

Transportation Needs of National Parks and Public Lands

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The travel and tourism industry is the third-largest component of U.S. gross domestic product, adding some \$400 billion to the economy annually and employing 6 million people (\$99 billion payroll). It is among the top three employers in 34 states. A major portion of United States tourism business is generated by visitations to federal lands. National Park Service studies have shown that parks are an economic engine for many surrounding communities. For example, a 1995 Blue Ridge Parkway study indicated a \$1 billion return to the communities along the 470-mi parkway. Visitors to Yellowstone National Park produce more than \$725 million in expenditures, creating 16,163 jobs. Key to facilitating tourism is a safe, efficient, and convenient transportation system to allow access and mobility to the visitor.

BACKGROUND

Approximately 30 percent of the land in the United States is under the jurisdiction of the federal government. These lands are managed by various agencies within the Departments of the Interior, Agriculture, and Defense; by various states; and by several independent agencies. The missions of the federal land management agencies [FLMAs (National Park Service, Bureau of Indian Affairs, Bureau of Land Management, Fish and Wildlife Service, Bureau of Reclamation, Forest Service, U.S. Army Corps of Engineers, U.S. Army, U.S. Air Force, U.S. Navy, and others)] vary significantly. The FLMAs within the Departments of the Interior and Agriculture are charged with managing the resources for present and future generations without impairing the resources for the enjoyment of future generations. Resource management includes preserving and protecting natural, cultural, and historical areas, as well as wildlife use areas. Each individual site managed by the FLMAs has a unique mission for preserving and protecting its specific resources. Many of the sites have multiple uses, whereas others have a limited, specific use. Access to the resources for the enjoyment of the public is often a major mission.

Transportation plays a key role in the way that people access and enjoy federal lands. The transportation systems serving federal lands provide opportunities for recreational travel and tourism, protect and enhance resources, and provide sustained economic development in rural and urban areas.

However, in many areas access and user demands are exceeding the system's carrying capacity. High visitation levels, at both large and small sites, are causing problems because of the growing volumes of traffic and demands for visitor parking. The FLMAs cannot build their way out of this situation, since to do so would undermine the very resources that the agencies are trying to preserve. For the federal government to continue to fulfill its mission of providing visitor enjoyment and conserving precious resources, innovative

solutions will be required. In many areas, the problem is not that there are too many users in total but that too many motor vehicles and too many visitations are concentrated in certain time periods.

THE PRESENT

Before the 1980s, all road improvements were dependent on unpredictable annual departmental appropriations that covered competing nontransportation needs, causing the road systems on federal lands to fall into a state of disrepair. Recognizing the declining condition of these road systems and the need for the FLMAs to be able to perform long-range transportation planning and programming on the basis of known funding levels, the U.S. Congress created, with the Surface Transportation Assistance Act of 1982, the Federal Lands Highway Program (FLHP) as a primary source for improving the roads on Indian and select federal lands.

The primary purpose of the FLHP is to provide funding for a coordinated program of public roads and transit facilities serving federal and Indian lands. The funds assist the FLMAs in addressing the U.S. government's national responsibilities concerning access to the nation's federal lands and the protection of those multibillion dollar assets. The FLHP currently provides funding for National Park Service park roads and parkways, Indian reservation roads, Fish and Wildlife Service refuge roads, and Public Lands highways (discretionary and forest highways).

Other significant initiatives for improving transportation systems on federal lands are initiated by Congress or the president. As a result of the Intermodal Surface Transportation Efficiency Act of 1991, an important study on alternative transportation in parklands was prepared and submitted to Congress in 1994. An April 22, 1996, presidential memorandum directed the Secretary of the Interior, in consultation with the Secretary of Transportation, to address ground transportation in the national parks. As a result, a memorandum of understanding (MOU) between the U.S. Department of Transportation (DOT) and the Department of the Interior was signed in November 1997. The MOU lays the groundwork for the National Park Service and DOT to develop more comprehensive and efficient transportation systems to serve the national parks. Several MOU initiatives are under way, including providing technical assistance to Yosemite, Grand Canyon, Zion, and Acadia National Parks and to Golden Gate National Recreation Area for implementing multimodal transportation systems; implementing a rural intelligent transportation systems (ITS) field operational test in a national park; and developing a transportation planning guidebook for the National Park Service.

The Transportation Equity Act for the 21st Century (TEA-21) contained several initiatives for improving transportation on federal lands. TEA-21 requires DOT and the Department of the Interior to undertake a comprehensive study of mass transportation needs in lands managed by the National Park Service, the Bureau of Land Management, and the Fish and Wildlife Service. TEA-21 also requires the development of transportation planning procedures and pavement, bridge, safety, and congestion management systems pertaining to the National Park Service, the Fish and Wildlife Service, the Bureau of Indian Affairs, and the Forest Service.

Given all of the activities under way and planned, a forum for transportation and tourism planners, operators, and public officials to share experiences related to access, circulation, and way-finding issues of users of public lands is necessary. One of the realities is that, in many instances, transportation- and tourism-related interests need to communicate more frequently to gain a better understanding of each other's perspective.

For example, transportation agencies consider mainly safety and capacity and social, economic, and environmental effects, whereas a primary tourism concern is market effects. Clearly, a process is needed whereby the parties can share perspectives and experiences and collaborate on activities.

Thus, in mid-1998, a TRB Task Force on Transportation Needs of National Parks and Public Lands was established. The task force provides a forum for identification of research needs and requirements regarding recreational travel and tourism on public lands. Its mission includes identification of alternative techniques, new technologies and implementation methods for serving transportation demand, identification of the characteristics of travel and travelers, and evaluation of prospective multimodal systems that will serve the cultural, natural, and recreational values. Fostering an understanding of the complex relationships among tourism and recreational travel; natural, cultural, and historic resource preservation; edge communities; tribal governments; regional transportation agencies; and federal and state land management agencies is an essential task force goal.

THE FUTURE

There are major challenges in identifying and involving all the stakeholders and in gaining a better understanding of the complex relationships among these entities. Providing a forum for all entities should foster a synergism that will help in addressing the significant issues facing this particular area. As identified by the task force, significant issues include the following:

- Transportation planning issues, including institutional relations and barriers between federal land managers, state and local transportation organizations, and the tourist industry;
 - Visitor information systems and the application of ITS advanced technology to such systems;
 - Identification and understanding of customer needs;
 - Planning and management issues involving scenic preservation and transportation;
 - Adaptation of transportation management tools for use in managing public lands and other recreational areas;
 - Safety and maintenance of transportation infrastructure;
 - Development of better data on recreational travel, including but not limited to predicting the anticipated scope of increased tourist visits to public lands, differences in nature and duration of travel between domestic and foreign visitors, and innovative ways to count pedestrians and bicycles accurately and economically;
- Advanced mobility technologies including transit, paratransit, guideway, personal, nonmotorized, and so forth;
 - Environmental management, particularly development of biological and social carrying capacities of national parks and other recreational areas and design of transportation systems in conjunction with such information; and
 - Need for increased funding (and identification of possible sources of funds) for transportation and recreational facilities to accommodate increases in visitors.

The task force provides an ideal focus to integrate a more global identification and consideration of these transportation issues.