



Traffic Program

Access to and within the National Park System has been a defining experience for generations of visitors.

The National Park Service (NPS) coordinates the planning and implementation of transportation systems that improve the visitor experience and care for national parks by:

- Preserving natural and cultural resources.
- Enhancing visitor safety and security.
- Protecting plant and animal species.
- Reducing congestion.
- Decreasing pollution.

NPS is committed to being a leader in pursuing strategies that can help make park units more enjoyable, cleaner, quieter, and more sustainable for present and future generations.

For more information, visit nps.gov/transportation

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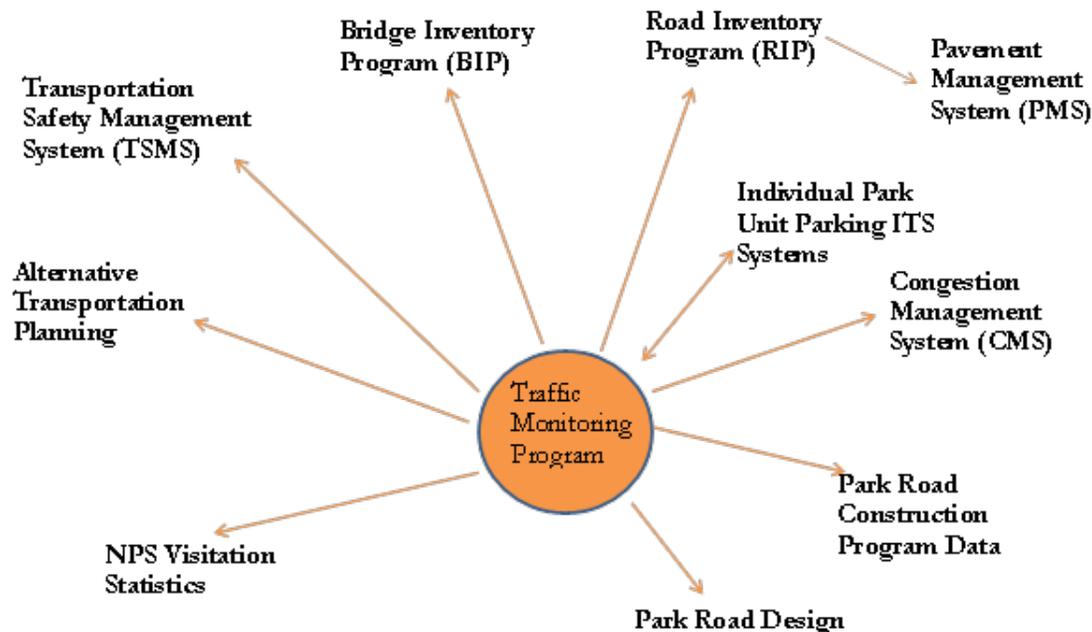
June 2014
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Background

The current NPS Traffic Data Program is managed by the Park Facility Management Division, Federal Lands Transportation Program (FLTP). The system is operated and maintained by the Field Operations Technical Support Center (FOTSC) in Denver, Colorado. The primary purpose of the FOTSC is to collect traffic data 24 hrs a day, each day of the year and to distribute these data to users in the NPS and FHWA.

FOTSC began installing permanent traffic counting equipment 1984. By 1989, equipment had been installed in 59 park units. In subsequent years, a number of parks have been withdrawn from the program based on evaluations of their crash data and the need to make more effective use of the staffing available to conduct the program. The parks remaining in the program today represent those with notable traffic safety concerns.

Under a plan for establishing a Park Road Asset Management System, this program was designed and developed to supply road segment level traffic data for the following key NPS processes:



Why is Traffic Data Essential to National Park Transportation Programs?

As shown above, traffic data is a building block needed by many users and management systems in the NPS. Planners and engineer need to plan designs for a certain number of visitors, pavement engineers need to know how many vehicles travel a road to design it properly, etc. Traffic data also fits into a broader business case for the NPS since the data are valuable to the NPS corporate management strategies, Park Unit, performance monitoring and assessment, and NPS performance plans.

Currently there are 109 permanent count stations located in 35 park units, in 21 different states. Based on an analysis for FOTSC users' needs, within the next 5 years, FOTSC will invite an additional 15 park units in an additional 8 states to join. Currently, traffic volumes on roadways FOTSC collects traffic data in the NPS range from 100 vehicles per day to over 110,000 vehicles per day.

Inside a Traffic Counting Station

As the photos below show, a traffic count station typically consists of a way to detect the vehicles (detectors) located on the roadway. All other equipment, such as the traffic counter, power source and communication equipment are housed inside a cabinet or an office located nearby. Each night the FOTSC computer calls each traffic counter to download the previous day's traffic data for processing. The following photos show examples of traffic count stations from around the Park Service.



Delaware Water Gap, Millbrook Village Traffic Count Station

Interesting Fact: All traffic count stations currently use inductive loop detection, which are the two hexagons in the photo above. Typically one inductive loop is located in each lane of the roadway to be counted.



Joshua Tree National Park, Cottonwood Entrance Count Station

Interesting Facts: Runs on solar power. Cabinet painted a desert camouflage, not NPS Brown, to blend into landscape.



Acadia National Park, Cadillac Mountain Road Traffic Count Station

Interesting Facts: Runs on solar power. Collects traffic volume and categorizes by vehicle length (passenger vehicles and buses).



Olympic National Park, Hurricane Ridge Traffic Count Station

Interesting Fact: About 40-percent of FOTSC traffic counting equipment is located inside an entrance station.

Park Units Currently in FOTSC

1. Acadia National Park (ACAD)
2. Badlands National Park (BADL)
3. Baltimore-Washington Memorial Parkway (BAWA)
4. Big Bend National Park (BIBE)
5. Blue Ridge Parkway (BLRI)
6. Chickamauga and Chattanooga National Military Parks (CHCH)
7. Colonial National Historic Park (COLO)
8. Delaware Water Gap National Recreation Area (DEWA)
9. Everglades National Park (EVER)
10. Gateway National Recreation Area (GATE)
11. George Washington Memorial Parkway (GWMP)
12. Gettysburg National Military Park (GETT)
13. Glacier National Park (GLAC)
14. Glen Canyon National Recreation Area (GLCA)
15. Grand Canyon National Park (GRCA)
16. Grand Teton National Park (GRTE)
17. Great Smoky Mountains National Park (GRSM)
18. Gulf Islands National Seashore (GUIS)
19. Joshua Tree National Park (JOTR)
20. Lake Mead National Recreational Area (LAKE)
21. Mammoth Cave National Park (MACA)
22. Mesa Verde National Park (MEVE)
23. Mount Rainier National Park (MORA)
24. Natchez Trace Parkway (NATR)
25. Olympic National Park (OLYM)
26. Prince William Forest Park (PRWI)
27. Rock Creek Park (ROCR)
28. Saguaro National Park (SAGU)
29. Sequoia and Kings Canyon National Parks (SEKI)
30. Shenandoah National Park (SHEN)
31. Suitland Parkway (SUIT)
32. Valley Forge National Historical Park (VAFO)
33. Yellowstone National Park (YELL)
34. Yosemite National Park (YOSE)
35. Zion National Park (ZION)

Park Units to be Invited in 2014-2019

1. Arches National Park (ARCH)
2. Bryce Canyon National Park (BRCA)
3. Cape Cod National Seashore (CACO)
4. Chickasaw National Recreational Area (CHIC)
5. Colorado National Monument (COLM)
6. Death Valley National Park (DEVA)
7. Denali National Park (DENA)
8. Golden Gate National Recreational Area (GOGA)
9. Haleakala National Park (HALE)
10. Hawaii Volcanoes National Park (HAVO)
11. Kennesaw Mountain National Battlefield Park (KEMO)
12. Mojave National Preserve (MOJA)
13. Point Reyes National Seashore (PORE)
14. Rocky Mountain National Park (ROMO)
15. Wind Cave National Park (WICA)