamp had an unusual visitor. A whistling swan, regal bird from the arctic circle, came south and stopped in the Okefenokee. A native hunter's gun brought it down, and when the bird was discovered, it had been picked for cooking. Only the head and feet were saved as a record of this rare bird's visit.

Probably one of the first records we have of the Okefenokee was given in 1773 by William Bartram, botanist and explorer. Bartram says:

The river St. Mary has its source from a vast lake or marsh, called Ouaquahenogaw, which . . . occupies a space of near three hundred miles in circuit. This vast accumulation of waters, in the wet season, appears as a lake and contains some large islands or knolls, of rich high land: one of which the present generation of Creeks represent to be the most blissful spot of the earth; that it is inhabited by a peculiar race of Indians, whose women are incomparably beautiful . . . that their husbands are fierce men and cruel to strangers. They further say that their hunters had a view of the settlements, situated on the elevated banks of an island, or promontory, and that in their endeavors to approach it, they were involved in perpetual labyrinths, and like enchanted land,



Minnie Lake, Okefenokee Swamp, inaccessible and seen by few persons except native hunters



Native Hunter, Okefenokee Swamp, wilderness area on boundary of Florida and Georgia



Okefenokee Swamp, called the largest fresh-water swamp, with its dense forest of virgin cypress hung with Spanish moss



still as they imagined they had gained it, it seemed to fly before them, alternately appearing and disappearing . . . . It is certain, however, that there is a vast lake, or drowned swamp, well known and often visited by both white and Indian hunters, and on its environs the most valuable hunting grounds in Florida, well worth contending for by those powers whose territories border upon it.

The Indians of which Bartram spoke were probably the Seminoles. They made their last stand in Georgia in the Okefenokee (or as Bartram interpreted it, the Ouaquaphenogaw) Swamp. Its depths were also one of the last strongholds in Georgia of the panther and Florida wolf. The whooping crane and ivory-billed woodpecker, which were once common birds in the dense, semi-tropical forests and on the broad watery "prairies," are now thought to be extinct.

Steve and I spent two weeks within the boundaries of this magnificent creation during the year 1931, when the great drought came to the southland and the streams dried up in their banks. The water of the Okefenokee, which normally covers an area of approximately 300,000 acres, evaporated until it stood in a few of the deeper lakes and pools, and covered only about one per cent of its usual area. That year the birds did not migrate southward on their usual schedule and the bears were late in leaving their summer homes. They all remained for the feast of fish which awaited them in the shallow ponds and on the wide mud flats. The anhinga, or snake bird, and the wide-winged stork ranged the swamp in countless hordes, taking their share of the food. Raccoons were more numerous than I have ever seen them anywhere. They fed at night, but we could spot them during the daylight hours, lying high in the flat forks of cypress trees, absorbing the warm rays of the sun. Otters, playing among half-sunken logs and tree tops, were not uncommon sights.

Fishing was superb. The fish, concentrated in the deeper lakes, were hungry, and taking them on artificial lures was a simple matter. There were times when we caught them as fast as we could cast a line, extract the hook with pliers and cast again. We kept only enough for our table.

Contrary to general opinion, the water of the Okefenokee Swamp is not poisonous or in any way disagreeable. We found it sweet and clean, and as healthy as the water which came out of our faucets at home. Laboratory tests have proved that fact. But the water on top of the lakes and pools is warm in the summer months, so we followed the native method of "digging a well."

With a machete we cut a square foot of sod out of the wet swamp floor. This immediately filled with muddy water. Then we sliced a narrow trench, or tail, into the mud at right angles to the well. After this second block of sod had been lifted, the well looked like a gigantic tadpole.

Then one member of the party dropped to his knees, and with his hand, threw water out of the well. Thus the muddy water was drained from the main chamber of the well, and soon we had cool, clean water.

While we have found the canoe to be very satisfactory in the swamp, sometimes we use the native method of transportation. It is a most unique one. The native makes a narrow swamp boat, usually sharp on both ends. This he propels with a long pole, forked on one end that it might find a grip against sticks, logs, and lily roots buried in the mud.

In traveling from one section of the swamp to another, the swamper must follow the black water trails, called "runs." These runs are usually choked with lilies, termed "bonnets" by native vernacular. Sometimes, too, they are filled with logs, and traveling through them is an almost impossible task. Where there are no water trails, a boat cannot travel and walking ends in tragedy. The mud sucks at the feet, dragging one down, and he never knows when he will plunge out of sight into a bottomless hole.

The "prairies," which cover thousands of acres, if not the most beautiful, are certainly the most interesting section of the Okefenokee. They are formed from floating islands of peat on which grass and weed seeds have sprouted. Through the generations, these islands have grown together into a mass of floating land, broken only by a few runs and trails through them. This "prairie" land will support the weight of a man if he moves continuously across it. A heavy, motionless object will quickly break through the layer of artificial earth and plunge into the black water beneath. By stamping his foot, one can set the land quivering like a mass of jelly for many yards around him. I have seen one of the guides cut a square hole in this floating land and push a fifteen-foot pole out of sight into the black water beneath.

These prairies teem with many forms of life. The prairie rat lives on them, building its elevated nest out of grass and having numberless underground burrows from one nest to another. Large cotton-mouth water moccasins frequent that section of the swamp, being more numerous where the rats are found, and occasionally one finds the open, black-water home of an alligator.

Recently a southern Georgia county provided funds to build a road through the heart of this last southern wilderness. The road was to be constructed as a short cut to the central portion of Florida. It threatened to open the Okefenokee Swamp to every automobile traveling north and south.

The purchase of the land by the U. S. Biological Survey opens an opportunity for the restoration of this beautiful southern swamp to its former attractiveness. Once it is placed under proper protection, birds and animals will come back in abundance and make it a spot that every naturalist will want to see. Creatures of the wild are quick to recognize the extent of wildlife boundaries and to take advantage of protection offered them.

Yesterday, Paradise was doomed. Today, it has been saved by the action of those who recognize wildlife values.

## The Contribution of State Parks to the History of the States

By RICHARD LIEBER, Indianapolis, Ind., President National Conference on State Parks

EDITOR'S NOTE.—This excellent address was given at the Banquet of the Sixteenth National Conference on State Parks, Hartford, Conn., June 2, 1936.

AT OUR last year's annual Conference at Skyland, Virginia, I pointed out that next to the scenic quality of desirable park lands, attention should be paid to its own history and that of its environment. We have found, in many years of experience, that the value of these great recreational places was decidedly enhanced, if we had been successful to discover the bonds which tie up an unspoiled bit of scenery with its own historic past.

This year, with your permission, I would like to consider the reflexes which emanate from this work.

So important, indeed, has been the recognition of history in our state parks that in several notable instances we had to go beyond the fixed scheme of parks and create historic state monuments. These monuments are in correlation to the state parks, and wherever additional opportunities for wholesome public recreation offered itself, it appeared wise to separate the dignity of a historic shrine from the adjacent center of joyous recreation.

National parks and state parks—I refer, of course, only to those which, in the fullest degree deserve this title—are our outstanding national monuments. In a thousand years from now, there will be little, if anything, left of man-made monuments of our time. The face of the very country itself will be so changed that no one could possibly reconstruct the America of our day, were it not for these great natural monuments which wise use and sympathetic treatment have left in their glorious, original condition. It will not be more than fifty or one hundred years, certainly a short span of time, before our streams have been so perfectly regulated that they no longer bear any resemblance to their pristine condition. We have a mania for building reservoirs, called lakes. Would it not be far better if we would pick up, here and there, lovely streams, still in their native, unpretentious condition, and see to it that they remain forever undisturbed and "unimproved"?

Let us be firmly determined to keep out of our parks all artificialities. Do not attempt to gild the lily. Compact your material needs in a service area, and remember that you are not the heir, but the steward of a great inheritance to be handed over unimpaired to posterity.

Park work, whether national or state, is part of the greater scheme of conservation, and it is but natural that the care and protection of our American scenery is inherently of historic and social importance.

Nature and History comprise the total of all manifestations. In the

one, we largely face correlation—Space; in the other, consecution—Time. The first order applies to natural substance where motion is constant change, albeit in periodic recurrence; the latter applies where, in this motion, continuous progress is noted.

Such progress is not immediately perceptible in nature, but only in the manifold expressions of human endeavor.

These expressions arrest the interest of the historian, for it is the object of history to delve into the process of creation and development of progressive moral ideas and attempt an understanding of the past on the basis of material—physical or intellectual—still present with us.

As the ever-fleeting present is but a cleavage separating us from two eternities—Past and Future—the vast importance of history of our every-day conduct should be evident.

Knowledge of one's self is as important to the individual as to communities and nations. Any sound development and fruitful activity is predicated upon it.

Historic feeling added to any worthy enterprise acts like a flood-light of information and gives greater security to the proper direction of our efforts.

Our every-day existence has become intensely intricate and complicated, but hopelessly so only to him who in bewilderment beholds this whirring million-gear social and economic machinery ignorant of its origin and construction.

It is ignorance of our historic evolution that makes it at times so hard to comprehend our present day, let alone our destinies. Inevitable History! Inevitable indeed, for everything that happens or will happen had its origin in the past.

The great epic of America has not yet been written. But when that time comes an unexampled story of the conquest of a continent through daring, fortitude and creative genius will be told. A tale as of old—of hardships, colossal waste, bloodshed, of cruelties and of hope deferred; but also of gigantic endeavor, of high superhuman perseverance and of high achievement.

When the story will be written we will have an adequate comprehension of the native richness of our land and of the support these great natural resources were to the pioneer and settler, as they are today, in their remaining forms, to us.

From the sacred codfish of Massachusetts to the prolific salmon of the Columbia, through three thousand miles of primeval forest, over prairie and mountain and still more forests, the pioneer slashed his way. Fish, game and fur-bearing animals sustained him. With him came his family. When that story of our country is once conceived, the glorious part which woman played will stand out. No empty flattery to gain her good-will and vote, but plain historic justice and recognition of the

fact that present-day mighty America is the result of colonial and pioneer family life.

Where are the great man-made colony schemes elsewhere in the world and how have they fared?

If they sneer at us in Europe over our exaltation of womanhood, let them remember the part they played at Plymouth Rock, at Jamestown, in the "dark and bloody ground" of Tennessee and Kentucky and a thousand other outposts of privation, peril and self-denial.

Today when I go out to our state parks, that proud remnant of colonial, of revolutionary and of pioneering times, I cannot but think that History is a living thing. And when I add to those in many of our States, places like Nancy Hanks Lincoln Burial Grounds, the Corydon State House, the Lanier Home and the Tippecanoe Battlefield in my own State of Indiana, I begin to understand that no group of adventurers, however brave and daring, would have successfully finished this conquest of a continent alone. The fathers of our country were fathers of their families first. The conquest was achieved because the women helped to preserve home and family.

Preserve the family and you will preserve the State. Protect your land and it will protect you. Have faith in that American dream of a better, richer and happier life for all our citizens of every rank, of which James Truslow Adams speaks, and which he truly holds to "be the greatest contribution we have as yet made to the thought and the welfare of the world."

Like mighty altars of the Master stand these parks, masterpieces of creation and crowning glory of our country.

It is a rare privilege to be in touch with men and women who love this unbroken wilderness.

It is a profound joy to be with those who, undisturbed by the din and roar of our machine-driven perfection, understandingly listen to the babbling of brooks and babes, to the song of the stars, the symphony of the winds in dale and glen, and who in all humility feel themselves drawn to the Eternal because they know His voice.

It is a comfort and a reward to be permitted—in ever so small a way—to contribute thought, effort and love, in helping to fill the ranks of those who stand guard over that most priceless heritage of ours, the unbroken American wilderness.

We are appreciative of the blessings of our industrial age, but will not be misled into accepting material comforts in exchange for our eternal souls. We know full well the price we pay for our mechanized existence and gladly pay it, for the machine has released us from much debasing drudgery and has given us a measure of leisure unheard and unthought of in bygone days.

This leisure we possess as the supreme gain of a mankind unchained. And there we stand, with fetters broken—at once blessed

and cursed—for as yet we do not know what to do with our new-found freedom.

Notwithstanding our great material wealth and prosperity, but rather on account of it, we must put to work this leisure time, for idle thoughts and idle minds are worse even than idle hands.

As long as we remember that material comfort is a means but not an end, we are safe. Whenever we forget it we shall necessarily become the abject slave of our own devices.

We must seek and will find the torch-bearers to lead us onward and upward out of the vale of brute existence into the sunbathed heights of a fuller life.

And how to follow this way? By retracing our steps, employing our leisure time and thought to relearn long-forgotten but eternal values.

We all hunger for the natural and spiritual, so let us seek it where "Heavens praise the Eternal's glory," out in the undefiled wilderness.

From the Atlantic to the Pacific, from the Gulf to the Great Lakes, over vast mountain ranges, majestic rivers, through fertile valleys, prairies, over cities, large and small, stretches that matchless country we proudly call our home.

It is our country! All we have and all we are, we owe to it, so let us think more of our duties and obligations than of our rights and privileges.

In our own country—here in the glory of its yet unbroken wilderness, we have the finest sermon on true Americanism. Here is a wonder which native and foreign-born alike may understand, in which they may take pride and from which they may draw inspiration. Here is the true expression of the Spirit of '76. Here an illumination of "The Land of the Pilgrim's Pride." This untamed wilderness is a harking back to the fundamentals of our Republic, representing as it does a bit of the sacred soil from which grew the Declaration of Independence and the Constitution. And if any more is needed—a constant reminder of the very source from which our present-day comfort and prosperity have flowed.

If all this is to survive, if a troubled mankind is to advance another étape on the road to Damascus, then let us strive with might and main to protect, to preserve and to glory in our unbroken, untamed American wilderness.

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- PROCEEDINGS** of the National Conference on City Planning (now merged with the former American Civic Association into the American Planning and Civic Association), 1910 to 1934. (The Proceedings of 1910, 1911, 1912, 1913, 1914, 1919, 1920, 1924 are out of print.) 901 Union Trust Bldg., Washington, D. C. 1927-1934, \$3.00. Prior to 1927, from \$1.50 to \$2.50.
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## PART II



# PLANNING FOR CITY, STATE, REGION AND NATION

PROCEEDINGS OF  
THE JOINT CONFERENCE  
ON PLANNING

MAY 4, 5, AND 6, 1936, RICHMOND, VIRGINIA

American City Planning Institute  
American Planning and Civic Association  
American Society of Planning Officials

AMERICAN PLANNING AND  
CIVIC ASSOCIATION

901 UNION TRUST BUILDING, WASHINGTON, D. C.



COMMITTEE ON PROGRAM AND  
PROCEEDINGS

FLAVEL SHURTLEFF, *Director of the Conference*  
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# Introduction

By ALFRED BETTMAN, Cincinnati, Ohio  
President, American Society of Planning Officials

THE annual planning conference is now entered into jointly by the three organizations which resulted from the reorganization a year or so ago of the planning movement, namely: the American City Planning Institute, the American Society of Planning Officials and the American Planning and Civic Association, representing respectively, in a general way, the professional group, the group which is officially connected with the making or administration of plans, and the group which is engaged in promoting the movement and creating popular support for it.

I think it may be said that it will not be necessary for each of us as we speak to define planning, especially as we have been spending many years unsuccessfully in arriving at a definition, but in general we mean the sort of thing we have done in *city* planning, the designing of the uses of land for human purposes and for the protection of human welfare. That may be said to have been begun in the field of the city thirty-five years ago. I believe it grew out of two streams of recognition of the problem. Those who had had some experience with city administration began to realize the wastes of uncoördinated, unplanned effort in the different administrative departments and the different administrative activities of the city.

I doubt whether at the beginning the social objectives were considered. I think this first sense of the need of coördination and adjustment by means of design- and program-making was felt rather as an economic than as a social activity idea. But, at any rate, there was here and there throughout the cities this sense of the need of having the street and recreation activities and so on programmed so as to assure each department getting itself under way and keeping its end up.

The second stream, so far as organizing the movement is concerned, was that which we call zoning, which was simply urban land-use classification in the case of privately owned land. It developed with the growth of the automobile, which involved the invasion of residential districts by garages, and to some extent also out of special experiences such as that of New York's Fifth Avenue with the invasion of the textile industry into that fine shopping street. These two streams and possibly others came together to produce the city planning movement.

As we discussed and talked we began to realize more and more, in the first place, that zoning was not separated from planning, but that it was simply a feature of it, a feature which could not be successfully met without an equal amount of attention paid to it, an equal amount of effort put into it, and with the same thoroughness as is put into all the other features of the lay-out of the city.

That is one lesson we learned. Another lesson was that our objectives were social, that we were originating the street system and the recreation system and the school system and all the rest of it in order that human beings who live in urban areas might live better lives; more orderly, more convenient, more healthful lives. So I feel that gradually the city planning movement became enriched by the consciousness of its meaning, its social purpose.

In the meantime there had been going on, especially in the colleges, and more particularly in the agricultural colleges, studies of the classification of rural land. I do not think that either the city planner knew, or that the men studying land-use classification of the rural districts were conscious of the fact, that in technique and in objective they were parts of the same idea. They grew up separately; they have not yet realized that they are parts of the same idea, and one of the things that we should bring about is this realization that they are fundamentally, in objective and in method, the same, differing only in the factors which rural areas or suburban areas or urban areas contribute to the problem.

There came along the depression, and that produced a consciousness of the terrific wastes of planlessness in the national and state fields. The National Planning Board, and its successor the National Resources Committee, realized that the same wastes had caused an enormous national loss, whether one expressed that loss in terms of dollars and cents or in terms of social ills, and from this realization grew the national planning movement. It inspired and brought into being the state planning movement and the great river basin regional movements, and consequently this fundamental concept is now present in more or less degree in each of the geographical and political fields and levels.

The tremendous interest in national planning and state planning by virtue of the prestige which, of course, national action always carries with it, and of the men who have engaged in it, and the novelty of it, the somewhat thrilling size and magnitude of it, and its ideals, has tended rather to overshadow city planning. That is something we must counteract because no skill, no high degree of thought, no degree of thoroughness in national, state or interstate planning will provide for the social welfare of the American people unless local planning be kept alive and growing and made effective.

So I think it is somewhat symbolic of a correct point of view that this national conference begins with the subject of city and local planning. The activities of the city come home to us and contribute to our welfare from the beginning of time, over every minute of the twenty-four hours of the day; the air we breathe and the water we drink in the cities, the streets we walk or drive upon going from business to the home and from the home to business. The quality of our lives is very much affected by what goes on in the public activities of the locality.

So there will be no real, general health in American life unless local planning be kept as alive and as growing as in the higher levels of the planning field, not higher in the sense of more important, but higher in a political and geographical sense.

Mr. Pomeroy was to have read the first paper, "City Planning Extends Its Boundaries," but because of illness is unable to be here. Mr. L. Deming Tilton, one of the most active men in the practice of planning in Southern California, has consented to speak on the same subject.

## City Planning Extends Its Boundaries

By L. DEMING TILTON, Santa Barbara, Calif.,  
Consultant, California State Planning Board

I AM HAPPY to be before you this morning because it gives me an opportunity to call to your minds that there is a tremendous interest in planning on the other side of the continent. The State of California is definitely committed to the system of planning with some thirty county planning commissions, about half of them active, and about ten of them possessing technical staffs and budgets to carry on a regular program of work, with a good many cities actively engaged in planning and carrying on during the depression period with about as much vigor as they did before. That is the record over there, and I want to call it to your attention as indicating that planning is still regarded as an important function of government out on the Pacific Coast.

There is a general recognition today in California, as elsewhere, that planning has moved into wider fields. The city is seen as a part of the organism that is known as the State; it is a definite area set aside for certain particular functions. We have an illustration of that in California—the importance of seeing our urban areas devoted to the functions which they are fitted to serve—in the case of a little town called Newport Beach, which lies south of Los Angeles. It is a recreation community pure and simple, and exists for the primary purpose of enabling people to go down to enjoy Newport Bay. Yet the city council of that city just a few months ago in a moment of weakness—after the Federal Government had spent about a million and a half dollars to dredge their bay to make it more useful for recreation purposes—the city council of that city, forgetting that the primary function of the city was recreation and pleasure, voted to grant permits for canneries on the waterfront, thereby introducing an element which everyone was bound to say would very largely destroy that whole area for the purpose for which nature ideally fitted it. We argued that Newport Beach should function as a recreation community in the interest of giving the entire State a balanced type of development—communities devoted to recreation here, communities devoted to industry there, and communities devoted to commerce elsewhere. When that point was presented

to the Newport council they said: "Let's revise our zoning scheme, and let's keep this community a recreation community and do everything we can to enable it to discharge its function."

Now that is merely a thought that indicates by an actual example how the cities have to be regarded as functional elements in the larger region with various kinds of roads, as Mr. Bettman has indicated, running out into the larger areas. There is the water supply that has to be brought from great distances into the city; there are forest areas that have to be depended on for the supply of essential building materials; there is, of course, the agricultural background which the city dweller must have some interest in because that is where his food is produced. It is that new understanding of the relationship between the urban communities and their functioning and the larger region which they serve and upon which they are dependent that gives this planning movement at the present time its wider scope.

The problems of the cities, however, are still acute and difficult to solve. The principal problem today in cities, as we all know, is that of trying to find some corrective for the spread of blight and decay at the heart, and that is a very difficult problem, one which challenges the ingenuity and thought of everyone engaged in this line of work. Another job, it seems to me, is to indicate clearly to those who are concerned with the improvement of power distribution that there is a special function in government today that has to be performed by someone. He can be called a planner or any other title you want to apply to him, but planning there must be, and it is possible within cities to show easily what we mean by planning.

This whole program in terms of our own individual interests and in terms of our group interests is vast. The problems are intriguing, and it is, after all, a work that has possibilities of giving us a rich sense of satisfaction in the knowledge that what we do, even though it may be just a little, is for the benefit of our fellow creatures.

## THE CITY





## City Planning and the Urbanism Study

By L. SEGOE, Cincinnati, Ohio,  
Director, Research Committee on Urbanism, National Resources Committee

WHEN invited to make a statement at this Conference on the subject "City Planning and the Urbanism Study," perhaps I should have referred the program makers to Mr. Eliot's paper at last year's Conference in Cincinnati, "New Approaches to Urban Planning," which, although we didn't know it at the time, announced the intention of the National Resources Committee to undertake the Urbanism Study and pointed out its significance as a means to a new approach to urban planning. Having overlooked this opportunity of escape, I shall endeavor to present the subject in closer perspective.

City planning, or, more accurately, the planning of the physical structure of urban communities and regions (which is really what we mean by the abbreviated term) and the research study of urbanism are related to one another in a number of different ways. In some respects the relation may be said to be reciprocal: the findings of the Urbanism Study being expected to offer a more solid foundation for the planning of urban communities and regions, to supply over-all controls and general directives; in turn, city planning, from the standpoint of the Urbanism Study, is one of the tools for accomplishing such improvements in the condition of urban life as can be brought about or fostered by the re-shaping of the physical structure of urban communities.

In general terms, the objectives of the Urbanism Study are to determine what the rôle of the urban community is in national life; what the social and economic functions are which can best be performed in urban communities; and what can be done to enable these communities better to perform such functions and, at the same time, to remedy and combat the evils and problems which appear to be associated with intensive urbanization.

The urgent need for at least a preliminary study of this sort was called to the attention of the groups here assembled during last year's conference by Dr. Merriam. He pointed out the difficulties confronting the governmental agencies and the planners of government in formulating programs of action affecting urban communities and in determining the correct policies on which to predicate such programs, without answers to some of the following fundamental questions: What kind of urban community should we desirably plan for? Should we encourage the building of larger and larger cities and the further concentration of urbanization or should we foster a wider dispersion of urbanization? Should public and private policies be directed towards industrial centralization, dispersion, regional specialization or diversification and balance? Should we try to improve the lot of the workers of congested industrial centers by encouraging them to move to smaller communities

and attempt to take their jobs with them, or should we seek to accomplish the same ends by transforming our cities and industrial areas into places where these workers will have a more decent environment in which to live?

Whether we should plan for the rehousing of much of our working population in the larger cities or in the smaller ones; whether we should attempt to discourage further urbanization by new Federal policies in respect to transportation and rates, the distribution of public works, and relief, or what form of urbanization we should encourage; whether one kind or another kind of city planning policies, land policies, transit policies, etc., should be pursued by our local governments—all will depend on the primary question, what do we have to look forward to in the matter of further urbanization and what is the direction we desire that this should take, to produce the kind of urban communities best adapted to the rôle these are to play in the social and economic life of the nation and in which we can expect to find or provide most of the good things and least of the bad of city life?

Search for the answers to these questions opens up an extremely broad and complex field of inquiry. We should have to ascertain the extent and nature of urbanization and its effects on urban life as well as on our national life; the forces that may be presumed to cause it; the probable future direction of the movement; and the means which may be employed to guide and control it.

1. What have been the effects of increasing urbanization and its concentration on various aspects of urban and national life, and what variation may be found in the consequences of urbanization in cities of different sizes and types? In somewhat more detail, what have been the effects?
  - (a) On population—its composition, characteristics, fertility, mortality, migration.
  - (b) On the economic and social conditions of the population.
  - (c) On the general physical development of the community.
  - (d) On health, safety, security and welfare, on recreation and education.
  - (e) On transportation and other public services and facilities.
  - (f) On the economic, political, and legal order.
  - (g) On culture, arts, science, and religion.
  - (h) On governmental administration, local, State, and Federal.
2. What are the forces and factors and the public and private policies fostering urbanization, and what changes may be expected in such factors and their influence?
3. What can we anticipate concerning further urbanization and what national policies might be formulated so to influence or control it as to mitigate present problems, guard against the creating of new ones and assist the cities in improving the quality of urban life?
4. What instruments and methods may be employed under our political and economic system for controlling urbanization and for dealing with the problems incident thereto?

No definite answer can be found probably to several of these questions but we will have to have some answers to most of them if we are to understand the process of urbanization, the forces that produce it and equip ourselves to chart the course of its future. No one will deny that an attempt to find these answers would be an extremely large and complex undertaking. "The growth of large cities constitutes perhaps the greatest of all problems of modern civilization," said Mackenzie towards the end of the last century, and he could not possibly foresee what has transpired since.

The present effort of the Research Committee on Urbanism cannot hope to make an exhaustive study of such a problem because of time and other limitations. Such a study would have to be conducted over a period of years and demand much more information and data about urban communities and regions than are at present available through public and private fact-collecting agencies. The present Urbanism Study can only hope to make an initial exploration of the field on a rather broad front but with limited penetration. By necessity it is focused on several major phases of the problem of urbanization which are pressing for attention by reason of developments during the last few years and the need of determining some guiding policies arising therefrom.

In their relationship to urban planning the studies programmed by the Research Committee on Urbanism may be grouped in the following four categories:

1. Those that deal with some of the most important factors expected to influence the future course of urbanization: population, the locational trends of industry, transportation and rate-making policies, power distribution, communication, etc.

It is anticipated that these will throw light on the probable future amount, distribution and characteristics of the future urban population.

2. Those studies that will compare the relative advantages and disadvantages of communities of various sizes and types, also of the urban and the rural way of living and will strive to discover the reasons for the presence of certain problems in some communities and for the absence of like problems in others.

These ought to lead to some conclusion as to the desirable types of communities, not perhaps in terms of size but in terms of the minimum standards of social and economic existence and of physical environment.

The uncovering of cause and effect relationship may furnish a new set of remedies, and illuminate the social origins and consequences of the existing maladjustments and deficiencies in our cities.

3. Those studies that will examine, appraise, and endeavor to improve the instruments already available for guiding and controlling the future development of the urban community, will seek to discover and experiment with new implements and methods of control, and will aim to strengthen them all by broadening the field of conscious social planning for shaping urban life.

City planning as practiced to date is to be examined to determine how effective a tool it has been and how it may be strengthened and made more effective. Experience with planned communities and neighborhoods is to be reviewed to ascertain their successes and shortcomings and the applicability of this experience to certain urban problems.

The effects of past and prevailing urban land policies and transit policies are to be traced to discover the influence these had on the development of urban communities and to what extent these may be held to be responsible for some of the maladjustment existing, to see what changes in such policies may be made to remedy these and to foster desirable future development and redevelopment.

An attempt will be made through experimental studies to explore the possibilities of rationalizing by industrial planning the industrial structure of urban communities and regions, directed not to produce just growth, as heretofore, but towards soundness of industrial development, greater stability, and the wiser use of natural and human resources.

An examination is to be made of recent trends in local government and the relationship of the Federal Government to cities, also the part that the unions of cities (formal associations, governmental and regional associations) can play in such relationship. These comprise the studies of the governmental machinery for implementing national policies and programs involving urban communities.

4. The studies of this category are to turn to some of the more mature foreign countries with a civilization like our own, to find out what we ought to look forward to in the light of their experience as a result of continued urbanization, what changes in our political, social, cultural, and economic life, what new problems and intensifications or lessening of old ones we should be prepared for. Likewise, to find out what instruments and methods were employed in these countries for guiding and controlling urbanization and dealing with the problems incident thereto and how effective these had been found to be, to determine which of these may be suitable and adaptable to our problems under our political and economic system.

With this summary of studies organized with respect to their relation to urban planning, and purposely severely condensed, it is now possible to discuss in more detail the relationship between City Planning and the Urbanism Study briefly stated at the beginning.

Manifestly, the studies in the first group will assist in answering those primary questions in the planning of urban communities which heretofore we have endeavored to arrive at without benefit of the overall controls and general directives to be developed by these studies. We had to grope almost in the dark trying to arrive at some reasonably acceptable forecast of such a basic question as the population for which the plan of the urban community or region ought to be prepared, and faced even greater difficulties when called upon to substantiate any such forecast not meeting the most buoyant expectations. Such over-sanguine

prognostications as used by official and semi-official agencies for the regions of New York, Chicago, Philadelphia, Los Angeles, Cleveland, Washington, and Boston, which in the aggregate, it was found, would absorb all of the national population increase and some more, would not have been entertained if there had been adequate knowledge of the national outlook. Likewise, it should be possible to gain the acceptance of zoning regulations more reasonable than those of New York under which, according to recent studies of the New York City Housing Authority, the area zoned residential would accommodate almost 77 million people and the business and industrial districts could provide working space for 340 million people. Perhaps we may even succeed in making an impression on the subdividers who provided enough lots around Chicago estimated to be capable of housing 10 million people and on Long Island to resettle the entire population of the five Boroughs of New York, and in comparably absurd proportions around Los Angeles, Detroit, Cleveland, and other cities.

More adequate knowledge about the locational trends of industry nationally, the probable effects of the reorganization of the transportation system and the wider availability of fluid power, should permit a sounder appraisal of the probable future of the community for planning purposes. It would no doubt stimulate the examination of the forces responsible for the growth of the community, and studies of the trends in direction and potency of these forces. This would be another approach to a reasonably sound prognostication of what the outlook is for the community, without which there can be no real planning.

With a reasonably reliable indication of future growth and with the aid of the studies of the comparative advantages and disadvantages of communities of different sizes and of the experience with planned communities and neighborhoods, it should be possible to formulate the basic general pattern of development appropriate for the specific urban community or region, which is to serve as a framework for the more detailed community plan. This would indeed be a new procedure in urban planning. Such a procedure, it seems to me, is fundamental to realize its full possibilities, although, I admit, it would be of no avail to attempt it unless we can develop stronger tools than heretofore available for carrying out such a plan.

The studies of the third category consist of the examination of the availability of several such tools and the ways these could be employed, including city planning itself as it had been practiced. Urban land policies, transit policies, the reorganization of the transportation terminal facilities are among such tools. The extension of the field of planning to industry and the securing of a stronger place for planning in government at various levels are additional avenues to be explored, for the purpose of strengthening planning and making it a more potent instrument for controlling the future development of our cities.

Some additional exposition may be of interest concerning the experimental industrial planning studies. It is not being proposed that city planning extend its scope to include this kind of planning, but it should not require much argument to show how important such planning is as a basis for the city plan and that it should be undertaken by someone. It has often occurred to me before, how *much* consideration we have given in the preparation of city plans to the configuration of the land on which the city is located and will continue to expand, on which the roads, schools, recreation facilities, etc., are to be built, and how *little* to the composition, the soundness and stability of the industrial structure on which the very existence of the community and its future depend.

The sample studies contemplated are to experiment with the possibilities of evolving a program of selective future industrial development directed towards attaining through better articulation of the industrial structure such aims as: greater stability of employment, improved organic relationship between manufacturing industries, fuller use of advantages in point of labor supply and special aptitudes, natural resources, markets, etc., and the coördination of the manufacturing industries with other productive industries such as agriculture, forestry, extraction, and with service industries. Also to demonstrate the desirability to the public and private agencies of guiding further industrial growth in accordance with a selective program.

In answer to those who would raise objections to such a program and any attempt at public control of the sort involved here, I wish to point to free land, tax exemptions, free rent, preferential utility rates, etc., that have been used by cities in the past to compete for industries without discrimination. What is proposed here is only that such inducements be extended with discrimination in accordance with a selective program of development.

Although city planning accomplished considerable good, taking into account that it is still a very young governmental function, at least a few of us felt for some time that it was deficient in two major directions: outwardly, because city plans were framed by the corporate limits or at the most by a border of a few miles outside, thus floating, as it were, not being anchored to or integrated with their immediate environs or with the broader plans for large regions and States; inwardly, because city planning stayed too close to the surface, because its approach was not fundamental enough, and because of lack of adequate tools with which to make a more fundamental plan effective.

The possibility of remedying the first of these major deficiencies—integration with the plans of region and State—appears now to be in sight with the state and regional planning movement in full swing. Assistance in a new approach to urban planning and finding new means for making it more effective, are hoped to emerge from the Urbanism Study.

## Large-Scale Housing and the City Plan

By RUSSELL VANNEST BLACK, New Hope, Pa., Consultant-Director,  
New Jersey State Planning Board

TO what extent has the Federal housing program been handicapped by the lack of adequate city plans? Are city plans essential to intelligent large-scale housing procedures? If city plans are important to housing, what special form should they be given best to serve housing purposes? These are among the questions that have been especially troublesome to both housing officials and city planners during recent months, producing, to put it mildly, much friendly conflict.

The planners contend that neither location nor character of housing projects may be well determined upon the basis of a three-day investigation by a zealous houser in a strange land, no matter how well he may be armed with real-property inventories. Housing officials concede that real city plans might be useful if such things existed but that, in their experience, such plans as they have come across are more likely to be obstacles than aids. They add that they have not much time for plans anyway—their job is building houses. The planners still insist that intelligent housing cannot be done safely on any considerable scale except with the guidance of good comprehensive plans. "All right," says the houser, "produce them."

I stand with my colleagues, the planners, not in support of all that has been done in the name of planning but in their insistence upon the essential contribution planning has to make toward solution of the national and local housing problem. To me, it is obvious that, since houses are a major part of the flesh upon the skeleton of the city plan, the plan can have little meaning except as it determines the housing pattern and defines the extent and character of and the limitations upon essential services to housing. If housing can be advanced safely and effectively without the guidance of comprehensive city plans, then what after all is the purpose of comprehensive planning?

There is both direct and implied criticism from housing people that existing city plans and information available at planning-board offices are quite universally inadequate to housing determinations. But this criticism seems never to include clear definition of what different and what more is needed.

There are, admittedly, all kinds of city plans and few indeed that represent any near approach to exhaustion of planning possibilities. The authors, themselves, would be the last to advance their plans as having reached the ultimate in either scope or refinement. Many city plans are frankly only introductions to planning in their respective communities. In few cities has there been either the money or the interest to do the real planning job. I venture that more money has been thrown into the making of any one of several recent real-property

inventories than has been available for city planning in the whole country during any given year since planning gained its new impetus early in this century. I think I can assure the housing people that their disappointment in the character and extent of existing city plans is shared with only slightly less poignancy by the planners.

But our purpose today is not to bemoan the shortcomings of past planning performance but to determine if we can the degree to which worthwhile housing is dependent upon what we call comprehensive planning and the kind of city plans that will be most helpful. Probably no more pressing problem faces either the public housing officials or the city planners. I believe that large concentration upon the job of rehousing the lower-income workers, in the relatively near future, is inevitable. We may soon find ourselves in the full tide of rebuilding many American cities. Added to the pressure of social necessity for more and better housing is the threat of chronic unemployment likely to seek at least a fair measure of relief through this form of expanded public activity. I may seem optimistic in thinking that enforced public enterprise will find one of its major releases in public housing, but such optimism as I have is leavened with enough realism to caution that whether or not public housing reaches any large proportions during your and my working lives depends in considerable part upon the quality and soundness of the beginnings. If behind public housing, from the start, there is no breadth of vision, if public housing accepts perpetuation of the old social and economic evils of the present outmoded form of American city structure, then public housing carries within itself the seeds of its own destruction and promises too little of permanent good to be worth serious effort. Really constructive housing offers an engaging challenge to housing experts, to planners, to planning boards, and to the entire citizenry of these United States. Good planning and good plans are essential safeguards of both the form and direction of public housing.

I do not wish to bore you with the technical details of the kind of city-plan background that many of us believe to be necessary to the proper selection of housing sites and to determination of the kind of housing that may be placed appropriately in any given locality, but a few rather specific suggestions may not be out of place.

First of all, I am rather convinced that a city plan which fails to serve such housing purposes as those of guidance in selection of sites, indication of the type of houses most appropriate to the site or sites selected, and direction as to appropriate street pattern, fails likewise and perhaps in equal degree to serve the various other purposes for which that plan is intended. In other words, any really good comprehensive city plan should be as effective in guiding these particular housing determinations as it is in directing street extensions and improvements, the routing of traffic, expansion of the park and playground system, and location of the new city hall.



For housing purposes, however, it may be that somewhat more than usual emphasis should be placed upon existing and future use-of-land studies. Existing use-of-land information should include: mapped indication of land and building uses and land coverage; approximate population density by blocks or by census tracts; and, possibly, a real-property inventory. For all general purposes, existing land and building uses and existing land coverage can be observed or shown most simply and quite adequately on a good large-scale air map. Existing population density usually can be determined with sufficient accuracy for general planning and programming purposes from information supplied by the most recent census count and by the existing use-of-land map. The real-property inventory serves multiple purposes but, so far as city-wide application is concerned, is most valuable in determining the extent of deficiencies in the various dwelling types and in establishing a scheduled construction program to correct these deficiencies. It is probable that, in most instances, the detailed real-property survey can be limited to otherwise determined specific problem areas, leaving quantities of and vacancies in the several dwelling unit types to be got from other usually available public records or by special vacancy surveys.

Existing-condition surveys as outlined above are, of course, merely a matter of money, men, and mechanics. The real and the difficult job lies in the prediction and establishment of future land-uses, to be based upon visible needs, suitability, adaptability, and probable future demands. The future land-use study must extend beyond the confines of a city to visualize so far as may be possible that city's place in the future regional and national pattern. There should evolve a reasonably well-founded guess as to the qualitative and quantitative future of the city under study. This guess must represent a fine balance between what it appears the city should be and what perhaps irresistible forces are likely to make of it. Within such a guess of quantitative and qualitative probability, the next step is to allocate most logical and most desirable functions to the various portions of the city. This is to be done in accordance with a proper coordination of interrelated functions, in accordance with the relative adaptability of the several land areas; and in accordance with existing and still feasible service facilities.

The future use-of-land plan, not only for housing but for all planning purposes, should go far beyond the usual present-day zoning ordinance and plan which is essentially negative in its determinations. To be fully effective, the future use-of-land plan should be legally established and, at least with respect to residential neighborhood units, should be fixed and virtually unchangeable. Such a fixed land-use and population-density plan is, of course, a far cry from now established zoning procedures. It would require much more thorough and competent basic studies and plans than have been employed in perhaps ninety-nine out of a hundred existing zoning ordinances. It may be that neither the

courts nor the planners are now prepared to take safely this long step in planning. Observing the weaknesses of much of zoning in its present embryonic stage, I hesitate to suggest rapid advance into a more positive application of the zoning principle however seemingly desirable. I offer this suggestion, therefore, not so much as a recommendation for immediate and universal action as an idea important to real city planning—as an idea worthy at least of much serious experimentation.

Regardless of whether or not the future use-of-land plan can be legally established, it remains an essential foundation for the general city plan and for the housing plan and program. The future use-of-land plan both determines and is determined by the structural form of a city as shaped by transportation arteries, underground utilities, parks and other public properties, and natural features such as mountains and rivers. The structural form of the city as represented by the above public facilities *can* be fixed by law. God is not likely to change His mind very much about most mountains and rivers. Private building enterprise and the use of land can be controlled in some degree through zoning. Much of guidance can be exercised through land subdivision control. Public housing enterprise certainly can be established quite in conformity with the land-use plan. There is no real reason, therefore, for shying from such basic planning while waiting for the time of crystallizing the long-period use of land through direct legislation. The integrity of the land-use plan can be preserved in considerable degree through the proper employment of already available machinery.

It may be argued that housing deficiencies are so obvious in nine cities out of ten that no shot aimed in the general direction of these deficiencies is likely to miss. I have tried that kind of shooting at bunches of quail and usually have had better results from more selective aim. It is possible, of course, in most cities to find here and there, without much study, a few blocks of vacant or otherwise available land, in an obviously residential district, where chances of subsequent interference with other major improvements is comparatively slight. By sponging upon existing park, school, and other community facilities in the general neighborhood it may be contrived to build upon one of these sites a few hundred dwelling units, irrespective of existing and traditional housing densities and dwelling types, without seriously disrupting the prevailing conditions and the future prospects of the community concerned. If this were the beginning and the end of new housing or rehousing in a given city, perhaps something might be said for such a hit-or-miss procedure. But even so, basic to planning philosophy is the idea that first things should come first. I venture that, from point of view of long-time serviceability and of safety to itself, the superficially selected site will seldom coincide with the site selected upon the basis of comprehensive planning studies.

The public housing job, however, is not going to end with the build-

ing of a few hundred or a few thousand dwellings in a few scattered cities. Those who should know say that we need in this country between eight and ten million new or modernized low-cost houses. Sooner or later we are going to build these houses if not upon the persuasion of our social conscience, then in the interest of our economic salvation. Large portions of many properly situated cities will be rebuilt. This rebuilding cannot and should not take place, block by block, but by whole neighborhoods and upon completely modernized street plans. To perpetuate the old street patterns, with their disrupting qualities, their inefficiencies, and their disregard for amenities, would defeat those corollary purposes of new housing—quiet and assured residential neighborhoods, adequate public services at reasonable cost, and effective coordination of community functions. This does not mean that the whole rehousing job has to be done at one time but that it should be *conceived* as one operation and that each step should be taken in accordance with a preconceived objective.

May I repeat—if the comprehensive city plan is of any value and at all worth making, it has a vital part to play in the broad and adequate approach to housing, and further, if a comprehensive city plan is really good enough to serve the other purposes for which it is intended, it is quite likely to serve equally well the needs of the housing official.

## Effect of Certain Significant Characteristics of City Housing Projects of All Kinds Upon City Planning Procedure in Locating Such Projects

By FREDERICK BIGGER, Architect and Town Planner, Pittsburgh, Pa.

**I**T has been impossible for Mr. Black and me to attack our subject coöperatively as it was suggested we do. My approach to it is, therefore, an individual one; and I venture to revise the title so I may justify a special, if only partial, approach.

It is axiomatic that housing projects in cities (the only location this paper allows to be discussed) necessarily constitute elements of the city plan. They may be alike in that the definitive characteristic is that each project is "a group of dwellings." But beyond that, it is my impression that, between housing projects, there are significant differences which of themselves raise questions of some importance to the planner.

Perhaps we should not attempt any too exhaustive classification of housing projects; but I may be forgiven for observing that we as students, and the general public as the bewildered victim, do not have any very specific and accepted picture in our minds when we use the mere phrase "housing project." Therefore, some classification and definition is necessary for the purpose of this discussion. Two major classifications

are in order. That which concerns only physical characteristics is a more obvious one, and may be laid aside until we examine the other. That classification has to do with ownership, and its social and pecuniary objectives.

*Category No. 1.* I would limit this to a housing project which is designed and built as one thing *but is destined to be sold off*, dwelling by dwelling, to future individual owners. To design this sort of housing project is to design something as an entity which will not remain an entity afterward. By this I mean that the individually owned small properties, into which the project will have been converted, are hardly likely collectively to retain intact the wholesome characteristics of the original unified design. Each of the individual owners will be subject to the vicissitudes and hazards of small property ownership, to which in the past our communities have been altogether too oblivious. Changes in the family financial status, or sale of a property to another family with a different point of view or different mode of living—these and other unpredictable conditions will tend to break down the original layout and character of the planned project. Therefore, from the point of view of the general public and from the point of view of the public officials, the kind of project here discussed may be nice to think of in the beginning, but is not an unqualified blessing for the urban community if the hazards of the future are considered. It cannot be emphasized too strongly that these hazards are real and serious; and, if time permits today, there should be discussion of this aspect of urban adjustment.

*Category No. 2.* Here may be included a housing project designed as an entity, but destined to be rented to many individual families, at the generally prevailing rates. This is a commercial venture, in which one or the other of two alternatives must be noted: (a) either continuity of ownership is implied, with the housing project representing a long-term-high-class *investment*; or (b) the ownership may shift from time to time, possibly quite frequently, with either gain or loss to the seller, in which case the method of handling the project makes it a venture of *speculation*.

In the case of the housing project which is an investment, the problem of the designer is to make a design for living, the conveniences and amenities for the occupants of the dwellings being a major consideration in order to prevent vacancies and to preserve tenant satisfaction and stability of income. In the case of the venture which is speculative, although the designer may have had comfort and amenity as one of his objectives, the actual manipulations of ownership have converted the project into something in which the housing is a mere *commercial commodity*, and the comfort and well-being of the occupants of the dwellings will in varying degree have less consideration than the primary pecuniary one.

*Category No. 3.* In this group may be included all housing projects

which might be carried out by a limited-dividend housing corporation or by a housing authority, wherein rentable dwellings are produced, calculated to serve people of modest or low income, and under a policy of limitation of rent and return on the invested capital. In this case there is a social objective, the promise of which is implied by the very undertaking itself; and the designer will provide all the comforts and conveniences that he can reasonably furnish with the money which is to be expended, and with a careful calculation of the probable rental that can be secured from modest-income and low-income families. The difference between this limited return on the invested capital, and the return upon ordinary commercially invested capital, represents the premium that is paid to achieve the social objective. This type of housing project, in theory at least, and, of course, if well designed, is a permanent asset as a part of the city pattern. However, it might very well be that such a project would be but one attractive oasis set down in the midst of other housing which is completely subject to commercial manipulation. In that event there would undoubtedly be a constant tendency for the desirable housing project to break down and become less desirable because of the conditions existing in the surrounding neighborhoods. This immediately suggests to the planner that, if at all possible, the future safety of a good project of this kind conceivably might be safeguarded if the project itself were completely surrounded by park areas which would effectively separate the project from the less desirable surrounding neighborhoods.

*Category No. 4.* In this group we must include all projects which are similar to that described above under Category No. 3, but different only in that the ownership is different, *i.e.*, the ownership in this case vested in the occupants of the houses, each renter being also a part owner of the entire project. This is the same idea that we know as the traditional English "co-partnership housing," and it is not essentially different in its principle of ownership from that applied in the familiar "coöperative apartment buildings." I reaffirm the warning to provide protection against the malign influences of blighted districts and undesirable housing which surround a well-designed housing project.

These four classifications, when reviewed, drive home to us the importance, to the planner, of knowing (*a*) whether a housing project is to be split up for ultimate sale to individuals; (*b*) whether it is to be utilized as a manipulated profit-and-loss commodity only, regardless of a paramount interest of the occupants of the dwellings; (*c*) whether there is a social objective contemplated, and in a measure secured by an effective limitation of income and of rent levels; and (*d*) whether or not the occupants of the dwellings are themselves the owners of the group of dwellings. The importance I assign personally to this matter may not have your concurrence; but I maintain that the issue is a vital one, even if we look at the entire matter without any bias favoring housing

projects based on social objectives as contrasted with housing projects based on pecuniary objectives.

*The Joker About Ownership.* If there were such a thing as a "realist," I think he would say something like this about ownership. He would admit that the possession of a title deed, and the complete freedom of the property from any lien or mortgage, could be called real ownership, since it involves complete control or opportunity to control on the part of the owner. On the other hand, if one holds a title deed to his property, but continues to be obligated to pay considerable sums to some money-lending institution on a mortgage or a note of any kind related to the property in question, then certainly ownership is only partially vested in the so-called owner who holds the title deed. He is not free to control; he may not be able to meet the financial obligations upon his dwelling; he may very well have to give it up and turn the property over to someone else who can pay to the money-lending institution the moneys that are due. In hundreds of thousands of instances of presumed ownership the ultimately effective and, therefore, the "real" owner is the holder of the mortgage. As I am not settling the affairs of the world, I pass on after posing the question: When is an owner not an owner?

*Relationship of Owner's Objective to the Problem.* Obviously those who hold an equity in property, those who hold a financial interest in it, are owners. If these owners are not identical with the occupant families in the project, then we have divergent forces. The needs of the occupants for more space and better living pull in one direction, while the demand for return on investment, or profit from speculation, pulls in the opposite direction. ,

There are those who would abandon the profit motive (if they could); there are those who would apply to it checks and balances; there are those who would have nothing but more and dizzier profits. Present-day planners in America know that the issue will be settled, if it ever is, almost without their assistance, even though they might contribute much to the stable evolution of an ultimate policy.

Why so relatively great a proportion of my presentation is devoted to this issue will be somewhat clearer if I give an example. The planner necessarily is controlled by the over-all financial consideration arising out of the cost of his land, the cost of revamping or building new public utilities, the cost of dwellings, the cost of attractive landscaping, etc., in addition to the basic item of cost of financing of the project. If he thinks carefully, he knows that he may have to provide funds for, and to design and construct, for example, sewers or a public school, because the city itself has not yet provided them to serve the part of the town in which he is proposing to locate his project. The designer realizes that the city with which he is dealing has not completely developed its entire utility system and school system for the service of a comprehensively designed distribution of dwellings, commercial buildings, and industrial

areas. If a purely pecuniary objective controls the designer, he will locate his housing project so that it can be subsidized by the existing community through an earlier provision of utilities and schools, even though some other location involving new construction of some of these facilities is a better one from the standpoint of the community's social and financial interest, *i.e.*, better from the standpoint of the city plan.

*Projects as Assets and as Liabilities.* We have seen that of the four categories of housing projects listed in the beginning, Number 1 (that which becomes a multitude of separate ownerships later) and Number 2-b (commodity housing on a speculative basis) might very well be said to promise no permanence and no stable contribution to the community. Those types might be thought of as leeches whose nourishment is filched from the social and economic life-blood of the more stable parts of the community. That would be a fair assumption, in the case of one because individual owners have no ability to cope with the disintegrating forces which surround them; and the other speculative one because its basic intention is to get the most out of the community, with the least possible contribution by itself. On the other hand, long-term investment housing, co-partnership housing, and limited-dividend-and-rental housing all share the need for certain stability and continuity of existence within the urban pattern. So we have every right to expect the community planner (city planner or town planner or regional planner) to look askance upon the two kinds of housing and with favor upon the others. That he must have an opinion is axiomatic, if he is to assist in the determination of the relationships of dwellings to open spaces, and of both to streets and other buildings, which relationships he must deal with as a planner.

*Two More Points.* There remain but two points that seem necessary to include in this presentation. One has to do with another kind of classification of housing projects, namely, that which concerns the actual physical arrangement in relation to the needs of the particular people who are to occupy the project. The other has to do with the procedure and technique of the town planner himself.

*Physical Characteristics of Housing Projects.* It has seemed to me that the discussion of what a housing project should be is one which has been and continues to be of prime importance to the people of this country. It is of paramount importance to those who take part in such a meeting as this. And it happens, fortunately, that many of those here present, and many other competent persons, are engaged upon those problems at this time under the leadership of the Federal Government. I do not consider it my function to describe either the physical characteristics of what ought to be done, or the multitude of cases that could be imagined. I do assert that a generous amount of open space, generously distributed, is a basic element in planning a housing project if that project is to be a socially desirable one, and if the financial values

in the project are to be stable and reasonably permanent. That is why, previously, the preference was expressed for those types of housing project which, judged by the type of ownership and the objectives of the owner, promise more stability.

*More Obvious Angle of Approach Ignored Here.* Again, it has seemed to me that the title of the subject which I am supposed to be discussing offered an opportunity to enter at considerable length into a discussion of the calculation of land values; the appraisal of the shifting aspects of population and the shifting of values from one locality to another; the character and adequacy of utilities and services of one kind and another; and, in general, the entire technique of preliminary analysis of existing conditions and synthetic formulation of new and better relationships which we refer to as planning. A discussion along these lines may be appropriate, it may be offered at any time, it is probably a perpetual one. I offer no apology for ignoring such discussion as of less fundamental significance than the points to which greatest attention is given in the paper now happily drawing to a close.

## DISCUSSION

MR. JOHN IHLDER, Washington, D. C.: Last week in New York I was informed that I was causing some gratification as being at least one housing worker who seemed to be optimistic, not so much because of certain definite things that are taking place, but because of the very rapid and widespread increase of interest in the subject of housing, and the realization that it is an integral part of a number of other subjects.

In this planning group we have, during the past few years, had a very progressive increase in the realization that housing is intimately connected with effective city planning, but there is a danger that the planner approaching it from a physical point of view, seeing things in a definite form, will go into too great detail or be too rigid in the application of his solution.

Mr. Segoe said a number of things that require a good deal of study and a good deal of consultation before we can get anywhere definitely with them, but, as you know, there was once a poet named Browning who penned the lines: "Unless our reach exceeds our grasp what is a heaven for?" We are trying to make something analogous to heaven here on earth, and our reach is exceeding our grasp at the present time. For example, Mr. Segoe blithely proposes we shall go into the matter of industrial relations, and even that of taking over the old discredited Chamber of Commerce practice of granting free sites, only doing it democratically and, of course, with intelligence rather than in the unintelligent way that local Chambers of Commerce used to do. Now it may be that this sublimated method may be effective where other methods appear discredited or futile.



Mr. Black proposes that city planning, in order to be effective, must take account of the kind of housing development that there should be in each part of the community. Every housing worker certainly would agree with that. For a good many years we have been advocating exactly that. Only remember that when one goes into details of that kind, if he is too rigid, if he says you "must"—and, as I understand it, Mr. Black is inclined to say "must"—instead of saying "Thou shalt not," he may impose handicaps which will interfere considerably with the development of the proper housing in that area of the city. There must be flexibility.

If the city planner, for instance, is going to decide exactly how wide every lot must be before approval is given to a housing development, he may impose just that additional handicap that prevents the development from being made.

Mr. Bigger gave you an indication of the various kinds of complications that the housing worker must face. I don't suppose that the city planner can possibly become technically informed on every question involved in the different kinds of housing financing, but he should have general information that will make him receptive to counter-suggestions from the housing worker when he makes his city plan in detail.

MR. HERBERT S. SWAN, Montclair, N. J.: I have been particularly interested in the paper read by Mr. Segoe because it recognizes that stability of industry is essential to proper city growth. Throughout the depression there has been a process going on of shutting down the high-cost plant and concentrating more in the low-cost centers. The situation today is practically this, that many of our smaller communities are, on the basis of the present industrial situation, from 25 to 50 per cent overpopulated. What are we going to do with these cities? Are we going to liquidate this surplus population or are we going to find work for the people to do? If we are going to find work for these people we have got to analyze the economic basis of existence of our community, and it is not sufficient that we draw plans.

We have ignored almost completely during the twenty years of this conference the importance of such things as raw materials and markets and the freight rate structure. Take such things as transit freight rates extended by the railroads. They are designed to equalize economic disadvantages between the communities midway between the producing centers and the consuming centers. They have had a tremendous effect on the concentration of building industries in many places. Such places as Kansas City and Minneapolis undoubtedly owe their industrial development in flour milling to this factor; such a community as Buffalo has its location at the foot of the Great Lakes to thank for the tremendous advantage that has come to it. One of the most important

factors in the centralization of the automobile industry around Detroit is the differential between set-up and knocked-down freight rates.

MR. JOHN NOLEN, Cambridge, Mass.: I am certainly vitally interested in both city planning and housing and am greatly concerned with the gap and the lack of understanding between the planners and the housers and puzzled to understand and more puzzled to know what to do about it. I agree 100 per cent with Mr. Black's general statement and his philosophy, and yet I believe that there is danger in any emphasis on what may be called rigidity. After all we are dealing with a living organism, biological in its character. A part of our difficulty may be that as planners we do not take enough into consideration that we are dealing with matters of real life. It is unfortunate that we appear before the public as academicians, as writers of books. Just now planning appears to be dead or sleeping, but housing is alive. If the housing people could more realistically adopt the planning idea of locating their housing projects with reference to existing city plans, or see the advantage of drawing upon city planning data where comprehensive plans do not exist or cannot be quickly drafted, much of our present difficulty would disappear.

MAJOR GEORGE W. FARNY, Morris Plains, N. J.: I have noticed that where two groups in the planning field consider themselves fundamentally opposed, and neither wants to give in, nothing is done. I am a trustee of the coöperative movement of America, but I find too often that coöperation means that the other fellow expects me to coöperate with him, but he doesn't want to coöperate with me. If the houser is expected to wait for the planner to present to him all that the planner wants to present, housing will never go forward. If the houser builds where the planner does not want him to, proceeds with the housing program without considering the planner, we are going to have even worse conditions than those that exist today.

MR. J. ROSSA McCORMICK, Scranton, Pa.: The separation between housing and planning and possibly the reason of it may be further illustrated by a recent story told of King Edward. He had visited the shipyards of Glasgow and had inspected the Queen Mary. From there he visited the slums of Glasgow, and is said to have remarked to the people who were attending him: "How is it possible that the scientific minds of the men of Great Britain have achieved such an excellent thing as that great ship, and on the other hand are content to allow the living conditions under which human beings are suffering?" Perhaps we do not, as planners, see the human element that enters into housing. The thing that we should achieve in America is that the man who has to work for a living shall be given enough wages to own his own home.

MR. FREDERIC A. DELANO, Washington, D. C.: I think that the city planner can make the greatest contribution to housing if he will address himself to the problem that is more aggravated in our country than in European countries, that is, the set-up of our cities. When it comes to where people's homes will be located—whether homes of the rich or the poor—there seems to be very little attempt at stabilization. When you consider that most of the altruistic housing projects are based on amortization in thirty to sixty years, it seems ridiculous to talk about them if there is not some definite plan of stabilization. When the city of New York adopted a subway system with stations every five to ten blocks, a destructive blow was dealt to many sections of the city. Where the stations were located values were greatly increased; between the stations properties were blighted. So, I appeal to you as a layman that you give close attention to stabilization of values.

MR. CHARLES B. BENNETT, Milwaukee, Wis.: I think raising the question whether planning should have anything to do with housing is an indictment of our intelligence. Certainly it is an integral part of planning. We have always considered it so in Milwaukee, perhaps because the Milwaukee Planning Commission is the housing authority. For years we have been making housing studies and when the Federal Government inaugurated its housing program we were prepared, and we worked closely with the housing division at Washington. If we have not established amicable relations, it is not because the problems are not related. In getting together each of us has to give up a little. The planner cannot design the apartment and neither should the houser select the site. The planner should have at hand those factors which should determine the location of housing projects. If he has not got them he is not qualified to do planning.

MR. WAYNE D. HEYDECKER, White Plains, N. Y.: The three papers presented this morning and the comments thereon all point to the need of greater attention to the quantitative side of city planning. The study that Mr. Segoe is making of urbanism has revealed the astounding excess of area provided for business and industry and even excess of housing sites that are already available in subdivided land. Some studies which have been made in Washington, for instance, show that under supposedly wise zoning ordinances areas have been provided for business many times in excess of those which can profitably be used. It does not profit the community to be forced to provide the city service facilities and public utilities for areas vastly in excess of those which can be intelligently used. We have wasted our substance in public expenditures far in advance of needs. The study that Mr. Segoe is making should be of inestimable benefit in bringing our estimates of future growth somewhere within probability.

MR. HARLAND BARTHOLOMEW, St. Louis, Mo.: The urbanism study will produce a great deal of interesting information that will be useful to us in the planning field. I hope it can be extended into the field of actual appraisal. For instance, will this information be used by those who advocate new forms of city development? Will it be used as a justification for the development of rural or suburban projects of the type proposed by the Resettlement Administration? Has the time come when we must admit that we are incapable of developing satisfactory cities by following the patterns which have so far been used? Now the fact that we haven't done more real appraising leads to a great deal of confused thinking on past trends and future programs. I know of communities where, because of planning, the growth is satisfactorily controlled. Some are self-contained, some are suburban communities. I know other communities wherein the planning commission has been able to discover the improper policies that have led to bad development. Now if those things were more widely known and studied in a number of communities and were found to be parallel cases, that in itself would be a very useful contribution in the planning field. I don't believe we can over-emphasize the importance of two things; one is the control of population density and the development of a very definite pattern which will result in better communities. The other is the working out of a very much more basic urban land policy.

## Revision of Zoning Ordinances

By ARTHUR C. COMEY, Assistant Professor of City Planning, School of City Planning, Harvard University

THERE have been a thousand reasons why zoning ordinances need revision today and every one of them is valid. They do not all apply to any one place, but practically every zoning ordinance in the country is in the same position in the end: it needs revision. We may consider zoning ordinances as they are from the point of view of the defects when they were written, the defects in their application, the fact that they are old, the fact that they are pioneers, the fact that the people who wrote them are departed, the fact that they could not get any money, the fact that they could not get any support for anything at all, practical or theoretical, the fact that there was no city planning. As to the hope of getting revision, I am not going to spend any amount of time on that. We owe no apology to anybody for the zoning ordinances that have already been perpetrated; they were drafted under conditions which were not within our control.

People wonder sometimes why the planners do not get up and do something. The unfortunate thing is that we are professional people. We can only serve our clients. We cannot go off in a corner and theorize about city planning and develop a wonderful structure. We have to have a body brought to us to work on, just the same as a surgeon, and with, I hope, as satisfactory results. But we have a very much greater difficulty in that we cannot do a thorough job and put out a new man. We have to patch up, as the public will allow.

But what is to be done? In the first place, it is fairly obvious from cursory observation that if every city and town adopted all the techniques and applications of zoning now applied anywhere in the country, every city and town would be pretty well zoned. In other words, our first job is to look around and see what other cities are doing. We made two investigations at Harvard not long ago. We found many cities where we had to dig the ordinance out of the town clerk's records because nobody outside of the town clerk knew the town was zoned, or, perhaps, no technician had ever seen the ordinance. Among those ordinances we found many valuable ideas.

Another opportunity in revision is not in the wording of the zoning ordinance, but in the map. We have heard a great deal on that; I do not need to dwell on it, except to bring it into the picture. Our cities are mapped for untold millions, untold thousands of feet of business area, great industrial districts. We did not adequately protect our cities because the map was too generous. The clue is not simple, because zoning has to be adopted in the face of public opposition. Those whom the zoning shoe pinches hardest are the ones that are energetic in opposition, and our well-wishers simply give us mild and friendly smiles.

Then we like to base zoning on comprehensive city plans. I have looked upon zoning as an opening wedge to get comprehensive plans into effect. Once a little of the city planning idea is tried the citizens are ready for more, and we give them a homeopathic dose in a moderate zoning ordinance.

Under those conditions the zoning became more like good house-keeping; it was an orderly procedure, making the city more orderly. It was not living up to the hopes of zoning by any means, but it was all we could do. There are hundreds of cities in that situation which have profited, and it is my belief that the ultimate complete zoning of cities in this manner has been advanced by this attempted partial application of zoning, this process of the adoption of a very mild preservation of *status quo*, and a little application of some of the principles we have had in mind.

Another reason that zoning ordinances need revision is the fact that zoning was a pioneer activity—at least, in New York and a few of the leading cities—and they knew they had to fight the case through the courts. Mr. Bassett has emphasized that point over and over again. I believe that the other cities of the country were well advised not to go beyond these pioneer leaders; they had not the resources to fight the legal battles which the interested private parties who were adversely affected by the zoning were bound to wage. For that reason, when people have asked me to send them a number of zoning ordinances, I have said: “Take one; the others are much like it.”

We have been criticized for that; I think not properly. We can excuse ourselves from that criticism because we had to consolidate the legal position. That legal position is now well consolidated. That excuse is no longer good, and we now have many towns branching out and adopting what makes some of our legal friends, who might approve a different zoning ordinance, shake a little bit or tremble with horrible fright because of the risks these towns are taking; but they also assure us that the upset of that particular feature in that town, if it should not prove to be tenable, will not damage the main structure. Since the main structure is now legally established, towns are perfectly within the proprieties to go ahead and try something new.

As to the other features in the ordinance—such familiar ones as use, height, area, density of population or number of families—all are capable of great extension in the control exercised to the benefit of the city, and there are several other features included in a few of the ordinances which can be applied to advantage.

In the first place, we have the refinement of the ordinance. Today where there is a comprehensive plan and an active planning board, the procedure is well understood and is part of the regular system of government. There is little use to try to refine the ordinance in a town where it is not well understood, although I see no harm in trying it. Zoning

is like trying to carve with a sledge-hammer. It is a crude weapon; but where the zoning works as a part of the plan and is a part of the regular administration, there is a chance to refine it, make it cut sharply, and actually to start a scheme which will really mold the city. The first opportunities are sometimes in the suburban and country towns, and we have seen several examples of that. There are also a few of our more prosperous cities where the refining process is beginning to give the protection that the community needs for its best development.

Now on the question of use. We are cutting down the opportunity for industry in those suburban communities to a negligible factor. Why? Because if the metropolitan area were being zoned, as a rule that particular residence section would not have any industry in it. Therefore, if it happens to be a separate municipality, why should it not be able to protect itself in the same manner? We let in perhaps one industry because the board of appeals or selectmen considers it not unsuitable for that particular location. That means protection such as these small communities have not had under the zoning plans which are based on the feeling that they must have industrial districts. We also can go further than we did at first and make sure that the local business districts, or even the central business district, shall not be cluttered up with the back-yard or back-alley type of industry which is so apt to lie right alongside the good business property. Of course, the drawing of the map helps.

When we come to residences we can zone the whole town for one-family houses. There are very few of the early-zoned communities that dared to do that. We find that it is popular. That is what the people want, although the housers do not like to unscramble our communities; they intimate that is anti-social.

Many of the towns are now finding that it is not to their advantage in any way to have any district in which houses can be built close together. That was interestingly argued by a politician, if you please, a town father, a young man who was influential in the town in which I happened to live. He said, "You people who come out from the big city to live here do not want small lots. If you do, you will not be able to get the schooling your children need because we cannot collect the taxes out of the town to pay for that schooling."

We have seen the soundness of this argument over and over again in the experience of the outer metropolitan district. If the number of houses per acre is high, the number of children per acre is high, consequently more schools are required and land values do not bring in sufficient revenue to support the town.

Then the same politician appealed to the people who do the work in this little town, mow the lawns, keep up the gardens, repair the streets. He said, "If you let other people live on small lots out here you will get too much competition for your jobs, and it is not to your interest."

Now in the town meeting form of government we have in Massachusetts it is absolutely essential that the majority of the people be convinced. When the zoning ordinance was up for consideration they crowded the hall and galleries; there must have been 600 to 800 people out of a small town of 1,400. They unanimously voted to zone the whole town for 40,000-foot lots.

There are other towns which have gone much further and our lawyers are not quite sure how they are going to support us, but presumably when we ask them to, they will find out. There are towns with 5 acres per family in the principal part of the town as a minimum size lot, for zoning could not otherwise protect the people who want to live there.

The same town that adopted the 1-acre lots adopted at the same town meeting a 40-foot building line for all the streets in the town including those in the business districts. That, too, was by practically a unanimous vote. They had a new super-highway built through the town in the last two years, a great arterial route, 100 feet wide between property lines and with a 40-foot pavement. Somebody pointed out: "The people are already 30 feet back from the pavement before they get to their own land. Why not reduce the building line on this street?" No, sir; they wanted to protect that street. It would be the beauty street of the town in the future, not just a back alley or a through-truck route. The property owners trembled for fear the town would have business districts all along the highway. They did not take any technical advice on how to protect it; they did not need any. They kept off all business from the street. They said, "There is business on it at either end of the town; let them fill up their gas tanks before they get in the town or walk," or words to that effect. Drastic zoning, but it works; the people are satisfied with it.

Now as to zoning provisions covering apartment houses. It seems to me the way to get light and air in an apartment house is to say that no window shall be less than so many feet from a wall or property line; make it, say 40 to 50 feet and provide for open-court or no-court apartments. We find that people are voluntarily building that type of apartment under our zoning ordinances. We hardly keep pace with the better builders, because a revolution has taken place among the people who have learned there are such things as air-light apartments and will not stay in the others more than a year or two while the building is new. When the building begins to deteriorate, sufficient rent to maintain the closely built apartment is not available.

There is little to be said for relying upon number of families per acre as controlling density in apartment-house districts. Studies were made in Detroit a number of years ago showing that the number of people per acre was less where the density of families was greater, because in the two-room apartment, which had kitchenette and bathroom also, nobody slept in the kitchenette and nobody slept in the bathroom



and you had an average of two people per apartment. In the four-room apartment you still had one kitchenette and one bathroom and had an average of four people per apartment. The average number of people handling the door-knobs and other places where they could get disease was fewer than under the denser type of regulation. I would use the family-per-acre regulation only as a stop gap where the political situation prevents the adoption of a decent zoning ordinance. I call a decent zoning ordinance, with respect to apartment houses, one which requires 40 to 50 feet between all walls of three- or four-story buildings. Such a provision gives the proper amount of light and air for each apartment. The notion of the side yard is all wrong. It may be too narrow and practically all light and air is in the front and in the rear. The ordinance should specify that every required window should have a yard or a certain reasonable space outside of that window. Then you will get light and air and will not have to worry about density of families and oversize apartments.

What use can be made of zoning to preserve rural conditions? When Frank B. Williams, whom we consulted in this matter, told us in his opinion open development could not be sustained by the application of zoning when the building-site value was greater than the value for open property, I was inclined to agree with him. That brings us back to the possibilities of zoning in theory. What we are driving at is what is possible under police power, and in spite of all the definitions of police power, I always fall back on this one: "When you do not pay damages, it is police power; when you do, it is eminent domain." That is about all there is to it. Apparently we cannot reserve large spaces for open development. By large spaces I mean golf courses, state parks, institutional grounds, air fields, possibly small farms and truck gardens, and many other spaces that would be valuable as open wedges in the town or belts around the town, or perhaps both. To assure this kind of development, I am free to say that we must find some other method than zoning.

The opportunity for the revision of zoning ordinances is here, and there is a good deal of popular interest in it. Just now the interest is somewhat diffused. There are responses here and there from all sorts of people—your friends, technical people, some of the zoning and planning boards, and magazines. I think the time is about ripe for another forward movement in zoning.

## DISCUSSION

MR. HAROLD S. BUTTENHEIM, New York City: Believing that the zoning ordinances of most of our cities need early and drastic revision, a committee of the American City Planning Institute has been gathering information as to the degree of land-overcrowding now permitted in

residential buildings in the congested sections of large cities. This survey has been made by means of a questionnaire addressed on April 14 to the American Planning and Civic Association's list of 66 planning commissions in cities of over 100,000 population.

The following questions were asked:

1. What is the maximum bulk in cubical contents (or square feet of floor area) which would be legal for a new multi-family building on a 1-acre lot, if built to the greatest height and lot coverage permitted under your zoning ordinance?

2. If your ordinance has a density limit, what is the maximum number of persons (or families) which may be housed in a new building on a 1-acre lot?

3. Has your zoning ordinance been amended recently, to reduce future land-overcrowding? If not, is such an amendment now under consideration?

Replies have been received (up to May 4) from 42 cities. Of these, 28 of the answers to Question 1 were sufficiently definite for tabulation:

### BULK RESTRICTIONS

City	Maximum Bulk Cubic Feet	Maximum Floor Area Square Feet
Atlanta, Ga.*	2,065,000	247,800 (total)
Buffalo, N. Y.	4,247,100	
Chicago, Ill.	5,227,200	39,204 (per floor)
Cincinnati, Ohio	2,401,600	
Cleveland, Ohio	4,250,000	
Dayton, Ohio*	2,756,600	34,514 (per floor)
Denver, Colo.	3,404,660	
Duluth, Minn.*	2,900,000†	258,800* (total)
El Paso, Texas	4,650,000	26,136 (per floor)
Erie, Pa.	1,400,000	112,000 (total)
Fort Wayne, Ind.	1,306,800	
Hartford, Conn.*	2,250,000	30,000 (per floor)
Kansas City, Mo.*	2,634,220	293,580 (total)
Louisville, Ky.*	4,356,000	
Los Angeles, Calif.	3,920,400	
Memphis, Tenn.*	4,774,800	
Milwaukee, Wis.	5,445,000	
Minneapolis, Minn.	4,237,000	
Nashville, Tenn.	6,519,000	
New Bedford, Mass.	1,557,720	25,962 (per floor)
New Orleans, La.*	2,209,950	176,797 (total)
New York, N. Y.	4,400,000	
Providence, R. I.	4,664,000	
San Diego, Calif.		26,136 (total)
Scranton, Pa.	1,437,480	23,958 (per floor)
Spokane, Wash.		277,450† (total)
Washington, D. C.	4,261,000	390,680 (total)
Yonkers, N. Y.	2,273,400	

NOTES to the foregoing table:

\* See also density restrictions in the table on the next page.

† From the Duluth figures the areas of "necessary interior courts" should be deducted. For Spokane the total floor area indicated is "absolute maximum permitted by the zoning ordinance under the city's 8-story height limit, and this total would actually be greatly reduced by required light courts and the necessity of providing windows for all rooms."

As will be seen, half of the replies listed above gave no answer to the question as to maximum permissible *floor* area. Where such figures were given, as above indicated, some replies showed the maximum floor area for the entire building, and others the maximum area per floor.

It will be observed from the foregoing tabulation that the city of New York, though high in the hierarchy of sinners, is not the only or indeed the worst offender as to permissible land-overcrowding with residential buildings. In several cities, including New York, it is legally possible in this year of enlightenment, 1936, for a developer to erect on a 1-acre plot a residential building having a bulk of more than 4,000,000 cubic feet. Let us see what this means.

Assuming no serious overcrowding *within* the building—allowing, say, 10 vertical feet per floor, and 240 square feet (of the gross floor area) per room and an average of only one occupant per room—this would mean an occupancy of one person for each 2,400 cubic feet of the bulk of the building. Hence a multi-family building with a bulk of 4,000,000 cubic feet on a 1-acre lot, would house, on a plot less than 210 feet square, more than 1,600 persons. In other words, 100,000 persons could thus be housed on about 60 acres—less than one-tenth of a square mile—an obviously needless and absurd degree of congestion.

In few cities are there bulk or density restrictions as such. In general, therefore, the figures in the foregoing list are not to be found in the respective zoning ordinances, but represent computations of zoning or planning officials as to maximum bulk for which a permit would be granted under existing restrictions as to height, lot coverage, and requirements as to courts, yards, setbacks, etc.

DENSITY RESTRICTIONS

Families-per-acre restrictions were reported by the following cities, the figures given in each case being presumably those for the apartment house district of highest density. The figures are based in most cases on restrictions as to minimum lot area required per family. The Louisville minimum, for example, is 250 square feet of lot area per family; New Orleans, 400 square feet; and Memphis, 625 square feet.

City	Maximum Families Per Net Acre
Atlanta, Ga. . . . .	70
Dayton, Ohio . . . . .	174
Duluth, Minn. . . . .	216
Hartford, Conn. . . . .	140
Kansas City, Mo. . . . .	116
Louisville, Ky. . . . .	174
Memphis, Tenn. . . . .	69
New Orleans, La. . . . .	108.9
Wichita, Kans. . . . .	174

MR. EDWARD M. BASSETT, New York City: I agree fully with Mr.

Comey and with Mr. Bottenheim and nearly all of the people that are studying this question, that the zoning ordinances of the United States need revision. I am intimately acquainted with the zoning ordinances of Greater New York. I fully agree with the committee with which I have worked which is about to submit a proposal of smaller cubage, less height and changes from business to residence in many parts of the city.

Now how to get results. Let us say that this committee in New York City goes before the Board of Estimate, and says: "We have worked out very carefully these desirable changes of cubage that will make less density, and changes to residence instead of business." The presiding officer says: "Whom do you represent?" "I don't represent anybody except this body that has studied this subject all over the city." "Well, don't you represent any property owners?" "No, I don't represent any property owners." "Those opposed arise," and perhaps three hundred property owners arise, and the presiding officer says: "Don't you think you had better get a petition or have a meeting to start the ball rolling in order to bring about your ideas?" All right; we will hold meetings, and the meeting is advertised, let us say in Flatbush. Nobody comes to the meeting. Why not? Because no one is interested among the property owners in discussing the density or decreasing the allowable height. It is one of those difficult things to get started.

I think I am able to say that the zoning of the United States to the extent of nine hundred and ninety-nine parts out of a thousand is what the average informed real-estate owner of that district will stand for. It is simply remarkable why those things which you work out ought not to penetrate more quickly. Now there is a way to get results. I am not a pessimist on this. I am working on it all the time myself in New York City as counsel of the zoning committee.

About one year ago when Robert Moses enlarged some of the parkways into Queens, we got about twenty square miles of beneficial changes because a dozen of us jumped right in to alter the zoning along those new parkways, and under the momentum of the new parkways we accomplished great changes along the lines of less density, less height and changes from business to residence.

If we will be ready to grasp opportunities, we can in many cases bring these changes about. On the west side of Manhattan an enormous district is now preparing a change in zoning, inspired by the property owners themselves. The proposal will prevent the spread of blight in an area of at least twenty square miles.

## The City Official Needs the Plan

By CLIFFORD W. HAM, Chicago, Ill., Executive Director,  
American Municipal Association

IN DISCUSSING this subject I should like first to pay my respects to the city officials of this country and give a word of testimony as to the work being performed by that group. This testimony is given in light of the fact that, in addition to being a city official for a great many years, it has been my privilege to know and work intimately with a very large body of city officials in America over the past twenty-five years. It is now my privilege also to watch them operate and to assist them in the study of their problems directly and through their combined efforts in leagues of municipalities in the various States. Local public officials on the whole are a sincere and able group, desirous of doing the best possible job, and increasingly do we find them reaching out for improved methods of administration and improved techniques in government. When one scans the results of the current period of economic stress through which we have been passing the last several years, he finds that city government has stood the strain remarkably well, and in comparison with the record of private business the record of the cities, to say the least, is commendable. City officials throughout this period have consistently, through their national and state organizations, taken coöperative steps for the solution of governmental problems, carried on research into the facts and best practices, and in a great variety of ways dug in intelligently into the problems of local government.

I should like to make another observation, the truth of which is becoming increasingly apparent to those charged with the administration of local government. The maintenance of the high standard of living and our democratic civilization is dependent directly upon the ability of cities to continue local services. The maintenance of these civilization standards of living and democratic institutions is not automatic, as we are so often apt to consider it. These standards and institutions can be, and are, maintained and advanced only through conscious effort and coöperative action. It is largely, I think, for their perpetuation that we concern ourselves so directly with the subject of planning and why planning must and does enter into the program of public administration at so many points. The National Resources Committee has stated that planning consists of the systematic, continuous, far-sighted application of the best intelligence available in order to provide higher standards of living and greater security for the people. "Planning," says the Committee, "is the use of scientific and technical skill coupled with *imagination* to determine and influence trends or changes which can be helpful to this larger purpose." Of course, too, when we speak of planning we think of relatively long-term planning.

The city official finds himself in the midst of two different dilemmas

in the execution of any plan. The first is the hiatus that exists between any long-term planning and the necessity for short-term appropriations. State governments appropriate usually on a biennial basis. Likewise, elected public officials and the policies of administrations are subject to review in periods ranging from one to four years. Planning, on the other hand, aims to project the program, policies and objectives over a much longer period in order that the work will not be subjected to the ineffectiveness of a short-range view. To bridge this gap between long-term planning and short-term appropriations challenges the genius of administration.

From year to year many matters, of course, intervene and experiences show that parts of a program once adopted must be changed and emphasis thereon must be shifted from time to time through the pressure of events. Because of all of these reasons the current and detailed program is many times modified, as conditions warrant, and yet we must prosecute the work with the long-term objective in view. The failure to bridge this gap successfully explains why so many good planning efforts gather dust.

The second dilemma faced by the city official is the training in budgetary practice and the worthy pride of achievement in sound current finance programs and balanced budgets. I sometimes think that we men who have occupied administrative positions as city managers, quite necessarily lack the *imagination* which the planning people say must be coupled to the use of scientific and technical skills. We are pressed to achieve sound current finance practice, balance our budgets, gain immediate results, render honest government. These are of immediate concern and test the skill of any official.

One of the most caustic criticisms I ever heard on the subject of city-manager government, spoken partly facetiously and mostly seriously, was that there was not enough corruption in it; that the City of Tokyo after the earthquake had a marvelous city plan for the rebuilding of that city and it failed miserably in many respects, because the people back of the plan were honest and had nothing to gain in a personal way in seeing it pushed to completion. This same critic pointed out some of the great developments of parks, arterial boulevards, and unfolding city plans which had been achieved in larger American cities. "Most," said he, "are monuments to corruption, but they got the parks and the boulevards." He was by no means condoning corruption in public office and would be the severest critic of such practices for any purpose. He was, however, calling attention to this dilemma in which the administrator finds himself when he is confronted with annual balanced budgets and current programs as ends in themselves and the pushing along of a long-term plan. I raise the question, therefore, whether we, as planners and public officials, have considered the problems of management and planning together and made a sufficient effort to reconcile the two.

The city official needs the plan which will consider its own implementation. The plan must provide for its own salesmanship and a continuity of program during and beyond budget periods and beyond changing public policies and economic conditions. We have unconsciously limited very often our scope of activity in this respect and have been content with physical planning and that primarily in one community. The problem of getting plans approved, once they are drawn up, of reconciling the conflicting elements and personal interests, the bringing to bear upon the problems of execution solid public support, and even enthusiasm, is as much a part of planning as the physical and geographical phases. Plans cut across all levels of government, local, state, regional, national. Until national, regional and state plans are translated into actual accomplishments of particular projects within particular local areas, the attempt remains so much paper work. Conversely, until local plans in their execution are coördinated with the larger aspects of regional planning, the city official fails in the opportunities for the best and most orderly developments.

Let me give you a current example. The Federal Government is now constructing the Grand Coulee Dam on the Columbia River in the northeastern part of the State of Washington. At the dam-site there has been, or will be, constructed a set of permanent buildings for the housing of the operating force required after the completion of the dam. This housing development, I understand, is on Government-owned land. There have been constructed a permanent school-building and other essentials of permanent community life.

On the other side of the river there has been built a rather large number of temporary homes to house the labor force during the construction of the dam. This community, known as Mason City, is fairly well built but is recognized to be of temporary nature, and, I understand, is to be torn down when the construction work is finished.

The Federal Government has built a paved roadway on government right-of-way from the main highway leading into this construction site. Straddling this Federal highway there has grown up a rather large number of houses of all descriptions occupied by the natural hangers-on that are found in proximity to large construction operations. Some four or five thousand people are now living in this settlement and there have sprung up stores, shops, garages, and other sorts of commercial establishments serving the community. This settlement grew up in unorganized county territory, and in addition to the problems of sanitation, schools, water supply, there were also the usual vice conditions to be found in that type of community. Some of the leading and more enterprising individuals of the community felt that the county organization was not in position to provide the requisite community services and protection. I believe the Federal Government has discouraged the growth of the community and feels that when the dam is completed the community

will have no reason for existence and quite naturally fall to pieces. However, real-estate speculation and other factors have operated to convince certain of the people that they have there the beginnings of a community.

To procure for themselves the essentials of community services they have just organized this community under the Washington State laws as a city under the name of "Grand Coulee." This city has paid its dues into the Association of Washington Cities and is now asking the Association for its assistance and guidance in solving its problems. I believe it is proposed to float bond issues, levy special assessments and make other financial commitments, with bonds being placed on the public market and probably sold to uninformed investors. It should be pointed out, also, that the main street of this new city is the right-of-way owned by the Federal Government on which is the paved road. A number of very serious questions are involved, perhaps the least of which is the control of this city over its own streets the main one of which is the Federal right-of-way.

The problem is one in which the Association of Washington Cities is quite powerless, and while the city is there and conditions of public health and safety are thus serious, the Association of Washington Cities is vitally concerned in seeing that every assistance is given to correct the condition.

The National Resources Committee, the Reclamation Service which has charge of the construction of the dam, the Resettlement Administration, are all vitally concerned in this particular problem and other problems of this sort. I am of the opinion that leadership must come from this group in a solution of this particular problem. If there is no reason for believing that the community will be permanent, then immediate steps should be taken to provide the essentials of community service without the building up of a municipal debt structure, sold to widely scattered private investors who would stand to lose in the future, thus presenting exactly the problem which the Resettlement Administration is now trying to solve in the older communities in the drought area. An attempt should be made to prevent this condition from jelling, necessitating later unsatisfactory efforts to unscramble the egg.

The city official is also confronted with the execution of the plan in light of the changing status of private undertakings and industry. Sound plans, if their administration is to succeed, must look for possible changes in the private industries of the community, as well as to the public needs. If I may be pardoned a personal reference, I had occasion in 1927 to rebuild the main street of the city in which I was then serving. An electric railway, connected by an interurban line to the city of Detroit, operated the local street-car transportation in the city, and its lines traversed the length of our main street. The company was in receiver-ship, its franchise was expiring, its tracks completely worn out. To



rebuild the main street, without either removing the street-car tracks or completely rebuilding, would have been folly. To recommend an additional long-term franchise was not wise.

We negotiated with one of the large manufacturers of buses and taxicabs to see whether they would be interested in replacing the street-car system with a coördinated bus and taxicab transport service. Traffic engineers spent many weeks in a detailed study of the problem, and the conclusion and recommendation of the bus people was that we should keep the steel rail backbone in the rebuilding of our main street, regardless of the cost to the city. They said frankly that we could not handle the mass transportation needs of the community by buses but must maintain the rail service.

To make a long story short, may I recall that the franchises of the street railway company were expiring, the company was in receivership, its structures in complete disrepair. We told the receiver that if he saw fit to rebuild the street-car tracks, coincident with our paving, and to meet our specifications as to the material, workmanship and time of completion with no franchise, we would permit them to rebuild. This was done. The court approved the expenditures from receivership and the defunct railway company spent over a million dollars in cash in the rehabilitation of that system, and there was built there, without cost to the city, the best street railway track in the country. They even paid for the seventeen feet of pavement surface in the center of the street occupied by their double track. This, may I recall, was in 1927, nine years ago, and yet there has not been a street-car operating in that city for five years and all of the local public transportation is being handled by buses.

An example, I think, of the need for the city official and the planner to canvass, not only the public needs but the changing status of private and quasi-public activities which tie-in directly to the problems of city planning and municipal operation.

The city officials of this country look with hope to these conferences on planning. They believe there is here the possibility of resolving the difficulties which beset them in their work in the ways I have described. The problems are mutual and the aims of officials are one with the aims of the planners. City officials have done much in improvement of administrative practices and techniques. They are pursuing these efforts with increasing zeal. The planning people have done much in the techniques and physical aspects of planning. Between the two fields, though, there has existed a sort of No-Man's-Land. I urge a more complete merging of efforts whereby the planning aspects of administration can be properly dealt with, while at the same time the administrative difficulties in planning can be recognized and solutions developed. Then we can go forward toward the objectives we all cherish.

## Experience with City Planning Programs

### THE GYMNASTICS OF MUNICIPAL PLANNING PROCEDURE

By CHARLES B. BENNETT, City Planner, Milwaukee, Wis.

**A**FTER seventeen years of rough-and-tumble experience with the Milwaukee Planning Commission, it is only natural that I should have formulated opinions on the value of city planning and the technique of putting it across, and, since today is my day to be opinionated, I shall not hesitate to take advantage of the occasion. While all of my experience has been in one city, I feel that human nature and politics are pretty much the same everywhere, and that the problems existing in all large cities are fairly comparable. Therefore, what I have to relate may be of some value to other municipal planners.

One's estimate of the value of city planning is wholly dependent upon one's conception of what planning is. Personally, I would define city planning as being the highest form of municipal research—a research that goes beyond mere figures on into human values, and the relation between these values and physical objects, both natural and man-created, a research that will some day evolve a perfect design for living.

To us technicians and others meeting here in mutual admiration, there can be no question of the value of planning. We, however, constitute but a handful of those upon whom the successful application of planning depends. Until a much larger group of disciples is organized, planning will not be effective as an instrument for perfecting a social and economic Utopia. How to organize such a group is one of the major problems facing planners.

As a step in this direction I would suggest that we first convert elected officials to our cause before attempting to organize large citizen committees. Unless they are convinced that planning is a necessary function in municipal administration, inside resistance will be more than outside pressure can overcome. I make this suggestion in the belief that, as a general rule, elected officials are not as yet convinced of the importance of planning. If they were, a much fewer number of planning commissions would have had their budgets cut to zero during the depression.

Unfortunately, no books have been written on city planning sales psychology and it is, therefore, necessary for whoever undertakes the job of selling planning to elected officials to blaze his own trail.

In my opinion, most of our failures in the past have been due chiefly to the method of approach. Too often, we have tried to sell city planning as a panacea for urban difficulties. I also believe that in many instances planning has been over-publicized. Nothing offends other public officials more than having a new municipal activity receive all the newspaper ink, when departments of long standing have to beg for space. Large

citizen committees organized to whip elected officials into line are also a mistake, I believe. They are apt to build up the very resistance they are intended to overcome.

In the city of Milwaukee, we work without large citizen groups, although special committees of the City Club and Real Estate Board do take an interest in city planning. However, we do not rely on these committees for much support, because we have found that elected officials do not relish having such groups tell them how to run their business. Fortunately, of course, elected officials in Milwaukee are fairly well converted to the importance of city planning, and we never fail to get their support on planning recommendations which fall within the city's financial ability to absorb.

How to sell city planning to politicians is a problem that needs a great deal more attention than we have been wont to give it. I can tell you, from my own experience, that in most cases it is no job for a dilettante. Any planner who attempts to use flowery rhetoric, delivered in the grand manner, to a group of hard-boiled aldermen, is apt to find himself looking for a job in a corset shop next budget-time. In most cases, rough-and-tumble salesmanship is the only medium that will be found effective.

Just for the fun of it, I am going to list what I believe to be the necessary attributes of a successful planning salesman. He must possess:

1. A diploma in the technique of planning;
2. A bachelor's degree in personality;
3. A master's degree in salesmanship;
4. A doctor's degree in tact and diplomacy;
5. A sense of humor;
6. A working knowledge of curbstome vernacular;
7. Ability to judge a good nickel cigar; and
8. The fortitude to drink a glass of beer without making a wry face.

Possessing these qualifications, only invincible ignorance can prevail against his success.

If I had my job to do over again, I would initiate planning into the municipal administration as a research bureau—a department charged with the responsibility of first gathering all of the facts having any relation whatsoever to urban problems. I would say nothing about master plans for expensive physical improvements. These can be intelligently discussed only after all of the facts have been assembled. Too often have we been criticized as an agency of the Government preparing plans for improvements which, if carried out, would bankrupt the city, and since wise planning dictates that recommendations be made only after competent research, I suggest this as the most important and first order of business.

A city planning commission set up on this basis can be of immeasurable value, not only to all other units of government but to commercial

interests as well. The more one studies municipal government the more one realizes how much intelligent research is necessary before we can hope to make any degree of progress in planning. The responsibility for this research, I believe, belongs with the city planning department. If we can put city planning on this basis, charged with the responsibility of such research, it will have little, if any, difficulty becoming one of the permanent functions of municipal government. Research never ends and, consequently, the city planning commission's job never ends.

I also believe that city planners should know more about the functioning of other municipal departments, and, certainly, more about the problem of taxation. After all, the primary purpose of taxation is to furnish the most necessary bread-and-butter services needed by the community for safety, health, and education. When the cost of these services gets up around \$30 per thousand, there is little, if any, hope for programs for expensive embellishments, even though man cannot live by bread alone. The average taxpayer first wants those services which come closer to home, and Mrs. Taxpayer gets a great deal more satisfaction out of having her ashes hauled regularly than she does out of a street-widening improvement or a new viaduct.

There are many recommendations the planning commission can make which are extremely important and do not affect the tax rate. Among these are: zoning ordinances, setback lines for the future widening of streets, and platting restrictions. These phases of city planning can be of tremendous value to a community and are financially painless.

For the past decade the Milwaukee Planning Commission has been operating more as a municipal research bureau than as an agency preparing plans for parks, boulevards, and civic centers. We entered the field of research mainly through a desire to probe deeper into the reasons why certain physical improvements should be recommended. The result of this research has been that not only are other city departments dependent upon us for factual data, but local and outside commercial interests as well. The research data available in our files were one of the primary determinants in the selection of Milwaukee for a \$2,800,000 PWA housing project and a \$7,500,000 Resettlement Administration suburban development.

Milwaukee has done nothing of a spectacular nature in city planning, and one reason for this is that we do probe deeper into the reasons why or why not certain improvements should be recommended. To us, careful city planning dictates that no matter how seemingly advisable certain improvements may appear to the planner, if they are beyond the ability of the taxpayer to pay for, they should not even be recommended.

We believe as faithfully as others in the preparation of master plans, but such plans should only be prepared after careful research and analysis. We do not believe in official master plans unless accompanying such a plan is a financial program well within the taxpayers' ability to

carry out. In the archives of the Milwaukee Planning Commission reposes an unofficial master plan. This plan is used as a guide in making all decisions affecting proposals for street widenings, additional playgrounds, parks and parkways. We find it a great deal more flexible and less embarrassing to have an unofficial plan than it would be to have one of an official nature.

Of course, I realize that an unofficial master plan requires a strong city planning commission whose recommendations will be strictly adhered to by elected officials. In any event, we should certainly want planning commissions more firmly entrenched, and it is toward the accomplishment of this end that I believe we should concentrate more of our efforts.

Since I have had so much to say about how the Milwaukee Planning Commission functions, it might be interesting if I enumerated some of its accomplishments during the past two decades. They are as follows:

*Civic Center Plan.* Well on its way to completion.

*Zoning Ordinance.* Adopted in 1920 and administered with excellent cooperation between the Building Inspector, Zoning Board of Appeals, and City Planning Commission.

*Comprehensive System of Fifty Playgrounds.* Costing three million dollars.

*Platting Code.* Adopted in 1924, which has considerably raised the standard of platting and secured many miles of widened highways through dedication.

*Major Thoroughfare Plan.* (First step.) This plan was adopted by the Common Council in 1930 as a guide in arranging a financial program, if possible, for the widening of important thoroughfares in the city.

*River Parkways.* Plans completed and three-fifths of the property needed purchased by the city. In connection with one of these plans WPA officials allocated \$2,300,000 for the development of the Lincoln Creek Parkway for a distance of three-quarters of a mile.

*Housing.* As previously mentioned, housing surveys made in the city of Milwaukee were responsible for the development of a \$2,800,000 low-rent housing project.

*Municipal Airport.* A comprehensive survey of the airport situation was made by the Planning Commission with definite recommendations for its location.

*Neighborhood Parks.* A comprehensive survey of the recreational facilities available has been finished, and the data secured will be used as a guide in all future park purchases.

*Truck Routes.* The Commission has just finished an analysis of truck movements within the Milwaukee region, and sometime in the near future will make definite recommendations to the Common Council.

In addition to the above, the Planning Commission has also made numerous studies on other matters, such as transportation, union terminal facilities, harbor development, grade separation, health centers, branch police stations, comfort stations, branch ward yards, dump-sites, water-tank sites, school-sites, and branch incinerator sites. Added to these, the staff has done research work in land economics, the motor vehicle parking problem, zoning experience, vacant-lot situation, tax delinquencies, and the rehabilitation of blighted areas.

## HOW CITY PLANNING PROGRAMS ARE MADE

By S. R. DeBOER, Planning Consultant, Denver, Colo.

CITY PLANNING has fully redeemed itself during the days of emergency work. During the late twenties it seemed as if planning had come to be like the proverbial prophet's preaching in the desert—there was no one to listen to it. Today the groups who valiantly proposed better ways of city building, who courageously stood for the sneers of stupidity and lack of imagination, may smile up their sleeves. They have been fully vindicated.

If city plans have not been as thorough in the past as they might have been, certainly it cannot be said that those who criticized planning have come forward with ideas for broadening it. The emergency period has shown the need for more planning and has shown the way toward broader planning.

This is perhaps the proper time to check up on experience with city planning programs. Many of them were prepared in the days before the industrial crisis, and great programs of construction were based on them. To many of us the work must have been rather gratifying.

In the light of the broader field of planning which is now opening up for large regions and States, the first decades of city planning look like a rather weak attempt toward broad planning. Traffic studies, recreational plans, zoning, and platting of additions have been the major lines of city planning in the past. There were some studies in economic planning but most of them were beginnings only. Studies in social planning for cities were lacking in most cities. Financial planning has barely been touched.

City planning work had to evolve and grow like everything else. The previous statements must not be taken as a lack of appreciation for the work done by city planning commissions. The fact is that the Emergency Relief work has been nearest to boondoggling in those cities where no city plans existed, or where they were fully ignored. In one city with which I am familiar, over one half million dollars was wasted in shoveling sand from sidewalks in subdivisions which were not as yet built up. The first storm brought new sand back on them again. This money was not from Federal funds, however, but was raised from private subscriptions. I have seen no Federal boondoggling that compared with this.

My observation in regard to building of utility lines for water, sewerage, and power, is that in the few cities which had broad plans of development for this purpose, unusual work has been done and that cities without them have built at relatively the same cost temporary, makeshift systems which eventually will need replacing. This, however, may be a rather exceptional case. Much good work has been done in cities, and everywhere one sees accomplishments which a few years ago were thought impossible.

One night, while stopping over between trains in one of the smaller cities in the Colorado River basin, the city manager came to the hotel.

"It is really too dark to see much," he said, "but I have a good spotlight—I would like to show you something." Together we drove to the river front and then over a rough dirt fill to the building of a great embankment. "Here," he told me, "is your river drive." He had made use of emergency labor to build a monumental boulevard along the river.

Another time, from another far-distant city, came an excited, hurried telephone call. "We are building this traffic line on your city plan. How does it cross the creek at such and such a point?" Again, at a third city, great plans of development were under way. "I don't know about the city plan," said the engineer, "our Planning Commission is dead; but this is what we are doing." Unconsciously, this man was carrying out the lines of the city plan which might never have been built except under the present emergency conditions.

This experience during the emergency period seems to indicate the fact that these first city planning programs were wholly inadequate and incomplete. We must now lay the foundation for more complete plans.

A future city planning program should contain:

1. A complete physical plan including arteries, streets, parks and playgrounds, utility lines, power provisions.
2. A complete economic plan based on economic history, economic foundation and future of city industry, commerce and agriculture.
3. A human resources plan, showing education, crime, health, employment, population studies.
4. A complete financial plan showing private and public finance, taxation, and indebtedness.
5. A study of the city's form of government and its laws.
6. A public works program based on the previous items.

*Coöperation.* The bold program of Federal emergency work, which is a challenge to our vision as city planners, has brought out the incompleteness of city plans as well as deficiencies in our methods, even though our plans have been mere beginnings. There has been a serious lack of coöperation between planning boards and city executives. The former have set themselves up as highbrow learned bodies of men who were willing to transmit their bigger and better plans only in a condescending way. The latter, secure in their nooks of executive power, have come back with sneers about visionary schemes and dreams. There should have been some all-seeing hand or power to take the two by the napes of their necks and knock their heads together to make them realize that the welfare of thousands of citizens was at stake. This supreme overlord, of course, can be found in adequate laws.

There have been many technical mistakes in the plans. As a rule they have been either too detailed or not enough so. The planning bodies have hardly ever had the technical assistance to make very thorough surveys; besides this is the province allotted to the city engineer. An

ideal arrangement would be for a planning board to limit itself to a general recommendation by stating that—for instance—a diagonal artery is needed, naming its advantages, but leaving the actual mapping and estimating to other civic departments.

Similar things might be said about such matters as sanitation. Very few city plans have brought out the relation between sanitation and health. In one city where health conditions and sewage disposal were very bad, the matter was not brought to a head until the state health commissioner of an adjoining State threatened to prohibit importation of produce from this city into his State.

Each city department has more or less complete plans for future work. The department heads are jealous about these plans. They know that once they give this material to the Planning Commission their personal thunder is gone. The Commission from then on is the shining light in the minds of the people. Not all of these department heads are politicians, but behind every office of this kind is—or must be—popular approval. If the office lacks this it will be in danger of abolishment or of lack of accomplishment. This holds also for planning commissions, but these bodies can take the broader viewpoint of the coördinating body and give due credit to departmental work. Planning commissions should be rather aloof from the detailed difficulties of the departments and encourage the heads rather than discourage them.

In the future, a much broader attitude by planning commissions is necessary. This attitude must be based on vision, legal background and a desire not to interfere with the detailed working of departments. With that, however, must go a greater determination to carry out the plans and this must come from greater contact with the people. City plans must be promoted far more courageously. If carefully studied, they contain the most important phases of a community work and the community is entitled to know about them.

The work of city planning commissions in the future must be based on:

1. Carefully drawn laws of authorization;
2. Greater coöperation between executive department heads and the planning board;
3. A far more courageous method in spreading knowledge about the plans.

Many of the programs outlined in city plans have been carried out to a certain degree of completion. It is now time to restudy these plans and in the light of all the new thought which the depression has given us in such plentiful measure, to broaden them and put into them a far greater amount of human service.

City planning has successfully outlived the weaknesses of the infant period; it is now entering the youth period, the time of ideals, of feeling of strength, and power. There is still more need for this type of planning to provide for the livability, the beauty and the practical usefulness of our cities.



## RICHMOND'S EXPERIENCE IN CITY PLANNING

By G. M. BOWERS, Director of Public Works, Richmond, Va.

RICHMOND'S first City Planning Commission was created by authority of an ordinance approved by the City Council on December 18, 1918, appointing the Advisory Board, consisting of the Mayor and his four department heads, the Directors of Public Works, Public Utilities, Public Safety and Public Welfare, as a City Planning Commission.

No meeting of this Commission, as such, was ever held, although its functions were carried on under the direction of the then Director of Public Works in the establishment of a precise triangulation—traverse control survey and topographic mapping of territory adjacent to the corporate limits of the city. This initial work was begun in 1921, and within less than two years thirty-two square miles of territory outside of and partially surrounding the city had been completely surveyed and mapped at a cost of approximately \$70,000 as a foundation preliminary to the preparation of a city plan.

Concurrent with this work the General Assembly of Virginia enacted on March 10, 1922, and subsequently amended on March 21, 1924, a law known as "The Platting Act," which provided, among other things, that no plan of subdivision of land lying either within the city or within five miles of the corporate line shall be recorded by the Clerk of any court without the approval of the Director of Public Works. The act further provided that all public utilities, such as gas, water, sewers, etc., installed by the owners in any subdivision within the limits of five miles of the corporate line should be installed in accordance with plans first approved by the Director of Public Works of the city, and if the installation met all requirements and acceptance of the Director, then, in that event, the city would, within six months after annexation, compensate the owners for the then fair value of such utilities.

After the enactment of this, "The Platting Act," and the completion of the initial topographic surveys by contract in 1924, considerable difficulty was experienced in obtaining funds to carry on and extend the topographic map work with the result that, despite the authority given us by the act over subdivisions of land, our efforts to plan and control the territory beyond the corporate limits were, for a time, handicapped for lack of basic map information.

Means were finally worked out for extending the control surveys and topographic map work by the use of our own departmental forces with the result that we now have completely mapped more than 100 square miles of territory both within and adjacent to the corporate limits of the city. This includes the area over which the Director of Public Works is given jurisdiction under the provisions of the "Platting Act." The precise control in both the triangulation net and traverse was established and

executed in accordance with methods used by the U. S. Coast and Geodetic Survey. The topographic mapping was done by plane table methods in sectional form on sheets approximately 20 by 26 inches to a scale of 200 and 400 feet to the inch depending upon its location, topography and the desired detail.

It would indeed be difficult to estimate the value of this extensive map information to the city. Some appreciation of its value may, however, be grasped by pointing out that the lack of such information prior to our last annexation in 1914 cost the City of Richmond upwards of one million dollars in the acquisition of streets for drainage purposes alone that could have been largely, if not entirely, obviated had similar map information been available at the time of the subdivision of the parcels involved. In this particular we have experienced a material value in this phase of city planning.

Since the adoption of the "Platting Act" in 1924, there have been submitted to the Director of Public Works for approval under the provisions of that act about 175 plans covering the subdivision of land embracing in all approximately 6,500 acres and aggregating 225 miles of streets. Likewise, plans have been submitted covering approximately 90 miles of sewer, gas and water lines constructed within the five-mile limit beyond the city. These were carefully investigated and checked and modifications made where necessary before approval. Much of such proposed construction was installed under the supervision of the Department of Public Works.

By the further use of this basic map information or first element of city planning, we have been able to develop and execute since 1924 many worthwhile projects. Plans for widening and extending more than 50 miles of streets have been prepared of which about 37 miles or 70 per cent have been executed. What has been accomplished by its use in planning street improvements also applies in great measure to the planning of parks, playgrounds, cemeteries, airport and other projects, especially the improvements proposed in connection with the navigability of the James River and the Harbor at Richmond.

Zoning regulations were first introduced in Richmond in 1922 through the enactment, by the General Assembly, during that year, of a tentative law authorizing the governing bodies of cities within the Commonwealth to divide the municipal area into districts and to regulate and restrict the use of land and buildings within their corporate limits. As a protective measure, the Council of the City of Richmond adopted in 1922 an interim zoning ordinance which was in force and effect pending the development and adoption of a comprehensive zoning ordinance. This act was subsequently amended in 1926 so as to enlarge and clarify its original purposes; provide for a board of zoning appeals and so modified as to be in harmony with the recognized standard zoning law, varying in instances only where local conditions seem to justify. This

was followed by the adoption of a comprehensive zoning ordinance approved by the Council of the City of Richmond, April 13, 1927, providing for its enforcement through the Bureau of Building Inspection and the setting up of a Board of Zoning Appeals. The operation of our zoning ordinance has, since its creation, met with marked success and coöperation between the public and city officials alike.

The original ordinance adopted by the City Council in 1918, creating the City Planning Commission, which never functioned, was amended and in its stead a new ordinance was adopted by Council on February 11, 1932, which provides that the Commission be composed of five members, namely, the Director of Public Works and four citizens, each citizen to be appointed by the Mayor subject to the approval of the Council and to serve without compensation for a period of four years. The Commission thus composed and appointed meets upon call of the Chairman. Its functions are limited to studies and recommendations for the improvement of the plan of the city, both within and for at least five miles beyond the city limits. Its duties are of an advisory nature without authority to appropriate funds to carry out and execute its recommendations, the authority to appropriate funds being reserved by the Council of the City of Richmond. The Commission is empowered, with the approval of the Mayor, to procure the advice and services of an expert City Planner.

Our City Planning Commission, has, since its creation in 1932, undergone some slight changes in its membership due to resignations and removals from the city. Its personnel from the beginning, and as now constituted, has always been of a high order; each member is well qualified, displaying rare interest, and rendering splendid and patriotic service in the studies and problems presented.

The General Assembly of Virginia, by an act approved March 5, 1934, adopted its first and only "City Planning Enabling Act," authorizing the councils or other governing bodies of incorporated cities and towns to provide for municipal planning and for the organization and powers of its planning bodies. This act, in general, followed the usual recognized standard form and gives to the locality a clear definition of its powers and legal stability to its enforcement in matters of City Planning.

The city planning ordinance defines as one of the duties of the Planning Commission, "to prepare a comprehensive city plan for the future improvement and growth of the city within and without the city limits. . . . After money to cover the cost thereof shall have been appropriated by the Council, to cause under the direction of the Director of Public Works the necessary survey to be made and the collection of statistical data, and to prepare a plan, etc." No realization of this accomplishment has been reached in face of the retrenchments made in the past several years in the personnel of the Department of Public Works due to the

curtailment of its budget. The present administration fully recognizes the desirability of such accomplishment but in view of the decrease in the city's income, the demand for more urgent needs and the burden of relief, the city has thus far been unable financially to provide funds for the necessary expense involved. Notwithstanding this, the department has nevertheless made definite advances in surveys and in the collection of statistical data pertinent and necessary to the development of a comprehensive city plan.

Taking advantage of the opportunities offered by the various Federal work relief plans, the Department of Public Works from time to time submitted several statistical project proposals pertinent to city planning. These proposals were approved and the services of Mr. Harland Bartholomew were engaged in an advisory capacity. In order to familiarize himself with local conditions, Mr. Bartholomew made several visits to Richmond at which time he advised and aided in the preparation of the State Enabling Act previously referred to and outlined very thoroughly and very clearly statistical data to be gathered and surveys to be made that were pertinent and essential to the development of a comprehensive city plan. The studies outlined were related to street planning, housing and slum clearance, zoning, recreation and parks, transportation and regional planning.

The results of some of these surveys, more particularly those referring to housing and slum clearance, have been completed and published in pamphlet form, and we hope the time is not far distant when funds will be made available for the development and completion of a comprehensive city plan.

**THE COUNTY**



## An Approach to County Planning

### CHAIRMAN'S INTRODUCTION

MR. MARSHALL N. DANA, Portland, Ore., Chairman, Pacific Northwest Regional Planning Commission: I come from the Pacific Northwest where planning, under its various forms at its various levels, has been found necessary. Of the 220 local organizations in the four States—Montana, Idaho, Washington, and Oregon—somewhat less than a hundred represent county planning organizations. Our experience is probably that of other States, that county planning is not original, that it is an outgrowth of city planning and of state planning; that it is an outgrowth of city planning, particularly where counties are urban in their character; that it is an outgrowth of state planning where counties are predominantly rural in their character and in their interests. County planning assures a common interest and that is the technical guidance of county planning organizations from the time that they are organized. It is a misfortune to organize a county planning commission and then leave it to its own initiative and orientation. There is a common meeting-ground between the local ambition and interest and recognition of the value of the work to be done and the technical wisdom, experience and guidance that can be supplied.

I would say that in Montana, Idaho and Washington, the legislative support of county planning organizations has considerably advanced. In Oregon, with the coöperation of the Governor, county planning boards have been appointed, but are unofficial in character. Whether efficiency is determined by legislative support, I think our experience does not permit me to say. The comment is often made that conferences of this kind are dominated by the interests and technique of *city* planning. The inference is that between city planning and other forms, particularly county planning, there is a conflict or competition. We think we have discovered in the Northwest a movement of coöperation between city and county interests or between the county and the near-by metropolis and between the county and state planning organization.

I have sometimes been accused of being a planner. If to have a plan is to be a planner, then I am one, and my plan is to translate the words of the professional planner into the language of the man in the street. I have a conviction that planning must abide in the understanding and the confidence of the people whose interests now and hereafter are affected by good planning.

## COUNTY PLANNING IN IOWA

By P. H. ELWOOD, Ames, Iowa, Consultant, Iowa State Planning Board

**T**HE first, and perhaps the most important requirement in approaching any planning problem is inspired leadership. The leaders, however, in any movement should not proceed too far ahead or beyond the ranks of the followers. No captain should be so far ahead of his company that he loses contact with his men or the objectives might not be attained.

So it is with planning. County planners in the United States have been cast in the rôle of followers, who have been inspired by the wise and intelligent leadership of the national and state planning movement of the past three years.

We should clarify the present confusion in the minds of many concerning planning. The term planning is often assumed to include actual control and administration. While this interpretation remains, there can be little sound, thoughtful, long-range local planning.

*The County as a Planning Unit.* It is my firm conviction that the next planning development in this country will be concerned chiefly with the county as the basic planning unit. The planning idea, now so magnificently developed through Federal and state planning agencies, must go to and come from the people who are most concerned. They must initiate the planning program and carry it out.

The state planning boards should help the counties in their planning efforts, serving as fact-finding, coördinating bodies providing facts and consulting personnel in a manner somewhat similar to the procedure followed by the National Resources Committee. Technical advisers and lecturers would be available for service in the counties.

In many ways the county is a logical and effective planning unit. It is a legal political unit with very definite physical boundaries. These boundaries, as planning proceeds, are often found very inefficient and poorly adapted to effective planning or administration. In many States, with improved transportation, there should be a restudy of the whole problem of county consolidation and the readjustment of county lines to insure more practical planning units. Many counties in our country have been doing a certain amount of planning in the past.

*Examples of County Planning.* Without attempting anything like an inventory of county planning in the United States, it is well for us, when approaching the complex problems of county planning today, to examine the work already accomplished. Many of the earlier efforts in county planning were confined chiefly to systems of parks and parkways. Outstanding among these were Essex, Union, and Hudson counties in New Jersey and the well-known Westchester County, New York, parkways. Milwaukee County, Wisconsin, and Cook County, Illinois, were the outgrowth of expanding cities into a metropolitan region or county,



repeating somewhat the earlier experiences of Boston, Massachusetts. Los Angeles County, California, is another example of a complex, intricate tangle of mushroom, haphazard, planless urban developments revamped into order out of chaos through comprehensive planning. In Los Angeles County the county planning program included: research and statistics, highways, land subdivision, zoning, and landscape and recreation design. It is interesting to note that the date of this plan is 1929, placing it among the early efforts toward comprehensive coordinated county planning.

A new approach, or the application of the principles of zoning to rural land-use, has been developed during the last three years in Wisconsin where several counties have legally established zoning laws which designate the use of land for recreation, agriculture or forestry. Several Kansas counties during the past year have presented planned public works programs. This, however, seems much too restricted to be termed comprehensive county planning.

In Tompkins County, New York, an interesting planning experiment is being unfolded which apparently springs more directly from the will and the wishes of the people concerned than any of the examples of county planning already mentioned. Here the people are working out their own problems with a minimum of control and guidance from the New York State Planning Council and the staff of Cornell University. This really constitutes another approach more human, perhaps, and decidedly more rural.

*Unity of Rural and Urban Interests.* One of the first and most important facts to bear in mind concerning county planning, especially in agricultural States like Illinois and Iowa, is the interdependence of rural and urban interests within the county. In an address before the recent Iowa Conference on Planning, Prof. Murl McDonald, Assistant Director of the Agricultural Extension Service and Chairman of the County Land Use Planning Committee of the State, said, "According to the project chart of the Iowa State Planning Board, land, water, people and commerce are our basic interests. They represent our physical and human resources and our economic, educational and social backgrounds. They are at the root of all planning. They concern all people whether rural or urban.

"Today, much of the land in this State is owned jointly by rural and urban people. Both have an interest in the land. They have a joint interest in land use and soil conservation. Likewise, the people living on farms are potentially heavy consumers of the products of labor and professional services; consequently rural as well as urban people have an interest in the problems of commerce and industry. Surely the experiences of the past, out of which have emerged the conditions of the present, have revealed the absolute interdependence of rural and urban people."

This interdependence of urban and rural interests we have tried to

emphasize in our suggested approach to county planning in Appanoose County, Iowa, particularly as it may differ from those already mentioned. Two facts I wish you to keep in mind are: (1) The Appanoose County Report is not a master plan. It is a vast reservoir of facts, some of which are from hitherto untouched sources of information, with but a few suggested plans for physical development and an outline of procedure for effective follow-up work. (2) It is a response by the Iowa State Planning Board to the call of the people of Appanoose County through their voluntary Soil Conservation Association and county and city agencies for help and guidance in solving their planning problems. In other words, the facts are placed in the hands of the people of the county for action.

The next step in this approach to planning should be an appraisal and analysis of existing conditions, problems and resources. From this analysis it may then be possible to decide on the disposition of these resources to achieve the desired end, which would be the greatest happiness of the greatest number. The plan, which will then be seen as the last step in an approach to planning, should be the outgrowth of the analysis and appraisal of resources, natural and human. Such a plan should be sufficiently broad and elastic to allow for its adaption to circumstances which may not be clearly recognized at the time of its inauguration.

In its final form this plan must be the plan of the people most concerned. They must decide what disposition is to be made of the resources they possess. However, in the appraisal and analysis of resources, not all of us have the necessary qualifications for such analysis. Parts of this work must be done by trained technicians. The soils program should be based upon the recommendations of the soils expert, flood control and water supply upon the analysis of the hydraulic and sanitary engineer, housing by architects, and parks by landscape architects.

The study of Appanoose County, Iowa, represents an attempted appraisal of the physical and social resources of an Iowa county in the light of present maladjustments or problems. It has been compiled from various sources and much of it is a result of original investigations and compilations by members of the Iowa State Planning Board staff. A great deal of the material is of a sort basic to planning in any Iowa county.

Appanoose County was chosen for this demonstration study because in many ways it seemed, when the study was undertaken, to be a county in great need of readjustment. This county had one of the heaviest relief loads in the State. It has suffered from a more steady and serious decline in population than most counties. Even so, a study of the employment figures would seem to indicate that there are still in the county a considerable number of persons, especially miners, who cannot reasonably expect reemployment in their regular occupation, even if the county were to return to prosperity.

The idea of planning is not new to Appanoose County. Soon after the Treaty of 1842, by which the Sac and Fox Indian tribes sold the last of their Iowa lands to the Government, a survey of the newly acquired territory was undertaken. Appanoose County was created the following year and the first election was held. Pending the completion of the necessary land survey and the opportunity for purchasing their claims, the settlers in 1845 organized a claim protection society. The first agricultural society was formed ten years later, since which time various orders have arisen to act as educational and planning forces in the county, including the more recently (1934) organized Appanoose County Soil Conservation Association.

To give a fair conception of the scope of our fact-finding survey and report on Appanoose County, let me mention briefly the subjects or aspects of the problem considered.

Part I concerns primarily the rural county and includes:

Physical characteristics	Electrification and communication
Population and employment	Public water supply
Agriculture and industry	Transportation

Part II includes the urban problems: Existing Conditions—

Population trends	Residential areas
Social organization	Commercial areas
Income and employment	Industrial areas
Housing and health	Streets
Urban land-use	Parks and playgrounds
Public and semi-public areas	

*Conclusions with Suggestions for local committees.* This report has been presented to the local officials and organizations in Appanoose County. They are taking active steps to make full use of it, and the State Planning Board hopes to keep alive the fine enthusiasm for planning in the county.

As stated at the beginning of this discussion, leadership, local leadership, is a prime necessity in successful county planning. It is suggested that some group of interested citizens—perhaps a civic organization, women's club, commercial club, church organization, American Legion, Kiwanis, Rotary, Lions, or similar group (or combination of groups acting jointly)—take the initiative to the extent of sponsoring an organization meeting.

An organization meeting ordinarily should be held at the county seat or other convenient location, and should be open to the general public. All civic and service groups in the county should be invited to attend. At an organization meeting, the general objectives of county planning and the purpose of the meeting should be stated.

It may be desirable to have representatives from other planning agencies—state, county or municipal—on hand to relate practical experience and aid in the explanation of a planning program. Graphic

material in the form of maps and charts may be found very helpful in emphasizing the procedure and purposes of county planning.

The citizen group, service club or other sponsoring agency should provide continuity to the county planning movement until an official county planning council has been selected. (After the passage of an official county planning enabling act, of course, a sponsoring group should work directly for the appointment of an official county planning commission by whatever appointing agency the law designates.)

If a representative attendance is present at the first organization meeting called by the sponsor, the unofficial county planning council may be chosen then. If for any reason it seems preferable to postpone selection of the planning council until a later meeting, such action is at the option of the sponsor. Unnecessary delay, however, should be avoided, and the county planning council should be selected as soon as conditions warrant.

*Unofficial County Planning Council.* In Iowa it is possible for municipalities to appoint official planning and zoning commissions (which in some cases have identical membership), but there is at present (1936) no legislation to provide for official county planning bodies. Nevertheless it is entirely possible for an unofficial county planning group to be appointed or selected, and for such a group to carry forward a program which can be as comprehensive as the vision and energy of the group members.

An unofficial county planning committee or council should seek to promote a comprehensive county planning program and urge the enacting of enabling legislation if needed to permit the establishment of official county planning bodies.

It is desirable to consider the administrative and technical officers of the county when choosing the members of a county planning council—not necessarily to have such officers on the council except as *ex officio* members, but their planning experience and executive authority should be recognized. The council should represent the lay citizens, but it also must be able to cooperate with the officials elected by those citizens.

It is my firm conviction that fostering, guiding, advising and assisting county planning boards in any way is one of the most important functions of state planning boards at the present time. Consultants and technical advisers, as well as all the facts pertaining to individual counties, should be furnished and interpreted for the local people.

The State Planning Board advisers might effect better integration of the many county committees, such as those on wildlife, recreation, parks, land-use, safety, housing and others, into a smooth unit working toward the general welfare of the people.

If such collaboration could be conducted in all States and counties, nothing could ever halt the forward march of planning in America.

## DISTINCTIVE FEATURES OF PLANNING PROCEDURE IN CLACKAMAS COUNTY, OREGON

By L. C. STOLL, Executive Secretary, Clackamas County Planning Board,  
and V. B. STANBERY, Consultant, National Resources Committee

**L**IKE Iowa, Oregon has no state law authorizing official county planning boards. A bill for an enabling act was recommended to the last regular session of the State Legislature by the State Planning Board. It passed the Assembly and failed in the State Senate. It will be again recommended by the State Planning Board.

Twenty-eight unofficial county planning boards have been organized in Oregon during the last year. Twelve of these are active and productive.

One of these, the Clackamas County Planning Board, has won particular attention, because, through its efforts, it has obtained allocation of nearly \$2,000,000 of Federal funds for construction projects of permanent value to the county and because it linked itself functionally and actively with local, state and Federal agencies. In this county there is an active and actual coordination of public agencies.

Clackamas County is predominantly a rural county. It covers approximately 1,800 square miles with a total population of about 46,000. The county seat, Oregon City, has a population of only 5,800. The county's resources are chiefly those of agriculture, forests and recreation areas. It may interest you to know that it was in Clackamas County that Rudyard Kipling caught that extraordinary salmon he wrote about in his "American Letters."

*Purposes and Aims.* The Clackamas County Planning Board conceives county planning as covering:

Study and analysis of county problems.

Plans for conservation of resources and increasing the efficiency of and benefits from public facilities and services.

Initiation and furthering of needed and justifiable improvement projects and development programs, including advance planning for public works and work-relief projects.

Creation of informed public opinion leading to active cooperation of public bodies and citizen support for the Board's recommendations.

Intensive follow-up of planning recommendations to full accomplishment.

The Board feels that planning must produce demonstrably useful results, that the real purpose of practical county planning is to insure that reports and recommendations are actually put into effect or are conclusively rejected by a majority of the people through definite expression of public opinion. This requires forceful and continuous follow-up of each advisory action and recommendation. The procedure adopted by the Clackamas County Planning Board in following through each separate recommendation to ultimate accomplishment is probably the most distinctive feature of planning in Clackamas County. It has produced highly successful results within a short time.

The Board recognizes two distinct phases of planning: (1) planning under emergency conditions for projects to be included in immediate unemployment and relief programs; (2) long-range planning on a broad scale for the future growth and development of the county. The Board has given much thought and effort to both these phases.

*Organization, Staff and Budget.* The Clackamas County Planning Board is, in effect, an unofficial, voluntary planning committee nominated by the Clackamas County Court, May, 1935, and appointed by the Governor of Oregon, so that the Board could cooperate with the State Planning Board, under the State Planning Board Act of 1935.

The Clackamas County Planning Board has eleven members, including two civil engineers, two bankers, two businessmen, one school superintendent, one farmer, one labor representative, one lumberman, and one County Commissioner. The Board feels that since its first duty is to advise county officials, it must be closely affiliated with the County Court. The County Commissioner was therefore elected chairman of the County Planning Board.

The present staff consists of an executive secretary, who is also a member of the Board, a stenographer-secretary, and one additional stenographer provided by the State Planning Board under its WPA staff project.

During the last year the Board received contributions equivalent to approximately \$1,600 from the following sources:

Cash allotment, working quarters, office equipment and supplies, furnished by the Clackamas County Court.

Cash contributions by public agencies which have been directly assisted by the Board.

In addition, WPA technical workers furnished by the State Planning Board under its WPA staff project have assisted the County Planning Board on a number of special studies.

*General Policies and Procedure.* The Board meets regularly twice a month. Because of these frequent meetings and a large average attendance, it has functioned with a high degree of efficiency. As far as possible, each meeting has been limited to the discussion of a single subject, such as flood control, forest problems, and farm conditions. Representatives of all Federal and state agencies, and local groups and organizations having special knowledge of these particular subjects, are requested to attend and participate, affording full discussion of each subject. During the last year representatives of nearly every Federal and state agency in Oregon have attended these meetings, given valuable advice and offered their cooperation.

Meetings of the Board are open to the public, and public attendance is steadily increasing. The people are gradually recognizing that the Board is endeavoring to act for the best interests of the county and not for any particular group or special interest.

Every effort has been made to instil public confidence in the Board's recommendations. A continuous educational program is being carried on to give full publicity to the Board's activities and reports. The policy of complete frankness has been followed throughout. Adverse opinions delivered at meetings have been given the same press notices as favorable support. This policy has been effective and cumulative in its results. Newspapers in the county and throughout the State have respected this frankness and have given widespread publicity to the Board's work. News stories appear several times each week. Many columns have been printed during the last six months concerning the Board's recommendations and follow-up on projects.

Differences of opinion are brought out, together with the underlying reasons for these differences, and usually a satisfactory solution or working compromise has been agreed upon. This is an important feature of the Clackamas County procedure, since whole-hearted and effective coöperation of all interested groups and agencies is required to solve many difficult county problems.

The Board has no standing or permanent committees. Whenever a detailed investigation or study of a particular subject is required, the Board appoints a special joint committee, composed of members of the Planning Board, outside technicians, experts from Federal and state agencies, and representatives of interested groups, to make the study. Upon completion of the study and submission of a satisfactory report, the committee is dissolved. This procedure eliminates the series of progress reports usually submitted by standing committees.

For each meeting a definite agenda, listing subjects for consideration by the Board and speakers, is carefully prepared. A folder containing the agenda, with copies of all relevant reports, correspondence, memoranda and excerpts from minutes of previous meetings, is made up in advance and given to each member at the meeting. Special reports upon which the Board is expected to act are mailed out to each member at least five days prior to the meeting, so that he may study them thoroughly and participate intelligently in the discussion.

The Clackamas County Planning Board maintains close contact with the State Planning Board and the State Consultant. Before taking any definite action on subjects directly related to the State Planning Board's program, or affecting development outside Clackamas County, the Board refers such subjects to the State Planning Board for consideration and advice, accompanied by the County Planning Board's comments and recommendations.

Whenever available, the advice of outside technicians and experts is obtained before decisions are made. The Board has endeavored to investigate every proposal thoroughly and base its decisions on an unbiased study of all relevant facts and conditions. Naturally, the Board has assumed heavy responsibilities in giving definite recommendations for,

or rejection of, projects and proposals submitted for its consideration. The Clackamas County Planning Board feels that its progress has been largely due to its accepting these responsibilities and in taking definite action on questions affecting the county's welfare. At first the opposition of unsuccessful petitioners was very strong, but by firm adherence to this policy, the Board has gradually built up a reputation among the citizens of Clackamas County which has given it considerable standing and prestige.

The Board is now beginning to function as a clearing house and coordinating agency for improvement projects within the county. It also serves as an information bureau, giving out information and advice on conservation and development programs being carried out by Federal, state and local agencies within the county.

The Board also anticipates future unemployment and relief programs by advance investigation of needs of local subdivisions and public agencies for improvements and increased facilities, and outlining sound and justifiable projects to be constructed when funds become available. Where necessary information is lacking, field surveys and investigations are made to obtain data required for project analysis. The Board feels it must take the lead in anticipating future requirements of the county and stimulating public bodies to study their own problems and needs in advance of future programs. The Board then reviews specific projects suggested by local agencies in relation to estimated future unemployed workers and to the broader aspects of county development. Approved lists of future PWA and work relief projects are on file for next year's program. Complete programs for county road construction during 1937 and 1938, with recommended priorities, are now being prepared and will soon be submitted to the County Court.

The Board acts as a buffer or cushion between county officials and pressure groups. Members have been subjected to severe criticism because of their definite stand on controversial questions, but have agreed to take these thrusts, feeling that they can render most effective service to their county by maintaining their position as a forthright advisory agency. The members of the Board have consistently rendered unselfish public service, inspecting field conditions and attending hearings upon short notice and often at considerable inconvenience.

The methods and procedure followed by the Clackamas County Planning Board may be considered by some as outside the scope of legitimate planning activities. However, this Board has accomplished so much during the last year that its methods and practice merit recognition by other planning bodies.

*Example of Emergency Planning.* In order to take advantage of the opportunity offered to obtain funds for needed public works and improvement projects under the Emergency Relief Act of 1935, the Board conducted an intensive campaign to stimulate the submission to the



PWA, WPA, the Army Engineers and the State Highway Commission of worthwhile projects of enduring value. A questionnaire and letter were first sent out to all political subdivisions and public agencies in the county, asking them to submit to the Planning Board detailed information on projects which they felt were needed and desirable, so that the Board could investigate these projects and give its recommendations thereon. This letter also pointed out the opportunities given public agencies to obtain financial aid from the Federal Government under the 1935 Relief Act.

The following description of the Planning Board's action on the County Court House is a typical example of the Board's procedure.

The Clackamas County Court House was over fifty years old and was in poor condition. It was a serious fire hazard, endangering many valuable county records and documents. It was also inadequate for the needs of a growing county. The Board therefore decided to make a detailed investigation of the need for constructing a new Court House. The State Fire Marshal was first requested to submit a report on the fire hazards and safety features of the building. A report was received which showed that the fire hazard was great and that a large amount of money would have to be spent to remove this hazard and make the building conform to state fire laws.

A competent engineer was employed by the Board to make a survey of the needs for future space requirements of all county offices which would logically be located in the new Court House. This survey showed that the present building was inadequate to house the present offices and that the county was spending approximately \$2000 yearly in outside rentals for county agencies.

Upon recommendation of the Board, the County Court agreed to submit an application to the PWA for loan and grant for a new Court House. The Board was asked to recommend the most economical method of financing the county's share of the cost. A study of the possible methods of financing was made by a special committee whose report showed that a direct tax of five mills for one year (plus the use of O. and C. grant money in the amount of \$37,000) would enable the county to pay its portion of the cost of the Court House in one year and that this was the most economical method of financing, as it eliminated carrying and interest charges required for a bond issue.

As soon as the application was submitted to the PWA, the Board engaged in an active educational campaign, urging voters to approve this five-mill one-year tax. Members of the Board spoke throughout the county on the subject. Five thousand pamphlets were printed and issued by the Board and every effort was made to inform the people of the opportunity for obtaining a new Court House at lower cost than would otherwise be possible. At the election the proposed tax was carried by a majority of two to one.

Continual contact was maintained by the Board with the PWA Administrator to see that all details were ironed out and taken care of expeditiously. The Court House is now under construction.

Anticipating possible future appropriations by Congress for future PWA, WPA and state highway programs, the Board has sent out questionnaires and has initiated a new series of projects to be submitted by political subdivisions for construction from 1937 to 1940. The Board plans to investigate carefully each of these projects before making recommendations so that balanced programs for future PWA, work relief and highway projects will be ready when funds become available. By thus anticipating and studying future needs, hasty, ill-advised decisions are eliminated.

*Example of Long-range Planning.* Since an active campaign was being carried on by real estate and other promotion interests in the county to induce farmers to come to Clackamas and settle on the land, the Clackamas County Planning Board felt that it should determine whether such a campaign was justified. Accordingly, the Board initiated a survey of existing farms and an investigation of the present economic condition of farmers throughout the county. This survey was made by the County Agricultural Agent in coöperation with the Oregon Agricultural Experiment Station. A report was submitted to the Planning Board indicating that in the past twenty years the number of farms in the county had increased from 3,000 to over 6,000. The average acreage per farm unit decreased from 52 to 22 acres. The farms in Clackamas County were obviously already of minimum size under existing productive capacity to support the present farming population adequately.

The report also showed that practically all super-marginal agricultural land in Clackamas County is now being farmed; further, that with an average of only 22 acres, the present farm income was not sufficient to provide a satisfactory standard of living and that this could only be attained by increasing the productivity and gross income of the present units, through drainage, supplemental irrigation, fertilization and more intensive crop production. The Planning Board therefore recommended that no additional farmers be brought into the county until further development work had been carried out.

In order to determine the feasibility of supplemental irrigation of Clackamas County lands, the Planning Board requested that an experimental demonstration irrigation project be set up by the U. S. Army Engineers and the Oregon State Engineer, with the definite request that \$15,000 be made available to determine the feasibility of irrigation on this experimental area.

Upon the recommendation of the State Planning Board, the Oregon State Legislature had appropriated \$7,500 to the office of the State Engineer for making surveys to determine the economic feasibility of supplemental irrigation development in the Willamette Valley. This was

to be matched by an equal amount of Federal funds from the U. S. Army Engineers. This survey also covers a detailed investigation of the cost of building canals, laterals and other irrigation works. Upon completion of the report, if favorable, an irrigation district will be formed and the U. S. Reclamation Bureau will be petitioned to construct the necessary works.

*Study of Unemployment and Relief Conditions.* For the past six months the Clackamas County Planning Board has conducted a study of the unemployment and relief conditions in the county, under the Emergency Relief Act of 1935. Reports were first obtained from the National Re-Employment Office, the Clackamas County Relief Committee and Works Progress Administration offices. The Planning Board then met with representatives of the WPA, USES, Clackamas County Court, Clackamas County Relief Committee and several groups of unemployed workers. In the presence of these officials and representatives of the unemployed, the whole subject of unemployment and relief was thoroughly reviewed, and the Board finally recommended:

1. That the allotment quota in Clackamas County should not be increased at the present time; but that the certifications for WPA workers from relief rolls, based on the May 1 and November 1 limits, were no longer applicable to the present relief status of relief cases.

2. That the Federal Administration should call for a recertification of all relief cases, determined solely on the basis of present need, the number of such certifications to be limited to the quota allowed the county.

3. That the Clackamas County Court should assume responsibility for all unemployables, who are working on WPA projects at the present time; that there should be a thorough physical examination of each worker by a doctor employed by the Clackamas County Relief Committee. Whether or not a worker is designated "unemployable" should be determined by the type of work available on active projects at the time of his physical examination, the list of persons to be examined to be furnished the Clackamas County Relief Committee by the District WPA Engineer.

These recommendations were sent to all the representatives mentioned above, to Harry L. Hopkins, and U. S. Senator Charles L. McNary for consideration during recent hearings on the \$1,500,000,000 appropriation.

The Board recently received a telegram from Senator McNary stating that its recommendations were very constructive; and, further, that he was introducing an amendment to the appropriation bill, covering the recommendation for recertification of all relief cases to be eligible for employment under the new appropriation, based solely on present need for relief.

## County Agricultural Adjustment Planning

By BUSHROD W. ALLIN, Agricultural Adjustment Administration, Washington, D. C.

**O**RGANIZED farmers have never subscribed to the idea that individual self-interest or individual action alone can be relied upon as an infallible governor of economic and social relations. If by *planning* is meant the purposeful attempt to modify such relations by collective action, farmers have been large-scale planners ever since Oliver Hudson Kelly founded the National Grange at the close of the Civil War.

From that time until now, one great farmer movement after another has held the national spotlight. The Grange, the Alliance, the Union, the Equity, the Non-Partisan League, and the Farm Bureau—all, in turn, have arisen in response to conditions which farmers believed should be changed by specific programs of joint action. Taken together, they have profoundly affected American economic and political institutions. All but the Alliance exist today, and, along with other more recent organizations, have in large measure determined present national agricultural policy. They have been the spearhead of the farm relief movement which was inaugurated in 1920 by the post-war collapse of farm prices, and which has culminated in the enactment of the Soil Conservation and Domestic Allotment Act of 1936.

The Federal Government first assumed responsibility for dealing with the farm relief problem when Congress created the Federal Farm Board in 1929 and replaced it with the Agricultural Adjustment Administration in 1933. When this happened, the national interest in maintaining farm income at a reasonable level was officially recognized. What had been previously a group or class interest became in part, at least, a national purpose. As such, it began to affect national planning.

To think that governmental assistance in agricultural adjustment is only a temporary phenomenon is to overlook its historical background and to misunderstand the intent of its immediate sponsors. It has always been the intention of those who framed the Agricultural Adjustment Act "to pass from the purely emergency phases necessitated by a grave national crisis to a long-time, more permanent plan . . ." The transition began in the spring of 1935 when the Department of Agriculture, in coöperation with the various agricultural experiment stations, launched a nation-wide research project in an effort to determine changes in cropping practices needed for soil conservation, and the possible effect of such changes upon production.

A second step was taken last August when the Agricultural Adjustment Administration, in coöperation with the Extension Service, inaugurated the county agricultural adjustment planning project, which

<sup>1</sup>From a statement to the press by President Roosevelt, issued in mimeographed form at the White House, October 25, 1935.

is the subject of this discussion. At that time, a start was made by organizing in each agricultural county of the United States an adjustment planning committee of ten to twenty members, representing the various agricultural interests of the county. Such committees now exist or are in the process of being established in most counties where agriculture is of economic importance. Each committee, with the assistance of community committees and subcommittees, is undertaking to determine a long-time plan for the agriculture of its county.

The reason for starting county adjustment planning is to provide the farmer participation needed both for formulating and administering long-time plans. The widest possible participation is needed if such plans are to be flexible and give proper weight to local as well as national interests, and if they are to be supported permanently by an adequate sense of local responsibility. Because of the necessity for swift action to reduce burdensome surpluses, it was inevitable that the emergency programs could not have maximum usefulness in the encouragement of sound farm practices and soil conservation. From the beginning, it has been recognized that uniform adjustments applied to all farms could not be maintained indefinitely without creating difficulties more serious than those they were intended to correct. While quite appropriate for emergency action, they were never intended as long-time measures. To ask all farmers to make uniform percentage adjustments in the production of a given crop is to disregard the need for differential adjustments required by differences in the topography, history, economics, and land resources of individual farms—it is to freeze agriculture to a historical mold regardless of the merits of past development.

Because of extreme variation in both the technical and economic adjustments appropriate for regions, communities, and individual farms, a satisfactory national plan cannot be developed by state and Federal agencies acting alone. They do not have all the knowledge and skill required for such planning if it is to be done with any consideration for the people now living on the land. The task is one in which individuals, communities, the States, and the Federal Government must all participate.

The complexity of the problem is at once apparent when it is recognized that there are 787 different type-of-farming areas in the United States. There are the well-known Corn and Cotton Belts—as well as the wheat, range-livestock, dairy, and other regions. But the character of farming in any one of these regions is by no means uniform. The Cotton Belt is divided into various subregions according to differences in both physical and economic conditions. At least fifteen to twenty such subregions can be easily distinguished. They include such areas as the small irrigated valleys of the Southwest, the large-scale cotton area of western Texas and Oklahoma, the Black-waxie Prairie of Texas, the Mississippi-Alabama clay hills and rolling uplands, the Northern and Southern Pied-

mont, and the Coastal Plains.<sup>2</sup> The process of refinement may be carried still further. In the Mississippi-Alabama clay hills and rolling uplands, for example, there are six different type-of-farming areas; and within each of these, differences between individual farms are often as great as those between areas.

The soil scientist, the economist, and other experts cannot develop the best program without farmer participation; and even if they could, farmer approval and assistance would be required for its administration. A plan developed solely from a national or state point of view, moreover, is likely to overlook or disregard important local interests. On the other hand, a national plan is not merely a summation of local plans. The problem is one of finding a workable program of action concerning which most national and local interests are in harmony. Plans formulated jointly by central and local agencies will be different from any which might be developed by central agencies acting alone.

Nor is county agricultural planning being done merely to provide a sounder basis for judgment as to needed adjustments and to give proper weight to local and national interests. It also seeks to provide a democratic procedure which will foster a feeling of local responsibility so essential for an enduring program. As Secretary Wallace has pointed out, "An effective county agricultural planning agency, adequately supplied with local and national data, established in every agricultural county of the United States would provide the organization required for planning in a democracy."<sup>3</sup> The economic, social, and political fact of paramount importance in agricultural planning is that the Nation's farm land is operated as more than 6 million separate enterprises by people who represent the most individualistic class of American society. There are probably half as many separate owners who now have, and very likely will continue to have, authority to do virtually as they please with the land they own. A national plan, therefore, must come to terms with millions of owners and operators, or an overwhelming majority of them, and it cannot be put into effect by Federal compulsion.

The immediate purpose of county agricultural planning, which comprehends the broader issues already discussed, was to get farmer judgments concerning changes in cropping practices needed for soil conservation, and the possible effect of such changes upon production. As previously pointed out, this is the same problem to which research workers addressed themselves last spring. The tentative conclusions reached by them last fall indicate that in order to check soil erosion and depletion, farmers of the Corn Belt would have to reduce their acreage of corn and oats and increase their acreage of soil-building crops such as legumes,

<sup>2</sup>M. L. Wilson and H. R. Tolley, "Some Future Problems of Agricultural Adjustment," mimeographed by the Agricultural Adjustment Administration, December 18, 1934.

<sup>3</sup>Henry A. Wallace, "The States, the Regions, and the Nation," an address before the Association of Land-Grant Colleges and Universities, November 18 and 20, 1935, mimeographed by the United States Department of Agriculture, p. 7.

hay, and pasture. Southern farmers would have to decrease their cotton acreage and increase their acreage in pasture and feed crops other than corn. In the wheat-producing regions of the Great Plains and the Pacific Northwest, wheat acreage would have to be reduced, and low-yielding land would have to be taken out of production. They also concluded that in the semi-arid range region, the number of cattle and sheep on the range should be stabilized at or near the present low level in order to restore the grass cover and check wind erosion.<sup>4</sup>

But these were the judgments of experts, and there was no way of knowing the extent to which farmers themselves would agree with these conclusions. Until this is known, the research results cannot develop maximum usefulness in modifying future action programs. This need for local judgments disclosed the lack of any effective procedure for bringing about an agreement between farmer and expert opinion. Since 1923, the Agricultural Extension Service, through the county agricultural agent, has conducted outlook programs with farmers. Together with farm management and related extension work, these programs have provided farmers with information which has helped them in making individual adjustments in the light of prevailing and prospective economic conditions. In a number of States, moreover, farm leaders have worked with the Extension Service in building what are known as county extension programs. Logically, such efforts were made almost entirely from the point of view of the particular counties concerned. An adequate program was impossible, for there was no national or state plan with which local planning might be coördinated, there was no coördinating agency, and there was no authorization for needed governmental assistance.

The Agricultural Adjustment Act provided both the necessary authority and the coördinating agency, but there was still the task of establishing a workable relationship between these and the necessary local agencies. This was facilitated by past experience of the Extension Service. By focusing outlook and extension programs upon specific problems which could not be previously considered, a "two-way track" for the interchange of facts and judgments between local and central agencies engaged in building a national plan is being established. Thus, county adjustment planning cannot be understood apart from the national planning to which it is related.

Building upon the extension organization that had grown up in the past, the usual procedure during the first year of county adjustment planning has been for state and Federal agencies to work with the county agent's committees. These are the committees that have been most active in the past in developing and carrying out extension programs.

<sup>4</sup>Oris V. Wells, "The Regional Adjustment Project: A Summary and Some Suggestions for Further Work," an address before the annual convention of the Association of Land-Grant Colleges and Universities, November 20, 1935, mimeographed by the Agricultural Adjustment Administration, United States Department of Agriculture.

They have volunteered their services, and, for the most part, represent the agricultural leadership of the counties. State agricultural colleges and the Department of Agriculture provided them with available statistical data and other background information. In an effort to reach sound conclusions as to the possible effect upon production of changes in farming systems needed for the maintenance of a permanent agriculture, these committees made a careful study of national, state, and local data bearing on this problem. With the assistance of the county agent, they have considered the possible effect on livestock production of recommended changes in cropping systems. Many meetings were held during the winter, both at the county seats and in the various communities throughout the counties. After these deliberations, definite recommendations were made concerning needed changes in the production of each crop and livestock product.

In view of the multiplicity of farms and the complexity of the problem, there are many who question the feasibility of this procedure for developing a workable, long-time national plan for agriculture. But these are the same considerations advanced in support of it. Of one thing, however, there is little room for doubt. The nation cannot afford to postpone longer the adoption of effective measures to arrest the present appalling waste of its land resources. Whether major emphasis is given to soil conservation or production control, the problem involved cannot be dealt with effectively by individual action alone.

A large proportion of our farms is in the hands of people who do not have a sufficiently long-time interest in the land they are cultivating to make it economically worth their while to take appropriate action in soil conservation. The income of many farmers is so low that they are unable to follow practices they know would better serve their own long-time interests. For a considerable number, the reason is that their farms are too small to make possible a type of agriculture which will yield a decent standard of living and at the same time conserve the soil. If remedies are to fit the causes, the necessary lines of action are clear. Positive incentives must be provided, farm income must be stabilized at a reasonable level, and the size of many farms must be changed. It is scarcely possible to accomplish these things without both the centralizing power of government and the active support of local groups.

Since the Supreme Court decision invalidating a part of the Agricultural Adjustment Act, the need for local planning has become even more urgent than previously, because the principal effect of the decision was to accelerate the development of long-time aspects of national agricultural policy. Relatively greater emphasis is now given to soil conservation, which requires a vastly more complex program. And while the Federal Government can no longer control output by contracts by individual producers in order to maintain prices, it can grant financial assistance to States for the same purpose if state programs are developed



by 1938 which are in line with specifications included in the Soil Conservation and Domestic Allotment Act of 1936. When, under the provisions of this Act, the problem of developing state control programs is faced, those States in which county adjustment planning has been done most thoroughly will have a distinct advantage. Work done this winter by the county planning committees should make the task less difficult.

Recommendations of these committees have been recorded on uniform tabulation sheets and sent to the state office of the Agricultural Extension Service where state totals are now being tabulated for the use of state agencies. Comparisons will be made with results of the research project already referred to, and meetings will then be held in the counties for the purpose of getting agreement and considering the extent to which the two estimates coincide. The data are being forwarded also to the Department of Agriculture for tabulation of national and regional totals. When agreement is reached between farmer, state and Federal representatives, it is expected to have a major influence in determining the procedure for arriving at the national goal for agricultural production. If this goal is really to promote public rather than merely group interests, it must represent a use of land which will provide consumers with continuous and abundant supplies of farm produce at reasonable prices, yield a reasonable income to farmers, and at the same time maintain soil fertility and control erosion.

In conclusion, it should not be understood from this description of the purpose and method of county adjustment planning that the usefulness of the county committees ends with the performance of the task undertaken this winter. At the same time this work was being done, a start was made toward planning for the more distant future. This involves balancing the agricultural resources and population of the various counties so as to make possible a satisfactory level of income. It includes not only soil conservation, but also other problems of agricultural land use, such as the retirement of submarginal land. County agricultural adjustment planning is a job begun that can never be finished. Most States are anxious to continue the work, and regard it as one of the best efforts ever started. It is expected that the county committees will continue to collaborate with state and Federal agencies on all matters of mutual interest, and that they will consider questions of purely local concern also—as they are now doing in a number of States.

## Inter-County Organization

### THE GEORGIA EASTERN COAST DISTRICT

By HENRY T. McINTOSH, District Chairman, National Resources Committee,  
Albany, Ga.

**T**HE East Georgia Planning Council is the direct outgrowth of the Southeastern Planning Conference which was held in the city of Savannah on December 4 and 5, 1935. At that Conference, the first of its kind in the Southeast, those contributing to the program brought informative discussions of local, state, regional and national planning. Attendance from the four participating States was splendidly representative, the proceedings were given excellent publicity through the press, and leading newspapers made constructive editorial comment on the significance of such a meeting.

The almost immediate fruition of the Savannah conference was a movement to organize a group of counties of the Georgia coastal section for regional planning. Planning-minded citizens of Savannah supplied the initiative, and other communities were prompt to evince interest and give assurance of coöperation. At a meeting held at Savannah on January 14, the East Georgia Planning Council was organized, with sixteen coastal counties extending from South Carolina to Florida participating. Mr. D. T. Simpson, of Savannah, was named president, and one member from each of the participating counties was appointed to an advisory committee.

At a subsequent meeting an invitation was extended, through the Florida State Planning Board, for a group of contiguous Florida counties to become members of the Council. Through the coöperative efforts of Mr. M. L. Montgomery, executive secretary of the Florida Board, the counties of Nassau, Baker and Duval, two of which touch the Georgia line, accepted the invitation and are now members of the Council.

This Georgia-Florida coastal region offers an inviting field for planning studies. In it are five South Atlantic ports, the more important of which are Savannah and Jacksonville. It is level country in which interesting land-utilization problems are presented, and where much of the rural population can be greatly benefited by intelligently directed programs to influence changes of existing agricultural practices, as well as many which prevail in naval stores production and lumber operations.

Understandable difficulties in inducing cordial coöperation in a regional planning activity by counties more accustomed to keen rivalry than to coördination of effort might have been expected, yet all such difficulties were avoided. When, in addition to crossing many county lines, a program such as this assumes an interstate character by crossing a state line, the invitation to obstacles is widened, yet it is a pleasing fact that in this case what might have been was not, and is not. The

nineteen counties embraced in the set-up view the program not as one for local benefits or advantages, but designed to benefit the entire region.

The planning studies contemplated are suggested by problems of the area. They will, of course, include such as are necessary in connection with the National Resources Committee's development of a National Plan. It is conceivable that the same problems would not be encountered in any other region embracing a score of counties of a coastal area.

Resident in the region are many belonging to the struggling tenant and share-cropper class, of whom there are 8,000,000, in 1,700,000 families, in the Southern States. Embraced in any program designed to improve the condition of these dwellers in rural areas, and bring economic benefits to the region in which they live, should be planning for better farming, and for diversified industries making use of agricultural products. The region is capable of extensive production of crops which may be utilized in the manufacture of starch and of alcohol. Such possibilities suggest studies of great potential value.

Every region offers something more or less unique to the planner, and in this flat country which extends from the Savannah River on the north to points well below the St. Marys on the south, he may find the peculiar and the unusual.

For example: The entire region is covered with an abundant growth of pines of the several types which Dr. Charles H. Herty's experiments have proved are ideally adapted to the manufacture of newsprint and other papers, as well as rayon. Hitherto these pines have possessed rather low timber value. They grow in open woodlands, much of which is used as cattle ranges. But the grasses indigenous to the region possess low nutritive value, and, as a rule, cattle from the pine ranges are of rather poor types.

But while the native grasses, including the wire-grass, have low grazing value, they feed fires which spread through the woodlands every winter, destroying the pine mast which falls in October and November, as well as thousands of young trees. Leading citizens of the region see in this situation a challenge to planning intelligence, and the problem falls within the field of land utilization. The problem seems to be:

1. To demonstrate the practicability of introducing carpet or other grasses into the flat-country woodlands—grasses on which the ever-present cattle will thrive, but which will not feed destructive fires such as have for many years taken heavy toll in the region.

2. To conserve the timber growth which a hopeful industry requires. One large paper mill in the region is about ready to begin operations, and plans for others are in preparation.

I repeat that every region offers certain situations or conditions more or less unique, and to which practical planning (and any planning which is not practical is certain to prove disappointing) must be adapted. That is true of the East Georgia-North Florida coastal region. Here is

an area in which thousands of acres of land are ideally adapted to limited profitable uses, principally cattle raising and the production of timber for naval stores, lumber and pulpwood. The reference is to timbered lands, in addition to which there are, of course, fine areas where profitable farming operations are carried on. Every newspaper in the region has discussed these and related problems from time to time, for their solution is recognized as of great importance.

It is to be borne in mind that these are the observations of one whose planning zeal may border on enthusiasm, but who does not profess to be a planner. The layman merely views a problem or a task; the expert considers how best to deal with it effectively, yet only common sense is required for one to understand that planning boils down to this: How may the resources of a region, be it great or small, be best conserved and utilized for the benefit of the men and women who live and labor in it, and not forgetting that other generations, with rights as sacred as our own, come after our generation?

All planning is more or less experimental. That will be true of this regional plan. Mistakes probably will be made, but who believes the perfect plan will ever be born of human intelligence? New problems present themselves with each rising sun, with countless old ones still unsolved.

But is it not true that the test of our fitness for any responsibility, whether voluntarily assumed or thrust upon us by circumstances beyond our control, is in the use we make of what we have? The answer to that seems obvious, and it lies very close to the heart of planning, both good and bad. We are making many experiments. We are daring to try the untried. We presently shall be immeasurably richer in experience crowned with success—yes, and illuminated by failure as well. It is trite to say that what we know already of the importance of planning is no less the fruit of experiments which have failed than of those which have wholly or measurably succeeded.

But in every venture in planning—or call it adventure if you will—the task is to take that which the region planned for offers, and direct its use to the end that the greatest benefits may flow to the people of the region who are the most important factors in the plan. We hope to do that in the coastal region of Georgia and northeastern Florida, where the program will receive united support from the nineteen co-operating counties.

## TENNESSEE COUNTIES

By GERALD GIMRE, Nashville, Tenn., Consultant, Tennessee State Planning Commission

**D**URING the period in which planning legislation was being considered for Tennessee, the question arose as to what type or size of governmental unit should be used to make the plans effective. The State functions under a very old constitution, with the municipal and county governments operating under a system of private statutes which has resulted in a state-wide group of principalities, each with its own laws and different methods of functioning. The counties in Tennessee were carved out by an old law which provided that the boundaries of any county should not be more than one day's journey from the county seat. This has resulted in a large number of county governments, each entrenched in its own locality and usually averse to any change. County consolidation has long been agitated, but with the entrenchment of the multitudes of office-holders, and because the people of the State are, in general, very deliberate in changing to newer procedures, it will be some time before there is any change in the established system. It was therefore realized that in our planning, the existing order would have to be recognized and that such detailed plans as might be perfected would depend on the individual county courts for enactment.

As would be expected under such a system of county governments, many counties exist for no real economic or governmental purpose and are so impoverished as to be unable to support the normal requirements of government. It was thought that, in light of existing circumstances, perhaps a means could be derived whereby, for planning purposes, existing county boundary lines could be forgotten and plans formulated on the basis of areas or regions of such size or character as might be expedient. Not only would planning be made more comprehensive by such a method, but perhaps an eventual effect might be a breakdown of the resistance against changing the existing county system.

It was decided, therefore, to delegate to the State Planning Commission the authority to create regional planning commissions without reference to any existing county boundary lines. The State Planning Commission appoints the members of the regional commissions and must approve the selection of the executive directors. After such regional planning commissions are established, they have the usual powers of municipal planning commissions in controlling subdivision layouts, perfecting major road plans, formulating zoning ordinances and the formation of such other parts of comprehensive plans as may be required. An additional restriction is that no state aid of any nature whatsoever may be given to any local government within any such region, until and unless the proposed aid has been referred to the State Planning Commission for recommendation and report.

Preparatory work has been under way for a number of months for the establishment of several such regional planning commissions. For the present, activities are under way only for those parts of the State where certain specific problems enabled the State Planning Commission to determine the boundaries of the regions and to outline the problems to be studied. Three such commissions have now been established and several months' preparation has been made on the establishment of a fourth.

The Northeast Tennessee Regional Planning Commission has been established for the area comprising the five most easterly counties of the State. The area embraced is one of the most important industrial and agricultural areas in Tennessee and covers an area of approximately 1,600 square miles. The problems to be studied immediately comprise the study of agriculture and land classification and certain physical developments such as roads and schools. It is hoped that this area will be one in which a very detailed study will be made of industrial and urban trends.

A regional planning commission has also been created for Hamilton County, in which is located the city of Chattanooga, and the New Chickamauga Dam of the Tennessee Valley Authority. This commission for the present is functioning as a county planning commission rather than as a regional planning commission. This was done because it was necessary to exert speed in getting certain measures of control into effect before the erection of the Chickamauga Dam was begun, and this would not have been possible if more than one county court had to be dealt with. This area will be expanded in the future to embrace the contiguous counties to this area. The commission has effectuated a road plan, a set of subdivision regulations and a subdivision manual and through the County Court has secured the enactment of an interim zoning law. A comprehensive zoning plan is now being formulated, and more detailed studies are being made of road relocations, which will be necessary because of the Chickamauga Dam and pool. The existing school plant, tax delinquency and the utility requirements are also being studied by the commission.

A regional planning commission has been created for the City of Nashville, giving control to the City Planning and Zoning Commission for the unincorporated area outside the city limits. Since this Commission is more localized in its operation, it need not be discussed in this paper.

Another region under consideration is that of the Obion River-Forked Deer River watershed areas in West Tennessee. Preliminary surveys and a report on the conditions within the area have been made by the State Planning Commission and negotiations are under way with the county courts within the area leading towards the establishment of a regional planning commission. The area embraced includes parts of thirteen counties containing approximately 4,500 square miles.

It is one of the most fertile and best agricultural areas within the State, but is faced with acute problems arising from over-capitalized drainage districts which, in many cases, have made flooding worse than before drainage began. Serious erosion in the uplands has clogged the streams and resulted in destruction of timber and the abandonment of much good agricultural land. This region, with its extensive drainage districts, sets forth a perfect example of the lack of planning in attempting to carry out large-scale enterprises. More than 6 million dollars have been expended by the citizens of this area in attempts to correct conditions, but, because of the piece-meal methods of construction, conditions are worse than they were in the beginning.

These regional commissions are necessarily difficult to establish in that the State Planning Commission does not wish arbitrarily to set up such regional planning commissions unless the citizens of the areas have an understanding of their purposes and are willing to lend interest and support. For that reason, it has taken the State Planning Commission considerable time to get the regional commissions actually in operation, and, while it is too early to report on their definite accomplishments, we hope they will serve as examples to the citizens of the State in arriving at a means of giving services to the citizens in the regions, which they could not otherwise obtain under the present form of county government.





## THE STATE



# State Planning Progress

## MASSACHUSETTS

By ELISABETH M. HERLIHY, Boston, Mass., Chairman, Massachusetts State Planning Board

**W**E, in Massachusetts, are a very young board. In fact, the Massachusetts Federation of Taxpayers' Associations, Inc., a voluntary, unofficial organization, in a recent report on the Massachusetts budget and related matters, prepared for the House and Senate Committee on Ways and Means, characterized the State Planning Board—appointed in 1935—as “one of the latest contributions of a generous Legislature to the field of new activities.” The report proceeds with a burst of oratory which I believe well worthy of perpetuation in the annals of planning literature:

The history of all new activities seems to be strangely similar. They grow with the rapidity of mushrooms. They flourish with the verdant luxuriance of the proverbial bay-tree. Their original intent seems always to become subordinated to the primal urge of reproduction and expansion. Therefore while considering . . . new additions to the “infant industries” of the Commonwealth it is well to utter a word of warning that just over the fence, busily burrowing to reach the inner circle, are the beauticians, the steam-fitters, the civil engineers and surveyors, the dry cleansers and dyers, the architects, the real estate agents and the magnetic healers, to be followed perhaps by the ward heelers

And, finally, after making certain misleading statements with regard to expenditures and certain sarcastic references to functions as set forth in the legislative act, the report concludes with the words, “It is an infant board of great promise.” Verily, many a true word is spoken in satire. Our best hope is that the implied prophecy may be fulfilled.

The Massachusetts State Planning Board opened its permanent headquarters in the State House on November 25, 1935, less than six months ago. We have a fine board, with eminent consultants, and we have made an excellent start in our technical staff and in our clerical staff. We have adopted an eight-point program which is coming to be rather generally recognized by my own characterization as an eight-cylinder program. Briefly this eight-cylinder program includes studies of

**LAND:** Agriculture, forestry, geologic resources, urban use, etc.;

**WATER:** Supply, flow, sanitation and flood control;

**POWER:** Production, distribution and use;

**INDUSTRY:** Trade and social conditions;

**RECREATION:** Extensive and intensive, scenery, wildlife, etc.;

**TRANSPORT:** Highway, rail, air and water coordinated;

**PUBLIC WORKS:** Ten-year state program and budget; Federal aid; and

**COMMUNITY PLANNING:** Encouragement and advice.

In order that there shall be smoothness and efficiency of operation, therefore, we have considered it advisable and even necessary to advance along all fronts at one and the same time, in the belief that no single

classification or cylinder is in itself complete, but that each one is, to a more or less degree, dependent upon the others in the group.

For the present, however, I shall ignore all but two of the classifications referred to. I have been asked by the Program Committee to direct my remarks particularly to the local situation, or our Community Planning cylinder, while at the same time the elements have conspired to *flood* completely our Water Resources cylinder. These two classifications, therefore, become the joint objective of this particular paper.

We have a somewhat anomalous situation in Massachusetts. In the natural order of things, the State Planning Board should be the parent organization, the stimulant and inspiration for the establishment and guidance of the local boards; but in Massachusetts the State Board, upon its organization in 1935, found local planning agencies scattered throughout the length and breadth of the Commonwealth, 129 orphans so to speak, some of them pretty well grown, which the State Board is supposed to adopt and to continue to function toward in the rôle of "guide, philosopher and friend."

Planning is mandatory in our Commonwealth, a fact with which the members of this Conference are perfectly familiar. Chapter 494 of the Acts of the year 1913, which later became sections 70, 71, and 72 of Chapter 41 of the General Laws, decreed that every city and every town having a population of more than 10,000 shall, and towns having a population of less than 10,000 may—mandatory in the first instance and permissive in the second—create a planning board. The Act further recites that such board

shall make careful studies of the resources, possibilities and needs of the town, particularly with respect to conditions injurious to the public health or otherwise in and about rented dwellings, and make plans for the development of the municipality, with special reference to proper housing of its inhabitants.

So far as the *letter* of the law is concerned, it has been apparently fairly well upheld, nearly one-half of the total number of boards being established in towns of under 10,000 population where the provisions of the enabling act are merely permissive rather than mandatory. I am not sure that I can speak with equal confidence so far as the *spirit* of the law is concerned for, while some of the boards have rendered splendid service, by far too many of them have remained inactive so far as studies of the "resources, possibilities and needs of the town" are concerned, and certainly few plans have been advanced "for the development of the municipality with special reference to proper housing of its inhabitants." This is not said in any spirit of criticism. It is part of the job of the State Planning Board, as I see it, and as specifically set forth in the legislative act under which we are functioning, to "advise and coöperate with national, regional and county, municipal and other local planning, housing and zoning agencies within the commonwealth for the purpose of promoting coördination between the state and local

plans and development." This same provision is set forth no less than three times in succeeding sections in the legislative act calling upon the State Planning Board in its relations with other agencies within the Commonwealth to "confer and coöperate," to "advise and coöperate," to "plan and assist in planning" to the end that there may be better housing, better planning, better zoning and the better distribution of population and industry.

You will recall the statement contained in the Findings of the National Resources Board in its Report on State Planning (1935):

Planning is an attitude and a practice which must command the confidence and invite the coöperation of wide groups of people. It must come from the bottom up as well as from the top down, from the circumference as well as from the centre. Indeed if it were not for local initiative and planning impulse, it would be necessary to continue its cultivation and stimulation. Fortunately the spirit of planning is strong in the American local tradition, in industry and engineering, in State as well as Nation, and the task is that of bringing together and making effective the various planning agencies so that the largest results may be achieved.

With this in mind, I have made a rather hasty, and by no means complete, survey of the work of the local planning agencies throughout the Commonwealth of Massachusetts in an attempt to ascertain to what extent the foundation has been laid upon which the State Planning Board is expected to build "from the bottom up." The results, while not entirely gratifying, are by no means discouraging.

We have, to begin with, 129 boards, more or less, including several unofficial and inactive bodies—perhaps the largest number in any State in the Union. Their growth has been steady rather than spectacular, dating back to the establishment of the Salem board in 1912, nearly a quarter of a century ago. This means that the seed of planning has been planted in the midst of more than three and a half million people and while some of it may have fallen upon barren ground, I believe it to be one of the functions of the State Planning Board to attempt at least, and I hope to succeed in reviving boards that may have become dormant, to coöperate with them in securing efficient support, and to assist them in developing constructive and forward-looking programs.

Appropriations for the work of the local boards, while reasonable in some instances, as a whole have left much to be desired. According to a survey made by the New England Regional Planning Commission, fifty-eight communities reported budgets with a total of \$44,181.15, or an average of \$762.50. In my own survey, I am impressed with the fact that the 1936 appropriation, in a number of instances, shows a very healthy increase over the average for the preceding ten years.

I am further impressed, or perhaps I should say depressed, by the comparatively few local groups that have taken advantage of the opportunity to secure Federal funds for planning purposes. In this my own city of Boston stands out in what is to me a most significant manner.

The Boston City Planning Board, in the two-year period beginning December, 1933, received Federal allocations to the amount of \$480,053. This enabled us to assemble a vast amount of basic material; to make housing, engineering and landscape studies; to complete a real property inventory, and a survey of business and industrial building; an alley survey covering in detail the conditions obtaining in more than two thousand alleys, and a report on the income and cost of six typical districts in the city of Boston, a survey which has now been extended to cover the entire 127 census tracts into which Boston is divided. Against this amount of \$480,053, the city of Boston appropriated \$11,500, or less than  $2\frac{1}{2}$  per cent, for the purchase of equipment and materials. In addition, we have now received a WPA appropriation to the amount of \$892,726 for the purpose of accurately surveying the street and lot lines of the city of Boston and developing therefrom an official map. More than 500 workers are engaged in this project at the present time.

Perhaps it is not too late for the State Planning Board to be of assistance to the local boards in developing programs for planning work that will find sufficient favor in the eyes of the Government officials to warrant them in approving for the work an allocation of Federal funds.

Few complete plans have been prepared, but here and there plans for streets, parks and playgrounds, civic centers and public buildings are reported. It shall be the aim of the State Planning Board to give to these existing plans new meaning, to assist in perfecting them, and to coördinate them with those of the neighboring communities. Housing plans are apparently non-existent, although housing was the motivating spirit back of the planning enabling act in 1913. Here the duty of the State Planning Board will be largely one of coöperation, since the State Housing Board, established in 1933, is fully equipped, by authority, ability and intent, to investigate defective housing, to study the operation of building laws, to acquire land by eminent domain, and to take various other steps in order to increase the number of wholesome homes for the people.

In the local communities in Massachusetts, the accent appears to have been placed upon zoning work. There are in the State 73 municipalities with a population of more than 10,000 persons, and of this number 50 have adopted zoning regulations. Here again the work of the State Planning Board is made clear by legislative act, to "confer, to advise, to assist," in zoning as in planning activities. If there is work to be done in connection with zoning activities, it is perhaps largely a matter of interpretation in so far as relates to variances granted and changes in the plan itself. It is generally recognized that a zoning plan must be flexible in order to meet changing conditions, but it is not so well appreciated that it must also possess stability in order to afford proper protection to persons and to property.

Many of the local boards report the lack of funds as their present

major difficulty; others the lack of public support, although here and there I found refreshment in the statement that officials and citizens were sympathetic and conditions generally favorable. One at least reported enthusiastic public support; and still another that its chief difficulty was the great extent to which the local officials relied upon it for information and assistance.

Many and varied were the suggestions offered by the local boards as to ways and means by which the State Planning Board could be of assistance to them, including information service on legislative matters and the work of other boards, clearing house activities, coöperation, assistance and advice.

Through long years of service on the Boston City Planning Board, and as a member of the Executive Committee of the Massachusetts Federation of Planning Boards, I have had the privilege of working with many of the members of the local boards for years. The opportunity has, of course, broadened in the last few months, and out of the experience of nearly a quarter of a century I am glad to pay tribute to the ability, the unselfishness, and the perseverance of the splendid group of women and men who make up the local planning boards of the State of Massachusetts. I could ask no higher reward for my own efforts than that I be permitted, as I now have been, to join my labors to theirs to the end that by our united efforts there may be brought to the people of our Commonwealth a larger measure of comfort and convenience in their homes, prosperity in their undertakings, and happiness in their daily lives.

We have just been visited, in Massachusetts, by a flood which in its severity broke all existing records. Events moved too rapidly in connection with it to permit, even at this time, of any coherent account. Drama quickly became tragedy as to the rush of water, the roar of landslides, the breaking up of ice jams, and the crash of falling bridges were added the destruction of homes and the loss of human life. That side of the story, with a full sense of my own incompetence, I leave to a more fluent pen.

To those of you who are not familiar with our State—if such there be—I would say that it has an area of 8,093 square miles. It is traversed, enriched and threatened by the Connecticut River, the Merrimac River, the Blackstone River, the Housatonic River, the Quinebaug Valley of which French River is a part, and the Hoosic River, in all comprising a drainage area of 5,188 square miles. To this might be added a large number of streams which are purely interstate in character. This means that with the exception of the eastern portion, including Cape Cod, practically the entire State shared in the tremendous damage experienced in the flooded areas.

It means also that a majority of our local planning boards were involved, which is my excuse for combining the two subjects at this time.

In November, 1935, in common with the State Planning Boards of the other New England States, the Massachusetts Board joined in sponsoring a project having for its purpose the securing of hydrologic and other data in connection with the Connecticut River drainage areas. At the present time there are about thirty persons employed on a program outlined by Prof. H. K. Barrows, who has but recently been appointed by the National Resources Committee as one of fifteen water consultants assigned to the different river-drainage basins as the next step in fulfilling President Roosevelt's recent request for a national water plan.

From the beginning of our project there was proposed a thorough study of the usual spring freshet caused by melting snow and ice break-up usually occurring in the latter part of March. According to the laws of probability, the flood should not have occurred. We had one in 1927 and the prediction was that such events would occur on something like a 75-year frequency. Unexpected as it was, however, it found our field parties on the job, both before and during the flood, working day and night in order that not a single detail of the unprecedented rise of the Connecticut River and its tributaries should be lost to future study and analysis.

The flow of ice was so violent that even the trees were stripped of their bark; travel became impossible; power and communication lines were severed, and several of our field parties, finding their return blocked by six to seven feet of water, were forced to seek refuge in farmhouses on higher land where they remained isolated for a number of days. Even in the headquarters office of the hydrology study at the Court House in Springfield, it was not possible to keep the water out. Entrance to the office was gained by wading in a foot of water along the corridor, and climbing over a few feet of sandbags at the door, all in pitch darkness, relieved here and there by the flickering rays of a candle.

As the waters receded, efforts were redoubled by our field parties to map the flooded areas, to obtain the elevation of high water along several hundred miles of main rivers and tributaries, to investigate the fifty or more bridges and dams destroyed, the millions of dollars worth of highways undermined, the farms inundated and covered with silt, gravel and debris, and to estimate the flow and discharge in river and over spillways.

Nor is this work now confined to the Connecticut River basin. With the aid of Federal funds, both in our staff project and in our WPA Projects, work is under way in the various river valleys throughout the State. Members of the State Planning Board and of the regular staff have worked continuously on emergency problems as well as on planning problems, with Federal, state and local agencies, giving assistance, encouragement or advice as the case may be.

No accurate estimate of the loss occasioned by floods has been



attempted, but it is safe to say that it has reached a higher figure in millions than many of us have attained in years. Suppose as a conservative estimate we say a 50 million dollar loss, or, in other words, a loss more than a thousand times greater than all of the budgets of the local planning boards throughout the State put together. In fact, if we subtract the city of Boston budget and the budgets of the other cities and towns in the Metropolitan Boston area and the Cape, and consider only the budgets reported by cities and towns in the flooded areas, then the loss may easily reach a figure 5000 times greater than the amount made available for planning work. This is a situation which should be brought forcibly to the attention of the local authorities, particularly to the end that the local boards in future may be properly equipped with personnel and with funds to enable them to do their full share toward the prevention of a repetition of the recent catastrophe.

President Roosevelt in his speech of acceptance at Chicago in July, 1932, declared:

Out of every crisis, every tribulation, every disaster, mankind arises with some share of greater knowledge, of higher decency, of purer purpose.

If, as a result of the 1936 flood in the State of Massachusetts, there shall come to pass a better appreciation of the possibilities of planning and a willingness to devote a larger share of public effort and of public funds to prevention rather than to cure, then from the standpoint of future generations, the flood shall not have been in vain.

The situation as it stands at the present time is a challenge to the local planning agencies as well as to the State Planning Board. It may be the knock of opportunity. In any event the State Planning Board will leave no stone unturned to bring about a better understanding of the benefits to be derived from a reasonable application of planning principles to public progress.

### SOUTH DAKOTA

By W. R. RONALD, Mitchell, S. D., Chairman, South Dakota State Planning Board

CAN the planning program be made practical? The outstanding impression that I have of the South Dakota State Planning Board is that it is very much on the spot and that the spot is constantly getting hotter and hotter. We have a marvelous staff in our State, not less than one hundred people working on research, with five different offices in the State. Squirrels accumulating nuts for their winter supply could not possibly be more industrious than this staff, and as the reports come to the central office, constantly getting higher and higher, I wonder more and more whether the consequences so far as the State Planning

Board is concerned will be anything more than an acute attack of mental indigestion.

It would be altogether trite to observe to this group that the planning board is a newcomer in the house of government. If one may judge from a rising tide of sentiment or expression over the country, there is a growing demand for some kind of limitation on government—a sort of zoning scheme—to establish an outside maximum for departments, bureaus, boards and commissions in state and Federal Government. In addition to that, many of these departments, bureaus, boards and commissions are engaged in planning on their own account. In fact, we might even say we have always had planning, consciously or unconsciously. Many acts of the legislatures and of Congress are the result of some idea of a plan. The same is true of many executive orders. Now, with all that going on, we have introduced something else—the planning board—and the burden of proof is certainly on the planning board to the extent that it must find for itself a place in this crowded house that will be its exclusive and natural habitat.

I think those of us who are on planning boards have a considerable degree of conscience in the matter. My own state's appropriation is not large—\$20,000—but it was liberal under existing conditions. Much more has been spent by the Federal Government. If we have the right idea, we must feel that full value received must be given, and in a very definite and unmistakable manner.

I have tried to work out the basis upon which the planning board's existence should be justified and its place found. I think there is no question that members of planning boards have no illusion as to their particular talents. They are not suffering from the belief that they are supermen. From the fact that each and every one here has been denying that he is a planner, it is more likely we are suffering from an inferiority complex. So it cannot be said that we are going to justify our existence by reason of any superior talents on the part of the personnel.

Therefore, apparently, the only way by which we can warrant the planning board as an institution is by the methods it pursues. These must be unique in some respects. Of course, we are all familiar with the formula. The planning board differs from others whose members have sought to look forward in that the planning board proceeds first to ascertain the facts and then go on from there and arrive at more informed opinions. We must accept that as perhaps the distinguishing feature of the planning board, and if any of its practices will justify its existence they probably are to be found in that approach.

Mr. Herbert Hoover said one thing some twenty-five years ago that may be recalled when everything he has said as President has been forgotten. He was then a business engineer, and he made this statement: "A correct statement of any problem is nine-tenths of its solution." Now if that is correct, it should be possible for the planning board to

find a problem or problems in the reports on research and the facts that are found, but it should also be able to discover a solution inherent in the facts themselves. That will not be a tremendously difficult task if Mr. Hoover was right, and I think he was.

But there is a much more severe test that will be applied to the reports and recommendations of the planning boards, whether they are conscious of it or not. That is, that any and all plans adopted must be practical of accomplishment. We know the answer to many of these problems. We need no investigation to discover what should be done. In some cases it is almost common knowledge. So as to those matters, the task of the planning board will be to discover how to arrive at the accomplishment of these particular solutions. I am frankly wondering if our Planning Board will go around and around and around and finally finish exactly where it started. We will probably confront obstacles of which we are not now aware, but there are three very definite hurdles which we must take if our plans are to be practicable of accomplishment.

First of all, there is the problem of cost. We are confronted with the fact that the demand is for a reduction in public expenditures instead of an increase. Therefore, the burden of proof is very definitely upon any proposal that calls for any additional expenditure. The Planning Board must, if it can, find a practicable and acceptable means of providing revenue required for its proposals.

Secondly, there is the time element. We talk a great deal about long-time planning. We know that erosion is doing its worst and destroying our resources in some parts of the country at a very rapid rate. Plans thus far developed to combat this very definite attack upon our resources call for a very long period if they are carried to completion. So of human resources we must time our program so we will not have lost irrevocably a valuable human possession. That calls for the expediting of conservation programs.

And, third, there is a very definite difficulty in the human equation. The people of the United States are notoriously conservative. Public opinion involves a great deal of inertia. What has been in the past hangs like a dead weight on what ought to be in the future. This is made more serious by reason of the fact that our form of government works in reverse. In the United Kingdom, for example, there is no stated period in which a commission is allowed to govern. It is what we call in our own newspaper business 'TF—'til forbidden. In our own country, in county, state and Federal governments, we choose officials for a stated term, and we give them unlimited commission to do as they please for that period of time. After two or four years we have a hectic two or four weeks in which each side tries to talk louder than the other and the voter gets more confused and we have another commission, unreserved, to handle the public for another two or four or six years.

The only recourse of the voters is to turn people out of office if they do not like what they have done, and that develops an attitude on the part of the public official and on the part of the voter that makes it more difficult to enlist their support in a forward-looking program that calls for understanding.

Now I might illustrate what I mean. We have 30,000 Indians who are going to be dumped on the State of South Dakota some of these days. They have been pushed along, of course, until now they are living in an area where the Resettlement Administration says whites cannot possibly make a living, and from which they are being removed. The Indian problem is not solved. It is going to become our responsibility. How are we going to work that out? In the matter of land-use, we know what should be developed, of course, but we have the difficulty of upsetting institutions and of changing the disposition of people to go on living on the lands whether they produce or not. They are apparently content to prosper on next year's crop.

We realize that somehow our plan—when we work it out—must be put over. We have developed a technique which I think is perhaps a combination of the Socratic, the bonfire and the alibi method. The Socratic method puts up the problem and asks for a solution. This will make men think, we hope. Then if that fails we are going to try to build a bonfire under the public officials by calling in the chairmen of all the county boards before we arrive at any plan, permit them to discuss it and give their recommendations, so they will feel it is their plan and will talk to their legislators. Finally, the alibi will be in these reports. We can say to the legislators, "Pass this bill," and if any ask you why, refer them to this report. It will contain hundreds of pages and nobody will read it but it will present the legislators with an excellent alibi.

I am not pessimistic; rather, I am hopeful and jealous—jealous of this plan because of its immeasurable opportunities, because it is a definite assault upon and an attempt to correct what might be described as our national fault, namely, our thoughtlessness and our heedlessness. So we are trying by our picture to give people the advantage of perspective, by projecting the past into the future, from a close-up of the present. We are hoping that we can accomplish enough so that it will be said in our State the money was not wasted, and that there is a place for one more board in South Dakota.

## FLORIDA

By C. B. TREADWAY, Tallahassee, Fla., Member of the Florida State Planning Board,  
and Chairman of the State Road Department

Read by MRS. M. M. EBERT, Lake Wales, Fla., Member of Florida State Planning Board

AS a member of the State Planning Board, and also chairman of the State Road Department of Florida, I am particularly interested in planning as it affects highways. The importance of highway transportation in Florida is not limited to any governmental subdivision; it is of vital interest to all citizens of the State. The highway problem in Florida is perhaps very little different from that in most of the other States, with the possible exception of our seasonal travel by guests from other States during the winter. We also have an extensive trucking industry, both in and out of the State, which constantly hauls our products, such as citrus, winter vegetables, fish and the like, over the highways.

The history of roads in Florida, too, is probably but little different from that of any other section of the United States—there were no pre-conceived plans. Foot, or horse, trails were, of course, the first paths of land transportation, or travel, and preceded settlement of the country. As the settlement of the country proceeded, roads were advanced to permit transportation of commodities in greater quantities and at lower cost than was possible by means of pack-sacks on men or loads on pack animals. In some cases military roads preceded the roads and trails for civil purposes and in some cases were constructed coincident with the need for roads for civil life. With the development of the need for more rapid transportation and transport of commodities in greater quantities, there were developed the public post roads for rapid travel on horse, or by stage coach, and on which roads freight wagons also moved. There were also developed the toll highways built and maintained by private interests. These highways, which were the best of their time, permitted, for payment of a toll for use of the road, rapid travel by horsemen, passengers in stage coaches and freight in freight wagons, which moved more easily over the paved and well-maintained toll roads than was the case on other roads. With the increase in density of population and development of settled territory and establishment of local governmental bodies, there began the construction of public roads necessary for transportation between all of the small communities and between the small communities and the large trading centers. Land transport moved on these public highways until the development of the railways began to offer transportation at much higher speed and lower gross cost.

The highways became a most important factor in a movement of individuals in individually owned conveyances as the motor vehicle superseded the horse and buggy. New developments for the high-

ways were based on the requirements for the individually owned and operated passenger motor cars. Later the opportunity of using the public highway for commercial transport was recognized, and the growth of this commercial transport has been one of the main factors influencing the maintenance and rebuilding of motor roads constructed prior to a date about ten years ago.

Road construction could not possibly keep up with the many demands placed upon it by the mushroom growth of the automotive industry, nor could our system of roads be discarded. It was a case of making the best of existing facilities. If proper future planning had been thought of and applied ten to fifteen years ago, we would not now be confronted with many of our road problems of today.

In Florida, state roads are designated in three classifications by the Legislature, namely, first, second, and third preferentials. The first and second preferential highway systems have been about completed by the Highway Department, and the necessity for wise planning for the future expansion of our highway system is more evident than ever before. The third preferential system of roads has been designated with very little thought toward the utility of the road, the territory that it will serve, or the expense of construction and maintenance. A properly developed long-range plan for highway construction will eliminate this hit-or-miss method, and will save millions of dollars to the taxpayers of Florida during the next few years. Further, a long-range plan will, if properly conceived and executed result in construction and improvements in maintenance and operation that will better serve the people who use the facility and will better develop natural and human resources.

About two years ago the State Road Department, in coöperation with the Florida State Planning Board, conducted a road survey within the limitation of FERA financing and the amounts of money that could be used by the Highway Department and the Planning Board for this purpose. While a mass of data was secured at this time which is most valuable for highway planning, this work is now being supplemented with a state-wide survey in coöperation with the Bureau of Public Roads similar to that now being carried on in over forty other States.

Florida has embarked upon another most interesting experiment. This is the creation of county planning agencies by statute. When the bill was written creating the State Planning Board officially, the question of county planning agencies was thoroughly discussed by the State Board and others interested. There was a variance of opinion as to whether such county planning agencies should be authorized under the law, or, as an alternate, regional planning groups comprising several counties be created for this purpose. Inasmuch as we realized that the counties were the political subdivisions with which it was necessary for us to deal in our planning work, it was finally determined that the county planning groups would be authorized under the law.

These County Planning Councils, as they are officially known, are composed of one member from the County Board of Public Instruction, one member of the County Commissioners, and one member from each official municipal planning agency within the county, in addition to which the Governor appoints members at large to a number that will exceed at least by three the total of the *ex-officio* members.

The first task was to obtain from the *ex-officio* bodies designations of their members for inclusion in these county planning councils. After this was done the Governor appointed the members at large, which appointments were made in October, 1935. To date all of the councils in the State, with the exception of two, have organized and elected officers and are officially functioning. Shortly after this organization, county planning councils were called upon by the state WPA officials to establish priority of WPA projects that had been submitted to the state office, approved, and on which, in many cases, work had already begun. There was, of course, no time for these planning councils to formulate a well-rounded public works program from which proper recommendations for WPA work could be made. However, from the knowledge of conditions by the members of the councils who were selected from the county at large, a very worth-while contribution to the development of a WPA works program was made.

The sudden induction into the service of planning of a mass of people, nearly five hundred, most of whom had no previous experience in the planning field, has been a most interesting experiment. The State Planning Board has had neither the finances nor the personnel to make the number of personal visits to these planning councils that we think desirable. Another feature that has prevented more progress by these county groups has been the total lack of finance for their activities. No provision was made in the law for financing with state funds and all of the county budgets had been closed before their appointments. It has been possible in some instances to secure county funds to help the councils carry on their work, but these have been very few. It is hoped that when the next budget is prepared within the next sixty days most of the counties will include some funds for county planning.

A number of the counties have attempted to secure through the WPA technical and clerical assistance to carry on planning activities within their counties. So far, while most of these projects have been approved by the state WPA officials, they have not been able to overcome the barrier at Washington. On the whole, we feel that this experiment has been successful, because most of these county groups have been constantly requesting that some representative of the State Planning Board appear before them and assist them to get started in the field of planning. This has been done in as many instances as possible, and the planning idea has been well received. We hope within the near future to hold one or more state conferences for these groups.

There still is a division of thought in Florida as to whether these counties should be grouped into planning agencies which would give us from seven to ten planning agencies in the State rather than sixty-seven, other than the municipal and state agencies. It is thought by some that the smaller number of groups, but covering a large area, would be able to accomplish a great deal more and the State Board could make more and better contacts with the fewer groups and that it would be easier to finance the activities. This is a question that probably will come up for further discussion, and a possible solution before the next Legislature, which convenes in the spring of 1937.

We do feel, however, that Florida is becoming more planning-minded every day and that much good has come from our efforts, and that state, county and municipal planning, with the possibility of regional planning, is now in Florida to stay.

### NEW JERSEY

By CHARLES P. MESSICK, Trenton, N. J., Chairman, New Jersey State Planning Board

WE in New Jersey are situated, as you know, between two great metropolitan centers, New York and Philadelphia. Stated more accurately, New Jersey is part of these areas and must, therefore, face the constant fact of congested population. The social and economic consequences of heavy population density make two groups of the many state problems especially urgent—those of transportation and of water resources.

Before any solution to the transportation problems of New Jersey can be found, some knowledge of the present and future distribution and movement of population is necessary. It is thought, for instance, that the future rate of population increase in New Jersey will be greater than that for many other parts of the country because the State, with its peculiar location, will probably continue to attract both industries and residents from neighboring States. Information about future trends is of inestimable importance in planning for tomorrow's highways, airports, and railroad systems. Because of the primary importance of this information the State Planning Board has placed, and continues to place, special emphasis upon studies of population and land-use trends. As more material is accumulated and as the trends of population growth and land-use become clearer, it will be possible to estimate future population with some fair degree of accuracy. These predictions depend, of course, upon many different social and economic factors. The Planning Board is studying these fields as well and hopes to expand its research in the future. A sound transportation program for New Jersey must be founded upon accurate basic data if it is to be economically sound.



The solution of the water problems of New Jersey is an extremely difficult one. The New Jersey State Planning Board is cooperating with the Federal Government in its studies of water resources within the area which surrounds and includes New Jersey. A committee of the Board is at the present time collecting material relating to the water problems of New Jersey. Within the State itself the chief problem centers about future water supply for the metropolitan district of northern New Jersey. In order to coordinate the work which has already been done along these lines, the Board has brought together the various departments, agencies, and committees which have worked upon, or are interested in, these matters. It is hoped that in this way a real beginning has been made toward the solution of the state's water problems.

As we see our function in the State, it includes much work toward a better understanding of these two fundamental problems. Our purpose is to build slowly, to keep asking questions, and to continue our research in the hope that we will assist in the education and information of the people of the State as to the basic questions of securing those services which we must make in living together.

## VIRGINIA

### CHAIRMAN'S INTRODUCTION

MR. WILLARD DAY, County Manager, Henrico County, Virginia: The Virginia State Planning Board was appointed in 1933 by Governor Pollard and the same personnel was continued by a resolution of the 1934 General Assembly at the request of Governor Peery.

The Board is composed of 14 members, 11 of whom are the head of or connected with one of the various state departments. The other three are Morton L. Wallerstein, Executive Secretary of the League of Virginia Municipalities, who is chairman of the Planning Board; Colonel Leroy Hodges, Managing Director of the State Chamber of Commerce, Vice-Chairman; and Dr. Douglas S. Freeman, Editor of the *Richmond News Leader*.

Thirty-five Virginia cities and three counties have adopted the manager form of government; in fact, it originated in this State in 1908 in the City of Staunton. The State Planning Board sponsored a bill which was adopted by the 1936 General Assembly authorizing the appointment by local Boards of Supervisors of county planning commissions. Henrico, one of the three manager counties, is the first to appoint a Planning Commission under the new law, and the newly created Planning Commission finds many opportunities for constructive planning.

The most pressing problem of the moment is in connection with contemplated annexation of the county's territory by the City of Richmond. It is the viewpoint of the County Planning Commission that the growth of Richmond can best be fostered by a plan providing for the joint control of the suburban areas around the City. The State Planning Board will cooperate with local planning commissions, and it has been in close contact with the various state departments.

This group here assembled will doubtless be interested to know something of what the state departments think of their Planning Board.

One of the speakers during the morning session has stressed the point that state or local planning must not be entirely in the realm of theory, but must be capable of practical application and workability. From the statements of these state officials, I am quite sure there is no doubt in the mind of anyone present as to the practical application and cooperative working out of state planning in Virginia.

### STATE PLANNING AND EDUCATION

By SIDNEY B. HALL, Superintendent of Public Instruction,  
Commonwealth of Virginia, Richmond, Va.

**T**HE Virginia State Department of Education has for some time realized that a very uneconomic, unplanned program of school building locations, and an unsound policy of pupil transportation, have existed. With the limited facilities available we have been unable to make the necessary studies and attempt to put into effect in the various communities the results of such studies. In 1933 we did begin a detailed school plant survey in an effort to determine the school building locations, the physical condition of school buildings, and various detailed items concerning the construction, planning, obsolescence, etc. With the assistance of the State Planning Board the State Department of Education was able to complete maps for each county, showing the location with reference to highways, population centers, along with a vast amount of detailed information covering the physical condition of the school plant.

This study has brought forcibly to the attention of all interested parties a number of conditions that need attention and correction as soon as practicable:

*First:* School buildings in many cases are located just across county lines, resulting in two buildings where only one would adequately serve all instructional purposes.

*Second:* School buildings have been located without reference to highway development either for the present or for planned future highway development.

*Third:* School buildings have been located without reference to any well-planned system of transportation.

*Fourth:* Consolidated schools have been built without reference to the development of improved highways, with the result that we find in Virginia a

high school for approximately each 100 square miles. A study reveals that with a carefully planned system of transportation, one high school for every 200 or 250 square miles would adequately serve the communities without excessively long transportation hauls for children.

The State Department of Education has been able to use to excellent advantage the studies made by the State Planning Board in advising local communities when buildings have been contemplated at locations that might be unwise in the light of points raised above, and it is conservatively estimated that already we have been able to save to the local taxpayers several hundred thousands of dollars in capital outlay by pointing out in the light of these studies that such capital outlay would be unwise.

Through the State Planning Board there has already been developed a close coördination between the Highway Department and the State Department of Education in preparing a master plan of school building locations, along with a master plan of highway development for the State as a whole. This should result in economies not only in capital outlay in the location of buildings, but also in the planned program of transportation.

Through the activities of the State Planning Board we are furnished with detailed information on marginal and submarginal lands, which serves as a guide in school building locations.

The State Department of Education has coöperated and will continue to coöperate fully with the State Planning Board in an effort to develop a long-time master plan that will involve school building locations in coöperation with a master plan of highway development, looking to the end that carefully planned consolidations may be effected and savings will result to taxpayers in locating buildings.

## STATE PLANNING AND CONSERVATION AND DEVELOPMENT

By WILBUR C. HALL, Chairman, State Commission on Conservation and Development, Richmond, Va.

I AM glad for several reasons to take part in this planning conference and to address you briefly at this time on "State Planning in Relation to Conservation and Development." As Chairman of the Virginia State Commission on Conservation and Development, I encounter each day problems of a most varied nature pertaining to the natural resources of our Commonwealth. As a member of the Virginia State Planning Board, I am often reminded that we have many hurdles to clear and obstacles to surmount before the lack of well-coördinated planning in past decades can be overcome. We are thankful, however, that in recent years the need for planning has become so evident that we enter the

campaign with a vision and a vigor that can do no less than improve conditions for this and succeeding generations.

Organizations such as the American City Planning Institute, the American Planning and Civic Association, the American Society of Planning Officials, the National Resources Committee, and the several state and other planning groups, must develop the methods, organize appropriately the materials, and press steadily forward toward new and better goals in the conservation and development of all of our resources: community, state and national; material and human.

In a society such as ours, there are two ways of approaching the manifold problems that naturally and inevitably arise in connection with the conservation and development of our natural resources. One way is aptly characterized by the familiar expression "muddling through"; the other method is typified by thorough planning. We have seen the results of the first way in many fields of activity. Often they have not been a credit to our vaunted engineering methods and our practical business acumen. We are beginning to see the results of the second method more and more in fields to which it has customarily not been applied.

With the examples from other nations, or even in our own land, recorded by history or illustrated in the current geographic and conservation periodicals, it is difficult to understand why we who live in the United States have been content so long more or less to "muddle through" in regard to our natural resources. This has become almost an insidious chronic state of mind and activity that affects vitally our whole social structure—in national, state, county and municipal groups. I doubt very much if present conditions are due in large part to mental indolence or social independence; rather I think they are the unhappy, almost tragic, result of several factors. Some of these factors have not been foreseen, but some have been so evident that we have overlooked their full significance.

One of the most important factors no doubt is the youth of this Nation. In spite of our pride in our antiquity as a commonwealth and the manifold examples of cherished historic traditions, after all, as a Nation we are young, quite young, compared to most of the world. It would be better, perhaps, to say that, as a group trying social experiments, we are in our youth and sometimes are harmed by the impetuosities and by the lack of farseeing planning which are characteristic of youth.

The germ of conservation—applied planning—is really as old as civilization. Natural resources coupled with some planned efforts have been the stepping stones upon which society has slowly progressed to its present state. Man has sought the treasure-trove of Nature and has mastered many of the refractory materials, but in turn he has become enslaved by them.

When our Colonial ancestors landed at Jamestown and at Plymouth Rock, they were confronted by primeval forests with magnificent trees in bewildering array such as most of them had never seen before. As they worked their way into those forests and up the rivers, it is little wonder that they and their children easily arrived at the conclusion that the forests on this continent were everlasting. It is little wonder, too, that they cleared them away almost with a vengeance in order to follow agricultural pursuits. Nowadays we accomplish the same result by carelessness with fire, so that forest fires are a constant menace. Efficient fire control and practical reforestation wisely planned and insistently practiced should go far to correct some of the mistakes of the past and the abuses of the present.

Time permits me to speak only of forests as an illustration, but the same mass view has applied, since Colonial times, to most of our natural resources. Consider for a moment soils as another example. Virgin soils of age-old fertility and tremendous productivity were found over vast areas. Our lack of foresight in the conservation of these soils has been almost ruthless. It is becoming a tragedy of modern civilization because, in the final analysis, soils are our most fundamental natural resource. Those losses are evident to all of you. As a single illustration, geologists tell us that the Mississippi River alone carries each year to the Gulf enough soil to make 200 daily trains, each train containing one hundred 50-ton cars. One such train in every seven minutes! Soils are produced so slowly and washed away so rapidly when the checks and balances of Nature are upset by man. Entrenched erosion is difficult to overcome, and eternal vigilance based upon wise experimentation and shrewd planning must become a general policy.

Note that I said age-old fertility. That suggests another factor, an almost complete lack of understanding of the antiquity of our natural resources. New forests can be grown, but in this day of great demands within short periods of time, in most places adequate quantity and quality can not be grown rapidly enough without long-range planning. Our soils have been produced through the mechanical and chemical disintegration and decay of the underlying rocks. That has not been done overnight even in a geologic sense, but has been the result of surface processes acting through millenia. Once our soils are destroyed through our carelessness and lack of planning, future generations may suffer severely before results of adequate planning become effective.

Mineral resources to the layman are generally considered inexhaustible, but they too have their limits in quantity and quality. The day is bound to come when the supply of some of our most useful mineral resources will be either inadequate or else the cost of production will be far beyond the present cost. Until we have the facts brought forcefully to our attention, we little realize how much our daily living is affected at every turn by minerals in this "Age of Mineral Utilization." Not

until we begin effective planning do we understand how tragic is the monetary and social waste involved in the unplanned development of some of our mineral deposits.

Water is commonly considered as free as air, but an understanding of the dendrologic and geologic conditions that control our water supplies soon leads to a different understanding and an emphasis upon the need of careful planning. Floods must be prevented or minimized. Adequate water supplies of high quality must be assured for all domestic and industrial purposes.

In brief, then, our American civilization has until recently more or less "muddled through" in regard to our essential natural resources, such as forests, soils, mineral resources, and water resources. We have been expressively reminded by J. N. Darling that as a nation we have been living upon a dole, a "dole that came from a rich inheritance of natural resources . . . as a gift of nature in the shape of public forests, rich mineral deposits, water, and an abundance of wild life seemingly inexhaustible in its profusion." It is true, of course, that planned efforts at conservation and development of some of these resources have been made more or less sporadically throughout the past century, but it was not until near the dawn of the present century that determined efforts were made towards the conservation of some of our resources. As is well known, it has only been within the past few years that well-planned efforts have been made to establish national and state planning on a sound basis.

The creation of the National Resources Board, now the National Resources Committee, was a step in the right direction. It should become a permanent organization to compile data on the resources of our country and to formulate plans and policies for their proper conservation and development. Our State Planning Board has those objectives for our commonwealth. Our General Assembly, which convened a few months ago, enacted a bill authorizing county planning commissions and defining their duties. One of those duties is "to make and adopt a master plan for the physical development of the unincorporated territory of the county."

The work of the State Planning Board should be intimately related to the work of the State Commission on Conservation and Development, through all of its divisional activities. Although their methods of approach may, at times and in certain fields, be somewhat different, the ultimate objectives should be approximately the same.

It may be taken for granted that the State Planning Board intends to search out all obtainable facts about Virginia, particularly as they bear on industrial and social problems. It is, in a word, a fact-finding organization, to which is added the duty of collating and correlating these facts and, upon those foundation stones, developing a well-planned system for the best utilization of all of the resources of the State. The

State Planning Board must rely, in considerable measure, upon the activities of state and other fact-finding departments for its basic data. Somewhat like an engineer using familiar materials, it organizes those materials into new structures to serve new purposes or to serve better long-established activities.

In the brief time available I have attempted to call your attention to some of the basic principles of conservation and development, to some of the activities of the State Commission on Conservation and Development as they pertain to the natural resources of Virginia, and to stress in a general way some of the needs and benefits of state planning as applied to them. Each division of our Commission is carrying forward well-planned activities in its own field. There is some need for a co-ordination of those diverse activities in a coöperative plan from the point of view of all the industrial and social needs of the State. That is a function and aim of the Virginia State Planning Board. From the basic facts about our natural resources, obtained from competent authorities, and all the social activities dependent upon them, it is envisioning and developing a program that we hope will make for industrial progress and greater social comfort and security throughout Virginia.

Our reflections are poignant as we inventory present natural resources and social conditions and we are made keenly aware of the tremendous losses sustained through lack of fruitful planning. A clear and sharply focused foresight should convince us that national and state planning along appropriate lines have become a necessity if our modern civilization is to persist and prosper. One is tempted to emphasize the need of a slogan—Plan and prosper; plan or perish!

### STATE PLANNING AND LEGISLATIVE PLANNING

By WILLIAM R. SHANDS, Director, Division of Statutory Research and Drafting,  
Commonwealth of Virginia, Richmond, Va.

VIRGINIA is at this time one of a few States specifically engaged in coördinating the activities of a State Planning Board and a Legislative Council.

The General Assembly of Virginia meets in regular session for a period of sixty days once every two years. During this short period it is necessary for the members of the General Assembly to consider, usually, over a thousand bills in order to determine which measures should be enacted. Under the circumstances it has been found necessary to do a considerable amount of advance planning.

In the past, legislative planning has been carried on by individual members of the General Assembly and legislative committees and commissions. The Governor has also played a most important part in legis-

lative planning through the performance of the duty imposed on him by the Constitution to communicate to the General Assembly at every session the condition of the State and to recommend to its consideration such measures as he may deem expedient. The Legislative Reference Bureau, now known as the Division of Statutory Research and Drafting, was created in 1914 to assist the members of the General Assembly, legislative committees and commissions, and the Governor in their work pertaining to legislative planning.

The Governor in the early part of 1935 appointed an Advisory Legislative Council to consider and submit to him recommendations concerning such matters as might be referred to the Council by the Governor. Funds for the Council were provided by a grant to the Governor by the Spelman Fund of New York, which also provided funds for the Virginia State Planning Board. The latter Board, an outgrowth of an unofficial board, appointed in September, 1933, to assist in planning public works to relieve unemployment, had, in 1934, been officially recognized by the General Assembly through a resolution authorizing the Governor to continue the Virginia State Planning Board.

The Governor's Advisory Legislative Council submitted reports to the Governor on seven subjects referred to the Council by the Governor and recommended the adoption of twenty measures, all of which were subsequently introduced in the General Assembly during the 1936 session and thirteen of which were finally enacted into law.

No specific recommendations of the State Planning Board were referred to the Council, due to the fact that the State Planning Board has so far been busily engaged in gathering factual data to be used as the basis for future recommendations.

During the recent session the General Assembly passed an act creating the Virginia Advisory Legislative Council. The Council will consist of seven members, to be appointed by the Governor. At least five of the members must be members of the General Assembly. The Director of the Division of Statutory Research and Drafting is Secretary of the Council. The new Council will replace the unofficial body previously appointed by the Governor. The act provides that it shall be the duty of the Council (a) to make an investigation and study of any matter or question which may be referred to it by the General Assembly, and submit a report containing its findings and recommendations to the Governor and to the members of the General Assembly at least thirty days prior to the next regular session of the General Assembly, or at such other time or times as the General Assembly shall direct, and (b) to make an investigation and study of any matter or question which may be referred to it by the Governor and to submit to the Governor a copy of its report containing its findings and recommendations at least thirty days prior to the next regular session of the General Assembly or at such other time or times as the Governor may request.



## THE REGION



# Regional Planning

## INCENTIVES AND OBJECTIVES IN REGIONAL PLANNING

By GEORGE T. RENNER, Department of Geography, Columbia University,  
and Senior Economist, National Resources Committee

*The Problem.* It is a constitutional fact that the sovereignty of the American people resides in the several States. Nevertheless, state boundaries do not correspond to many modern social, economic or administrative requirements. Therefore, while the States are units of sovereignty, they are by no means satisfactory units for planning. Indeed, when taken individually, they are usually so geographically incomplete for this purpose that the joint action of States becomes a prerequisite for constructive action. Interstate coöperation is, therefore, a matter of almost universal concern to the planning profession.

Interstate coöperation is not a new concept; indeed, the Federal Government seems to have had its inception in an initial attempt of the States to create a means whereby they could do collectively what they could not do individually. Now that the States have federalism, they seem not to like it in all its aspects. At present there is an increasing need for planning, resource conservation, and large-scale engineering development. In connection with this, a paradoxical situation has arisen; namely, there is a growing reluctance to allow the Federal Government to make and execute large-scale developmental and conservational plans, even though it is often a geographical impossibility for any individual State to do these things.

Two agencies are at work seeking to overcome this dilemma, the Council of State Governments, and the United States National Resources Committee, together with its wholly non-partisan state planning boards. Both of these agencies are concerned equally with the promotion of state action and interstate coöperation. The Council of State Governments represents a long-delayed second attempt to secure general interstate action, this time through a completely decentralized structure rather than a centralized or Federal one. The National Resources Committee has considered the same method of approach, but, in addition, has been exploring the possibility of a way out through regional organization for planning.<sup>1</sup>

*Interstate Coöperation and Regionalism.* The joint action of States may assume two distinctly different aspects, as follows: (a) The projection of certain sovereign state powers laterally at the same governmental level, and (b) the projection of certain sovereign state powers vertically to a new governmental level.

<sup>1</sup>Gaus, J. M., Crane, J., Dimock, M. E., and Renner, G. T., "Regional Factors in National Planning and Development," National Resources Committee, Washington, D. C., 1935, p. 223.

The first of these is where two or more States agree to act in unison or toward a common end. This extension of state powers at the same level is *interstate coöperation* in the ordinary sense; the interstate compact is a specific application of the principle.

The second of these is where two or more States project certain of their powers upward, so that these focus at some point below the Federal level; this in such manner as to form a new polity whose areal jurisdiction is not synonymous with the combined areas of the participating States and whose functions are not the combined functions of those States. This is *regionalism* in its operative aspect.

These two political phenomena are often confused, or rather they are never separated in the minds of most people. It may be readily seen, however, that interstate coöperation and regionalism are not necessarily synonymous. They are promising but different ways out of a dilemma; it is possible to have either without the other. Even then the mere projection of certain sovereign state powers upward to a new administrative level does not necessarily produce a bona fide regionalism. Instead it may assume any one of three possible forms.

*First*, it may create a new unit similar to the States but larger in area and above them in administrative level. *Second*, it may create a purely subnational unit, or what has been called a "little capital," wherein certain Federal functions are concentrated. Or *third*, it may give rise to a new type of polity with an entirely new geographical basis. To this last, the name *region* may be applied.

Planning officials and planning-minded citizens have been groping after this third solution; but, in general, it has been rather generally misunderstood. Consequently, many different concepts have been posed as regionalism, and many different things have been done under the guise of regional planning. There is no desire to disparage any of these, but if we be *planners*, then we must understand the exact nature of the planning device which we propose to use, its implications, and its inevitable results.

*Incentives to Regional Planning.* There are today some six significant incentives toward regional planning. *First*, the constantly increasing complexity of society demands a constantly increasing service of government to the individual and to the group. This means an augmentation in the problems of control which transcend state jurisdiction. Some of these focus at the Federal level and demand national planning, while some focus at a lower level and demand regional planning.

*Second*, large-scale physical development and conservation of resources are becoming increasingly urgent. More and more these two processes are giving rise to interstate problems, most of which are of national interest but which concern areas smaller than the whole country.

*Third*, it has been suggested that the planning and execution of programs of resource development and conservation be done by blocs of

States actuated from a local center, such as Boston for the New England States or Atlanta for the Southern States. This is probably one of the results of a growing "sense of community" in the mind of modern man in America. The village or grange hall is now too small to hold the man with an automobile; counties are too small for their original purposes; in many respects the States are also too small, and need to be supplemented by the region. This is strengthened by the fact that it is easier for men to think kindly in terms of Boston, or Atlanta, or perhaps Des Moines, than in terms of far-off Washington, D. C. This regional principle is also strengthened in reverse order by the fact that the Federal Government finds its bureau functions can be administered in the field more satisfactorily from sub-centers than from Washington directly.

*Fourth*, economic planning, precipitated largely by the "depression," has also provided an urge toward the regional approach. The late NRA industrial program, the regulatory program of the Petroleum Administrative Board, the former crop-control planning and the present nascent soil-improvement schedule of the AAA, all these and other forms of commodity or functional planning have required specialized areas as bases for calculations or operations.

*Fifth*, the growing manifestation of the social phenomenon known as regionalism has also played a part. Regionalism arises out of a spontaneous loyalty to area. It may be described as "a clustering of environmental, economic, social, and governmental factors to such an extent that a distinct consciousness of separate identity within the national whole, a need for autonomous planning, a manifestation of cultural peculiarities, and a desire for freedom of administrative action, arises and clamors for recognition."

Regionalism is to be measured neither entirely in the social realm nor in the physical realm. Rather it grows out of man's adjustment to area. For example, "an area, wherein there has grown up one characteristic pattern of human adjustment to environment, one general class of human use of resources and locus,—is a region."

Most States possess regionality only to a slight degree. Hence we tend to identify ourselves as Southerners, or Middle Westerners, because our basic or natural loyalties are elicited by other areas than States. We, therefore, tend to think in terms of the region rather than the State. As pointed out by Prof. John Gaus, regionalism is the basis for "the encouragement of a richer and more varied life for the Nation, whereby the peculiar characteristics, resources, and contributions of the major sections of the country can be protected from invasions, exploitation, and suppression by ill-considered and hasty national policies. The very stimulation of self-consciousness of the individual region or section may recruit a wider leadership for civic affairs, and a richer culture."

The *sixth* and last incentive to regional planning is the deliberate encouragement and systematic stimulation by professional planners.

Many of these latter have perceived the limitations of both the national and the state approach, and have deliberately steered for a new polity.

*The Promise of Regional Planning.* Regionalism, as a *motif* for planning, seems to offer manifold promises, the road to which involves several definite steps: (a) identifying the regionalism which is present; (b) demarking the area which encompasses it; (c) determining the needs of this area; (d) making a plan and fitting it to the area in question; (e) implementing the plan in terms of state and federal sovereignties.

An eminent Southern scientist has outlined the aims and opportunities of regional planning for his region, as follows:

The task of planning (for this region) is an extraordinarily difficult one, but all the elements necessary for success are present and only need to be focused in the right ways and combinations. There is ample evidence that unless there be a definite change in regional economy, there will be retrogressions in agriculture, in industry, and in general culture and institutions. Some aspects of this prospect are alarming, indicating that the South can ill afford to make many more mistakes.

Regional reconstruction can be successfully achieved only in relation to national integration and interregional adjustments. By the same token, national social-planning must be based upon regional analysis and functioning, giving logical values to regional differentials and distributions.

Realistic and stable results can be attained only through approximate delimitation and definition of the region on the basis of scientific and functional analysis, reclassifying border areas, and providing for adequate functional sub-regional divisions to meet the practical needs of overlapping areas and specialized activities. In this regional classification there is need for more approximate uniformity among the many national and local boards, agencies, and consultants, and less accidental and arbitrary allocation of areas and functions.

The objectives of the new planning envisage no Utopias, yet they do look toward the rehabilitation of the people, toward the reconstruction of cotton economy, toward increasing the Southeast's revenue to the nation as well as its own wealth, and toward general regional, cultural adjustment. . . . Such emphasis in the Southeast ought to serve as a new regional motivation as well as to point the way to tangible, visible next steps.

While continuous emphasis must be placed upon state planning, regional planning can contribute wisely to many special aspects and to the general regional development. This is especially true in agricultural reconstruction, in land and other resource utilization, in institutions of higher learning and research, and in social legislation needed as adequate framework for practical planning.

This means a very realistic program . . . comprehending the whole problem of land use and planning, and of optimum programs of agricultural production in relation to population, to industry, and to total capacity of the region, its interregional relations and its foreign markets. This . . . involves the measure and use of present surplus people and labor as well as land of readjusted crop production and land improvements, or programs of rural housing and rural electrification. It implies new emphasis upon special activities such as dairying and livestock industry, small industries and part-time farming, new occupations and new crops, new industries, and it assumes new reaches in expanded coöperative organizations and endeavor.<sup>2</sup>

<sup>2</sup>Odom, H. W., "Southern Regions of the United States." University of North Carolina Press, Chapel Hill, N. C., pp. 664, various pages.

*Possible Regional Forms.* So far, most of the discussions which have been carried on in this country regarding regional planning have centered about two questions: *First*, shall we have regional planning or not? *Second*, what powers will be assigned to it? The answers to these will perhaps appear in the two related papers which follow. Meanwhile, it is here proposed to raise a third question and examine its implications, namely, "What kind of regional planning are we going to have?" In order to answer this, one must examine the major proposals along this line which have already been made.

*First*, it has been proposed to create blocs-of-States operating by compact agreement. To many, a unit consisting of, say, six States is preferable to one of 48 States, partly because it is more wieldy and partly because it is nearer both the citizen and the problem.

*Second*, it has been proposed to project city planning over the hinterlands of the large cities. The advantages and problems of this procedure are fairly obvious, but it should not be overlooked that at present there is in progress all over the Western world an almost silent but bitter struggle between the urban and the rural way of living. Indeed, it has been asserted by some that the present need for planning has, in considerable degree, arisen out of the need to protect rural culture and resources against those exploitive forces emanating from the modern city. To adopt this premise for regional planning might, therefore, place the emphasis in regional planning in an undesirable quarter.

*Third*, it has been proposed to orient regional planning in terms of that deep-seated regionalism which is geographically inherent in America and which is constantly apparent in the culture of its inhabitants. This would be not so much a new polity in American government as it would be an entire realignment of loyalties, incentives, and objectives in our national life; a harnessing of an heretofore neglected factor to achieve desired and worthwhile ends.

*An Example—The Great Plains.* In order to evaluate these three alternative proposals, suppose they be applied to the Great Plains.<sup>3</sup>

The general characteristics, both natural and human, of this area are well defined; its boundaries are fairly clearly established. Politically the Great Plains Region involves parts of *ten States*, but does not include all of any one State.<sup>4</sup> This is one of the crucial problem areas of the Nation; indeed, it presents numerous serious problems which demand treatment as a unified region rather than as part of ten States. Chief among these problems are:

- (1) recurrent drought;
- (2) extensive farming on submarginal land;
- (3) need for enlargement of farm units;
- (4) control of wheat production;

<sup>3</sup>The writer is a native of this region and hence particularly familiar with its conditions.

<sup>4</sup>These are: Montana, North Dakota, South Dakota, Wyoming, Colorado, New Mexico, Texas, Oklahoma, Kansas, and Nebraska.

- (5) feed, seed, and land loans;
- (6) shelterbelt planting;
- (7) restoration of range grasses;
- (8) conservation of water;
- (9) revision of local governmental pattern;
- (10) partial revision of settlement pattern.

At once arises the question as to what premise shall be used in creating a region to deal with these problems?

*First*, shall regionalization be on the basis of urban spheres of influence? If so, Denver, Portland, St. Louis, Dallas, Chicago, and the Twin Cities, all have valid claims to pieces of it. On such a premise, the area falls apart.<sup>5</sup>

*Second*, shall it be on the basis of grouping together the ten States concerned? If so, it becomes necessary to include much area and population outside of the Great Plains.<sup>6</sup> The extraneous parts thus included comprise some of the finest portions of the adjacent cotton, corn, and wheat belts. The external better portions of the States concerned so color the total combination as to convert the bona fide Great Plains interests into an assemblage of minorities. The primary regional objectives are thus obscured or submerged.

*Third*, shall we recognize that the Great Plains are a fundamental unit in both physical and human terms, and proceed by setting the area up as a prima facie region? If so, our main concern is to identify the fundamental regionalism which is the core or nucleus of the area. Similarly, our major objective becomes that of preserving the area's essential unity and homogeneity as a frame for program formulation and for the execution of those programs. Thus the paramount emphasis is placed upon the problem area and not the States, although the sovereignty of the latter is not impaired.

*Conclusions.* Regionalism is real, regardless of what may be done with it, but its instrumentation is neither self-directing nor self-executing. If it is to be useful, it must be rationally controlled. Otherwise we will reproduce the same old medley of checks, balances, compromises, and fractional jurisdictions, which has come to be identified with the American system, but which has little to offer the planner.

Regional organization is unquestionably the coming polity. Whether it will eventuate next year, next decade, or next century cannot be forecast. There are many forms which it may assume. Its future pattern may be left to chance, with all which that might mean in waste, inefficiency and indirection. Indeed, developments to date suggest that regions are apt to be created administratively by catch-as-catch-can methods similar to those used in the past in laying out States and lesser

<sup>5</sup>There is already a movement on foot to include part of the Great Plains in a unit of this kind.

<sup>6</sup>There is already under way an organization including the four northern Great Plains States together with one State entirely outside that area.



civil divisions. On the other hand, regional organization can be carefully planned ahead of time in the interest of efficiency and harmony within the structure of national life. At any event, regionalism presents one of the most significant and insistent challenges to the professional planner today.

### POLITICAL AND ADMINISTRATIVE ASPECTS OF REGIONAL PLANNING

By MARSHALL E. DIMOCK, Department of Political Science, University of Chicago,  
and Consultant, National Resources Committee

**F**EDERALISM remains the most difficult problem of the American constitutional system. It becomes increasingly clear, therefore, that in a country as vast and varied as ours, there is needed an intermediate level of administrative coördination and planning authority midway between the States and the Federal Government.

There has recently appeared a vigorous revival of the doctrine of states rights. In large measure this is a result of the feeling that too much Federal control results in a paralyzing over-centralization and loss of democratic participation in government. Regional decentralization and regional planning can provide the needed balance.

A few planners, geographers, and political scientists have been aware of this fact for a long time, but not until recently have they begun to work out its practical implications. Within the last six months, three significant studies have appeared: first, Howard Odum's penetrating and challenging "Southern Regions"; second, Karl Lohmann's "Regional Planning"; and third, the National Resources Committee's "Regional Factors in National Planning."

This represents splendid progress. But the regional solution is far from being realized. It is one thing to know what is best to do from a rational standpoint, but quite another thing to change popular lethargies, constitutional rigidities and administrative modes. Francis Delaisi, a distinguished French economist, has written a book entitled "Political Myths and Economic Realities." He points out that boundaries are merely myths and that well-being is to be secured by following economic dictates. We would all agree with him. But there is irony in the words Delaisi employs. Political boundaries are stubborn facts; popular attachments to symbols are realities—disappointing as their irrationality may be.

Regional government may possibly be a long time in coming. This despite the fact that regional consciousness has grown rapidly in almost every section of the country within the last few years. But even when the desire has become strong, it will probably be found difficult to transform our constitutional and administrative structure, so as to provide for it.

Meantime there are a number of very definite things that can be accomplished. Some of them will lead us toward an ultimate sub-national regionalization. It should be possible to effect a substantial degree of regional planning within the existing boundary provisions and governmental powers of this country. Moreover, administrative coördination on this level can be effected in several ways. One of the most significant developments of recent years has been the almost universal regionalization of Federal departments and newly established agencies; the next step is coördination between them at regional centers and the use of such centers for Federal coöperation with state and local governments. There is no reason why we should not recognize regional capitals in fact even though we do not do so in constitutional law for some time to come. The Federal Government has already fostered regional planning commissions in two sections of the country and has established the Tennessee Valley Authority in an area including parts of seven States. Then there are means also whereby closer coöperation can be obtained among the several States, among regional groups of States. The interstate compact is one way. State Commissions on Interstate Coöperation, a recent development, also seem to hold promise.

If we are to make progress within the limitations of present areal and administrative alignments, all possible means of coöperation and coördination need to be employed. While I would not discourage the search for the best and most efficient system of sub-national planning and administration (and I have made it clear, I think, that personally I favor regional governments), I am also convinced that no one present method is in itself sufficient. The regionalization of Federal agencies has undoubtedly improved the efficiency of their administration. There are, in all, 106 regional schemes in use by the Federal Government. Concerning this development, James Fesler has said, "The areas chosen were in almost every case larger than States and were usually formed by the grouping of several States. Over three-fourths of the regional schemes use less than 17 regions. In other words, the 48 States have been found both too small and too numerous for use as paramount areas of federal administration."<sup>1</sup> For national planning purposes, it is important that the various departments and bureaus concerned with natural resources and social planning be located in the same regional city. This is far from being the case at the present time. However, proposals for remedying the situation have been worked out and it is to be hoped that speedy progress along that line can be made.

Regional planning has already been given concrete administrative expression in New England, the Pacific Northwest, and the Tennessee Valley. You are already familiar with these developments.<sup>2</sup> But, for

<sup>1</sup>James W. Fesler, "Federal Administrative Regions," *American Political Science Review*, April, 1935, pp. 257-268.

<sup>2</sup>They are described in *Regional Factors in National Planning*, National Resources Committee, chapters 9, 10.

the purpose of the present discussion there are two questions of major importance which ought to be considered. In the first place, should preliminary planning be kept distinct from the execution of plans? Should planning and execution be entrusted to separate bodies or is it desirable to combine the authority? The first method is represented in the set-up of the New England and Pacific Northwest planning commissions, while the unified procedure is exemplified in the Tennessee Valley Authority. However, the difference is not as great as might at first appear, because, as you know, a very complete survey of basic data was prepared for the Tennessee Valley Authority before its present development program was started. Personally, I am glad that both methods are being experimented with. I presume that the planning profession still adheres to the principle that planning is a separate process and that program execution should be turned over to others. However, both business management and public administration have found that there is a continuous chain of responsibility and control between planning and execution, with the result that they tend increasingly to be commingled rather than differentiated. The Tennessee Valley Authority is a testing-ground for the diverse theories. I think the most important point to be insisted upon is that irrespective of which method is employed, adequate advance planning must be required in every case. The second administrative matter to which I wish to refer is the use of the public corporation, as exemplified by the Tennessee Valley Authority, for planning purposes. It can be said with assurance that the public proprietary corporation has demonstrated its social utility and administrative effectiveness when trading activities are to be undertaken by governments. Will the same advantages result when a governmental body is charged with the mixed responsibilities of social planning and public utility management? Here, again, we must expect a longer trial period before a conclusive answer can be given.

Regional planning can be furthered by means of interstate compacts. For this governmental procedure ample constitutional provision has been made. Within recent months certain persons and organizations have thought that they saw in the compact method a panacea not only for physical planning but also for social planning within the realm that the Supreme Court has held Federal power unconstitutional. I believe that such an expectation is far too sanguine. The history of the compact method does not support any such supposition. On the other hand, there are things that can and should be done by means of interstate compacts. The number of compacts has been fairly small, suggesting limited applicability. According to records compiled by the Library of Congress, 57 compacts have been authorized, of which 34 have finally become effective through state ratification. In addition, 13 have been authorized by one or more States without congressional authority and approval. In the Regionalism study of the National Resources Commit-

tee some of the important conclusions reached concerning the compact method were these:

(1) Compacts when most serviceable have dealt with problems that were traditionally "governmental," such as boundary disputes and debt settlements.

(2) The compact method may be expected to succeed when confined to subject matter involving definite conclusions and uniform laws to be administered through the already existing departments of government.

(3) Compacts are not recommended for situations involving the opposite set of circumstances, that is, when the problem is a continuing one; when the solution demands the establishment of independent machinery over and above the separate state departments; and when independent planning and autonomous execution are clearly indicated. (It is this conclusion which is obviously of greatest significance for planners.)

(4) The interstate compact has not proved a satisfactory medium for continuous and progressive planning activity. Additional grants of power must constantly be secured. The system lacks independence, initiative, flexibility and coercive authority.<sup>3</sup>

However, matters such as crime prevention, bridge building, park planning and stream pollution have been effectively handled by use of the interstate compact.

The Interstate Sanitary Commission, created in 1931 by New York, New Jersey and Connecticut, is probably the best-known example of a pollution-prevention program. The Commission has the task of attempting to control pollution of the upper New Jersey coast, most of the shore line of Long Island and the Hudson River up to Tarrytown. It cannot itself undertake construction projects, but can bring suit against any of the 103 communities in its territory which are negligent in preventing water pollution. The compact has recently been given greater effectiveness by legislation in New York, in harmony with acts of the New Jersey legislature. Enforcement is left to the appropriate administrative agencies of the cooperating States. The compact method may be expected to succeed in cases such as this, where compacting States simply agree to do certain definite things and where continuous administration is not a major factor.

Just recently six out of the seven principal petroleum-producing States signed a compact promising to observe prorating schemes; California refused to join. The results of this compact should be watched with great interest. However, I think you planners would agree with me that the basic difficulties in the situation can be adequately adjusted only by Federal authority.

The most active effort to bring about regional solutions by means of agreements between two or more States is being sponsored by the Council of State Governments. At the present time fifteen States have created Commissions on Interstate Cooperation. About half of these are on a statutory basis. The movement held its second annual conference not

<sup>3</sup>*Regional Factors in National Planning, op. cit.*, pp. 50-52.

long ago in Chicago. The Council of State Governments has set up a regional office in New York to serve the Commissions on Interstate Coöperation in that area. To date the principal activities of this new movement have centered in the States of New Jersey, New York and Pennsylvania. Matters which have been dealt with are milk supply, crime, transients, highway safety, the Palisades Park and stream pollution. The uses of streams and the protection of water supply constitute the chief question around which recent efforts have revolved. The New York secretariat of the Council of State Governments has been particularly concerned with the Delaware River pollution-prevention scheme. New Jersey and Pennsylvania have created Commissions on Interstate Coöperation; Delaware has not. The pollution problem is being considered by a joint authority consisting of four representatives from each State, three Commissioners on Interstate Coöperation and one person from the Planning Board of each coöperating State.

There are three significant features of this coöperative movement sponsored by the Council of State Governments that should be noted. In the first place, a well-financed national organization is behind group-of-states schemes; secondly, if the example of the New York secretariat is followed elsewhere common agreements among States are more likely to result; and finally, individual state commissions make provision for representing both the legislative and the administrative branches of the government. It is this last feature that may be most important in the long run. In the past, planning and other programs have all too frequently been jeopardized by failure to educate the legislature, upon whose action approval and funds depend.

I have tried to show that several methods of regional planning and administration are already functioning. Regional planning commissions are in active operation. A Federally created planning authority has made substantial progress. The regionalization of Federal administration is well-nigh universal. Tentative centers of regional planning and coördination have been proposed by a technical committee of the National Resources Committee. Efforts are being made to revitalize interstate compacts and to use them wherever it seems wise. Commissions on Interstate Coöperation are off to a promising start. Every conceivable political and administrative device must be utilized if regional realities are to be given deserved recognition within the confines of the American constitutional system.

All of this results in administrative complexity. But in a Federal system such a result is seemingly inevitable. Eventually, however, let us hope that fully recognized regional governments, standing as a buffer between the extremes of Federal over-centralization and outmoded state particularism, will be demanded by our fellow-citizens.

## ACCOMPLISHMENTS IN REGIONAL PLANNING

By CHARLES W. ELIOT, 2d, Executive Officer, National Resources Committee

LAST winter the report on "Regional Factors in National Planning and Development" gave a general background for regional planning work. It has been described to you in more precise terms this morning by two of the authors. Growing out of that report and partly as a result of it, the National Resources Committee is now about to issue three or more separate reports on regional activity in special areas. Do not be alarmed at this stack of documents, I am not going to read them all, but this is a sample of what we are doing. Regional planning is going on. Another report, another barrel of facts or whatever you want to call it, is being issued this morning with the release of this document on "Regional Planning, Part I,—The Pacific Northwest." That report is one, as the title suggests, of a series of reports.

This Columbia Basin Report is a sample of planning work by joint Federal and state action in order to suggest a new agency or new method for operating the great Federal works at Bonneville and Grand Coulee. The report includes a general statement of the development of the Pacific Northwest and particularly of the great Columbia valley and recommends the establishment of a new "northwest power agency,"—a proposed corporation of three members who would be given the responsibility of operating and distributing the power from those plants.

Sometimes it seems necessary to add a few words as to why a problem of this sort is important. I don't know whether this audience appreciates the situation in the Northwest. One fact alone is sufficient to open most of our eyes to the importance of that area. When you realize that 41 per cent of the total possible hydroelectric power of this nation lies in the Columbia basin you get some idea of the size of this power problem in the northwest corner of the country. It is for that reason that the recommendation in this report by the Northwest Regional Planning Commission with the covering statement from the National Resources Committee is now before Congress. Since the report recommends action at this session of Congress, its issuance today is opportune.

The other two reports which are coming out in the next few weeks deal with two other kinds of regional problems and demonstrate two other kinds of regional planning activities. The next one on the schedule, which we hope will be out before the end of this month, is another example of voluntary procedure without state authority for planning—this time, in the St. Louis regional area. Those of you who attended the St. Louis conference two years ago will remember that we were just getting under way with the St. Louis plan at that time. The report is now complete and will be issued with a covering statement from the National Resources Committee.

So we have two examples: *first*, in the Pacific Northwest of a body

set up from the chairmen of the state planning boards as the official group with the addition of a district chairman from the National Resources Committee; and, *second*, a scheme in St. Louis of a voluntary association patterned on the same method that was described to you last night by Colonel Wetherill in the Philadelphia Tri-State District or the New York Regional plan or the Chicago Regional plan.

The *third* report represents still another approach and problem. It is the report of the New England Regional Planning Commission which is an outgrowth of many years of work by the New England Council and many other New England federations and groups in those six States. New England is unique in having a longer period of regional consciousness than most other sections of the country. The Regional Planning Commission grew out of the previous efforts of the New England Council which, in turn, was generally representative of the chambers of commerce and the business men. So there is a business interest in the movement in New England which is not equalled probably in any other part of the country.

Now we hope to add to that list of reports as the year rolls on and give you other examples. Perhaps I can give you very briefly a few of the newer activities to expand the picture already given you of the actual accomplishments and past doings in the regional planning field.

First, let me refer to another western example. Dr. Dimock made some remarks about the difficulty of getting any action through interstate compacts. We have found that difficulty to be a very real one. We were appealed to last summer to do something about the controversies which were going on in the upper Rio Grande Valley. They had an interstate compact among the States of Texas, New Mexico and Colorado for agreement on the division of the waters of the upper Rio Grande. Our attention was first directed to the problem by some of the Federal bureaus which showed that Federal agencies were actually competing against each other for water that did not exist in the upper Rio Grande Valley. This situation was a cause for concern to the Reconstruction Finance Corporation, to the Resettlement Administration, the Reclamation Bureau, Biological Survey and to other Federal agencies conducting projects with little correlation among them.

The result of this disclosure was a presidential "stop order" on all projects on the upper Rio Grande, subject to clearance by the National Resources Committee. That gave us an opportunity to deal with the larger problem as a planning project. We have now under way another demonstration project showing the possibilities of regional or interstate planning in those three States.

I would like to give you a little more of that story because it casts so many side-lights on the methods and the problems which are involved. For years those States have just been unable to agree on what was a fact. Nobody believed anybody else could present an unbiased fact to

the commission. So, obviously the first necessity was for some impartial agency outside of the group which could provide the facts and bring them in definite form to the attention of the three States. The Resources Committee is the agency to initiate this demonstration project.

But we obviously could not get the facts without coöperation of a great many agencies and we had to secure money. So the first thing to do was to pass the hat. I am giving you this detail because this is what regional planning really is. Dr. H. H. Barrows, a valued member of our water committee, and I took our hats in hand and went from one agency to another: "How much money can you put up? How much can you put up?" and in that process we corralled quite a nice little nest egg for the encouragement of the States and later of the Public Works Administration; we got \$30,000 from Reclamation, an agreement from Dr. Gray for \$10,000, from the Geological Survey \$20,000, and so on. We then went to the Public Works Administration and said: "We have got to have at least \$250,000 more." They cut us down to \$200,000. Then we went to the States and said: "We are practically ready to go, but we are not going to move until you show serious intention to participate," and they came across with approximately \$17,000 apiece. So now the project to gather those disputed facts and to present a planned program is under way in the Rio Grande basin valley.

Still another example of procedure of this sort is evidenced by the new water plan which will be discussed by Mr. Wolman, the head of our water committee, this afternoon.

I would like to sum up a few of my own reactions to the remarks of the two previous speakers. This is more in the nature of discussion than of a paper.

I am concerned personally with certain doubts about this new regional program. There are certain things about it that leave me quite jittery as to what they may portend. One thing I hope we may avoid is adding a new level of government in this country. It has been repeatedly pointed out that we have too many governmental units already, and if we are going to add on some more, it seems to me more a loss than a gain. If we have now 192,000 units of government, surely we do not want to add even 12 more regional units!

The second thing I hope we can avoid is this idea of boundaries. We do not want, as I see it, provinces or regions in any sense in this country. What we must have is elasticity without those powers that go with administrative organization.

I hope that out of these doubts or worries we may get some corresponding hopes, particularly the hope that through the technique of the planner, separate from execution, we can make some coöperative agreements among groups of States, different groups and different combinations, to meet different problems, who shall perform as opportunity arises without attempting to set up any new level of government.



I hope also that for the time being we can keep the emphasis on physical planning as being more easily understood by the public and less subject to misinterpretation.

I hope further that we can stress what was already indicated by both the preceding speakers—concentration of effort *in centers* instead of at the fringe of the problem. We can get agreement on certain centers of interest and we might be able to work out some arrangement for coöperation among officials as has been demonstrated to be possible in the organization of state planning boards.

I should not stop this discussion without reference to the fact that practically all of the district chairmen of the National Resources Committee are very vitally concerned in this question of coöperation among States for regional planning and practically all of them are making some effort to get either a center established or some understanding among groups of States for this work. Mr. Bettman, for instance, has succeeded in organizing the Ohio Valley Regional Planning Commission; Mr. Moderwell has called a conference of the upper Mississippi Valley States to discuss how they can work together effectively; Mr. Ronald is now acting chairman of a similar group in the Missouri Valley States and part of the Great Plains area where they have adopted a scheme of a rotating chairmanship among the state planning board chairmen. In the Pacific Southwest our district chairman, Mr. Woods, has in mind the early calling of meetings for the discussion of organization in that area. On the Delaware River problem, help has been forthcoming from the Council of State Governments.

We have certainly not yet had sufficient experience with different forms of regional organization to be ready to recommend any one form. We have before us a long period of experimentation and a different kind of experiment from that we have been conducting in the field of state planning. It seems to me the fact that the States were organized as administrative units made it entirely logical and proper that that was the first and most important step to be taken in the way of enlarging the scope of planning work, but this regional problem because it involves both the powers delegated by the States to the Federal Government and the powers reserved by the States to themselves, is something which must be worked out with much more backing of public opinion than was necessary in the case of starting the state planning movement. We need all of your thought, all of your advice in the further development of this regional planning field.



**THE NATION**



# National Planning

## EMERGING POPULATION PROBLEMS

By FRANK LORIMER, Technical Secretary, Committee on Population Problems,  
National Resources Committee

THE American colonists were exponents of a population policy so appropriate to their situation that it was universally taken for granted. They found the classical expression of this policy in the ancient admonition, "Be fruitful, multiply, and replenish the earth." The young Nation responded exuberantly to this ideal which seemed peculiarly appropriate to the situation. Before them stretched the wide wilderness, a land to be tamed and replenished. Even in an era of rapid expansion of world population when the combined population of Europe and its colonies rose from about 150 million in 1750 to about 550 million in 1900, America was outstanding. Malthus, in 1792, was able to point to the doubling of population in America once every twenty-five years as affording the best illustration of the type of population growth to be expected in the absence of "positive checks" on natural increase.

The dividends of this increase naturally accrued in greatest measure to the owners of established enterprises, those in possession of land, railroads, factories, and to a considerable degree to the entire population in centers that served surrounding areas of expanding population. The tradition that population expansion is a fundamental characteristic of a normal, healthy Nation became firmly fixed in American ideology. "Bigger" came to be regarded as more or less synonymous with "better." Even in the sober language of the Census, a population increase is a "gain," a decrease is a "loss."

This expansion was, of course, irregular. Areas of population pressure began to develop at an early date, but these were constantly relieved by migration to new lands. A number of Virginia counties, for example, had a larger population in 1790 than in 1930. It is true that titles to the best unoccupied land had been taken up about 1890, but the West, and especially the Far West, remained an area of primary opportunity throughout the last decade. In fact, the net interstate migration into California during the period 1920-1930 passed the million mark, and was the largest movement into any State ever recorded in any decade of American history. The posting of guards on the California border during the present depression symbolizes the fact that free expansion into undeveloped areas has ceased to be a ready automatic-adjustment-mechanism for the maladjustments of a planless economic order. The first important reversal of population policy in this country, the limitation of immigration, although in part an expression of ethnic conflicts, may be ascribed primarily to recognition of the changing outlook in this country with regard to population growth and resources.

Signs of the slowing down of population growth are already clearly in evidence. It is apparent that our present crude rate of natural increase is due entirely to the disproportionate number of persons now alive at reproductive ages. When an intrinsic rate of natural increase is calculated by applying age-specific birth rates and death rates for the United States to a population with normal age distribution, these rates are found to have reached a point of equilibrium in 1932. It is therefore highly probable that within a few decades population growth through natural increase will be superseded in this country by a period of diminution. The public reaction to this situation may lead to wholesome and constructive measures designed to give greater support to normal family development, or may result in repressive measures with possible disastrous consequences. This suggests an emerging problem of considerable interest and importance.

Other aspects of population change present problems of more immediate urgency. We have at the present time some severe cases of maldistribution of population in relation to economic resources. Various factors tend to retard the adjustment of population to opportunity by migration, such as attachment to local situation, lack of adaptability on the part of certain groups in areas of limited opportunity, the high birth rates in such areas, bad schooling which intensifies the lack of adaptability and is partly responsible for the high birth rates, and above all, the absence of industrial opportunity. Any permanent solution of the farm problem must involve population adjustment. Sound population adjustment appears to depend on a balanced industrial expansion.

Problems of differential reproduction are more intimately related to problems of population distribution than is generally recognized. Using an index of economic level, developed by the Study of Population Redistribution, the group of counties characterized by the lowest plane of living was found to have, in 1930, a ratio of children to women 62 per cent above that sufficient for mere population replacement, and the group at the next level showed a rate of natural increase of about 40 per cent per generation, whereas in the fifth or sixth groups there were 10 per cent fewer children than would suffice for mere population replacement, and in the group of counties at the top there was a fertility of about 25 per cent.

Differential reproduction trends that are similar in character, though less in degree, are found in comparing families classified according to occupation, economic or social status. The reproductive tendency of scientific occupational groups, using a study based on 1928 birth statistics, and taking differences in child mortality into account, is represented by such reproductive indices as the following, using 100 as a base representing tendency toward equal population replacement: Coal mine operatives 134, carpenters 107, semi-skilled operatives 104, electricians 94, bankers 76, physicians and surgeons 70, architects 65.

There is clearly a tendency for a disproportionate number of the forthcoming generation to be recruited from parents with meager educational advantages, and to be brought up in areas marked by inferior economic and social opportunities. There is a high negative correlation between reproduction indices and indices of school efficiency for States. A similar analysis by counties would undoubtedly yield an even more decisive result. Such a situation raises national problems relating to public health, education, and economic adjustment which it would be rash for anyone to attempt to define in a brief address.

In many other ways population studies supply a necessary base for institutional and regional planning including, for example, estimates of population of school ages, population to be covered by old age benefits, trends in location of population as affecting school building programs, and other features of community development. It is becoming increasingly imperative that population problems receive careful research attention by government and private agencies far beyond past efforts in this direction and merit a large place in planning activities with local and national development.

The appointment of a Committee on Population Problems by the National Resources Committee marks a significant recognition by the Federal Government of population problems as a matter of national concern. Such recognition has long been made by professional bodies, including the President's Committee on Recent Social Trends. Studies by the Scripps Foundation, Milbank Memorial Fund, the Social Science Research Council's Study on Population Redistribution, and the Conference on Population Study and Social Planning, under the auspices of the Population Association of America, in Washington, May, 1935, may also be cited in this connection. Population studies have been conducted by the Bureau of Agricultural Economics, with reference to farm life, and the activities of the Resettlement Administration have implicit reference to population problems. The recent establishment of a Division of Research in the Bureau of the Census implies recognition of its responsibility for the scientific development of data on population and related topics. The subject has also frequently received occasional recognition in the addresses of public leaders, notably by the President. The appointment of a Committee on Population Problems is directly in line with the attention to population studies which has been one of the most important features of the State Planning Board reports.

The Committee on Population Problems has been requested to present its report early this fall. This Committee, therefore, cannot do more than define problems of national importance in this field, present enough data to illustrate the character of these problems, indicate some tentative results and suggest significant research by Federal, state, and local agencies.

## INDUSTRIAL RESOURCES

By GARDINER C. MEANS, Director, Industrial Section, National Resources Committee

I HAVE been asked to speak on the subject of industrial resources and to describe some of the work which is being carried on by the Industrial Section of the National Resources Committee.

In considering industrial resources I wish to use that term in the very broadest sense. Our industrial resources consist of our man-power, our machines and our knowledge of techniques. The problem of conserving industrial resources is primarily the problem of conserving our man-power and the use of machines.

Now, man-power is a very peculiar resource. It is like water-power. If you do not use it when it is there, it is gone, and no amount of king's horses and king's men will bring it back again. Man-power which is allowed to go over the dam unused is so much sheer waste.

Machines likewise present a resource which can easily trickle through our fingers and be waste. Idle machinery can often lose its usefulness quite as rapidly as machinery and equipment which is used. Here again failure to use machines is likely to involve waste.

Consider the waste of man-power and use of machinery which has occurred in the last six years. If all the man-power and use of machinery which has gone to waste during the depression could have been used to build houses, every family in the United States could have had a brand new \$6,000 house. Think of the waste of resources which this involves. The waste of forest resources, the waste in oil extraction, the wastes from unplanned cities are no greater than this tremendous waste of human and machine resources. It is the conservation of this type of resource with which the Industrial Section of the National Resources Committee is concerned.

In approaching this problem the National Resources Committee organized an Industrial Committee composed of Jacob Baker, Assistant Works Progress Administrator, Chairman; Hon. E. G. Draper, Assistant Secretary of Commerce; Dr. Isador Lubin, Commissioner of Labor Statistics; Leon Henderson, formerly Director, Research and Planning Division, NRA; Edwin G. Nourse, Brookings Institution; Col. G. T. Harris, Jr., Director, Planning Branch, Office of Assistant Secretary of War; Thomas C. Blaisdell, Jr., Economic Adviser, Office of the Administrator, Resettlement Administration, and myself. We have commenced studies into the joint problems of industrial capacities and consumption requirements. What are the industrial capacities of the country and how many people would be required to produce this, that, or the other amount of goods and services, of shoes and ships and sealing wax and cabbages? What things are the people going to demand at different levels of national income? How much are they likely to spend on coal and shoes, how much on cotton cloth and how much on food? These are



the problems of industrial capacity and of consumption requirements with which our studies deal.

The purpose of these studies—and I will explain their detailed character in a moment—is to furnish more adequate and comprehensive data for those who have to make decisions in respect to industrial activity. The uses to which such data can be put are many and important. Both individual producers and the community as a whole suffer great economic losses from mistaken estimates on the part of businessmen as to consumer demand and as to existing capacity. In planning new factories or in expanding old ones, individual businessmen are likely to have excellent information on the immediate problems of engineering and economics which they face, but they are not likely to have an adequate framework picture of the larger engineering and economic problems into which their enterprises will have to fit. Such a picture would be too complex for any but the largest enterprises to construct. Accurate information on industrial capacities and their relation to consumption requirements could greatly reduce the waste resulting from the inability of the individual business to create the larger picture. Thus data on consumption requirements could constitute a direct aid to business in the layout of sales campaigns and sales territories. Data on industrial capacities could constitute a direct aid to business in planning new industrial facilities. Labor and consumer groups can use such data as a direct aid in protecting their interests and working for a higher standard of living. Finally, local governments will find such material a direct aid in the development of particular regions, while such data would aid the Federal Government in seeking to bring about better economic balance.

In dealing with these problems the function of the Industrial Section is primarily that of a research agency planning studies to be carried out by different bureaus of government, coördinating actual studies as they are undertaken and combining the results of the separate studies. It is not the intention of the National Resources Committee that the Industrial Section should build up a large staff. Ours is the work of stimulating and guiding research and of integrating material to give a more comprehensive picture than any single department of government is in a position to give.

In carrying on this work it is our intention to approach the various facts concerning industry from two quite different points of view. *First*, we will examine the industrial process from the point of view of the producer looking down the stream of goods as they flow toward the consumer. *Second*, we will examine the industrial process from the point of view of the consumer looking up the stream of goods as they flow down from the producer. The first of these approaches involves primarily the problem of jobs, of industrial capacity, and of markets. The second involves primarily the expenditure of income, the goods and services

received, and the using up of valuable resources. Only as both of these points of view are adopted can we present a well-rounded picture of industry.

The work of the Section up to the present time has made the most progress in the field of consumption requirements. This has been due in part to the pioneer work already done by other government agencies. Two bureaus of government, the Bureau of Home Economics and the Bureau of Labor Statistics, are particularly concerned with the subject of consumption, though each has approached the problem with a slightly different emphasis. The Bureau of Home Economics has made several small studies of family expenditures, placing special emphasis on the adequacy of the living obtained. In making these studies it has taken important steps in developing effective techniques for the collection of family-consumption data. The Bureau of Labor Statistics has made similar studies with respect to the expenditures of families of wage-earners and low-salaried workers, placing particular emphasis on the money outlays necessary to maintain a constant real income. This Bureau has expanded its work in the last two years and has devoted considerable sums to collecting data on family expenditures, to be used in revising cost-of-living indices. In this work it has further improved the techniques for collecting family-consumption data. However, in spite of the work of these two bureaus and of other agencies which have made small studies in this field, the techniques developed for making such studies have required further elaboration and the existing information on family consumption is entirely inadequate for the many purposes for which it is needed, and particularly it is insufficient for drafting an adequate picture of the consumption patterns of the population.

Because of this inadequacy of information on family consumption, the Industrial Section was directed to undertake as one of its functions the development of more adequate techniques for studying family consumption and the planning of a national investigation of the expenditure on goods and services by American families. This it has done in close collaboration with the Central Statistical Board, the Bureau of Labor Statistics and the Bureau of Home Economics. As a result of eight months' work on the part of a technical staff, working in coöperation with the two bureaus concerned, a coördinated plan was developed with two projects to be administered respectively by the Bureau of Home Economics and by the Bureau of Labor Statistics. This plan carries out the recommendations for such an investigation made by the Social Science Research Council and calls for study of urban and rural families of various income classes and occupational groups in 50 cities and 22 rural sections. Funds for the projects have been obtained from the Works Progress Administration, and field work is now going on under the direction of the Bureau of Labor Statistics and of the Bureau of Home Economics under the general supervision of the WPA.

The families being covered in the study are distributed according to six major classifications: (1) by geographical area, (2) by size of community, (3) by income, (4) by occupation, (5) by color, and (6) by family composition. The geographical distribution has been provided for through the adoption of six areas and two metropolitan districts. In each area large, middle-sized and small cities as well as villages and farm sections will be covered so as to reflect differences in the degree of urbanization. Several rural sections will also be covered in other areas, representing the important types of farming not found in the six main areas. Twenty income classes, eight occupational groups and seven family types will be covered.

Most of the information will be obtained by the schedule method through personal interviews, voluntarily given. It is expected that data will be secured on income, occupation and family composition from approximately 336,000 families selected through random sampling. From approximately 53,000 families detailed information will also be obtained on current expenditures and savings, ownership of durable goods, housing facilities and other indices of levels of living. This sample is being selected according to a prearranged plan assuring an equal number of families at all income levels for each occupational group. From a small part of this sample, dietary records, health records and household accounts will also be obtained.

It is expected that the statistical results of the project in each community studied will be published by the two bureaus making the field studies. These bureaus are likewise expected to publish the analytical reports on the expenditures of particular occupational groups.

On the basis of this material the Industrial Section expects to present pictures of the consumption requirements of the American people as they would exist under various possible conditions, as they would be if the national income were of a given size and were distributed geographically and with given frequency. The whole problem is how people are likely to spend their money, how much is likely to be spent on coal, on shoes, on cotton cloth, and on tobacco.

Corresponding to the work on consumption requirements is a series of studies concerning industrial capacity. Though there is a great mass of information concerning industry, very little of the pioneer work has yet been done in organizing the data to show what our industrial capacities really are. As a result, the work of the Section in this field is not yet as far advanced as is that on consumption requirements.

In developing this work, the Industrial Section has first undertaken studies to work out techniques for estimating industrial capacities. The problem was found to be vastly more complex than is usually supposed, and as a result the techniques of analysis developed tend to be quite different from those previously employed and call for a redevelopment of data with respect to industry.

The most important differences in approach have developed in connection with the question—what do we mean by industrial capacity? In general discussions of capacity, the problem is usually considered as one of capacity to produce. The same attitude is reflected in discussing certain industries. Thus, the capacity of a blast furnace is spoken of as the capacity to produce so many tons of pig iron per day. However, for many industries capacity is rated as capacity to consume. Thus the capacity of a coke oven is rated as the capacity to consume so many tons of coal a day. (In the technical language of the industry a coke oven has a “throughput” of so many tons of coal in twenty-four hours.) Similarly the capacities of ore milling plants, packing houses, and refineries are spoken of in terms relating to capacity to consume. In other cases neither the capacity to produce nor the capacity to consume gives an adequate clue to the capacity of an industry. For instance, some blast furnaces have been built in connection with city gas plants in part to consume coke and in part to produce flue gas for mixture with coal gas. The pig iron is a by-product. Here neither capacity to produce nor capacity to consume would give an adequate picture. Just what then does industrial capacity involve?

In meeting this problem, the Industrial Section reached the following conclusion: the industrial capacity with which the National Resources Committee is concerned is neither the capacity to produce items of output nor the capacity to consume items of input but rather the capacity to convert items of input into items of output. Stated in the broadest terms, the question to be put in studying the capacity of a plant or industry is the question—how much of what items can be converted into how much of what items in a given period of time? Under given price conditions how many tons of ore of a given quality, how many tons of coke, how many tons of limestone, how many man hours, and how much power can be converted in a blast furnace into how much pig iron, how much flue gas, and how much slag per twenty-four hours? The problem of industrial capacity thus becomes one of *conversion capacity*.

Such a shift in emphasis greatly complicates the problem of estimating industrial capacity but it does more correctly state the problem. Only as adequate estimates of the conversion capacities of industries are developed will a clear picture of industrial capacity be obtained.

With conversion capacities established as the objective, the next step in studying industrial capacities has been to develop techniques for estimating conversion capacities. This work has been under way and has resulted in a generalized technique which should be available for publication in the near future. The concrete application of the general techniques to specific industries is also under way.

In making these studies, striking inadequacies in the existing data on industry became immediately apparent. Little or none of the data on industry has been collected with a view to estimating conversion capaci-

ties. Much of the available data will be useful for this purpose but many serious gaps must be filled before the data can be effectively used. This is not a matter of getting more refined data, but of getting data which are of primary importance to the problem of industrial capacity, yet have not been important to the particular purposes for which data have been collected by the different agencies in the past.

This inadequacy of existing data makes necessary the laying of plans for filling the gaps at the same time that plans for organizing the data are developed. The latter is an essential step in disclosing the gaps while the former is essential to an adequate picture of industrial capacities.

As in the case of consumption requirements, it is regarded as the function of the Industrial Section of the National Resources Committee in collaboration with other government agencies to develop plans for studying the conversion capacities of particular industries and to assist in coordinating the activity of government agencies carrying out such studies.

As a background for such activity, the Industrial Section is making a series of studies in particular industries which will, in large part, form the basis for the organizing of existing data and the collection of any new data necessary to throw a clear light on industrial capacity.

The initial exploratory studies to develop techniques were undertaken in the blast furnace industries and in that of cotton spinning. Studies are now under way covering iron ore, coal, coke, and cement. Plans have been laid for carrying the exploratory studies into other parts. The work is being carried on by a small staff of engineers and economists and will result primarily in laying a foundation for the development, with other agencies of government, of plans for more comprehensive studies into particular industries so as to estimate their conversion capacities. It is presumed that these plans will be comparable in nature to the plan for the study of family consumption developed by the Industrial Section in collaboration with the Bureau of Home Economics, the Bureau of Labor Statistics and the Central Statistical Board. Of course, the planning of such studies is only a beginning. The actual work of carrying them out will rest with other government bureaus.

This type of work goes slowly and the initial results are not spectacular. The developing of techniques, the careful working out of proposals for study involve time and energy without showing immediately useful results. Yet as this type of work is carried on and the studies are made we will gradually be able to build up a very clear picture of the industrial capacities of the country. Such a picture will be an effective guide to all those concerned with the problems of industry. The combination of this material with the data on consumption requirements should allow us to picture the possibilities for the more effective use of our man-power and machines—more effective use of our human and material resources.

## PLANNING FOR PUBLIC WORKS

By FRED E. SCHNEPFE, Director, Projects Division, Federal Emergency Administration of Public Works

WHILE the advance planning of public works has actually been practiced only to a limited extent, so much has been written and discussed in regard thereto as to make it difficult to present any thoughts on the subject without the risk of repetition.

For some years certain cities have prepared plans relating to their future physical development. However, until recently little has been done to provide a construction program containing a list of definite projects to be undertaken at a specific time over a period of years.

In the Federal Government most of the bureaus planned only one year in advance, or at best, two years. Not until 1931 did the various construction agencies of the Federal Government begin the formulation of a six-year advance plan. This was brought about by the passage of the Act known as the "Employment Stabilization Act of 1931," a measure sponsored by the Honorable Robert F. Wagner, Senator from the State of New York.

The fundamental purpose of the Act is stated in its title as follows: "An Act to provide for the advance planning and regulated construction of public works, for the stabilization of industry, and for aiding in the prevention of unemployment during periods of business depression."

Senator Wagner's foresight in fostering legislation for the advance planning of Federal public works resulted in untold benefits and was indeed timely. Subsequent to the passage of this Act the advance planning programs resulting from this legislation were used as a basis for the selection of Federal projects for the allotment of funds by the Public Works Administration. The establishment of the Federal Employment Stabilization Board marked the first step in actually bringing into being an authorized advance planning activity of the Federal Government.

Necessarily, a large amount of preliminary work with the various agencies of the Federal Government had to be carried on so that these agencies would have a clear understanding of the purpose of the board, and at the same time enable the staff of the Board to become familiar with the intricate procedure which had been followed in connection with the construction work of the many agencies of the 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 grounds that they did not think it possible to visualize their construction needs six years ahead. A campaign of education and demonstration gradually broke down this resistance, with the result that complete coöperation was obtained from all the agencies.

This period of conference and contact required considerable time, and it was not until June, 1932, that the Stabilization Board first sent to the construction agencies of the Federal Government a request for the submission of a six-year plan for both construction and repair. These plans were submitted in August, 1932, by approximately 70 agencies and formed the basis for many discussions with the agencies concerned, in order to reduce the plans to a somewhat common basis. With the convening of the 73rd Congress in March, 1933, it became evident that the possibility of the passage of necessary legislation would embark the Federal Government on the construction of an expanded program of public works.

While the six-year plan which had been prepared did not anticipate a program of the size required by the proposed legislation, it did serve admirably as a base on which to build the so-called expanded program. The construction agencies, through their association with the Federal Employment Stabilization Board in carrying out the requirements of the Employment Stabilization Act of 1931, had been made conscious of the necessity for the advance planning of public works. The knowledge and experience which they gained in this activity was invaluable to them and to the success of the public works program. Therefore, when in May, 1933, before the National Industrial Recovery Act was passed, a request was made to the agencies to submit immediately programs arranged by priorities, the submission of such programs was accomplished with a minimum of delay and contained projects which had been subjected to months of study and from which the least desirable projects had been eliminated. Without the planning experience gained by the construction agencies from 1931 to 1933, the submission of such well-selected projects in the short time available would have been impossible.

The National Industrial Recovery Act, signed by the President on June 16, 1933, established the Federal Emergency Administration of Public Works and authorized an appropriation in the amount of \$3,300,000,000 for public works and other purposes. The Administrator, under the direction of the President, was charged with the task of preparing a comprehensive program of public works.

As previously mentioned, the agencies had already submitted lists of projects which they considered suitable for inclusion in an expanded program. In submitting these lists it was essential that they furnish for each project recommended, the location, character of work, estimated cost, the estimated increase or decrease in annual expense of physical upkeep and operating cost, and the estimated cost of acquiring the site. Inasmuch as the speed with which work could be commenced and the amount of employment that would be given are of prime importance in any program for the relief of unemployment, information was required indicating how soon work could be started after funds became available and how soon it could be completed. Specific data regarding the status

of site and the status of plans were also required. Furthermore, to determine the status of projects as expressing the will of Congress, a question was included as to whether the project had previously been authorized by Congress.

Priority numbers were assigned to all projects to indicate the order of their relative necessity and importance as viewed by the agencies. In assigning priorities, they were asked to do so with due consideration to the following:

Whether the projects were under construction or under contract and had to be completed if financial loss to the Government was to be avoided,

Whether necessary for the national protection of life, the national protection of property, to sustain the physical property of the Government, the conservation of national resources, the conservation of national health, the housing of Government activities, replacing obsolete facilities, and if revenue producing.

With this information in hand the Public Works Administration made a tentative selection of projects through its engineers and its special subcommittee on program. These projects were separated into categories, including in the first group those which were considered "highly desirable public works, not adding to future expense." Less desirable projects were separated into groups in the order of their importance and value. Projects requiring a large expenditure for land were considered among the less desirable because of the relatively small amount of employment which they would provide per dollar of expenditure.

The replacement of necessary facilities that were obsolete and would soon require substitution under normal procedure, and the reconditioning of existing facilities to put them in first-class condition, offered projects that demanded favorable consideration. Thus work has been accomplished that under normal conditions would have been completed within the next few years, and with a consequent reduction of the necessary expenditures for such projects in future years.

Projects were carefully examined to determine whether they would entail recurring expense for operation, maintenance, increased personnel and ultimate reconstruction, with a view to eliminating those projects which would place a burden on the taxpayers in the future.

Another factor requiring consideration was the geographical distribution of the work. It can readily be seen that the projects of high priorities in several of the many bureaus might all fall within a comparatively small group of States in which the necessity for emergency employment was not sufficiently pronounced.

The methods which I have outlined were closely adhered to in the selection of projects comprising the Public Works Administration program of Federal projects, the total of which exceeded \$1,560,000,000. This program is now nearly complete, and the more than 15,000 Federal projects distributed all over the United States and its possessions speak for themselves in answer to the question—"Were these projects wisely



selected?" Not only did these projects put men to work at the site and throughout the industries by the manufacture of material and equipment, but they stand as a wise investment, serving the people and the Nation in countless ways and adding to our wealth as capital investments.

The value of an advance plan for public works has been demonstrated by the usefulness of the programs of the Federal Employment Stabilization Board to the Public Works Administration. The existence of this plan made possible the immediate allotment of funds and the prompt beginning of construction, which resulted in men being given, without delay, the employment so sorely needed.

In the planning of non-Federal Public Works, that is, public works projects of States and subdivisions thereof, the first movement toward a coördinated plan of national scope occurred in 1935, when the State Planning Boards prepared for the Public Works Administration a comprehensive inventory of public works in their respective States. While it cannot be said that this inventory furnished a list of definite projects on which to base a series of allotments, yet it made available to the Congress and to the country at large a knowledge of the situation as it actually existed, and had the effect of bringing public officials of States, counties and cities to a greater realization of the necessity for a coördinated public works plan.

Political units of every State were given an opportunity to express their need for useful public works. The inventory, as some of you know, involved more than 130,000 individual projects reported by over 20,000 units or agencies and exceeded \$20,000,000,000 in estimated cost. The projects reported in this inventory were well distributed throughout the country, and their apportionment bears a fairly uniform relation to the distribution of the population of the country.

Many State Planning Boards have encouraged county planning and the preparation of well-considered county-wide programs. In one Kansas county the planning committee, composed of interested citizens, formulated a 20-year plan for improvements to be carried out by Federal, state, county, town and township agencies. The Committee's purpose was to work out such a plan of public improvement as might eventually bring about coördination of effort between the various political subdivisions, to the end that all public works in the county should be built economically, be properly located, and adequate, both in design and utility.

In all States and subdivisions thereof, officers change frequently, but it is believed that a plan will, to a noticeable extent, assure continuity in public works development.

The inventory has also brought forcibly to the attention of municipal and county officials the advantages of city and regional planning in developing their programs of public works, and local interest in planning agencies has been aroused by requirements that projects sub-

mitted for grants under the Public Works Administration be checked against city and local plans. In brief, the inventory will assist the State Planning Boards in their coördinating functions among state and local authorities, particularly in bringing out long-range programs not previously available from coöperating agencies.

A definite opportunity emanating from the Public Works inventory lies in the development of contacts established with county, municipal or metropolitan planning agencies.

The success of the majority of the State Planning Boards, in obtaining data and analyzing it for the inventory, indicates the possibilities of continued service in this field in order to establish a permanent policy of public works planning.

The principles involved in the advance planning of expenditures for construction projects have been applied for many years in commerce and 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 is 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. It is more difficult to measure the social values to be obtained by a governmental expenditure than it is to estimate the returns on a proposed investment for a commercial enterprise. The reason for this is, of course, the difficulty of measuring social values with a dollar yard-stick. While certain projects are revenue-producing or provide economies or services, others produce social benefits only.

As the number of projects that can be shown to be economically justified is so much greater than those which can be financed, the mere statement that a project is economically sound is in itself not sufficient reason to cause it to be given high priority in a planning program, or even to justify giving it a place on the program. The true measure of the importance of a project resolves itself into questions as to whether the project is necessary, how urgently needed, and its value as compared to other projects of a similar type; and what is more difficult, to determine its value as compared with needed projects of other types.

In any discussion of planning the term "economically sound" as applied to projects to be included in a public works program is likely to be heard and properly so. The official engaged in planning a public works program, to be successful in his work, must have a sound appreciation of the economic factors to be dealt with. He must have a clear

conception of the weight and importance to be assigned to the many elements that must be considered in arriving at a decision regarding the relative importance of a project as compared to other projects. Naturally there is a limit to the amount of money available and the ultimate selection of the projects and the assignment of priorities to them is largely an economic problem. Of course the project must be feasible and sound from an engineering standpoint. This, however, in itself would not assure its receiving a high priority or even cause it to be placed on the program.

In determining the usefulness, practicability and desirability of a project and the order of importance of the various projects that comprise a program, the planning body cannot apply a formula and obtain the answer. Sound judgment, obtainable only through a suitable background of technical knowledge, broad experience and vision, is indispensable to the proper functioning of a planning body.

The number of projects disclosed by a planning program as being "economically desirable," and, to go a step further, that are "economically justified," may be very large. Due to a lack of sufficient funds, to undertake all of them would be impossible and unwise. The tests to be applied in determining their priority are current need and relative need, not only as existent between projects of the same type, but between projects of different types.

In setting up a program for several years in advance, the projects appearing for the first year should express the current needs for that year. Likewise, the succeeding years each should show a listing of projects that endeavor to meet the requirements for each year specified in the program. This should provide for an annual program in normal times.

It may be well to emphasize at this point that the list of projects appearing for the first year of a program should not include those projects to be used in an expanded program. In other words, the projects listed for any one year should comprise a normal program for that year.

In order to expand the program in a period when it is necessary to relieve the unemployed, the list of projects shown for the first year can be augmented by adding those shown for succeeding years to the extent necessary for increasing the program to the volume desired. Projects included in an emergency program should be of the same general type as those set up in a normal program, but should be selected with prime consideration of the extent to which such projects will relieve unemployment.

Certain data are necessary prior to determining the position that a project should be given in a planning program. This information should be assembled by the sponsor desiring the allotment and a carefully prepared form used for the reporting purposes. The form submitted should show definitely certain specific information along the lines previously mentioned in connection with the plans submitted to the Stabi-

lization Board, such as the location of the project, the sponsoring agency, whether the project is for construction or repair, the priority number, a clear description of the project, ample justification for its inclusion, the estimated cost by fiscal years, the status of plans, the status of site, how soon the project could be started, how long it would take for completion, the direct employment which it would afford and the man-year cost for such direct employment.

If a plan is to serve with any degree of adequacy, annual revision must be made to provide for changed conditions and emergencies which may have arisen.

In commenting upon advance planning, the Honorable Harold L. Ickes, Chairman of the National Resources Committee, stated as follows:

I hope State Planning Boards, backed by legislative and popular approval, will develop continuous six-to-ten-year programs, annually revised, and that larger goals of attainment can be visualized and reached. . . . Their effectiveness will depend on the character of their personnel, the wisdom and vision of their plans, the scope and accuracy of their researches and, more particularly, on the firm support of the public.

If public works are to be timed to aid in counteracting industrial fluctuations, one of the essentials is a long-range program, constantly kept up-to-date, such as State Planning Boards are now attempting. To embark on public works expansion without such advance planning is to increase the danger of including ill-advised projects. . . .

I believe that the catch-as-catch-can method which ignores the necessity of national planning is a thing of the past. It is a wasteful, futile and unscientific method which deserves oblivion.

In the National Resources Committee, which is an integral part of the present Administration, we have a body that is gradually evolving a national plan which I am sure will fit into an adequate social vision of the future.

I am convinced that long after the necessity of stimulating industry and creating new buying power has been removed, national planning will continue as a permanent government policy.

## HIGHLIGHTS OF THE NATIONAL WATER RESOURCES STUDY

By ABEL WOLMAN, Chairman, Water Resources Committee,  
National Resources Committee

**P**ROBLEMS in the use and control of water resources of the Nation are not new. Their importance, however, becomes clearer and clearer as competition for, and conflict in, their uses become more frequent and intense. The geographical distribution of such conflicts varies from time to time, and it is only in recent years that the controversial aspects of western water resources have penetrated into the East. Increases in population, more varied uses for water supply, competition between municipalities and industries for relatively limited quantities of water, all tend to focus attention of the public upon a problem as old as civilization itself.

Periods of drought succeeded by periods of flood flow in the past six years have emphasized once more, but with greater dramatic effect, the fact that water is a menace to life and property as well as a necessity for the continuance of our existence.

The study of water resources is likewise not a novel enterprise, for many millions of dollars and many years have been spent in their detailed study. In few instances, however, have our agencies been so constituted as to make it possible to review the national water problem as a whole and in particular relation to the economic and social situation of the country, as exemplified in land-use, industrial development, population trends and the requirements of health and recreation. In this field as in all others, the detailed immediate problem, specific in nature and local in implication, has naturally held the attention in the past. This is by no means surprising in a country of rapid growth and, until recently, except in limited geographical areas, undisturbed by the specter of resources decreasing in proportion to need. The pressure of immediate solution of specific problems of water-use and control so often may preclude the balancing of all uses or even of their prior review.

In recent years, however, even in the eastern part of the United States, Nature has reminded us that conservation of water resources and balanced development for their use and control cannot be ignored in successions of droughts and floods. With these lessons in mind, the National Resources Committee, through its Committee on Water Resources, is undertaking a national study of water-use and control in the major drainage basins of the United States. The Committee hopes to obtain a reasonably clear picture of the long-range pattern for each important drainage basin and at least a preliminary list of projects which may be properly constructed in keeping with that pattern. This preliminary plan or reconnaissance it is hoped will be submitted to the President of the United States on December 1, 1936. This can only be accomplished through the complete coöperation of state and regional planning boards, of interested Federal, state and local agencies and of private industry.

By this effort the Committee is attempting to provide a sound and nation-wide outline for securing the greatest beneficial use of the water resources of each major drainage basin in the United States. Obviously, with the limited time and financial resources available for the study, only a skeleton plan, largely of preliminary character, is feasible. Such a bird's-eye view, however, of the national problem and of the available data shedding light thereon should be the beginning of recurring and continuing adjustments in each major basin.

By this study the Committee should also be able to furnish various Federal, state and local agencies a clear statement of the dominant physical and economic considerations affecting the use and control of water resources in each basin, even though such a reasonably integrated

pattern of development can be furnished only in broad outline. Out of this study a series of specific construction projects should also appear which might properly be executed as time goes on, in accordance with the integrated plan of ultimate development.

To those of you familiar with various parts of the United States, it should be clear that uneven programs of development will necessarily result from this study. Some areas of the country have been intensively studied for years while others have had little or no detailed review by either state or Federal agencies.

In the latter areas, the elements of an investigative program for further study and revision of the general program which may be outlined during 1936 are to be presented.

The three major objectives, therefore, of the Committee in this proposed study of drainage basin water resources are:

(1) To point out the outstanding problems of water-use and control in the different parts of the country.

(2) To outline in broad terms a reasonable and integrated pattern of development, and

(3) To present specific construction and study projects which, in the light of available information, are consistent with the broad plan.

Questions of administration and financing of programs and projects developed in the study will not be reported upon in any detail, since they offer problems of national policy which can be determined only after long discussion in the public forum.

Specific recommendations will vary greatly in detail from one basin to another. In one basin further surveys and investigations may be recommended before any construction work is proposed. In another, it is probable that a number of projects ready for construction or requiring a short period of detailed design may be recommended. The Committee, of course, will not attempt to prepare detailed plans and specifications for construction projects, although it will enumerate projects for which plans and specifications are already available.

In order to provide working arrangements with state planning and other boards, and to secure the continuous views and criticisms by state and Federal authorities, the Committee has assigned 17 water consultants to work with the state and regional boards. These consultants will be responsible for the conduct of the field work necessary for the preparation of the water plans. They have been selected according to major areas and convenience of operation. They will be responsible for the review of existing information and reports, for the crystallization of long-range plans and for the preparation of a final document embodying the answers to the three major objectives already pointed out above.

The Committee hopes for participation of the various state planning boards in three ways:

(1) The water consultants will require the assistance of such agencies as state and local health departments, state engineers and state departments of conservation. They will look to the state planning boards for smoothing the way in providing for this coöperation of local and state agencies. Precedent for accomplishing this coöperation is at hand in the experience in connection with a similar survey which has been in process for some months in the basin of the Red River of the North. In that area the State Planning Boards of Minnesota and of North and South Dakota have coöperated with Federal, state and local officials in a study under the general supervision of a water consultant appointed by the Water Resources Committee. The respective state boards initiated the conferences leading to the present survey. Their coöperation has produced excellent progress and the completion of a comprehensive report on this particular area should be possible within the next two months.

(2) The state planning boards, in addition to the general clerical and technical assistance rendered by their staffs, may be able to assign full time technicians to this survey by an arrangement with WPA.

(3) Wherever possible, it is hoped that the state planning board or other offices concerned may be able to make office space available for the water consultant and his assistants.

In other words, the intent of the Water Resources Committee is to carry out this study in the closest coöperation with existing Federal, state and local agencies whose familiarity and experience in the field of water resources are essential to the development of any comprehensive long-term program. With the necessities of time and money confronting us, however, it is obvious that the ultimate review and crystallization of the program in each drainage basin must be placed upon a single responsible authority, in this case the water consultant.

## ORGANIZATION

The field and office operations leading to the preparation of the report proposed will be under the direction of Frederick H. Fowler of San Francisco, California, a consulting engineer of wide experience in water resources problems. He is a director of the American Society of Civil Engineers, a member of its Committee on Dams and on Flood Protection Data, a member of the Federal Emergency Public Works Administration Technical Board of Review and a consultant on flood control problems in the Kansas City and Los Angeles regions.

The assistant director is Merton L. Emerson of Boston, Massachusetts, a consulting engineer and a former member of the Public Works Administration Technical Board of Review.

The Water Resources Committee will outline and supervise the study through the special organization established under Mr. Fowler's general direction. The drainage basin districts so far organized and the water consultants assigned to them are as follows. All of the studies are now under way and the detail of accomplishment must wait upon the receipt of the preliminary reports of these consultants.

**Drainage Basin District 1:<sup>1</sup>**

Prof. H. K. Barrows, Water Consultant, 6 Beacon St., Boston, Mass.  
 Drainage basins in Maine, New Hampshire, Vermont, Massachusetts,  
 Rhode Island, and Connecticut and New York, including the Housatonic  
 as the westernmost basin.

**Drainage Basin District 2:**

James F. Sanborn, Water Consultant, Room 1725, 30 Church St.,  
 New York, N. Y.

North Atlantic drainage basins in Connecticut, New York, Pennsyl-  
 vania, New Jersey and Delaware west of the Housatonic and including  
 the Susquehanna as the most westerly drainage basin.

**Drainage Basin District 3:**

William McKinney Piatt, Water Consultant, 401 Depositors National  
 Bank Bldg., Durham, N. C.

Chesapeake Bay and South Atlantic drainage in Maryland, Delaware,  
 West Virginia, Virginia, North Carolina and South Carolina, south of the  
 Susquehanna basin, including Port Royal Sound drainage as the most  
 southerly basin.

**Drainage Basin District 4:**

Dean Blake R. Van Leer, Water Consultant, University of Florida,  
 Gainesville, Fla.

South Atlantic and Eastern Gulf drainage in South Carolina, Georgia,  
 Florida, Alabama and Mississippi from the Savannah basin on the north-  
 east to Mobile Basin on the southwest, both inclusive.

**Drainage Basin District 5:**

Fred. H. Weed, Water Consultant, 1123 Carew Tower, Cincinnati,  
 Ohio.

Ohio River drainage in New York, Pennsylvania, Maryland, West  
 Virginia, Virginia, Kentucky, Tennessee, Ohio, Indiana and Illinois.

**Drainage Basin District 6(a):**

Royce J. Tipton, Water Consultant, 2083 Clermont Street, Denver,  
 Colorado.

Southwest Gulf of Mexico drainage, south and west of Vermilion  
 River, Louisiana and including drainage in the United States entering  
 the Rio Grande south of Fort Quitman, Texas.

**Drainage Basin District 6(b):**

Gerard H. Matthes, Water Consultant, Mississippi River Commis-  
 sion, Vicksburg, Miss. (By detail from Corps of Engineers, Mississippi  
 River Commission.)

<sup>1</sup>The tentative subdivision of the United States into areas for water resources study  
 would define the regions as follows: (1) New England, (2) Middle Atlantic, (3) Southeast  
 Coast, (4) Southeast Gulf, (5) Ohio Basin, (6a) Southwest Gulf, (6b) Lower Mississippi  
 Basin, (6c) Red River of the South and Arkansas Basin, (7a) Upper Mississippi Basin,  
 (7b) Great Lakes and St. Lawrence, (8) Upper Missouri Basin, (9) Lower Missouri Basin,  
 (10a) Colorado Basin, (10b) The Great Basin, (10c) California, (11) Pacific Northwest.

NOTE: The Red River of the North and the Upper Rio Grande Basin are not segre-  
 gated because work is already under way in those basins. The Tennessee Valley is omitted.



The Alluvial Mississippi Basin and Gulf of Mexico drainage, in the States of Mississippi, Tennessee, Kentucky, Missouri, Arkansas and Louisiana, from Pascagoula River on the East to Vermilion on the West, both inclusive, and northerly to the mouth of the Missouri; excluding the main drainage basins of the Red, Arkansas, Missouri and Ohio Basins, but including the White and St. Francis Basins to the West and drainage lying west of the Mobile River Basin to the East.

**Drainage Basin District 6(c) and 6(d):**

Wesley W. Horner, Water Consultant, 1325 International Bldg., St. Louis, Mo.

Western Mississippi River drainage in Louisiana, Texas, New Mexico, Colorado, Oklahoma, Kansas, and Missouri, from the Red River basin northwardly to the Arkansas basin, both inclusive.

**Drainage Basin District 7(a):**

Wesley W. Horner, Water Consultant, 1325 International Bldg., St. Louis, Mo.

Mississippi River Basin Drainage North of the Ohio and Missouri Basins, in Missouri, Iowa, Minnesota, Wisconsin, Indiana, and Illinois.

**Drainage Basin District 7(b):**

LeRoy K. Sherman, Water Consultant, 53 West Jackson Boulevard, Chicago, Illinois.

Great Lakes and St. Lawrence River Drainage in Minnesota, Wisconsin, Michigan, Illinois, Indiana, Ohio, Pennsylvania, New York and Vermont.

**Drainage Basin District 8:**

Prof. S. T. Harding, Water Consultant, University of California, Berkeley, California.

The Northerly portion of the Missouri River basin, to and including the basin of the Platte River on the west side, and to and including the basin of Mosquito Creek on the east side, in Iowa, Minnesota, South Dakota, North Dakota, Montana, Wyoming, Colorado and Nebraska.

**Drainage Basin District 9:**

Frederick H. Fowler, Water Consultant, 4308 Interior Bldg., Washington, D. C.

The portion of the Missouri River Basin south of the basin of the Platte River on the west side and south of the basin of Mosquito Creek on the east side, in Missouri, Iowa, Nebraska, Colorado and Kansas.

**Drainage Basin District 10(a):**

J. C. Stevens, Water Consultant, Spalding Building, Portland, Oregon.

The Colorado River basin in Arizona, New Mexico, Colorado, Wyoming, Utah, Nevada and California.

**Drainage Basin District 10(b):**

Walter L. Huber, Water Consultant, 1325 Crocker 1st National Bank Bldg., San Francisco, California.

The Great Basin drainage in California, Nevada, Utah, Wyoming, Idaho, and Oregon.

**Drainage Basin District 10(c):**

Ralph I. Meeker, Water Consultant, 303 Flat Iron Bldg., Denver, Colorado.

Southwest Pacific drainage in California and Oregon, to and including Smith River basin on the north.

**Drainage Basin District 11:**

Prof. Samuel B. Morris, Water Consultant, Leland Stanford University, Palo Alto, Calif.

Northwest Pacific drainage in Oregon, Nevada, Utah, Idaho, Wyoming, Montana, and Washington, from and excluding Smith River basin on the South.

To facilitate the work of these consultants and to maintain a continuous and completely coördinate contact with state and regional planning boards, with Federal agencies and with other coöperating agencies, two regional coördinators have also been appointed by the National Resources Committee. These individuals will travel throughout the country for the purpose of assisting the water consultants and keeping them currently informed of various phases of the study so that uniformity of approach and of ultimate reporting will be assured. To accomplish this purpose the country has been divided into two major areas, the western area, covering Districts 6(a), 6(c), 6(d), 8, 9, 10(a), 10(c), and 11. The western regional coördinator is Donald M. Baker of Los Angeles. The eastern coördinator, Howard Critchlow of Trenton, New Jersey, will cover Districts 1, 2, 3, 4, 5, 6(b), 7(a), and 7(b). These areas are listed in footnote, page 142. Both of these individuals are consulting engineers of long experience in the water resources field and members of the American Society of Civil Engineers and of the American Water Works Association.

The compilation of existing lists of rated water projects under new and improved rating methods will be under the supervision of an office coördinator, Mr. Brent S. Drane, who has had considerable experience in this field with both the Mississippi Valley Committee and the Water Resources Section of the National Resources Committee. It will be his function to amplify existing lists of water projects throughout the United States by the addition of all new water projects planned by Federal, state and regional agencies and such other projects as may be developed by the field forces and ultimately approved by the Director and the Committee. He is to act further as liaison officer with all Federal agencies concerned with the economic problems affecting or affected by the plans of the drainage basins. The coöperation of other committees and agencies of the National Resources Committee on land, minerals, power and industrial resources is assured through his efforts.

From time to time special consulting service will be available to both field and office organizations in the solution of complex technical problems involved in comprehensive basin planning. Such men will be on

call to render service when requested by the Director or Assistant Director.

It should be emphasized that, when these preliminary inventories and crystallizations have been completed, no mere compilation of projects now on file in various state and Federal agencies should be the result. For the first time in the history of this country the various Federal, state and local interests in a drainage basin are to be brought together in the field for the development of the broad program. Aside from the important end result of developing a preliminary long-range plan, the study should go far toward initiating coöperative planning activities in the field of water resources which it is hoped will continue long after this first national study has been completed. Progressive modification, refinement and adjustment of program should be the continuing ultimate aim of this first effort. The broad picture here proposed for the water resources of the United States will be the framework within which more detailed study and evolution should take place in the future.

The Water Resources Committee responsible for the final presentation of the report on the study of drainage basin water resources has the following membership:

H. H. Barrows, Department of Geography, University of Chicago.

H. H. Bennett, Chief, Soil Conservation Service, Department of Agriculture.

Ira N. Gabrielson, Chief, Biological Survey, Department of Agriculture.

N. C. Grover, Chief Hydraulic Engineer, Geological Survey.

Edward Hyatt, State Engineer of California.

Major General Edward M. Markham, Chief of Engineers.

John C. Page (Representing the Commissioner of Reclamation), Chief of Engineering Division, Bureau of Reclamation.

Thorndike Saville, Associate Dean, College of Engineering, New York University.

R. E. Tarbett, Sanitary Engineer, U. S. Public Health Service.

Thomas R. Tate, Director, National Power Survey, Federal Power Commission.

Sherman M. Woodward, Chief Water Planning Engineer, Tennessee Valley Authority.

Abel Wolman, Chairman.

## RESOLUTION OF THE CONFERENCE

### APPRECIATION

RESOLVED, *That this Conference express its sincere appreciation to the Governor of Virginia, to the Virginia State Planning Board and to its Chairman, Morton L. Wallerstein, the local chairman of this Conference, to the officials of the City of Richmond, and to all others who contributed to this most agreeable and successful meeting.*

**ADDRESSES DELIVERED AT  
THE BANQUET**



# Addresses Delivered at the Banquet

## CHAIRMAN'S INTRODUCTION

MR. MORTON L. WALLERSTEIN, Chairman, Virginia State Planning Board, Richmond, Va.: Before presenting our first speaker, permit me to welcome to this dinner meeting of the conference a large number of our people, both from Richmond and other places in Virginia, who have so generously manifested their interest in the planning movement by their presence here tonight. I am glad to say also for the benefit of the conference that many of them have attended our session throughout.

Representative Maverick, whom I have the privilege of introducing, is a member of Congress from Texas and comes from the city of San Antonio. He is a lawyer by profession, was an officer in the 28th Infantry, First Division, during the World War, where he was wounded and cited for gallantry in action and extremely meritorious service. Of all his qualifications, however, I am most interested in his membership in the Circus Fans of America, as I belong to that great galaxy of American citizens who attend every circus on the theory that my children enjoy it. I am sure all of us would be interested in knowing the qualifications for membership in that organization. Certainly I would. But seriously, Mr. Maverick has been one of the Congressmen most outstanding in his interest in the planning movement and most coöperative with the National Resources Committee. He served as president of the Citizens' League of San Antonio, which league was most instrumental in bringing good government to that city. It was only natural, therefore, that one so interested in good government should be a leading advocate of the planning movement.

I present to you—Hon. Maury Maverick of the State of Texas.

## A PERMANENT NATIONAL RESOURCES BOARD

By MAURY MAVERICK, Member of Congress

Thomas Jefferson was a believer in individual liberty—civil, religious, and academic—he believed in the utmost liberty of intellect and spirit. But let us remember he was the first man in America who advocated plowing on contours, conservation, reforestation, and the preservation of our natural resources. Not only that, but he advocated farm coöperatives—and some people tell us that that is some terrible form of socialism.

Yet neither Thomas Jefferson nor any man then living could have foretold the tremendously changed conditions in the United States of America today. And, of course, he did not have the integrated ideas of today on the subject of planning and conservation by all our govern-

mental units, but he did have the idea of conservation within the limits of science of that day.

He thought, and so expressed himself even before the Louisiana Purchase, that there was enough land to last our people forever. And then, as President, he made the Louisiana Purchase and thought for sure that the day would never come when there would be a shortage of land. He did it just as in the old days when a Texan would go out and get ten or twenty thousand acres more land, feeling sure that the ranch business would go on prosperously forever and that the trail up to Abilene, Kans., would always be roaring with the cloven hoofs of cattle. But in that thought Jefferson was mistaken, just like the early cattlemen of Texas.

We who are Americans have an "important mission," or else, to put it in plain American language, a big job to save our country. Most of you know that cities and metropolitan areas and States must be planned with all the tremendous problems of roads, highways, bridges, homes, apartment houses, business buildings, sanitation—everything. You all know that our resources are in extremely bad shape. So let us all quit making reactionaries out of our ancestors and do what they did—think for ourselves, be democratic, and plan and coordinate our country so that it will be a decent place in which to live.

When we talk about planning and conservation, let us talk about it in such a way that we come to certain logical conclusions, upon which we can act intelligently. Let us go into a labyrinth of thought, and if this labyrinth of thought brings us to certain conclusions, then let us accept those conclusions without fear. In this adventure will come all of our concepts of the Declaration of Independence, the theories of our forefathers, the interpretation of the Constitution, our opinions on the Supreme Court, everything. But we need not go into all this intricate phraseology and thought; let us think only of the simple necessity of the preservation of a free country to live in, with a free people in it, and with the people in possession of their God-given resources.

*Natural Resources Belong to the People.* The natural resources of America are the heritage of the whole Nation, or the people as a whole, and should be conserved and utilized for the benefit of all the people. I deny no man the right to his ambition, or his individuality. But I deny to every man in America any right to destroy any portion of the natural resources, or so to plan his business or industry as to be a danger to the health and lives of his fellow citizens. The gains of our democracy in civilization and culture are essentially mass gains. If you do not believe that, I am sure you will understand that the losses of our democracy in the matter of our natural resources are essentially mass losses.

Let me be more specific: If in a certain section of the country we destroy the natural resources and there come great floods or dust storms, then the people as a whole suffer the result of all this destruction. There-



fore, we should not let a few people or any number of people destroy these resources, but the resources should be protected for the general welfare.

There can be no logical, constitutional, patriotic, or sensible denial of this. Yet in the past, when efforts have been made to put these principles into living facts, a multitude of pretexts and evasions and obstacles have been advanced. We cannot stay progress—or rather, we should not do it. Nature is the servant of man—or, again, she should be the servant of man. Our natural resources, properly conserved, are limitless—why shouldn't we take a limitless advantage? There is absolutely no excuse for the senseless, savage, and brutal exploitation which has defaced many pages in our national history.

I have been interested in conservation for a few years, and do not know as much as those who are in this audience about its technical aspects. But I can remember in the old days when Gifford Pinchot and Theodore Roosevelt and the others were making a good fight against great odds in the matter of conservation. I remember then the discussions about saving our forests, our rivers, our hills, and valleys—that was 25 or 30 years ago, but since then we have destroyed untold natural wealth. In fact, all that Teddy Roosevelt accomplished was to save a little, build an idea, and have it as a matter of record that we were really destroying our natural resources, and ourselves.

And now, at this time, Franklin D. Roosevelt and the Government are starting all over again a policy of conservation with intelligent zeal and real convictions. "Planning" may sound odious to some—but that is now possible through various agencies of Government. And I see no reason why we should not "plan" to prevent dust storms, floods, diseases—and save our country.

Now that a large body of public opinion is alert, let us, as Americans, make a clean breast of the fact that for years the attempt to execute even rudimentary conservation policies was jeered as visionary or banished as a threat to individual liberties. The recent floods and dust storms have shocked and appalled the whole country.

*Let Us Plan Against Dust Storms and Floods.* Now what are we going to do about it? Are we going to stop the dust storms and the floods? The answer is that we must; we have to do it. And the reason is that we cannot do as we used to do and exist. We cannot move West nor go to a foreign country. We must stay in our own country and conserve it. We must stay in the big city and make it livable.

Generally we have almost broken down the natural "plan" in America. Now it must be restored. It is of little use to rehabilitate and conserve our lands if we cannot thereby improve the condition of human beings. Therefore, the final and most significant element to be considered is neither land nor water but the people who live on the land and are dependent on the water.

I have recited these facts because the use and control of our natural resources presents a bewildering array of problems, some technical, some economic, some social, some legal and constitutional, in which, without a guiding master plan, we would inevitably lose our way. The vastness of the country, the wide range of climate and topography, the abrupt seasonal changes, our inherited prejudices all tend to make the formulation of a national policy difficult. But nothing short of a national policy can deal effectively with conditions.

The task of making and carrying out such a policy will involve many agencies. It will take a long time. It will demand the highest order of patriotism, statesmanship, and skill.

*T. V. A. Example of Profitable Planning.* Now let me bring together the different ends of the threads and make something of a conclusion. In many of these things our inherited ideas, our ideas of government, may clash with the principle of saving our own lives. But, I hold that individuality should not go to the extent of destroying the country. I should like to see a man make all the money he wants to make, but not at the expense of the natural resources or the general welfare of the people.

Let me take a particular case on which we may base some conclusions, the Tennessee Valley Authority. There is where dams are built—where power can be produced cheaply (if we have as much sense as the Canadians, and I think we have)—where there is a coördinated plan of conservation. Now, a dam is built. The water backs up. The water begins to pour over.

Now the question is, should the Government steal this water from its own people and give it to some private monopoly in order that it may exploit the people, or should the Government take advantage of the water which God let fall from the skies and use that for the benefit of the people of the United States and to help pay for the project? I hold unalterably to the latter view.

Now let me state a conclusion: The people of this country will not accept the regimentation of fascism or communism. The people will, however, find it necessary to conserve their own natural resources. This will mean, when it comes to matters which solely concern the public welfare, that the Government should have sufficient power to accomplish the purposes. Sometimes it means government—national, state, or local—ownership. Remember that, from a legal viewpoint, a drop of water which falls in Idaho goes all the way through its course down the Mississippi Valley into the Gulf of Mexico. Through its course it does not worry about city, county, state, or national lines, about governors, Congressmen, or even judges of the Supreme Court. Some of the water even flows from Canada. No water cares anything for our courts and cannot be cited for contempt, or at least water or nature does not obey.

With this in view, let us get back to the T. V. A. It concerns six or seven States. It would be utterly impossible to have the various units

in there to make contracts and treaties in order to accomplish these purposes. Therefore, the only way this great plan of conservation and cheap power can be accomplished is through the Federal Government. If our Government does not do it, it will not be done.

*National Plan Necessary for States.* Now I presume that there are many here who will say that I am making a speech for a strong centralized government. I am not doing so. I am saying that the Federal Government should have the necessary power to have a coördinated plan, and that the work of the different States should be done by those different States. Various state planning boards will have plenty to do; in fact, they will have too much to do, and the Federal Government has neither the time nor the inclination to take any of their powers away from them. And yet, I am perfectly frank in saying that I do not believe that any State should have a right to destroy another State either with its flow of water, its dust storms, or the effect that it may have on another.

We are in the most primitive state of national planning. People are afraid to use the word "plan." It is supposed to be radical or something bad. But in order to accomplish anything in the conservation of natural resources, we must start somewhere. The first thing we must do is to enlarge the work that has already been established by the National Resources Committee. As you know, the National Resources Committee is appointed by the President and has no independent statutory standing. I have introduced a bill known as the "national resources board bill," which provides for the statutory creation of a permanent board. I want the board to be, and I am sure you want it to be, a permanent national institution which will study our natural resources, collect data, and prepare programs according to the hearings on the bill such "as may be helpful to a planned development and use of land, wind, water, and other national resources and such related subjects as may be referred to it by the President."

*History of National Resources Board.* Let me tell you about the National Resources Committee. It and its predecessors, the National Planning Board and the National Resources Board, have brought together for the first time exhaustive studies and plans for public works, land-use, water-use, minerals, and other related subjects in relation to each other and to national planning. These reports provide a sound basis for effective conservation.

When I came to Congress the first Government publication sent me was this report of the National Resources Board. I believe it is by far the most important work done by any Government agency and probably one of the most effective. I became interested in the National Resources Board report because it brought together material on national policy or national planning that had not been put in one place since Theodore Roosevelt's Commission on Country Life got out its report

in 1909. I set about to find out what kind of people were working on the report and what they were driving at.

*First* of all, I found out it was a non-partisan effort, and that the men who were responsible for making this plan for the better use of our land and water resources were Frederic A. Delano, Charles E. Merriam, and Wesley C. Mitchell. Dr. Mitchell and Dr. Merriam had previously been working on President Hoover's Committee on Recent Social Trends; in fact, they were chairman and vice chairman of that committee. So they were just carrying out what they had started some years before.

Back in 1929 Mr. Frederic Delano, through the Federated Societies on Planning and Parks, got out a book on "What About the Year 2000?" That book stated in concise and interesting form the problem of making the best use of our land. Mr. Delano and his co-workers were interested in this planning work as a continuing inventory of our natural resources and a constant readjustment of our policies to meet emerging problems. The planning work that they have been doing is a job that does not get finished with just one report or with two reports. It must be continued as long as we have a country.

The *second* thing I found out about this National Resources Board was that its members not only talked about decentralization of planning, but practiced it.

With Secretary Ickes' help, back in November, 1933, they suggested to the Governors of the various States that each State ought to have a planning agency to think about what was going to happen to the resources of the State. The Resources Board agreed to help by assigning specialists and consultants to these state planning boards. When they started this idea there were one or two States where some work of this sort had gotten under way—in Iowa and in New York, for instance. Now there are 46 state planning boards, and 32 of these boards have laws behind them to make them permanent. This National Resources Committee has done all that in a little over two years. Now they are encouraging the state boards to get the cities and counties to thinking about their future, following the example of what has been done in county planning in California and the rural zoning work that has been going on in Wisconsin. There are three or four hundred of these county planning boards in this country, and over 800 city and town planning boards.

The *third* thing I found out about this report on the national resources was that it represented a real coöperative job by a great many different bureaus of the Government—that they did not just go out and duplicate what a lot of other people were doing. They got the people with experience—the people who knew—in different bureaus to get together and to put all of their material in one report.

They have followed up this coöperative work through continuing committees on land and water and other things, which have helped to

prevent competition in the purchase of land by different Government bureaus, and more recently to coördinate projects for drainage and storage of water to avoid conflicts between the wildlife interests and the agricultural, power, and other groups. The Resources Committee is showing us a way to get results without interfering with bureau activities.

It is to assure the continuance of these valuable efforts that I introduced in Congress the bill I just mentioned to make this National Resources Committee a permanent and continuing body. Such a body will take a long-range view of the entire national problem and will apply the highest engineering and technical knowledge to the reorganization of our natural resources.

*Are We to Live Like Chinese Coolies?* And all this should be done not as an end in itself but as a means of decreasing the burdens imposed on the average citizen, raising the living standards of the Nation, and enhancing the well-being of all Americans. And when I say Americans, I mean it! If we keep on going, we'll be like a hive of Chinese coolies. We might as well admit the fact, according to the situation of our natural resources today and our lack of conservation, that our standard of living is slipping. We of course have electric lights, automobiles, and fine roads and apartment houses in different places; but the country is blowing and washing away and we have certain large groups of our citizens who have a lower standard of living than many Americans who lived from fifty to a hundred years ago.

Thus we should proceed from the viewpoint of intelligent, human, and natural conservation and planning, both within and without Congress—that is, in the cities and States, our business relations, our human relations, our clubs and societies, everywhere. And along with this, I think we should support a statutory continuance of the National Resources Committee. This will not come without effort, and I mean great effort. That is because people talk about bureaus when it is not an additional bureau, and is not going to cost any more than it does now.

As a matter of fact, it is going to save the country if established—and if we carry on intelligently. So let me talk about this National Resources Board in a legislative way:

At this point let me “coördinate” a few conclusions, and then let us talk about what we are going to do about it.

The *first* conclusion is that we should not let our prejudices, however dear they may be to our hearts, keep us from realizing the public necessity of conservation. Many of you are technical men, engineers, professional planners—I am an elected public official and, for all I know, you probably call me a “politician.” So in abandoning your inherited prejudices—if you have any—you may also find it a good thing to coöperate with elected public officials toward the end of effectuating something really worthwhile.

*Second*, an immediate objective is the adoption of a coördinated

national plan with a proper decentralization for smaller units, and as a first step in the realization of this the National Resources Board bill must be adopted by Congress.

*Third*, the most important thing is to have a correct mental attitude on the subject of "planning." The word is woefully misunderstood and widely distorted. It does not mean destruction, anarchy, and the end of the world. It means the opposite—the practical, orderly, and far-sighted use of what God gave us. But by pernicious propaganda and misrepresentation it has acquired a sinister meaning. Opponents of conservation and planning are generally persons who have some interest in some speculative enterprise which will bring a profit out of the natural resources. The public must know this.

I have stated three conclusions briefly. They are, to repeat, leave off your prejudices and cooperate with your elected officials; put over the Resources Board bill; and let the public know what "planning" and "conservation" really mean.

Now let us keep those in mind.

*Congress Respects Intelligent Public Opinion.* All right, let us get to the practical things. A session of Congress immediately preceding a national election is, of course, not such an opportune time to press a measure like this. It is too easy for opponents to yell about "more Government interference," "paternalism," "bureaucracy," and so on, and it is not good manners of me to suggest that you "write your Congressmen."

But I do say this: You have been doing a good piece of work in your various capacities and in your various organizations and you must get in the fight publicly and politically, yourselves, with your own courage and your own minds. Hence, you must create public opinion so that public opinion will know and you must also discuss this either personally or by letter with your Congressmen—and back them up and give them courage to do this. To put isolated pressure on a Congressman is useless, but to have him understand an intelligent plan, with the backing of public opinion, is another thing.

*Let's Dramatize Our Peaceful Fight!* Now, here are some other things you can do. I have seen a lot of your state reports. You start out by trying to tell a story from the beginning like an old English novel and it is tiresome and unreadable. We should get out shorter reports, much shorter; we should have a foreword, heads and subheads, colored drawings that mean something, so that the average man can understand it without going crazy over hideous black statistics that blur your eyes and confuse your thoughts. Some of the stuff you get out goes to the ashcan, where it belongs, or to the statisticians who make your statistics and who are the only ones who can possibly understand it.

So my final message to you is that we must dramatize this battle to save the natural resources. We must put color in it and organize, and

make the game worth fighting for. You can always put color in a war, where people are killing each other and destroying each other and their resources. It seems that we ought to have sense enough to make a colorful fight for the preservation of human and natural resources and for making this a decent country in which to live. Fellow Americans, that is our job and let us go to it.

### CHAIRMAN'S INTRODUCTION

I have so often boasted at our annual conferences about our distinguished Governor that it is more than a rare privilege for me to introduce him. I have painted him to you on various occasions as being planning-minded, as having written that most splendid talk which was circulated on State Planning and of having coöperated with us in our various problems to the fullest extent. Certainly no Governor could have given his State Planning Board any finer coöperation than has Governor Peery, and I can say here now that whatever we may accomplish through our board should certainly reflect the fine spirit which he has shown toward our operations.

It is a pleasure to introduce to you His Excellency, George C. Peery, Governor of Virginia.

### STATE PLANNING

By GEORGE C. PEERY, Governor of Virginia

St. Luke is one of the early authorities on the need for wise planning. In his book of the Bible we find these words:

For which of you, intending to build a tower, sitteth not down first and counteth the cost whether he have sufficient to finish it? Lest haply after he hath laid the foundation and is not able to finish it, all that behold it begin to mock him, saying, "This man began to build, and was not able to finish."

Planning is necessary to any well-ordered and successful individual. It is likewise necessary in government.

But for the vision and wise planning of L'Enfant in laying out the City of Washington, it would probably not be today the beautiful city it is.

And but for the planning of the founders of our Republic, we would doubtless be deprived of the proud boast that ours is the best of all governments in the world. From the very beginning of our national life, wise planning was in evidence. The Constitution itself was a great plan providing for a democratic form of government. It dealt with currency, tariffs, interstate commerce, and international relations. In later years it was termed by a great Englishman as the greatest instrument every penned by man. It was the Magna Charta for our political

and economic development. And within it many plans have from time to time been made for the continued development and progress of our Nation and people.

The policy of encouraging manufacturing in our early history by a tariff was a form of economic planning. It may have been sound in the beginning and served a good purpose to become outmoded in a later day when American manufacturers became the equals of foreign rivals in efficiency and production costs. Thereupon sound planning called for a revision of tariff levies for the benefit of the consuming public, based in the main upon the difference in labor costs due to the higher standard of living enjoyed by the American laborer.

Still more recent developments which have resulted in retaliatory tariffs have led to further legislative planning by which reciprocal agreements as to tariff levies may be negotiated to the mutual advantage of our country with other contracting nations. A tariff against the products of other nations, of which America itself produces a large surplus, is unworkable and harmful in its effects and calls for a change in economic planning.

The early plans for education upon the western frontier rested largely upon grants of land. The conquering of the frontier, the building up of the country, and the settlement of the great areas of land called for revisions and changes in the plans for education.

The early days in our Republic were the days of individualism. The frontier beckoned to the hardy pioneer. He responded to its call, conquered a portion and made it a home. As master of his own castle, he defended it from attack and developed a rich and self-reliant life. If in the rearing of a large family his domain became too limited, he could without great difficulty add other acres and enlarge the sphere of his activities and increase the fruits of his labor.

In those days of individualism there was not so much need for state and national planning. The chief planner was the individual himself. But his operations as an individual were not sufficient in extent materially to conflict with the interests of the public at large.

But following the Civil War changes took place. Large enterprises were launched. Intensive planning in their behalf sought to extend their power and control over large areas of industry. The end sought was monopolistic control and domination. While these plans resulted in greater efficiency to the enterprise itself, they did not always promote the general good. Quite the contrary was too often the result. The railroads, promoted at first by grants of land and money, grew and flourished. But with their growth came practices on the part of some of them that may not have violated the letter of the law, but were violative of the right and subversive to sound business morals. Rebates and discriminations were allowed to some and denied to others. One section could thereby be destroyed while another would prosper. One enterprise or



individual could be wiped out of existence while another would go on and profit. Planning for such private enterprise outstripped for the time planning for the public good; and it became necessary to plan for the common good to meet this condition. The Interstate Commerce Act was the result, enacted in 1887. It provided against rebates and discriminations and set up a tribunal to fix and determine rates. So, likewise, did the growth of monopolistic enterprises and business practices, violative of the rights of others and contrary to the public good, lead to legislative planning resulting in the enactment of the anti-trust laws and the establishment of the Federal Trade Commission to prevent and correct abuses of this character.

In great emergencies more intensive planning becomes imperative. The World War compelled economic mobilization. The War Industries Board, the War Board, the Food Administration, the Fuel Administration, the Railroad Administration, and other governmental agencies were set up. Individual rights were subordinated to the plans of the Nation for winning the war. We remember the meatless and wheatless days that came to us as incidents of those plans.

And now seventeen years after the close of that momentous struggle, which brought to the world the emergency of the greatest war in all our history, we are in the throes of another emergency. It is not the emergency of war—but an emergency, world-wide in its extent, and devastating in its effects. It is as complicated and difficult of solution as the problems of war. In a land of plenty, there is hunger and suffering and distress. It is a time that calls for wise planning, not only for the present, but for the future.

It has been said that “Planning consists in the systematic, continuous, forward-looking application of the best intelligence available to programs of common affairs in the public field, as it does to private affairs in the domain of individual activity.”

Planning goes on continuously in every well-ordered home, in every successful business, and in every other worthwhile organization.

In the national emergency that has come to us, the need for sound planning on the part of the Nation and of the States has become manifest.

On July 20, 1933, the Administration of Public Works appointed a National Planning Board. Its functions were:

To advise and assist the administrator in the preparation of the “Comprehensive Program of Public Works” required by the Recovery Act through—

1. The preparation, development and maintenance of comprehensive and coordinated plans for regional areas in cooperation with national, regional and state and local agencies based upon—

2. Surveys and research concerning:

(a) The distribution and trends of population, land uses, industry, housing and natural resources; and

(b) The social and economic habits, trends and values involved in development projects and plans; and through

3. The analysis of projects for coördination in location and sequence in order to prevent duplication of wasteful overlaps and to obtain the maximum amount of coöperation and correlation of effort among the departments, bureaus and agencies of the Federal, state and local governments.

This board assumed that one of its primary functions was to stimulate city, regional and state planning, and in the performance of this function it was quite successful. Many city and regional planning boards were organized and state planning boards were organized in more than forty States. Virginia was among the number to set up a state planning board.

By executive orders, issued on June 30, 1934, the President established the National Resources Board as a successor to the National Planning Board and the Committee on National Land Problems. The new board represented a consolidation of previously existing agencies. It has continued the activities organized by the National Planning Board.

In Virginia existing state agencies have planned constructively in the past and continued to do so in anticipation of the future.

Our Department of Health, by sanitation and preventive medicine, has substantially reduced the toll resulting from preventable diseases, and has made good progress in improving and preserving the health of our people.

Our Department of Public Welfare has made substantial advances in caring for and in improving the condition of the unfortunates and wards of the State.

Our Department of Education, with approximately 15,000 school teachers in our public schools, with the financial support afforded by the General Assembly, has assured a minimum school term to all of the school children throughout the State. Comfortable and adequate school buildings have been built in nearly every section of the State. Our institutions of higher learning rank well with those of other States.

Our Highway Department, efficiently administered, has planned a highway system and brought most of it to completion, affording a fine system of splendid highways extending throughout the State.

Our Conservation and Development Commission, in addition to making surveys of our material resources and marking the various points of historical interest throughout the State, has established a series of state parks, to which our people may easily go for recreation and health.

Our Department of Labor has planned wisely and well for the welfare of our working people.

Our Department of Agriculture has planned and worked successfully for the development of the interests of that large body of our citizens who are engaged in the production of food and the pursuit of agriculture.

In governmental planning we have adopted the plan of budget control so that we may count the cost in advance and provide for meeting

it in an orderly and business-like way. We have effected a consolidation of governmental departments and agencies, thereby eliminating duplication of work and effort and promoting efficiency in the business of government. We have set up modern methods of accounting, to the end that sound business practices may be followed.

All of these things have proved helpful in our social, economic and governmental life.

But new conditions have brought new problems, and with them the need for continuous planning. The problem of unemployment is probably the chief one. We must plan our economic life so that those who are able and willing to work and who must depend upon the rewards of their toil for their sustenance have gainful work. And it is not enough to provide for them a bare existence; for in a civilization such as ours those who contribute the labor necessary for the production of our goods and products are entitled not only to bare necessities, but to some of the comforts and good things of life.

We need to plan for a sound development of our agricultural resources, so that those who till the soil and produce the food for our people may be assured a comfortable existence for themselves and their families.

The problem is not that of former days to produce more food. It is to control the production of food, so that those who need may buy and those who produce may receive a reasonable and living price for the things they produce. We need to plan for the conservation of our natural resources. Our forests, our minerals, our water resources should not be wasted and squandered for one generation. They should be economically and wisely used so that the needs of future generations may also be supplied.

Already our forests, which in the beginning seemed almost inexhaustible, have largely yielded to the onslaught of the lumberman who has in view present profit, rather than the interests and needs of future generations. And the practice has been so wasteful as to fail to provide for the growing forest to take the place of the mature trees cut and removed.

Now private ownership can hardly afford the expense of holding land, paying the taxes each year, until the forest has yielded another growth of merchantable timber. This means that conservation of our timber resources can be effectively accomplished only through public ownership on the part of either the State or the Nation.

To the consideration of these and other kindred problems involving our economic and social life, the planning boards are directing their research and thought.

The State Planning Board in Virginia has been established pursuant to a resolution of the General Assembly. Of the personnel comprising the board, five are the heads of departments in the state government;

three are technical men employed in state departments; one is an agricultural engineer in the service of one of the state's educational institutions; and the others are leading citizens of Virginia without official position with the State. The plan, of course, is to correlate the work of the planning board with the various state departments and supplement the planning work done by them.

The board has set up nineteen committees for the consideration of the different problems before them.

The first essential work is research, in order that the facts may be definitely and accurately ascertained.

The Planning Board will utilize the facts and information already collected by the various state departments and seek to ascertain such additional facts as it may deem necessary. In this way it is hoped that sound and constructive plans may be developed, not only for the present, but for the future.

The board is without an appropriation from the General Assembly, but it has been fortunate enough to receive a substantial grant from the Spelman Fund which will enable it to enlarge upon its research work and make more effective its work and investigations.

One of the essential objects in sound planning is to prevent duplication of work and expense. It is to be hoped that the various agencies that are being set up to promote planning may afford concrete evidence that they, in the very outset, are avoiding the very thing which they advocated should be avoided, namely, the over-lapping of activities and duplicating of efforts which result in unnecessary waste and expense.

Let our generation seek to plan wisely and well, not only for the present, but for the generations that are to follow.

### CHAIRMAN'S INTRODUCTION

Our next speaker will occupy the dual rôle of making an address and of introducing the speaker who will follow him. Although he has been president of several railroads, served as a Colonel in the Transportation Corps in the World War, I have no doubt that of all the terms that might be applied to him he would prefer to be known as a planner. He was Chairman of the Regional Plan of New York and is Chairman of the National Capital Park and Planning Commission of Washington, and Vice-Chairman of the National Resources Committee. In fact, he is the dean of the planning profession. Several years ago Mr. Raymond Unwin was knighted in England. His friends felt that it was not Sir Raymond who was being knighted, but City Planning. I feel sure that if we had that great institution of knighting and nobility in this country that exists in England, its first recipient in the planning field would be our next speaker—Col. Frederic A. Delano, Vice-Chairman, National Resources Committee and President of the American Planning and Civic Association.

## PLANNING AND PROGRESS

By FREDERIC A. DELANO, President, American Planning and Civic Association

I AM not here to tell you about the work of the American Planning and Civic Association of which I have the honor to be President. The speaker who follows me will do that. In my capacity as Vice-Chairman of the National Resources Committee and as Chairman of the National Capital Park and Planning Commission, however, I wish to stress the need which we, as officials, feel for intelligent citizen understanding and support of planning. If, as Socrates did, we could gather the citizens of each community about us and by astute questions lead them on to a knowledge of what city, county, state, regional and national planning can do, we should indeed develop an invincible public opinion which would express itself in legislation and appropriations from the appropriate governmental units, to insure the realization of those environmental conditions which can only be brought about by intelligent planning based on sound investigation of social and economic as well as physical facts.

The National Resources Committee has conducted a number of investigations of national import. A clearing house of research in planning has a distinctly national significance. But we, in the National Resources Committee, have from the first preached the doctrine of state's responsibilities for state planning and state projects. We have practiced what we preached. Of course we have thought that, in this emergency, following the precedent in similar cases of making Federal aid available, the Federal Government, through the National Resources Committee, should extend Federal aid in some form to the many new and struggling state planning boards. This we have done in the form of providing planning consultants when requested to do so by the state planning boards.

This has proved successful to the extent that progress can be measured. But naturally we hope that the time will come when the people living in the States will see that, in the interest of preserving and providing high standards of living and working conditions for their own people, it is both economically and socially desirable to maintain continuous state planning boards, charged with the responsibility of co-operating with state departments and other state and local agencies to prepare and keep up to date a sensible, consistent plan for the utilization of the state's resources.

By *utilization* I do not mean *using up*. The preservation of natural scenery for the inspiration and education of the people is one of the highest forms of utilization. It is a form of utilization which permits use by this generation without impairing the same kind of use by future generations.

Now, I take it that we in this room are all converted to the principles of planning just as thoroughly as though we had sat at the feet of

Socrates and submitted ourselves to his canny questions. But our problem is one of extending our influence. That is what we are trying to do by setting up state chapters of the American Planning and Civic Association, not with the idea of duplicating the work of other organizations, but, on the contrary, with the definite idea of serving existing organizations through a personnel of members well informed on planning principles and familiar with the planning proposals of their own state planning boards.

Colonel Wetherill, who will speak to you on "Citizen Support of Planning," has had successful experience in focusing public opinion on the problems of regional planning. Through the Regional Planning Federation of the Philadelphia Tri-State District, he brought about the cooperation of the many governmental units in the Philadelphia district, lying in three States, in the preparation of a regional plan.

I have the honor of introducing Colonel Samuel P. Wetherill, President of the Regional Planning Federation of the Philadelphia Tri-State District.

### CITIZEN SUPPORT FOR PLANNING

By SAMUEL P. WETHERILL, JR., President, Regional Planning Federation,  
Philadelphia Tri-State District

**M**R. DELANO in introducing me has spoken very courteously of the contribution to the planning movement which was made by the Regional Planning Federation of the Philadelphia Tri-State District with which it was my privilege to be actively engaged for many years.

Fascinating and interesting as is the technique of the making of plans for the best development of the areas under the jurisdiction of the community, region, State or Nation, even more fascinating and significant is the underlying problem of how such plans will be received by the communities which they seek to serve and under what circumstances will they be most useful in guiding the future development of the areas planned for.

The informal assignment to me of the subject "Citizen Support for Planning" is a most happy one as it reflects that aspect of the work which has intrigued me most ever since my first connection with it.

It is also significant that this title should be receiving the consideration of those who are now associated with the American Planning and Civic Association and its affiliated groups. Surely, no organization in America is better qualified to give consideration to this question—a judgment which would be confirmed by the most superficial review of the long record of influential support of planned programs and policies which stands to the credit of the American Planning and Civic Association and its predecessors.

Ever since 1897, when the Park and Outdoor Art Association was organized in Louisville, Kentucky, its policy has been to mould and inform public opinion and to rally this informed opinion behind one governmental project after another.

In 1900 the American League for Civic Improvement, which was organized in Springfield, Ohio, was another step in the direction of the organization of the American Civic Association through the merger in 1904 of the two above named organizations.

From 1904 to 1924, Dr. J. Horace McFarland led this Association vigorously and aggressively in support of planned progress for parks and conservation of national resources, and his example will long remain an inspiration to private citizens of the practicality of bringing effective pressure to bear on their governmental representatives when the cause they seek to serve is so clearly in the public interest.

In Chicago, from the days of the World's Fair in 1893, the stimulation of public opinion in support of planning became progressively more and more effective to the point where no citizen of Chicago could fail to trace the progress of the city to those efforts with which our present President, Frederic A. Delano, is so intimately identified and in which he acquired such great skill in this technique of marshalling informed public opinion in support of planning. Under his Presidency—from 1925 on—this same policy has continued and the scope and significance of the planning movement has spread from the region to the Nation and from the Nation back to the 48 States in a manner most gratifying to those of us who still believe that it is practical to establish long-term scientific planning as a vital element in the success of our representative democratic institutions. It is particularly appropriate that the American Planning and Civic Association, as it now stands, should be a merger of this type of civic effort with the more highly professional group which composed the National Conference on City Planning.

I have always said that were I a professional city planner, my greatest concern would be the question of arousing public opinion in support of the above planning practice. Therefore, it is almost instinctive with me perhaps to appraise the development of the planning movement, not in the light of the excellent technical achievement and progress which are being made, so much as in the light of those factors which are conducive to public interest in, and support of, the whole policy and principle of community planning.

In the years preceding the establishment of the Philadelphia Tri-State Federation, the sociological resistance to the planning idea was great and was only overcome by us through invoking the most widespread possible financial administration and technical coöperation throughout the region to be served. In this way \$600,000 or more was contributed, innumerable citizens and professional people contributed gratuitous service worth many times the total money spent, and the

officials of 357 governments participated in the negotiations and deliberations which preceded the final adoption of the 400 and more recommendations included in the Plan.

Even before the depression began, a number of projects under construction were taken up by the local communities and put into effect. However, when the question of the need for emergency employment became acute, the Federal Government led off on a policy of using relief funds for the construction of municipal projects which were in accordance with the spirit, if not the letter, of the Philadelphia Tri-State planning program.

Very wisely the L. W. D. administration employed William H. Connell, who was the Director of the Plan and was therefore familiar with all of the detailed studies upon which it was based. In consequence, a high percentage of the plans has already been realized although the Plan has been published for considerably less than five years.

Looking forward, much concern has been expressed regarding the type of support which is to be expected for the work of the professional planner of the future. There are those of a pessimistic turn of mind who believe that a drastic reaction against all forms of public expenditure will set in and that taxpayers will be blind to the benefits of planning in their zeal to curtail public expenditures. Meanwhile, they predict dire and overwhelming tax burdens of such magnitude as to discourage over-taxed citizens from making gratuitous contributions through such official channels as we in America have learned to look to for the sponsorship and support of important civic planning effort.

At this point, and at the risk of stretching the boundaries assigned to me, I cannot refrain from expressing a personal measure of optimism in direct opposition to the rather pessimistic views above quoted. This optimism, I believe, is grounded in a sound, thoroughly scientific appraisal of the economic trend which seems to me to be turning the tide away from despondency and toward a program of coöperative self-realization such as, perhaps, no nation on earth has ever before experienced. In these days of inter-dependence, planning must, and I believe will, hold its own and grow immensely as the means of guiding and articulating the common effort in the channels that will economize the taxpayer's money and attain to standards of collective environment probably beyond the vision of our most enlightened contemporaries.

I admit that this will involve large sums of taxpayer's moneys and that it will involve a spirit of whole-hearted coöperation amongst citizens who hold no public office and must pay large taxes. To me the question is not so much, "Will the taxes be large or small?" as it is, "Shall we have the resources with which to meet them and still have abundant margin to maintain the high standards of living towards which all Americans naturally yearn?" Here we come to the crux of the situation. In those previous civilizations which were dependent upon human en-



slavement to perform the work and create the surpluses with which civilization advanced, it was inevitable that what one gained another lost; that the prosperity of the few was earned by the self-denial of the many. Within the last decade, however, America has learned that great lesson of the potency of the machine age to turn out the products needed for the progress of men with ever less and less human drudgery. It is said that on an average, less than five man-days are required to produce a Ford automobile through the use of modern machine methods. I can see no reason why this principle should not be deliberately extended to meet a vast range of needs other than for transportation. Already man's production methods are turning out automatic refrigeration and innumerable other devices, and the prices for these superior products bring them within the range of modest pocketbooks.

For the first time in human history it is now practicable, and practical men with vision are demonstrating the fact, to pay higher wages to increase the per man day output and to reduce the selling price of articles of general consumption which are susceptible to this type of man's production!

It is my belief that political, economic and social planning will best be advanced if all of us dedicate our best thought and attention to the extension of this great American system under which wages can go up and prices can come down at the same time. Wise labor leaders will see in this a short-cut to Utopian standards which could never be attained by restriction of output, and financial profiteers who seek excessive prices and the lowest possible wage will see that a small profit and a mass production made possible by a higher general consuming power of the wage-earners will be the only sound business practice of the future. It is for this reason and because of my profound confidence that the lessons of this philosophy of abundance are rapidly being learned by the American people, that I am confident that for generations to come the planning profession need have no fear of lack of popular support for its well-considered program.

It is for these reasons that I am definitely a "bull" on America and I feel that we of this generation are living through a thrilling and significant era and, instead of handing on to our posterity nothing but debts and burdens and impoverished self-respect, quite the reverse is in store for them. They will learn to coöperate; they will learn to adjust private to public interest; the legitimate incentive to profit will be shared by more and more and the American standard of living will once more become the envy of the world.

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