



Transportation Safety

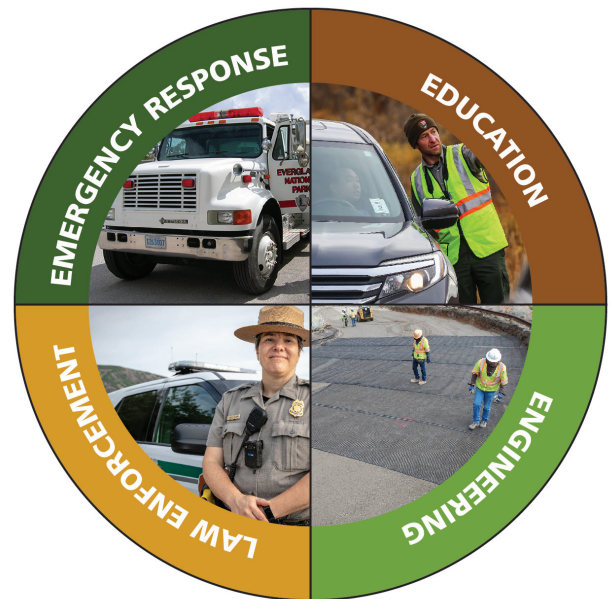
FEDERAL LANDS TRANSPORTATION PROGRAM FACT SHEET

Motor vehicle crashes are the second leading cause of unintentional fatal injuries in the National Park Service. On average, one person dies every week on NPS roadways. The key to improving long-term roadway safety lies in reducing crashes using data-driven and evidence-based strategies.

Improving Safety, Reducing Crashes

Between 2008 and 2016, motor vehicle crashes were the second leading cause of unintentional fatal injuries in the National Park Service (NPS). To address roadway safety across the service, the NPS is developing a Transportation Safety Program (TSP). The TSP will use data driven, evidence-based, and context sensitive approaches to reduce motor vehicle crashes and save lives.

The NPS and the US Department of Transportation are working together to identify industry-standard best practices to develop the TSP. These important roadway safety practices use engineering, enforcement, education, and emergency response strategies, also known as the 4-Es. Partnerships and collaboration at the local, state, and federal levels and among multi-disciplinary experts (4-Es, natural and cultural resources) are critical to the program's success. When fully implemented, the TSP will guide the NPS in reducing crashes, saving lives, and protecting resources.



The "4-Es" of safety are Emergency Response, Education, Law Enforcement, and Engineering. (all photos NPS)

Transportation Safety Management System

A transportation safety management system will be integrated into the TSP to analyze crash data patterns to identify hot spots and systemic safety issues, select targeted 4-E strategies, conduct cost benefit analysis, and track implemented projects to measure results and performance in reducing crashes.

Access to and within the National Park System has been a defining experience for generations of visitors. The National Park Service coordinates the planning and implementation of transportation systems that improve the visitor experience and care for national parks by: **1) Preserving natural and cultural resources** **2) Enhancing visitor safety and security** **3) Protecting plant and animal species** **4) Reducing congestion** **5) Decreasing pollution.**

The NPS and the Federal Highway Administration (FHWA) have initiated a pilot project to test and evaluate an analytical software program using safety data from 22 parks that have the highest number of total crashes. The crash analysis system will analyze the data and recommend roadway engineering countermeasures designed to treat the safety issues and reduce crashes in each park during the pilot phase. Upon successful completion, the NPS will evaluate the system's potential to help decision makers choose effective solutions servicewide.

Current Safety Approaches in Parks

While the transportation safety management system is under development, the NPS and FHWA are working with multidisciplinary experts to identify safety issues and implement strategies that can reduce the frequency and severity of crashes.

Traffic Safety Coalition

In 2015, the National Highway Traffic Safety Administration and the NPS entered into an agreement to develop a focused traffic safety law enforcement program to prevent and reduce alcohol-related traffic crashes on federal designated lands. Under the leadership of the NPS Federal Law Enforcement Liaison, the NPS Traffic Safety Coalition (TSC) coordinates with participating parks servicewide and works to prevent impaired driving and unsafe operations on NPS roads. The TSC has been highly successful in expanding local and national partnerships, providing training for law enforcement to identify impaired drivers, and implementing high visibility enforcement and educational campaigns.

Road Safety Audits

The NPS has effectively used Road Safety Audits (RSA) at national parks to identify safety issues and recommend 4-E strategies to reduce crashes. RSAs are conducted by a multidisciplinary team that travels to the project area to visually evaluate the roadway, identify stakeholder safety concerns, and review existing crash data to develop effective short- and long-term safety recommendations.

In 2017, safety issues on Blue Ridge Parkway and Natchez Trace Parkway were addressed through RSAs. These parks implemented engineering, enforcement, and educational strategies to improve safety. For example, the Blue Ridge Parkway is installing signage to warn drivers about the presence of sharp curves, pedestrians, and wildlife.

Following multiple fatal and serious injury bicycle crashes on the Natchez Trace Parkway, the park conducted an RSA with technical experts and engaged with local stakeholders to identify potential safety solutions. Based on these recommendations, modifications were made to the pavement markings and signage throughout the park in addition to other 4-E efforts. The park did not report any additional fatal bike crashes between 2018 and 2020.



Road safety and engineering education booth at the opening of the Foothills Parkway in Great Smoky Mountains National Park. (Photo: Joye Ardyn Durham, courtesy of the Great Smoky Mountains Association)



Interagency DUI Checkpoint in Lake Mead National Recreation Area. (Photo: NPS)