

## National Park Service | Congestion Management Toolkit | Summary

Full Congestion Management Toolkit is available here: [https://www.nps.gov/orgs/1548/upload/NPS-CMS\\_Toolkit.pdf](https://www.nps.gov/orgs/1548/upload/NPS-CMS_Toolkit.pdf)

Congestion is not a new issue for national parks. Many national parks experience a level of visitation that often exceeds the capacity of the parks' facilities and resources. While congestion can result from too many people at a trailhead or on a trail, a crowded visitor center with a waiting line for a film about the park, or even too many bicyclists using a pathway, the Congestion Management Toolkit summarized here focuses on motor vehicle congestion (cars, trucks, buses, etc.).

Congestion can occur at individual or multiple locations including: gateway communities, on roadways leading to the park, on roadways within the park, in parking at visitor centers, trailheads, and other attractions. Causes of congestion vary, from bottlenecks to visitors congregating at an attraction, or from normal traffic fluctuations and commuter traffic. In short, congestion occurs when (and where) there is more demand than supply. The most common issues impacted by congestion are visitor experience, safety and park operations. The Congestion Management System/Process uses a step-by-step process to solve congestion, based on adaptive management. The steps are as follows:

- Step 1: Identify the congestion problem(s)
- Step 2: Determine the location(s), frequency, and impacts of congestion
- Step 3: Consult the Toolkit to identify potential solutions
- Step 4: Analyze alternatives and select preferred solution(s)
- Step 5: Implement solution(s)
- Step 6: Test/monitor effectiveness of solution(s)
- Step 7: Revisit Toolkit if problems are not adequately resolve

### Categories of Congestion Management Tools:

- **Additional Capacity:** These solutions focus on creating more capacity in the system (creating more parking spaces or adding additional travel lanes). Note that this approach includes some of the most costly, lengthy, and difficult solutions to implement.
- **Electronic Systems:** These solutions are often referred to as intelligent transportation system "ITS". These solutions include systems that can both collect information (such as how many parking spots may be available in a parking lot), and present information to travelers, through dynamic message signs or other visitor notification methods.
- **Public Transportation:** Often referred to as a "shuttle" or "bus" service, public transportation solutions include putting multiple carloads of people on a van, bus, tram, or other higher capacity vehicle to get them to a destination or destinations. Public transportation solutions can often reduce the number of vehicles on a roadway or parking area, but can be costly to operate and maintain and can have unintended consequences which could simply move crowding and reduced visitor experience downstream.
- **Traffic Operational Improvements:** These solutions may include static signage that improves "wayfinding" so that visitors find their destinations more quickly, adding a turn lane to reduce traffic conflicts, adding a roundabout, or other improvements, such as reducing or increasing speed limits on roadways.
- **Visitor Demand Management:** These solutions influence the choices that visitors make about how, when, where, whether, and which way they travel to their destinations. These solutions include tools such as reservation systems to try and influence when people may enter a park, or may include Electronic Systems that may provide information to travelers that a certain location/feature may be crowded.

Many parks, and areas surrounding the parks, experience congestion. Further, many parks have already implemented solutions to try and manage the congestion that is occurring. A park should monitor the solutions that are implemented to determine if they are having an effect on congestion. If not, the Toolkit should be revisited to determine if additional tools/solutions should be implemented.