



Center for Transportation Analysis
Research Brief
Oak Ridge National Laboratory

National Parks and Transit ITS

Center for Transportation Analysis (CTA) Research Areas

Aviation Safety
Air Traffic Management Analysis
Data, Statistical Analysis
Geo-Spatial Information Tools
Defense Transportation
Energy Policy Analysis
Environmental Policy Analysis
Highway Safety
Intelligent Transportation Systems
Logistics Management
Supply Chain Management
Modeling and Simulation
Transportation Operations
Planning and Systems Analysis
Transportation Security

The immense popularity of our national parks and the fact that the primary mode of transportation within most parks is the personal vehicle have resulted in congestion, damage to the environment, impacts on safety, and a degraded visitor experience. The Great Smoky Mountains National Park is no exception! It is the most visited national park and represents one



of the most difficult challenges to the establishment of any type of public transit system.



To assess the problem, Oak Ridge National Laboratory (ORNL) examined transportation issues, documented existing transit usage and Intelligent Transportation System (ITS) applications in surrounding areas, and collected a comprehensive list of interested organizations.

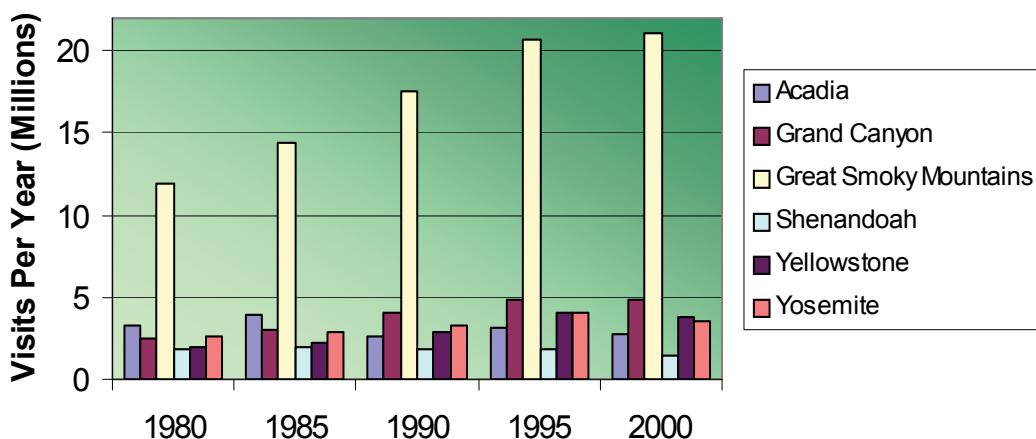
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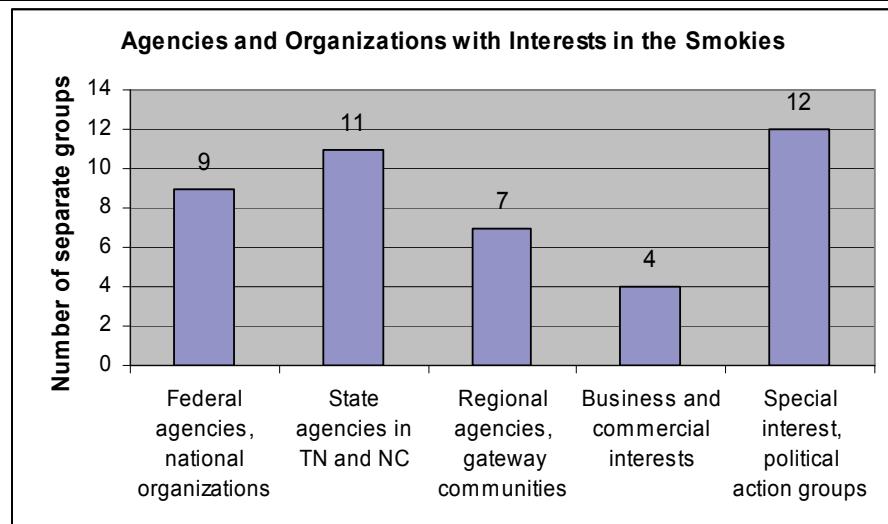
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National Park Service - Total Visits Per Calendar Year



In order to determine a feasible solution, ORNL identified both technical and institutional barriers to potential implementation of transit solutions to the Smokies' dilemma. One of the conundrums of the Smokies situation is how to address two opposing public opinions: "The least enjoyable part of going to the Smokies is the traffic congestion," and "We don't want to have to ride a bus in the mountains."



ORNL determined a set of feasible solutions for areas within the Smokies with the most serious immediate problems and provided long-term recommendations for the entire Park. ITS applications, involving innovative technologies and integrating data/communication needs, can fulfill transportation needs and coordinate agency requirements. ORNL also recommended strategies for bringing together stakeholders that might have conflicting objectives.

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