

## Chapter 27

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### **Transit on Federal Lands**

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## Introduction

Federal lands account for about 29 percent of the land area of the United States, principally in the western part of the country. Over the past decade, these lands have been used increasingly for recreational purposes while business activities such as the extraction of minerals and lumber have declined. This section, which discusses transit needs on Federal lands, is provided as a complement to the section on the Federal Lands Highway System, in Appendix E of the 1999 C&P Report.

A large number of Federally-managed sites have the capacity to accommodate more visitors, but are unable to expand their roadway and parking capacity without incurring prohibitive costs or negatively affecting the natural environment. In many cases, transit can serve as a cost-effective method of accommodating additional visitors while preserving the natural environment and providing visitors with a pleasant experience. As more tourists continue to visit Federally-managed sites, additional investments in transit services will be needed to achieve the following goals within these lands and their adjacent communities:

- Relieve traffic congestion and parking shortages.
- Enhance visitor mobility and accessibility.
- Preserve sensitive natural, cultural, and historic resources.
- Provide improved interpretation, education, and visitor information services.
- Reduce pollution.
- Improve economic development activities for gateway communities.

## Description of Federal Lands

Federal lands include the National Park Service (NPS), the Bureau of Land Management (BLM), the U.S. Fish and Wildlife Service (USFWS) and the U.S. Forest Service (USFS). NPS, BLM, and USFWS are administered by the Department of the Interior and the USFS by the Department of Agriculture. The extent of the geographical holdings of each of these Federal land areas and a brief description of some of the existing transit services on each are provided below.

- **National Park Service:** NPS currently manages 379 parks covering more than 81 million acres. There were 287 million recreational visitors to NPS sites in 1999. Transit services have been put in place or are in the process of being developed in the most heavily visited parks, including Grand Canyon, Rocky Mountain, Great Smokey Mountains, Acadia, and Yosemite. Transit also serves much smaller NPS sites without parking facilities, including residences of former public figures such as the Eisenhower farm and the Lyndon B. Johnson ranch. In FY 2001, the NPS and the Federal Highway Administration (FHWA) set aside about \$8.4 million from the Federal Lands Highway Program (FLHP) for transit projects, of which \$5.1 million went toward 28 planning projects and \$3.3 million funded nine implementation projects.
- **Bureau of Land Management:** BLM's holdings constitute one-eighth of the U.S. land area and are located primarily in the western states. There are over 4,500 miles of National Historic, Scenic, or Recreational Trails through BLM lands in addition to multi-use trails. Around 60 million visitors use BLM lands for recreation annually. Some BLM sites are experiencing traffic congestion and parking shortages similar to those at some of the major NPS sites. Particularly severe congestion is occurring in the La Posa Long-Term Visitor Area along the Arizona-California border and its gateway community of Quartzite due to the influx of northern retirees who visit these areas during the winter.

- **U.S. Fish and Wildlife Service:** Although USFWS manages extensive properties—refuges, fish hatcheries, ecological services field stations, and thousands of small wetlands and other special management areas—most of its sites receive relatively few visitors. However, some heavily visited USFWS sites are located on beaches close to major tourist or urban areas. These sites include the National Wildlife Refuge at Sanibel Island, Florida, and Santa Anna National Wildlife Refuge, Texas. Both of these sites offer transit services to improve accessibility and to reduce the negative environmental effects caused by excessive private vehicle travel.
- **The U.S. Forest Service:** USFS manages 151 national forests and 20 grasslands with a combined area of 191 million acres. USFS was established to provide quality water and timber for the Nation’s benefit, although parts of the areas are open for recreational use. USFS does not monitor transit services on its properties, although municipalities adjacent to USFS areas may provide transit services to and/or through USFS areas. Commercial operators provide transit services at some recreational sites on Forest Service lands. A transit system is being developed on both USFS and NPS lands to serve the Grand Canyon National Park in Arizona, which is adjacent to the Kaibab National Forest.

## **Funding Sources**

The majority of funding for the provision of transit services on Federal lands is allocated through State and local transportation authorities, but is not specifically targeted for transit programs on Federal lands. Transit programs on Federal lands are required to compete with other transit projects in the same State or local jurisdiction for Federal funds. A smaller percentage of funds is allocated to transit projects on Federal lands through the Federal Lands Highway Program (FLHP), which disburses funds exclusively to Federal Lands Management Agencies (FLMA). In the past, the bulk of FHLP funds have been used primarily for future roadway and bridge projects and not for transit. As the funds needed to maintain roadways and bridges on Federal lands are likely to continue to exceed available FHLP funds, only a very limited amount of funding for transit programs is expected to come from this source in the future.

## **Transit Needs**

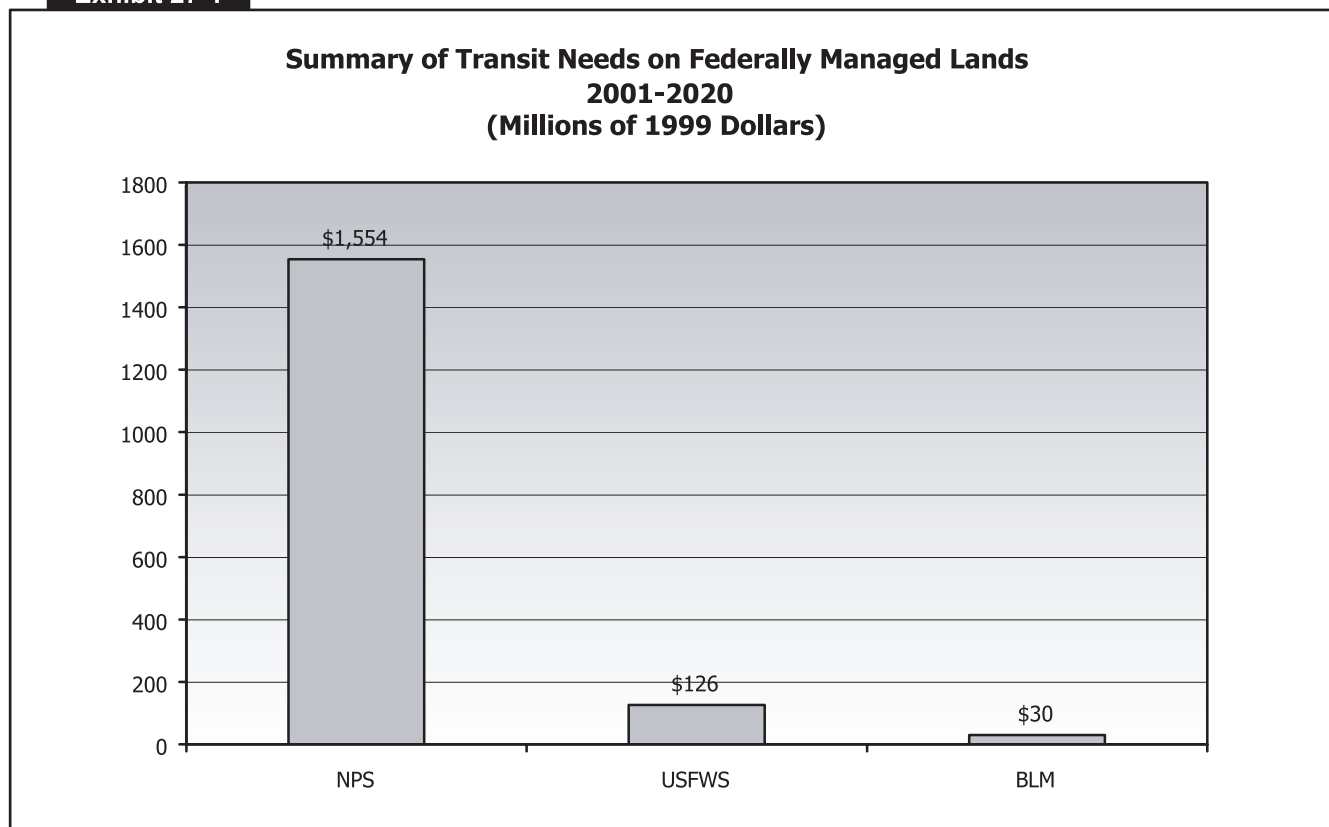
Over the past decade, several initiatives were undertaken to examine transit issues on Federal lands. A study mandated by ISTEA reported that over-crowding, traffic congestion, and pollution were affecting the quality of tourism in the more heavily visited National parks. In 1997, a memorandum of understanding was signed by the Secretaries of Transportation and the Interior in which the two Departments agreed to work together to address transportation and resource management issues in and around National parks. Section 3039 of TEA-21 mandated that the Secretaries undertake a comprehensive study of transit needs in National parks and related Federal lands managed by the Interior Department. The resulting study, *Federal Lands Alternative Transportation Systems*, (ATS), was published in August 2001 and identified significant transit needs at sites managed by NPS, BLM, and USFWS.

The ATS study evaluated 207 Federal land sites, 85 with extensive field visits and 122 with telephone calls or brief visits. Many of the NPS sites examined by the ATS study would not be easily accessible without transit. These sites include the Boston Harbor Islands National Recreation Area, the Statue of Liberty and Ellis Island, and the USS Arizona Memorial in Hawaii. Transit needs were identified at

118 of 169 NPS sites that were included in the study based on the recommendations of NPS. Needs were also identified at five of the 15 BLM sites visited, and 13 of the 23 USFWS sites. Transit needs include improving or expanding existing transit services and implementing new services. Transit needs were found to be modest and able to be served by a small number of vehicles operating on a seasonal basis in most of the Federal sites that were included in the study.

As shown in Exhibit 27-1, total transit needs for the 20-year period are estimated to be \$1.71 billion in 1999 dollars as reported by the ATS study (\$1.75 billion in 2000 dollars). NPS will have the largest transit needs, estimated at just under \$1,554 million (\$1,586 million in 2000 dollars), followed by USFWS with estimated needs of \$126 million (\$129 million in 2000 dollars), and BLM with \$30 million (\$31 million in 2000 dollars). Of this amount, \$1.3 million will be needed for bus and rail/guideway (a very small percentage for rail/guideway), and \$0.2 million for water services. Bus transit is, and will continue to be, the most common form of transit service on Federal lands, although water transportation needs are also expected to be significant. The majority of BLM transit needs will be for waterborne systems. (Note that 1999 dollars were converted to 2000 dollars with the GDP chained price index reported in the Budget of the United States, FY2003.)

**Exhibit 27-1**



Source: Federal Lands Alternative Transportation Study, Congressional Report, August 2001.

Transit needs were identified by the ATS study in 1999 dollars in two time segments— short-term (2001-2010) and long-term (2011-2020). Of the total 20-year period requirement of \$1.71 billion, approximately \$678 million, or 40 percent of the total, will be needed between 2001- 2010, and \$1.03

billion between 2011-2020. Longer term transit needs are higher than shorter term needs as they include capital-intensive projects requiring long lead times for planning and obtaining funds.

The ATS study developed estimates for project development, vehicle capital costs, other capital costs, and operations and maintenance:

- *Project development costs* include conceptual planning, engineering, design, and environmental evaluation.
- *Vehicle capital costs* are incurred for the purchase of vehicles accounting for the largest percentage of capital cost expenditures.
- *Other capital costs* include capital investments in maintenance and storage facilities, parking areas, docks, piers, administrative facilities, shelters, and waiting areas, as well as the cost of managing construction projects.
- *Operations and maintenance expenditures* include the full range of administrative, operating, and maintenance costs, such as direct labor costs, employee benefits, marketing expenses, insurance, fuel, and parts purchases.

These costs, which are provided in Exhibit 27-2 and reported in 1999 dollars, are disaggregated according to whether they are short-term or long-term and whether they are needed to maintain and expand existing systems or develop new systems. *Total upfront costs are comprised of project development costs, vehicle capital costs, and other capital costs.* These costs combined are estimated to be \$724 million and account for 42 percent of total projected costs. *Project development costs* account for five percent of the total 20-year period needs estimate. Over the 20-year period, these costs are estimated to be \$90.4 million, \$31 million to maintain and expand existing systems and \$59 million to develop new systems. *Vehicle capital costs* account for 23 percent of the total needs estimate, at \$396 million for the entire period. Vehicle capital costs required to maintain and expand existing systems are estimated to be just over \$195 million, and those for developing new systems, just over \$200 million. *Other capital costs* make up 14 percent of the total needs requirement, and are estimated to be \$237 million over the 20-year period. An estimated \$55 million would be required to maintain and expand existing systems and \$182 million to put in place new systems. Operating and maintenance costs would be \$986 million, or 58 percent of the total needs estimate. Thirty-three percent of these costs, or \$322 million, would go toward existing systems, and 67 percent, or \$664 million, to new systems. According to the ATS study, it would be possible to charge passenger fares at many sites to recover a portion of operations and maintenance expenditures.

**Potential Transit Needs by Agency, System Status and Type of Expenditure, 2001-2020  
(Thousands of 1999 Dollars)**

**Costs for Existing and Expansion of Existing Systems**

<b>Short-Term (2001-2010)</b>	<b>PROJECT DEVELOPMENT</b>	<b>VEHICLE CAPITAL COSTS</b>	<b>OTHER CAPITAL COSTS</b>	<b>TOTAL UPFRONT COSTS</b>	<b>OPERATIONS &amp; MAINTENANCE</b>	<b>TOTAL UPFRONT, OPERATIONS &amp; MAINTENANCE</b>
BLM	\$45	\$450	\$0	\$495	\$2,419	\$2,914
FWS	\$980	\$2,995	\$2,642	\$6,617	\$8,818	\$15,435
NPS	\$21,659	\$93,298	\$42,066	\$157,023	\$147,647	\$304,670
<b>Short-Term total</b>	<b>\$22,684</b>	<b>\$96,743</b>	<b>\$44,708</b>	<b>\$164,135</b>	<b>\$158,884</b>	<b>\$323,019</b>
<b>Long-Term (2010-2020)</b>						
BLM	\$22	\$450	\$0	\$472	\$2,420	\$2,892
FWS	\$282	\$2,995	\$0	\$3,277	\$8,818	\$12,095
NPS	\$8,368	\$94,973	\$10,743	\$114,083	\$151,896	\$265,979
<b>Long-Term Total</b>	<b>\$8,672</b>	<b>\$98,418</b>	<b>\$10,743</b>	<b>\$117,832</b>	<b>\$163,134</b>	<b>\$280,966</b>
<b>2001-2020</b>						
BLM	\$67	\$900	\$0	\$967	\$4,839	\$5,806
FWS	\$1,262	\$5,990	\$2,642	\$9,894	\$17,636	\$27,530
NPS	\$30,027	\$188,271	\$52,809	\$271,106	\$299,543	\$570,649
<b>TOTAL Existing</b>	<b>\$31,356</b>	<b>\$195,161</b>	<b>\$55,451</b>	<b>\$281,967</b>	<b>\$322,018</b>	<b>\$603,985</b>

**Costs for New Systems**

<b>Short-Term (2001-2010)</b>						
BLM	\$430	\$1,375	\$1,607	\$3,412	\$9,266	\$12,678
FWS	\$1,736	\$4,665	\$5,481	\$11,883	\$32,061	\$43,944
NPS	\$14,318	\$54,480	\$43,517	\$112,314	\$185,881	\$298,195
<b>Short-Term total</b>	<b>\$16,484</b>	<b>\$60,520</b>	<b>\$50,605</b>	<b>\$127,609</b>	<b>\$227,208</b>	<b>\$354,817</b>
<b>Long-Term (2010-2020)</b>						
BLM	\$162	\$1,475	\$50	\$1,687	\$10,444	\$12,131
FWS	\$2,208	\$9,150	\$3,912	\$15,270	\$39,843	\$55,113
NPS	\$40,223	\$129,240	\$127,904	\$297,367	\$386,456	\$683,823
<b>Long-Term Total</b>	<b>\$42,593</b>	<b>\$139,865</b>	<b>\$131,866</b>	<b>\$314,324</b>	<b>\$436,743</b>	<b>\$751,067</b>
<b>2001-2020</b>						
BLM	\$592	\$2,850	\$1,657	\$5,099	\$19,710	\$24,809
FWS	\$3,944	\$13,815	\$9,393	\$27,153	\$71,904	\$99,057
NPS	\$54,541	\$183,720	\$171,421	\$409,681	\$572,337	\$982,018
<b>TOTAL New</b>	<b>\$59,077</b>	<b>\$200,385</b>	<b>\$182,471</b>	<b>\$441,933</b>	<b>\$663,951</b>	<b>\$1,105,884</b>
<b>TOTAL Existing and New</b>	<b>\$90,433</b>	<b>\$395,546</b>	<b>\$237,922</b>	<b>\$723,900</b>	<b>\$985,969</b>	<b>\$1,709,869</b>

Source: Federal Lands Alternative Transportation Study, Congressional Report, August 2001.