

PARK ROAD STANDARDS



**NATIONAL PARK SERVICE
1984**



United States Department of the Interior

NATIONAL PARK SERVICE
WASHINGTON, D.C. 20240

IN REPLY REFER TO:
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JUL 9 1984

Memorandum

To: Director

From: Associate Director, Park Operations

Subject: Park Road Standards

The Surface Transportation Assistance Act of 1982, P.L. 97-424, amended 23 USC and established a coordinated Federal Lands Highways Program, making available Highway Trust Fund money for construction and rehabilitation of Federal Agency roads, including park roads and parkways. In accordance with 23 USC 402 (23 CFR 1230) and with the provisions of Interagency Agreement #IA-0610-3-8002, the Service is required to construct, operate and maintain its roads to defined, acceptable standards.

In line with these requirements, by memorandum of December 17, 1982, Acting Director Hutchison established a task force to review the 1968 Park Road Standards and to develop, as needed, new road design and maintenance standards.

The Road Standards Task Force consisted of Jim Straughan, Denver Service Center, Chairman; Donald Falvey, Rocky Mountain Region; John Gingles, Washington Office; Robert Jacobsen, Shenandoah National Park; Gerald Lorenz, Denver Service Center; Merrick Smith, Denver Service Center and George Walvoort, National Capital Region. The Federal Highway Administration provided technical assistance during all phases of the review and development of revised standards.

The task force has completed revisions to the Park Road Standards which we feel fully address the requirements of 23 USC, will accommodate current and planned road usage and still preserve the natural or historical characteristics of park areas. The revised standards have undergone Servicewide review, a follow-up review by NPS Regional Offices and FHWA, and after publication of a Notice of Public Review in the May 1, 1984, Federal Register, a public review. All comments from the reviews have been considered and incorporated to the fullest extent possible.

This final document is herewith submitted for your approval as superseding the 1968 Park Road Standards and for issuance to the Field. Also enclosed is a Notice of Adoption prepared for your signature for publication in the Federal Register.



Enclosures

APPROVED: Russell E. Dickenson
Director

DATE: 7-18-84

Preface

The purpose of this document is to meet the need for National Park Service road design standards that will accommodate current or planned park road use, while continuing to preserve the natural and cultural values of National Park System areas; to address the requirements of Standard 12 of the Federal Highway Safety Program Standards (23 CFR 1230; 23 U.S.C. 402); and to provide design guidance for projects under the Federal Lands Highways Program for Park Roads and Parkways (P.L. 97-424; 23 U.S.C. 204) compatible with Chapter 3(C)(1) of the Federal Highway Administration (FHWA) Direct Federal Manual. This document is also intended as a definitive guide for managers, planners and designers involved in the planning, design and construction of park roads.

As the Senate report accompanying the Federal-Aid Highway Improvement Act of 1982 states, "Roads through areas administered by Federal land managing agencies must be carefully designed to protect important natural and cultural resources under the jurisdiction of those agencies. Such roads must be designed to blend in with the natural landscape. Because of the resources preserved in the Federal land management areas, and the type of tourist use in such areas, the roads in certain instances do not have to be constructed to normal highway standards."

The standards contained herein provide flexibility in the planning and design processes to allow for consideration of variations in types and intensities of park use, for wide differences in terrain and climatic conditions, and for protection of natural and cultural resources in National Park System areas.

It is important to note that the standards vary considerably with the type of use to be accommodated. Basic decisions will have to be made by park management in the application of these standards based on careful examinations of the desired use levels to be allowed considering impacts on visitor use and resource protection in conformance with legislative mandates.

The criteria presented have been adapted from available design standards to meet the unique requirements of park roads. This will provide a framework within which design and construction of park roads should be conducted; however, this document is not intended to encompass a level of detail comparable to that normally found in design manuals.

These standards will supercede those adopted by the Service in 1968 as existing park roads are reconstructed or when new roads are constructed. On resurfacing, restoration and rehabilitation (3-R) projects they will be utilized to the extent practicable and feasible.

* * *

Acknowledgements

The 1983 Park Road Standards Task Force acknowledges its indebtedness to the Park Roads Task Force appointed by National Park Service Director George B. Hartzog, Jr., in 1967. Its members were Ansel Adams, Ira Gabrielson, Joseph Penfold, Charles E. Krueger, Robert Linn, and William C. Everhart, Chairman.

The Park Road Standards they compiled and published in 1968 set down the basic philosophy of park roads which had evolved over many years since the inception of National Parks. Their work provided the foundation of our efforts, and significant portions of that earlier document, in many instances verbatim, have been retained in this document.

We also acknowledge our gratitude to the Federal Highway Administration, U.S. Department of Transportation, whose technical assistance and advice have been invaluable--particularly that of Messrs. Thomas O. Edick, Otto Mayr, Norman W. Loeffler, Robert Warren and W. Larry Klockenteger.

Finally, we are indebted to the many NPS and FHWA employees who, over the years, pioneered an internationally recognized tradition of excellence in the design and construction of park roads and parkways.

* * *

Participants in 1983 Park Road Standards Task Force:

Jim J. Straughan, Civil Engineer, Denver Service Center,
Chairman
Robert R. Jacobsen, Superintendent, Shenandoah National Park
Merrick Smith, Landscape Architect, Denver Service Center
Donald A. Falvey, Civil Engineer, Rocky Mountain Region
Jerald M. Lorenz, Landscape Architect, Denver Service Center
George Walvoort, Civil Engineer, National Capital Region
John Gingles, WASO Maintenance Division

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THE PURPOSE OF PARK ROADS

Among all public resources, those of the National Park System are distinguished by their unique natural, historical, cultural and recreational qualities--values dedicated and set aside by law to be preserved for the benefit and enjoyment of people in such a manner as will leave them unimpaired for future generations.

Ideally, perhaps no road would be permitted to violate or despoil the sanctity of park resources. Pragmatically, the protection, use and enjoyment of these values in a world of modern technology has necessitated the encroachment of a system of public park roads. Today's visitors are no longer required, as early motorists to Yellowstone once were, to chain their cars to logs and turn over the keys to the superintendent. In most parks today, the basic means of providing for visitor access is the park road system. It is both a means and an end. It enables one visitor to reach his goal; for another, it is the goal.

The marked increase of park visitors in the latter half of the 20th century represents both a profound threat to park values and an extraordinary opportunity for those values to become more tangibly significant in each individual's recognition of our natural and cultural heritage.

The fundamental purpose of national parks--bringing humankind and the environment into closer harmony--dictates that the quality of the park experience must be our primary concern. Full enjoyment of a national park visit depends on its being a safe and leisurely experience. The distinctive character of park roads plays a basic role in setting this essential unhurried pace. Consequently, park roads are designed with extreme care and sensitivity with respect to the terrain and environment through which they pass--they are laid lightly onto the land.

Each segment of every park road should relate to the resource it traverses in a meaningful way and should constitute an enjoyable and informative experience in itself while providing the visitor the utmost in visual quality. Long tangents that encourage high speeds--and only fleeting views of "kinetic scenery"--should be avoided. The horizontal and vertical alignment and cross-section should respect the terrain, blending into the environs. A park road should be fundamentally designed to maintain an overall continuing sense of intimacy with the countryside or area through which it passes.

The purpose of park roads remains in sharp contrast to that of the Federal and State highway systems. Park roads are not intended to provide fast and convenient transportation; they are intended to