

National Park Service Transportation System Needs and Priorities



A Resource Paper to Accompany the National Transportation Strategy



2024



... to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

**National Park Service
Organic Act. 16 USC 1**



Table of Contents

Executive Summary	iii
1 Introduction	1
1.1 Background	1
1.2 Visitor Spending Effects – Economic Contributions.....	2
1.3 Challenges and Opportunities.....	3
1.4 NPS National Transportation Strategy	4
2 NPS Transportation Today	5
2.1 Scale of the NPS Transportation System.....	5
2.2 Performance-Based Transportation Management.....	6
3 NPS Transportation Funding and Accomplishments	7
3.1 Recent NPS Transportation Funding.....	7
3.1.1 Annual Funding Programs.....	8
3.1.2 FLTP Obligation Limitation “Lop-Off”	9
3.2 Inflation	9
3.3 One-Time Project Funding	10
3.3.1 NSFLTP Funding	11
3.3.2 LRF Funding.....	12
3.4 Accomplishments.....	12
4 NPS Transportation Investment Needs and Priorities	16
4.1 Overview	16
4.2 Maintaining and Improving Transportation Asset Condition	17
4.3 Transit Vehicle Fleet and Transit Operations.....	18
4.4 Major Project Needs	19
4.5 Improving Safety	20
4.6 Preparing for the Future of Transportation.....	23
4.7 Adapting to Climate Change and Extreme Weather.....	24
4.7.1 Emergency Relief for Federally Owned Roads (ERFO).....	26
4.8 Reducing NPS Transportation Impacts on Wildlife and the Environment.....	26
5 NPS Transportation Program Improvements	28
5.1 Reauthorize and Improve FLTP, NSFLTP, and ERFO.....	28
5.2 Designate federal land management agencies (FLMAs) as eligible applicants and recipients of additional U.S. DOT discretionary grant programs.	30
5.3 Create Funding Efficiencies and Clarify Transfer Authorities	31



5.4 Authorize transfer of jurisdiction to and/or cooperative management of NPS transportation facilities by state and local partners31

Appendix A: Transportation Legacy Investment Project Needs33



Executive Summary

The National Park Service (NPS) transportation system provides access to 425+ park units in all 50 states, the District of Columbia, and in U.S. territories. The NPS transportation system is the backbone on which all visitor experiences rely, connecting national parks with nearby communities. In 2023, the system supported approximately 325 million visits. These visits generated roughly \$50.3 billion in economic output in local gateway regions.

The \$60+ billion NPS transportation asset portfolio is similar in scope and scale to a small state department of transportation (State DOT) and includes a diverse inventory of assets, including approximately 6,600 miles of paved roads, 7,300 miles of unpaved roads, 1,800 road bridges and tunnels, 6,300 paved parking areas, 1,800 unpaved parking areas, 1,000 miles of transportation trails, 200 transportation trail bridges and tunnels, and 100 transit systems.

The National Park Services faces several challenges and opportunities related to its stewardship of this public investment in park transportation access, including that a significant portion of the system is now more than 60 years old and in need of maintenance and modernization. Changing visitation trends, an aging U.S. population, and new technologies are impacting when and where visits occur and the services that visitors need and expect. The ways that NPS transportation infrastructure are funded are changing as well, with the greater emphasis on discretionary grants and partnerships in recent years.

The 2024 NPS National Transportation Strategy (NTS), the agency's long-range transportation plan, identifies three overall transportation goals (below). The NTS includes objectives, strategies, and performance measures to advance these goals and is consistent with the transportation planning and programming approach used by State DOTs.

1. Protect the Climate and Advance Resource Protection
2. Enhance Visitor Experience and Connect Diverse Communities
3. Reinvest in the System and Make Legacy Improvements

Between fiscal years (FYs) 2016-2021, the National Park Service allocated or was awarded a total of \$3.5 billion for transportation projects. Approximately two-thirds came from Annual funding sources, such as the Federal Lands Transportation Program (FLTP), and one-third came from One-Time funding tied to specific projects, such as the Nationally Significant Federal Lands and Tribal Projects (NSFLTP) program and the Legacy Restoration Fund (LRF). FLTP was the largest source of NPS transportation funding (45% of total). Over the life of the Bipartisan Infrastructure Law (BIL), NPS plans to invest more than \$1.5 Billion of FLTP funding through projects big and small, touching all 50 states.

NPS FLTP allocations are specified by FY in the BIL, but are reduced by the annual obligation limitation (known as "Lop-Off"). From FY16-24, NPS estimates that the obligation limitation reduced NPS FLTP funds available by an average of 9.5 percent each year.

Inflation has and will continue to reduce the buying power of NPS transportation funding. Although Congress authorized increases in NPS FLTP allocations in the FAST Act and in the BIL, the impacts of inflation, as measured by the FHWA Highway Construction Cost Index, have reduced the buying power of NPS FLTP funding to its lowest level in recent years. Measured in 2023 inflation-adjusted dollars, NPS FLTP buying power decreased from \$449 million in FY16 to \$298 million in FY23, a decrease of 33 percent. This was despite a nominal increase in NPS FLTP allocations in legislation from \$268 million in FY16 (\$254 million as reduced by lop-off) to \$339 (\$298 million as reduced by lop-off) in FY23. As a result, NPS estimates that nominal NPS FLTP apportionments of \$500 million or more per year would likely be needed to return NPS to the same buying power provided under the FAST Act in FY16-18.

One-Time funding sources play a major role in NPS transportation. These sources allow the National Park Service to, among other things, accomplish legacy projects such as large-scale road and bridge rehabilitations or transit system recapitalizations that the agency's Annual programs would not otherwise allow for. One-Time allocations are awarded on a project-by-project basis, based on grants or other special funding programs. The National Park Service was fortunate to



receive grants for major transportation projects from NSFLTP, receiving 42 percent of the funding available to Federal Land Management Agencies (FLMAs) – a total of \$238 million between FY19-FY22. These and other one-time grants are critical supplements to the core FLTP program. However, NPS major project needs far exceed the capacity of these programs and the funding available is declining significantly. NSFLTP is subject to annual appropriations for amounts beyond the trust-funded \$55 million per year (split between Tribes and FLMAs). Furthermore, the Legacy Restoration Fund (authorized in the Great American Outdoors Act), which has been an important source of funding for NPS major projects, is set to expire at the end of FY25.

The Emergency Relief for Federally-Owned Roads (ERFO) program provided critical funding and resources to assist with repairing and restoring transportation access in National Park Units after damage from extreme weather events. ERFO funded \$68.9 million of NPS emergency restoration projects from FY16-21, and an additional \$101.6 million in FY22. Continuing access to ERFO funding, including “quick release” funds is an essential part of maintaining NPS transportation infrastructure.

In the 2024 NTS, the NPS estimated that \$458 million is required annually to maintain the current condition of NPS transportation assets, which average in Fair condition. An additional \$272 million per year is needed to reach target condition levels (average Good condition), for a total estimated maintenance need of \$730 million per year. Approximately two-thirds of these needs are for the Paved Road and Bridge Network, with the remaining one-third for Transit, Trails, and Unpaved Roads and Parking. These needs estimates only account for maintenance, repair, and limited modernization of the existing transportation system. Based on NTS funding forecasts, which do not account for the impacts of inflation, the NPS estimates a current funding gap of at least \$290 million per year under the BIL. This gap will grow as NPS buying power decreases with inflation.

In addition, the NPS has major project needs to address transportation assets reaching the end of their useful life. Many NPS transportation assets are over 60 years old and require major projects to recapitalize or replace them. NPS has identified 41 Transportation Legacy Investment Projects, in 18 states, ranging in cost from \$13 million to nearly \$500 million (\$2.4 billion total). These projects require a significant investment that far exceeds Annual transportation funding such as the FLTP. The NPS pursues One-Time funding from external grants and partnerships to fund these major projects.

Maintaining assets in good condition is not the only goal of the NPS transportation program. Improving safety outcomes by reducing fatalities and serious injuries is a primary concern, as is integrating new transportation technologies, adapting park transportation systems to the impacts of climate change and extreme weather, and reducing transportation impacts on wildlife and the environment. Needs in these areas are harder to quantify, but each requires significant focus, attention, and investment, beyond the maintenance of the existing system.



The National Park Service has identified potential program improvements. These include:

- 1. Reauthorize and improve programs that are specifically tailored to the NPS and other FLMAs (i.e., FLTP, NSFLTP, and ERFO).**
 - Inflation and the obligation limitation have significantly reduced FLTP buying power and funding availability.
 - Clarify that NPS transit systems qualify as “public transportation” and are eligible for Title 49 funding, subject to the rules of those programs.
 - Fund the NSFLTP through highway trust fund or advance appropriations; lower the 3 million visitation threshold for the guaranteed NPS project.
 - Increase ERFO funding available for “quick release” and expand eligibility for resiliency enhancements.
- 2. Expansion of NPS eligibility for the full range of U.S. DOT discretionary grants and formula programs (e.g., Safe Streets for All, PROTECT).**
 - Make projects on Federal lands explicitly eligible for all surface transportation formula funds and discretionary grants.
 - Allow NPS to apply for all grant programs without co-sponsorship from State and local governments.
- 3. Create funding efficiencies and clarify transfer authorities.**
 - Create a Federal Lands Transportation Working Capital Fund to improve efficiency of project delivery.
 - Clarify statutory funding transfer authority between FHWA and FLMAs.
- 4. Authorize the transfer of jurisdiction to and cooperative management of NPS transportation facilities to state and local partners.**
 - NPS does not have authority to toll or otherwise manage traffic demand on its roads and parkways. NPS also lacks administrative flexibilities and mechanisms to transfer ownership and operation of these facilities to partner jurisdictions if they wish to assume responsibility for them due to their importance for regional travel not related to park visitation.
 - Provide administrative flexibilities and mechanisms to transfer maintenance and/or management of parkways that function as regional transportation assets to state and local partners if mutually agreed.



1 Introduction

This document provides information about the condition and needs of the NPS transportation system and the accomplishments under the Infrastructure Investment and Jobs Act (IIJA; (Pub. L. 117-58)), most commonly known as the Bipartisan Infrastructure Law (BIL).

This Resource Paper includes the following sections:

- ***Introduction***
Background on the scope of the NPS transportation system, how it supports visitor economic contributions, and the challenges and opportunities NPS is presented with.
- ***NPS Transportation Today***
Describes NPS transportation facilities, uses, characteristics, and economic benefits. Provides information about the systems that NPS uses to manage its transportation system.
- ***BIL Transportation Funding and Accomplishments***
An overview of funding programs that NPS relies on to maintain its transportation infrastructure, and recent accomplishments.
- ***NPS Transportation Investment Needs and Priorities***
A summary of current and future funding needs related to the NPS transportation system, including topics such as asset maintenance, major project needs, environmental sustainability and resiliency, and emerging transportation technologies.
- ***Proposed Program Changes***
Describes options for changes that would allow NPS to better deliver its transportation program.

1.1 Background

The Organic Act of 1916 established the National Park Service (NPS) and a National Park System with the goal of “conserving the scenery and the natural and historic objects and the wildlife therein” for generations of Americans to appreciate and enjoy. The mission of the National Park Service is to conserve and provide access to natural and cultural resources and values. Perhaps in no other area is this dual mission more evident than in transportation. For more than 100 years, the National Park Service has provided the people of the United States, and the world, with opportunities to visit and experience some of the most unique and special places the country has to offer. First with railroads and stagecoaches, then with personal automobiles, and now with highways, buses, ferries, and emerging mobility technologies, the National Park Service has built and maintained the infrastructure and services needed to provide millions of annual visitors with these opportunities.

Providing transportation services to access 425+ park units in all 50 states, the District of Columbia, and in U.S. territories requires careful planning and a context-sensitive approach. With aging bridges and roads; the effects of climate change



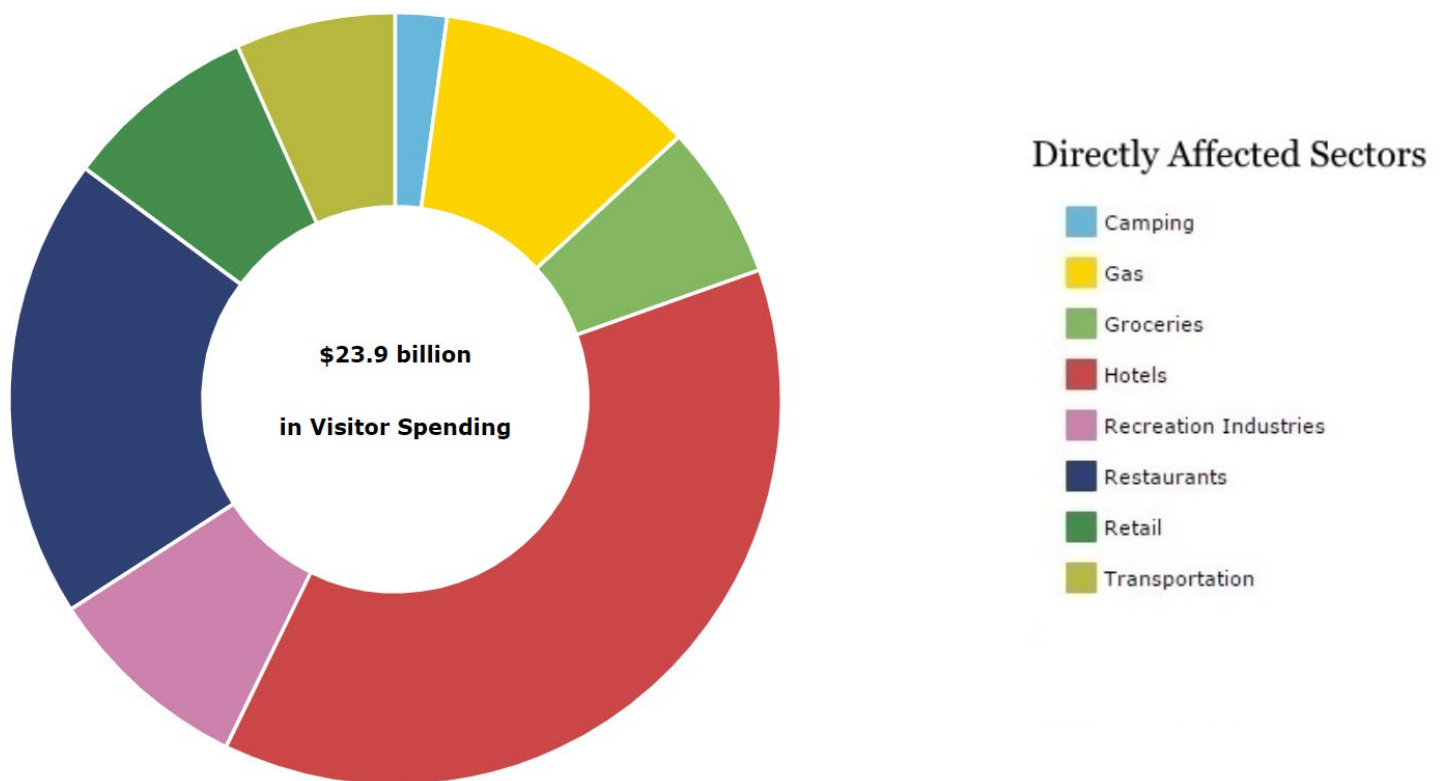
on park resources and infrastructure; and an urgency to reduce emissions, and with changing technologies and visitor expectations, the National Park Service has much to prepare for to achieve its transportation vision:

To provide safe and equitable access to the United States' most unique and special places.

1.2 Visitor Spending Effects – Economic Contributions

Improving and repairing NPS infrastructure is not merely an expense, it's an investment in America. Each dollar invested in our parks returns \$10 to the U.S. economy through visitor spending. National Parks accommodated roughly 325 million recreational visits in 2023, an increase of roughly 13 million from 2022. In 2022, visitors spent roughly \$23.9 billion in local gateway regions, contributing to 378,400 jobs, \$17.5 billion in labor income, \$29 billion in value added, and \$50.3 billion in economic output (Figure 1).

Figure 1: Visitor Spending by National Park Visitors in 2022



Source: [2022 National Park Service Visitor Spending Effects Report](#)



1.3 Challenges and Opportunities

Maintenance and Modernization: The NPS transportation asset portfolio is extensive, diverse, and aging. A significant proportion of the NPS transportation system is more than 50 years old, including approximately 900 bridges; many assets are approaching the need for major reinvestment and modernization to continue their useful life or to improve safety and performance in-line with today's standards.

Changing Visitation Patterns: Park visitation trends are shifting, which has an impact on the NPS's transportation system. Park visitation is trending towards front country areas and some of the largest, most iconic national parks in the NPS portfolio. Park visit duration is decreasing, while peak times for visitors are shifting.

Aging Population: The number of Americans over the age of 65 continues to increase, and with that comes the need to design park facilities that accommodate older adults.

Climate Change: The NPS transportation system faces increasing impacts from climate change, such as extreme weather and wildfire events. At the same time, NPS is seeking to reduce the contributions of its own transportation portfolio to climate change.

Remove Barriers for Underserved Communities: National Parks belong to everyone. The National Park Service has a valuable opportunity to ensure equitable access to a park's facilities, programs, services, and experiences, particularly for underserved communities. A key component of this need is providing multiple modes of transportation, such as transit and trails, to ensure that members of disadvantaged or underserved communities do not face access-related barriers on NPS lands.

Transportation Technologies and Changing Visitor Expectations: The National Park Service has an opportunity to identify and implement new technologies that improve visitor access and protect cultural and natural resources. New transportation technologies must be implemented in a context-sensitive manner, keeping in mind the financial and human resources required, while balancing visitor expectations for modern amenities.

New Partnerships: Integrated planning approaches that include state and local governments can help better integrate parks with their surrounding transportation networks. These approaches can also help incorporate local stakeholders into NPS planning activities, which can create economic benefits and improve park access for underserved communities.

New Funding Sources: Recent Federal legislation, including the BIL, the Great American Outdoors Act (GAOA), and the Inflation Reduction Act (IRA) have provided NPS with a historic opportunity to invest in the maintenance, modernization, and expansion of its transportation system. Realizing these opportunities, however, requires a greater emphasis on building partnerships and competing for discretionary grants.



1.4 NPS National Transportation Strategy

The 2024 NPS National Transportation Strategy is the agency’s long-range transportation plan. Information in this resource paper is informed by analysis developed for the NTS. The NTS provides additional context and information about the NPS Transportation system and is available here:

<https://www.nps.gov/subjects/transportation/planning.htm>

The NTS identifies the National Park Service’s overall transportation goals (Figure 2):

1. Protect the Climate and Advance Resource Protection
2. Enhance Visitor Experience and Connect Diverse Communities
3. Reinvest in the System and Make Legacy Improvements

The NTS includes information about objectives, strategies, and performance measures that the National Park Services uses to advance its transportation goals and measure performance, in line with Federal Lands Transportation Program rules and the transportation planning expectations for our State DOT counterparts.

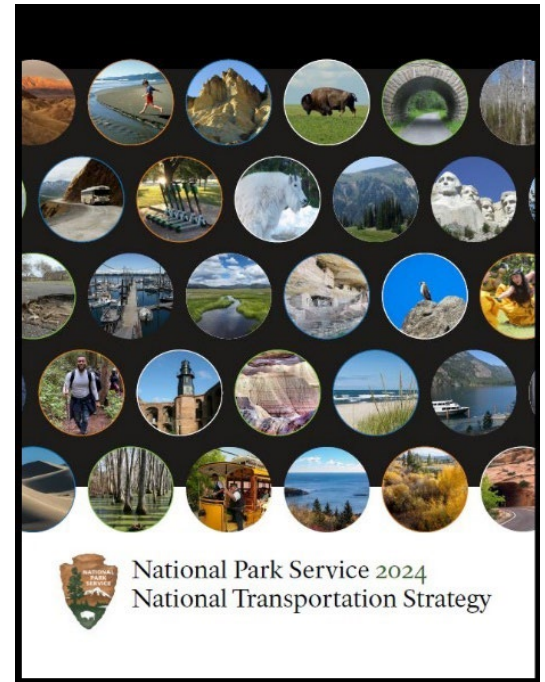


Figure 2: NPS National Transportation Strategy Goals



Protect the Climate and Advance Resource Protection



Enhance Visitor Experience and Connect Diverse Communities



Reinvest in the System and Make Legacy Investments

2 NPS Transportation Today

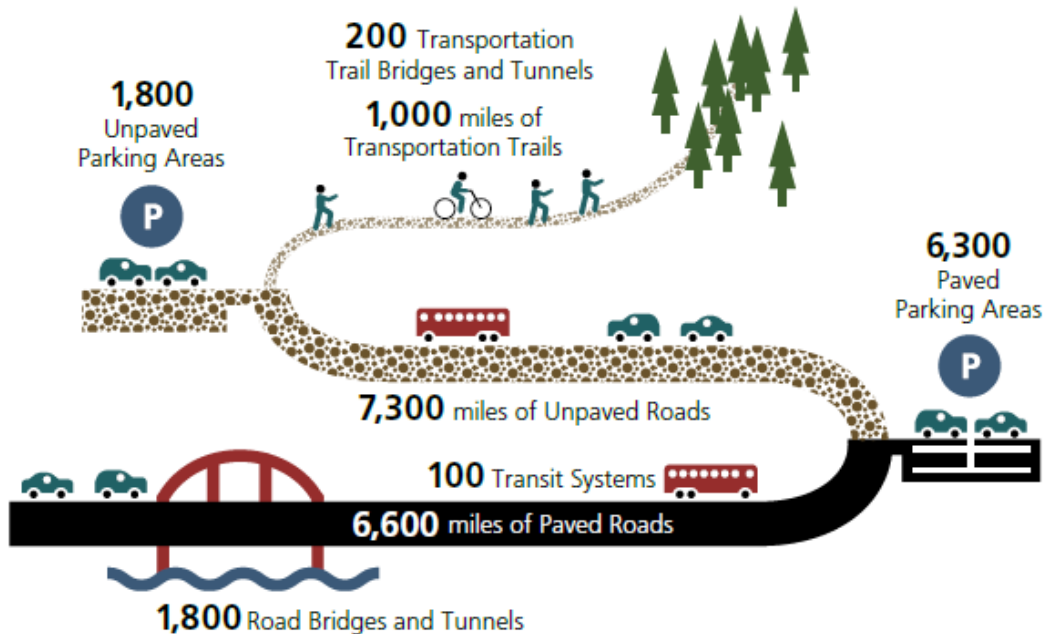
2.1 Scale of the NPS Transportation System

The NPS transportation system is an extensive network of roads, bridges, tunnels, transportation trails, and transit systems. These assets represent a combined \$60+ billion transportation portfolio that support a core mission of the National Park Service by providing visitor access to America’s greatest natural and cultural treasures. The NPS transportation system is the backbone on which all visitor experiences rely, connecting national parks with nearby communities and contributing to economic benefits.

The NPS transportation system is similar in scope and scale to a small state DOT and includes a diverse inventory of transportation assets (Figures 3 and 4):¹

- **Roadway systems**, including approximately 6,600 miles of paved roads, 7,300 miles of unpaved roads, 1,800 road bridges and tunnels, 6,300 paved parking areas, and 1,800 unpaved parking areas.
- **Nonmotorized systems**, including approximately 1,000 miles of transportation trails and 200 transportation trail bridges and tunnels.
- **Approximately 100 transit systems**, including buses, trolleys, trains, ferries, and snow coaches, as well as the maintenance facilities, buildings, docks, and other assets that support their operation.

Figure 3: Approximate Scale of NPS Transportation System

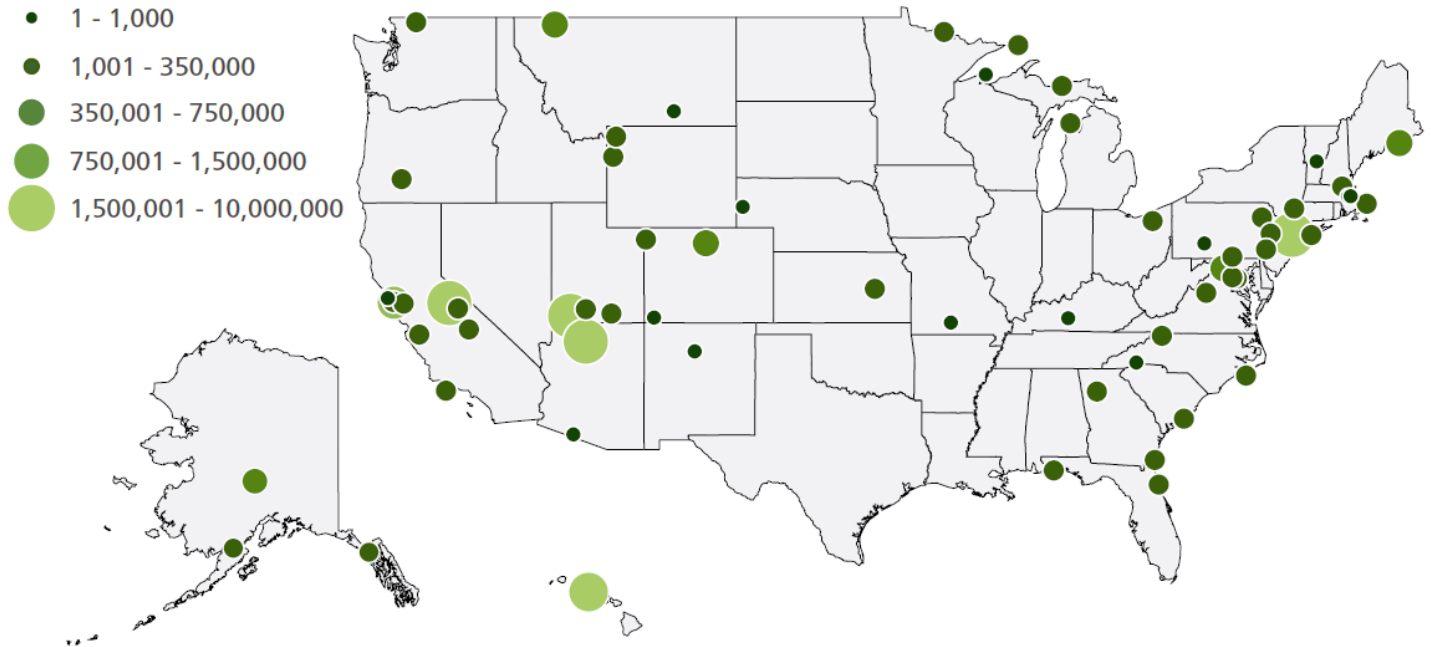


Source: [2024 NPS National Transportation Strategy](#)

¹ Transportation system asset inventories are approximate. The NPS provides annual performance reporting on assets eligible for the Federal Lands Transportation program: [Success Stories & Accomplishments - Federal Lands Transportation Program \(U.S. National Park Service\) \(nps.gov\)](#)



Figure 4: NPS Transit System Passenger Boardings



Source: 2023 NPS National Transit Inventory and Performance Report

2.2 Performance-Based Transportation Management

The National Park Service uses a performance-based approach to transportation system management, and partners with the U.S. DOT to select projects based on sophisticated data systems and industry best practices:

- **Pavement and bridge management inventory and condition modeling:** FHWA routinely collects road and bridge condition information on behalf of NPS. This data is used to identify and prioritize infrastructure projects and maintenance activities.
- **Asset management and condition information:** NPS staff use asset management and condition information to track transportation asset maintenance and investment needs and transit fleet recapitalization needs.
- **Traffic and transit passenger count data:** NPS staff collect traffic and transit passenger counts using a variety of automated technologies and approaches. This data helps inform project prioritization, roadway design, congestion management and operations strategies, and safety countermeasures.
- **Crash data and analysis:** NPS staff collect crash data using a department-wide law enforcement records management system. NPS and its partners analyze this data, conduct road safety audits, and implement context-sensitive safety countermeasures.
- **Congestion management data and analysis:** NPS staff rely on traffic counts and survey data to identify high-use recreation areas, design appropriate infrastructure, and develop congestion management tools.



3 NPS Transportation Funding and Accomplishments

3.1 Recent NPS Transportation Funding

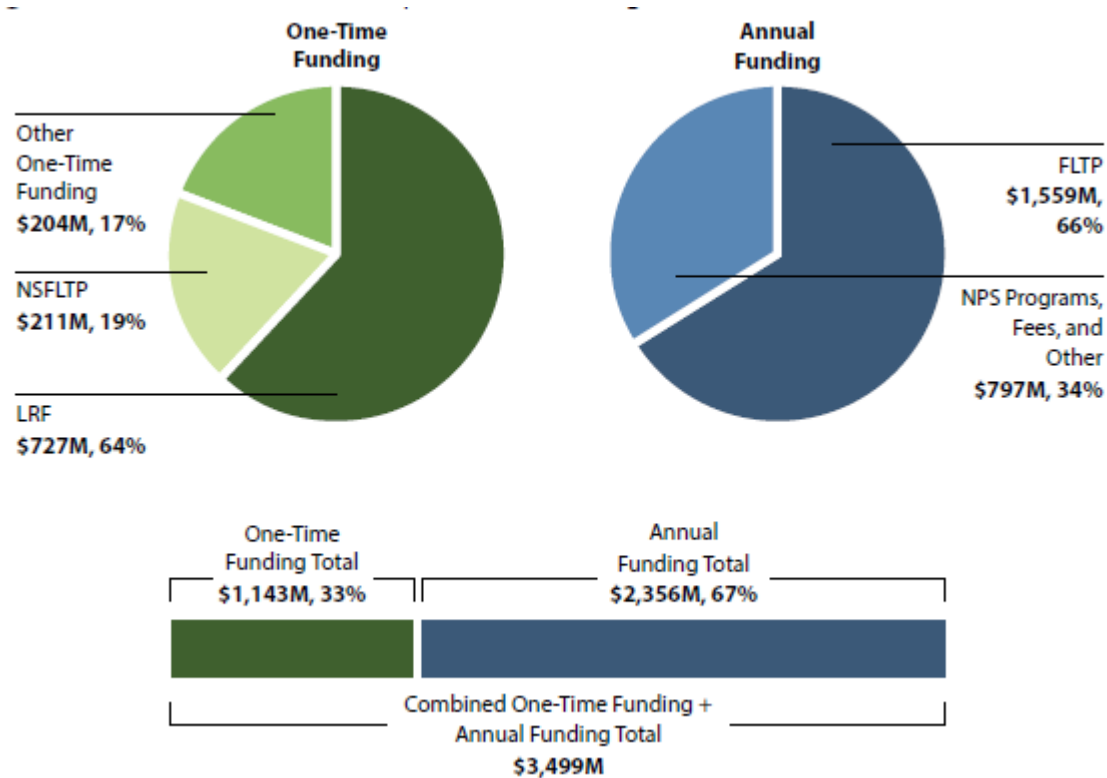
NPS relies on a variety of funding sources to maintain its transportation network. NPS transportation spending is mostly supplied by **Annual funding programs** and **One-Time allocations**.

Between fiscal years (FYs) 2016 to 2021, the National Park Service allocated or was awarded a total of \$3.5 billion for transportation projects (Figure 5). Approximately two-thirds (\$2.36 billion) came from Annual funding sources and one-third from One-Time funding (\$1.14 billion), with the majority of One-Time funding (\$727.4 million) coming in 2021 from LRF.

More than half of all NPS transportation funding (55 percent), including all transportation-dedicated funding, originated from surface transportation programs between FY16-21:

- Federal Lands Transportation Program (FLTP)
- Nationally Significant Federal Lands and Tribal Projects (NSFLTP)
- Other USDOT Discretionary Grants (e.g., TIGER/RAISE, FASTLANE/INFRA)
- Emergency Relief for Federally-Owned Roads (ERFO)

Figure 5: Cumulative NPS Transportation Funding, FY16-FY21 (millions \$)



Source: [2024 NPS National Transportation Strategy](#)

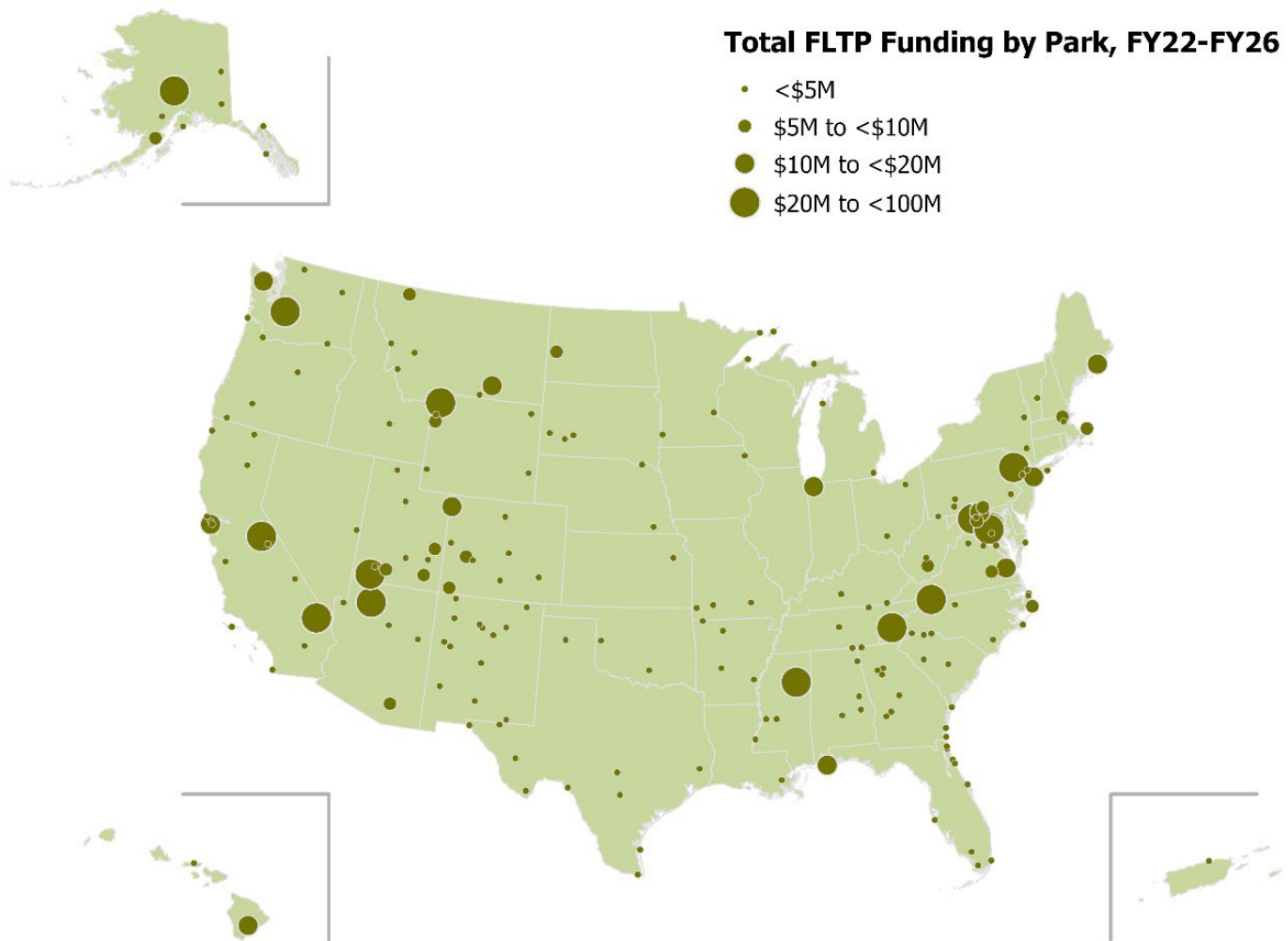


3.1.1 Annual Funding Programs

Annual funding programs, most notably the FLTP, provide NPS with a consistent source of transportation funds on a multi-year basis. The FLTP represents the largest source of annual transportation funding for NPS (66 percent of total Annual funding), and 45 percent of total transportation funding. Other annual funding is sourced from NPS Programs and Fee Programs, but these programs are not dedicated to transportation – transportation projects are in competition with other needs, so future availability for transportation projects is not certain.

Through the life of the BIL, NPS plans to invest more than \$1.5 billion of FLTP funding. These investments will be made throughout the national park system, in projects big and small, touching all 50 States. For example, in FY23 the FLTP provided \$298 million for NPS (\$313 million statutory allocation with a \$41 million reduction due to the obligation limitation) which funded over 400 projects in approximately 150 parks in 45 states. The map below (Figure 6) is an illustration of the scope of NPS planned FLTP investments under the BIL.

Figure 6: NPS FLTP Spending by Park Unit, FY22-FY26



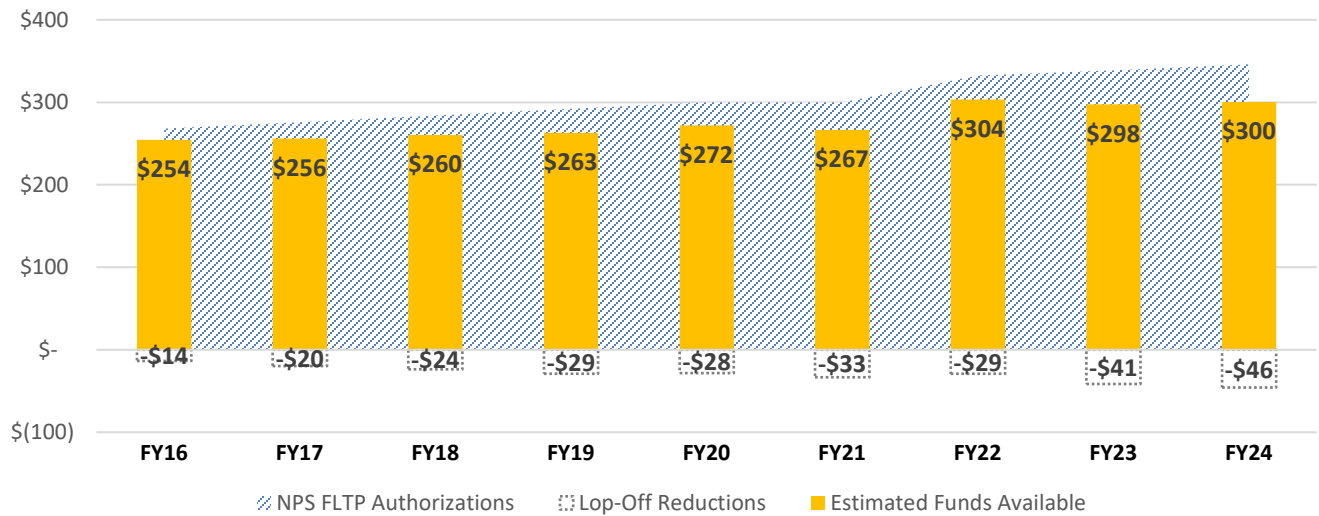
Source: NPS Analysis



3.1.2 FLTP Obligation Limitation “Lop-Off”

NPS FLTP allocations are specified by FY in the BIL. However, the [obligation limitation](#) imposed through the annual appropriations process reduces the amount of funding that is available to the National Park Service. Although the specific amounts vary, the NPS FLTP allocations specified in legislation for FY16-24 were reduced by approximately 9.5 percent on average each year (total of \$116 million reduced during BIL thus far: FY22-FY24). Figure 7 shows NPS FLTP authorizations, lop-off reductions, and actual funding available from 2016-2024.

Figure 7: NPS FLTP Authorizations, Lop-Off Reductions, and Estimated Funds Available, 2016-2024 (\$ millions)



Source: NPS Analysis

3.2 Inflation

Inflation will reduce the National Park Service’s buying power and introduce significant financial uncertainty for its transportation system.

Historically, inflation in the general U.S. economy has been low, averaging between 0.1 and 3.2 percent between 2010 and 2020, resulting in consumer products costing approximately 19 percent more in 2020 than in 2010.² However, increased construction costs for transportation projects grew faster during the same period, experiencing an estimated 29 percent increase.³

Beginning in 2021, the U.S. economy experienced higher than average inflation in the general economy and in construction, particularly due to supply chain disruptions, international events, and other factors. From the last quarter of 2021 through the third quarter of 2022, average highway construction costs increased by more than 69 percent.² Inflation has declined significantly from these peaks and increases in construction costs have moderated. However, it is unclear if future construction costs will be in line with historical averages.

Figure 8 shows the impact of inflation on the buying power of NPS FLTP funding from FY16-FY24. Based on the Federal Highway Administration’s [National Highway Construction Cost Index](#), NPS FLTP buying power decreased from the equivalent of \$449 million in FY16 to \$298 million in FY23, despite a nominal increase in NPS FLTP apportionments over the same time period. Using White House Consumer Price Index (CPI) inflation assumptions for FY24, NPS FLTP buying

² Consumer Price Index, Bureau of Labor Statistics. 2023.

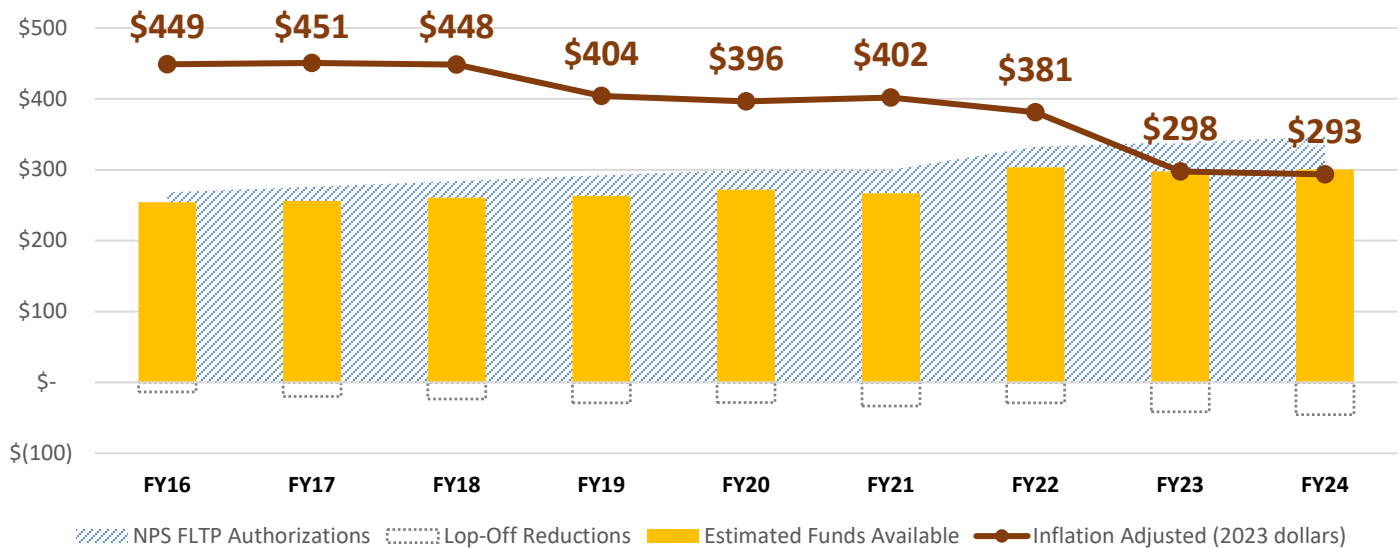
³ National Highway Construction Cost Index, Federal Highway Administration, 2023.



power may decrease further to \$293 million in FY24 (in 2023 dollars). If highway construction costs increase faster than the CPI, the erosion of NPS FLTP buying power would be greater.

Because of recent higher highway construction cost inflation, NPS estimates that nominal NPS FLTP apportionments of \$500 million or more per year would likely be needed to return NPS to the same buying power provided under the FAST Act in FY16-18.

Figure 8: NPS FLTP Inflation-Adjusted Buying Power, 2016-2024 (\$ millions)



Source: NPS Analysis

3.3 One-Time Project Funding

One-Time funding sources play a major role in NPS transportation. These sources allow the National Park Service to, among other things, accomplish legacy projects such as large-scale road and bridge replacements or transit system recapitalizations that the agency’s Annual programs would not otherwise allow for.

One-Time allocations are awarded on a project-by-project basis, based on grants or other special funding programs. Examples of one-time sources include the Great American Outdoors Act (GAOA), National Parks and Public Lands Legacy Restoration Fund (LRF), and NSFLTP. These programs provided approximately one-third of all NPS transportation funding from FY16-21.

The National Park Service was fortunate to receive grants for major transportation projects from NSFLTP and other programs under the BIL and other surface transportation appropriations. These one-time grants are critical supplements to the core FLTP program for NPS, enabling recapitalization and replacement projects that would not otherwise be possible.



3.3.1 NSFLTP Funding

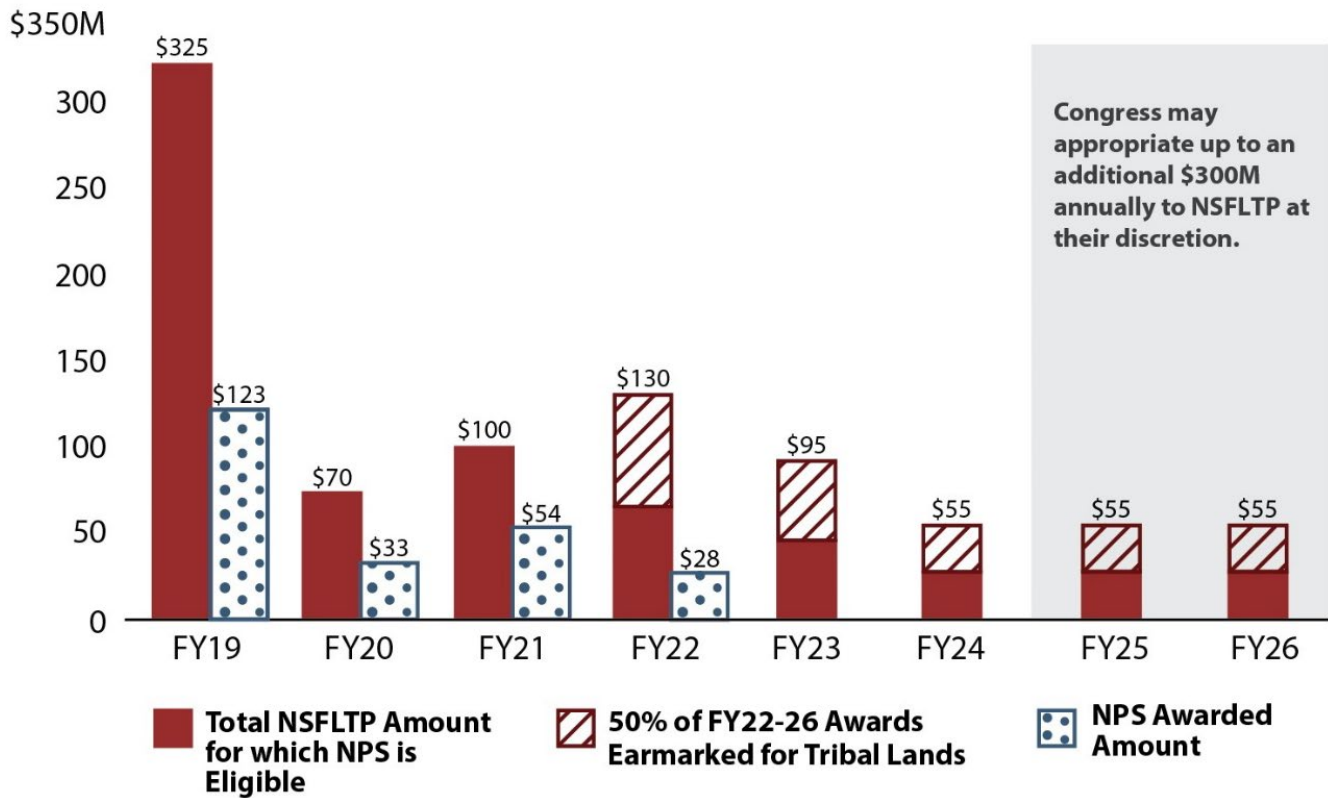
The Nationally Significant Federal Lands and Tribal Projects (NSFLTP) program is a competitive grant program that provides funding for major transportation projects that benefit Federal Land Management Agencies (FLMAs) like the National Park Service, and Tribal governments.

By law, NSFLTP funding is split between Tribal governments and FLMAs. States can compete for this funding as well with the sponsorship of an FLMA or Tribe. Each year (beginning in FY22), at least one award is required to be for an NPS unit with more than 3 million annual visitors. The program has a minimum project size of \$12.5 million.

The National Park Service has received an average of 42 percent of NSFLTP funding available to FLMAs — a total of \$238 million between FY19-22 (Figure 9). However, this has partially-funded only four major NPS projects, NPS needs far exceed one project per year, and without additional appropriations⁴, NSFLTP’s annual funding will be reduced dramatically, as will the amount NPS could potentially receive.

Continuing the NSFLTP program is critical to addressing NPS major transportation project needs because financing large construction projects using only Annual funding sources like FLTP is exceedingly difficult, particularly when those funding sources cannot meet the needs for more routine projects.

Figure 9: NSFLTP Funding and NPS Awards FY19-FY26 (millions of \$)



Source: NPS Analysis

⁴ Under BIL, Congress may appropriate up to an additional \$300M each year to NSFLTP through the annual appropriations process.



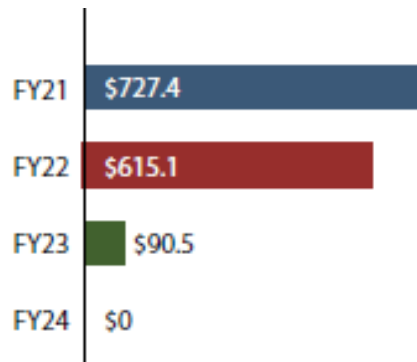
3.3.2 LRF Funding

The Legacy Restoration Fund (LRF) created by the Great American Outdoors Act (GAOA) has been particularly transformative for the NPS in recent years, with more than \$1.3 billion in transportation investments announced between FY21 and FY24 (Figure 10).⁵

Congress authorized this five-year program in 2020 (set to expire at the end of FY25), providing the National Park Service with a funding mechanism to accomplish large-scale infrastructure projects that address legacy deferred maintenance needs. The LRF program is limited to 35 percent investment in transportation projects.

These funds have allowed the National Park Service to address significant deferred maintenance issues using a combination of LRF, FLTP, and other funding. For example, a large section of the George Washington Memorial Parkway, a primary gateway to Washington, D.C. and to numerous NPS park units in and around the Nation’s Capital, is currently being reconstructed to address long-standing challenges.

Figure 10: LRF Transportation Project Funding Announcements, FY21-FY24 (millions \$) as of March 19, 2024



Source: [2024 NPS National Transportation Strategy](#)

3.4 Accomplishments

NPS and its USDOT partners are actively investing FLTP, NSFLTP, and other BIL funding to preserve and improve the NPS transportation network. Highlights of accomplishments from [2022](#) and [2023](#) are shown below. For more information see the [NPS FLTP Accomplishments Reports](#).

FY22-23 NPS FLTP construction program summary:

- **Funding:** Obligated close to 95 percent of available FLTP funding (approximately \$575 million).
- **Paved Roads and Parking:** Improved 886.5 miles of roads and 149.3 parking route miles.
- **Road Bridges and Tunnels:** Improved 100 structures, including five new/replaced bridges.

⁵ In this chapter, FY21 LRF project funding announcements are included in historical One-Time funding. Funding announcements for FY22+ are included in forecasted future One-Time funding. Figures are as of March 19, 2024.



Five Largest NPS Transportation One-Time Funding Awards, FY16-FY21

George Washington Memorial Parkway North Section Rehabilitation:

This project rehabilitated and repaired a 7.6-mile section of the George Washington Memorial Parkway in the Washington, DC area, addressed serious deterioration of the roadway and drainage system, completed structural bridge repairs, implemented safety countermeasures, and improved travel time reliability. Approximately 26 million vehicles use the parkway annually. *\$208 million of LRF funding announced for this project in FY21.*

Blue Ridge Parkway Reconstruction: This project reconstructed and rehabilitated a portion of the Blue Ridge Parkway within North Carolina and the associated overlooks and parking areas. Road safety audits in 2012, 2017, and 2018 indicated that roadway edge rutting presented safety challenges along many sections of the Blue Ridge Parkway—one of the busiest units in the National Park Service. The road is critical to maintaining the park’s purpose, significance, and resources. *\$124 million of LRF funding announced for this project in FY21.*

Arlington Memorial Bridge Rehabilitation: Serving as the “ceremonial entrance to the capitol,” the Arlington Memorial Bridge rehabilitation was one of the largest projects in NPS history. Workers repaired or replaced the bridge’s foundations, concrete supports, deck, and sidewalks and installed 450 pre-cast concrete panels. FHWA engineers worked with the project contractor to use innovative methods that sped up construction and lowered costs. *\$90 million of FASTLANE and INFRA grant funding awarded for this project in FY16.*

Tamiami Trail Project: The project repaired, elevated, and constructed several bridges across a 6.5-mile section of US-41/Tamiami Trail adjacent to Everglades National Park to help restore the natural flow of surface waters and helping ward off saltwater intrusion into groundwater resources, mitigating the negative impacts the road creates to the natural environment in South Florida. *\$60 million of NSFLTP grant funding awarded for this project in FY18 and FY19.*

Natchez Trace Parkway Project: This project rehabilitated a section of the Natchez Trace Parkway in Mississippi and Alabama, with heavy resurfacing, restoration, and rehabilitation to improve several miles of paved parkway. Raised pavement markers were installed to improve safety throughout the project area. *\$54 million of NSFLTP grant funding awarded for this project in FY21.*



George Washington Memorial Parkway. Credit: JudithAnne - stock.adobe.com



Blue Ridge Parkway. Credit: Dave Allen - stock.adobe.com



Tamiami Trail. Credit: Francisco - stock.adobe.com



2023 FLTP Accomplishments Highlights



Sitka National Historical Park: Connection to Sitka's Multimodal Sea Walk

Sitka, Alaska, has a Sea Walk trail that provides safe, multimodal circulation between Sitka's downtown waterfront facilities and the western boundary of Sitka National Historical Park. Many cruise ship passengers and local residents walk from downtown to the park and use the Sea Walk, which terminates 400 feet from the park boundary. The 400-foot-long Sea Walk extension will connect the current terminus with the park visitor center. The extension will include a concrete walkway, elevated boardwalk, improved pedestrian safety, access to scenic waterfront vistas, and a direct multimodal connection between Sitka's central business district and local recreation destinations. Construction was nearing completion in FY23.



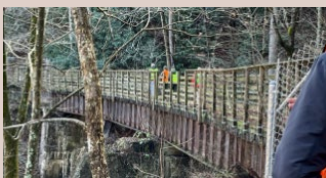
Great Smoky Mountains National Park: Gatlinburg Tunnel Rehabilitation

The Gatlinburg Tunnel, located on the northbound lanes of the Gatlinburg Spur, carries roughly 49,000 Average Daily Trips. The repair and rehabilitation of the tunnel included repairing spalled areas in the tunnel lining, replacing the drainage system/drainage chases, repointing stone masonry portals, and adding a new lining system that increases illuminance and decreases maintenance. A new lighting system was added, to improve visitor and staff safety and reduce operational and maintenance costs. Funds were obligated in 2022, and the project was substantially completed in 2023.



Baltimore Washington Parkway Rehabilitation

The Baltimore Washington Parkway is the scenic entrance that has connected Baltimore, Maryland, and Washington, DC, since 1954. Due to emergency conditions, this heavily used commuter route was repaved in 2020. This project also completed the parkway's multi-year rehabilitation by installing new signage, mile markers, striping, and guardrail replacement and repair. Construction funding was obligated in prior years and the project was substantially completed in 2023.



New River Gorge National River: Repair Rend Trail and Bridges

This popular historic route includes five historic railroad trestle bridges. Significant deficiencies were found during an FHWA inspection. An updated condition assessment and design alternatives, including cost benefit analysis, was provided for the entire trail system. The NPS then led the engineering and design of the preferred alternative, construction documentation, compliance, and contracting to return the trail to safe and long-term use. This project also included design for the rehabilitation of critical retaining walls to support the trail bed, trail resurfacing, routing alternatives, slope stabilization/rockslide mitigation, the rehabilitation of structural and surface elements of the bridges, and repairs to damaged areas of the trail. Design was completed in 2023.

2022 FLTP Accomplishments Highlights



Grand Canyon National Park Fleet Replacement and Bus Maintenance Facility Upgrade

Grand Canyon National Park has the largest multimodal system in the NPS. The system has been in operation for 40 years, with an average of 7.5 million boardings prior to the pandemic. The transit system is the transportation backbone of the park for both visitors and locals for travels throughout the South Rim. The fleet and bus maintenance facility require upgrades for the fleet to continue to operate safely and effectively for another 20 years. The project consists of a fleet replacement component, to include 10 new battery electric buses (BEB) and charging infrastructure, plus 20 new compressed natural gas buses, in addition to a new transit vehicle maintenance facility with spatial and technical capacities to provide a modern transit fleet support.



Mojave National Preserve Safety Implementation Plan

Mojave National Preserve acquired and became responsible (via congressional legislation) for roadway operations and maintenance on 165 miles of paved roads. Local perception is that a route through the preserve is the fastest way to Las Vegas from the highly populated areas of southern California. Over a 10- year period (2009–2018), at least 93 crashes were reported within the preserve (18 were severe or fatal and 75 resulted in injuries). Preserve staff have reported as many as 6 transportation-related fatalities in a year, along with undesirable impacts on the iconic, endangered desert tortoise population (10 or more are killed annually by vehicles). To address these factors, a safety implementation plan was developed in 2022. An interdisciplinary team from the FHWA, NPS, and Caltrans met virtually and at the preserve to develop short-, medium-, and long-term safety strategies to address and mitigate safety risks.



4 NPS Transportation Investment Needs and Priorities

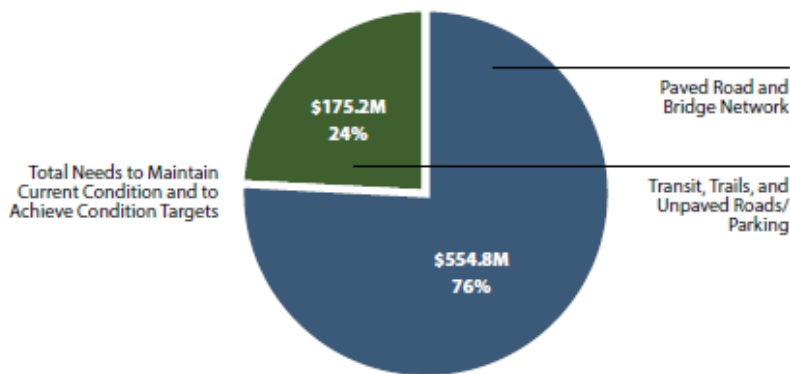
4.1 Overview

With a large, multimodal transportation system serving visitors in every state and territory and in many challenging and unique environments, the National Park Service faces substantial costs to maintain its transportation network, achieve performance targets, and address strategic priorities.

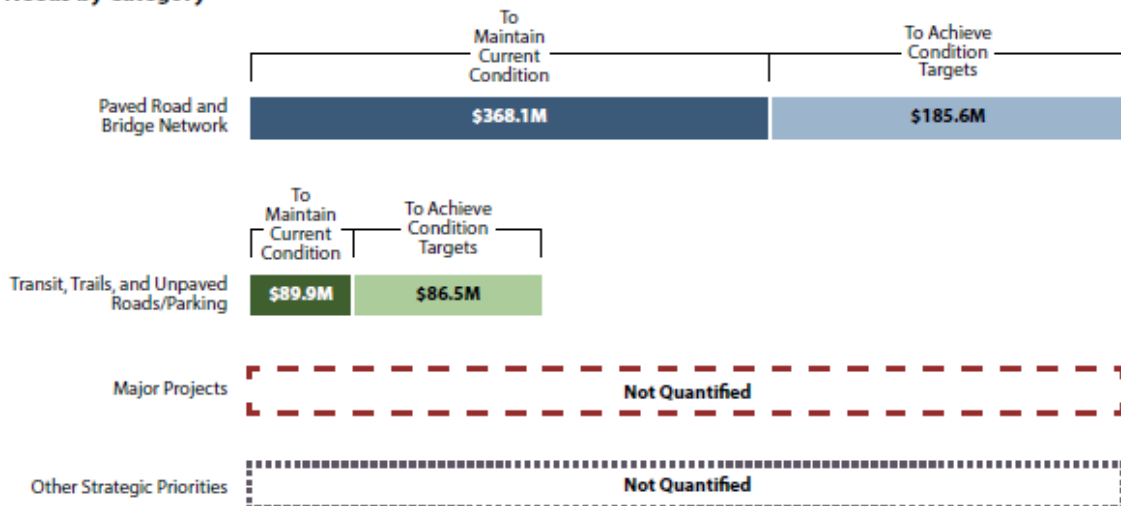
The annual cost of maintaining the current NPS transportation system in its current condition is estimated to be \$458 million per year on average. An additional \$272 million per year is needed to reach target condition levels (average “good” condition). Figure 11 shows how these costs break down between the Paved Road and Bridge Network and other transportation asset types such as unpaved roads and parking, transit and ferry systems, and transportation trails. These estimates do not account for other types of needs which are more difficult to fully quantify, including major projects needs and addressing other strategic priorities such as improving safety, incorporating emerging technologies, climate change adaptation and mitigation, and reducing impacts on environment and wildlife from transportation.

Figure 11: Estimated Annual Funding Needs for NPS Transportation Assets (millions \$)

Needs Summary



Needs by Category

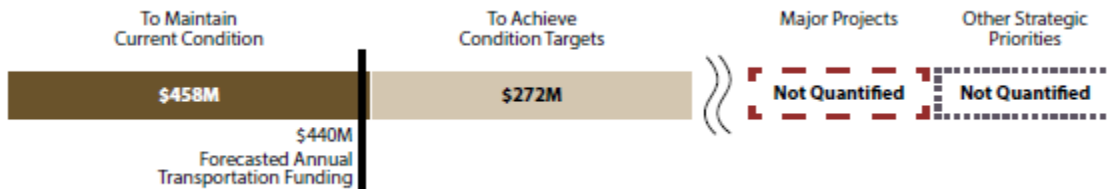


Source: [2024 NPS National Transportation Strategy](#)



The National Park Service estimates that Annual funding programs (e.g., FLTP) will fall more than \$290 million per year short of the funding levels needed to maintain NPS transportation assets in good condition (Figure 12). BIL funding levels are insufficient to maintain even current condition levels for all asset categories. Additionally, the buying power of NPS transportation funding is likely to continue to decline as a result of construction cost inflation. As a result, this funding gap will widen over the life of the BIL, absent any change in appropriations.

Figure 12: Annual Funding Gap



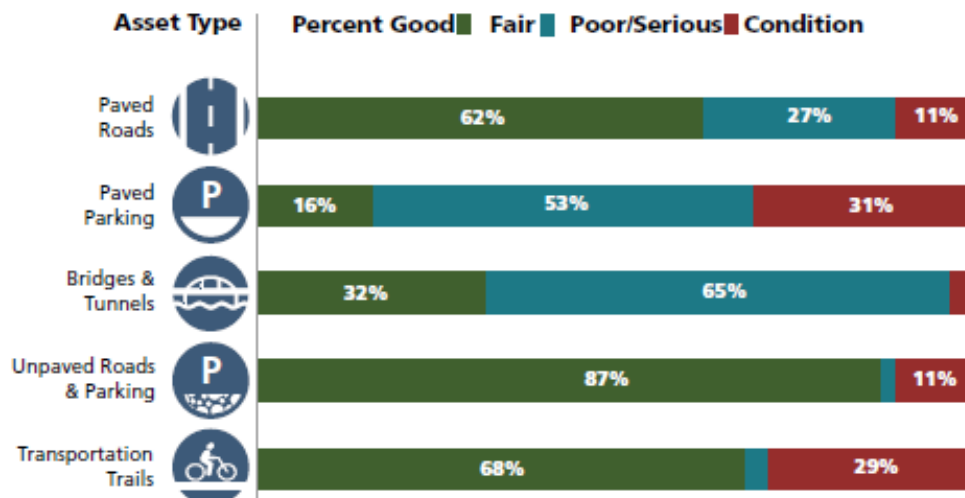
Source: [2024 NPS National Transportation Strategy](#)

4.2 Maintaining and Improving Transportation Asset Condition

Maintaining the condition of existing transportation assets is central to supporting a financially sustainable transportation system and ensuring a safe and quality visitor experience. The National Park Service will strategically prioritize assets for investments to reduce long-term maintenance costs and maximize asset lifespans. When possible, it is also important to decommission lower priority assets to remove maintenance liabilities when transportation assets no longer serve an important function or are unsustainable due to climate change and other hazards, and to return lands and critical habitat to a more natural state.

Maintaining a large and diverse transportation system requires a data driven approach. The National Park Service works with FHWA and other partners to continuously monitor pavement and bridge conditions, model future conditions, and develop maintenance and rehabilitation work schedules that optimize system conditions over the long term. The condition of other transportation assets is monitored by park maintenance staff and managed using NPS facility management software and models. The goal of these systems is to maximize long-term system health at the lowest cost to the government (Figure 13).

Figure 13: Transportation Assets Condition by Type



Source: [2024 NPS National Transportation Strategy](#)



Maintenance and Improvement Project Examples

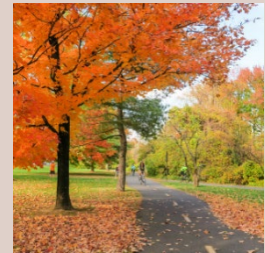
Denali Park Road Repaving

The paved portion of the Denali Park Road was last re-surfaced in 1989, and many sections were failing due to year-round use and Alaska's extreme freeze thaw activity. The resulting rutting and heaving caused vehicles to avoid these rough conditions by moving into the opposite lane, creating unsafe driving conditions. To maintain this critical asset, the National Park Service replaced all failing asphalt pavement on the Denali Park Road from 2017-2020. Resurfacing the Denali Park Road improved safety for all park road users, reduced the backlog of deferred maintenance projects, and enhanced visitor experiences.



Mount Vernon Trail Rehabilitation

The Mount Vernon Trail is an 18-mile paved multiuse trail that winds along the Potomac River and the George Washington Memorial Parkway. In recent years, the National Park Service has strategically replaced and widened major trail bridges including Bridge 12 and 23 and 24 while planning for the rehabilitation and widening of the rest of the trail and other deteriorated bridges. These projects are improving trail condition and correcting safety deficiencies, while addressing significant deferred maintenance.



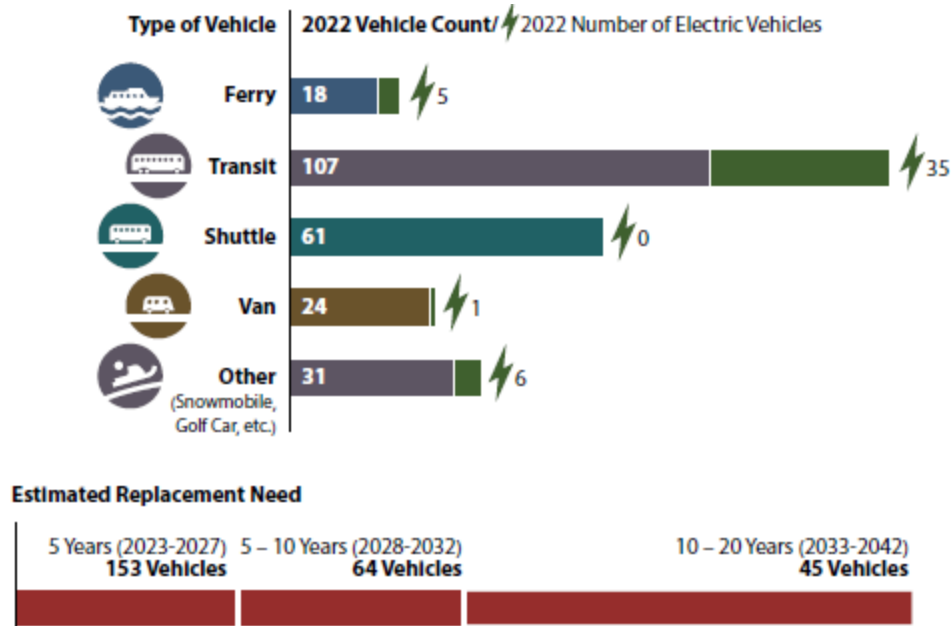
Credit: Joe – stock.adobe.com

4.3 Transit Vehicle Fleet and Transit Operations

NPS-owned transit vehicles have an estimated **\$202 million** in recapitalization needs between 2023 and 2032. Parks with estimated transit vehicle replacement costs over \$5 million during the next 10 years include Acadia, Glacier, Grand Canyon, Harpers Ferry, Isle Royale, Yosemite, and Zion. As the fleet vehicles continue to be replaced, the National Park Service will evaluate and pursue electrification of the transit fleet whenever feasible in line with Executive Order 14057 (Figure 14).

The National Park Service estimates that operations costs account for approximately two-thirds of the overall expense of providing transit service to the visiting public. The estimated operating requirement for all NPS transit systems totals approximately **\$100 million** annually. Transit operations are typically funded from entrance fees and park base operations funding. However, higher labor costs and increased visitation are putting financial stress on these systems.

Figure 14: Transit Fleet Age, Type, and Expected Vehicle Replacement Need



Source: [2024 NPS National Transportation Strategy](#)

Transit Vehicle Fleet and Operations Project Example

Grand Canyon National Park Shuttle Bus Fleet Replacement

In 2023, the National Park Service was awarded a \$27.5 million federal grant to replace 30 buses. The replaced fleet will include ten new battery electric vehicles and 20 new compressed natural gas buses. The funds will also support installation of charging infrastructure in the park for the electric buses. The new greener, quieter transit buses will replace an aging fleet that carries an estimated 6 million people annually, providing access throughout the Park.



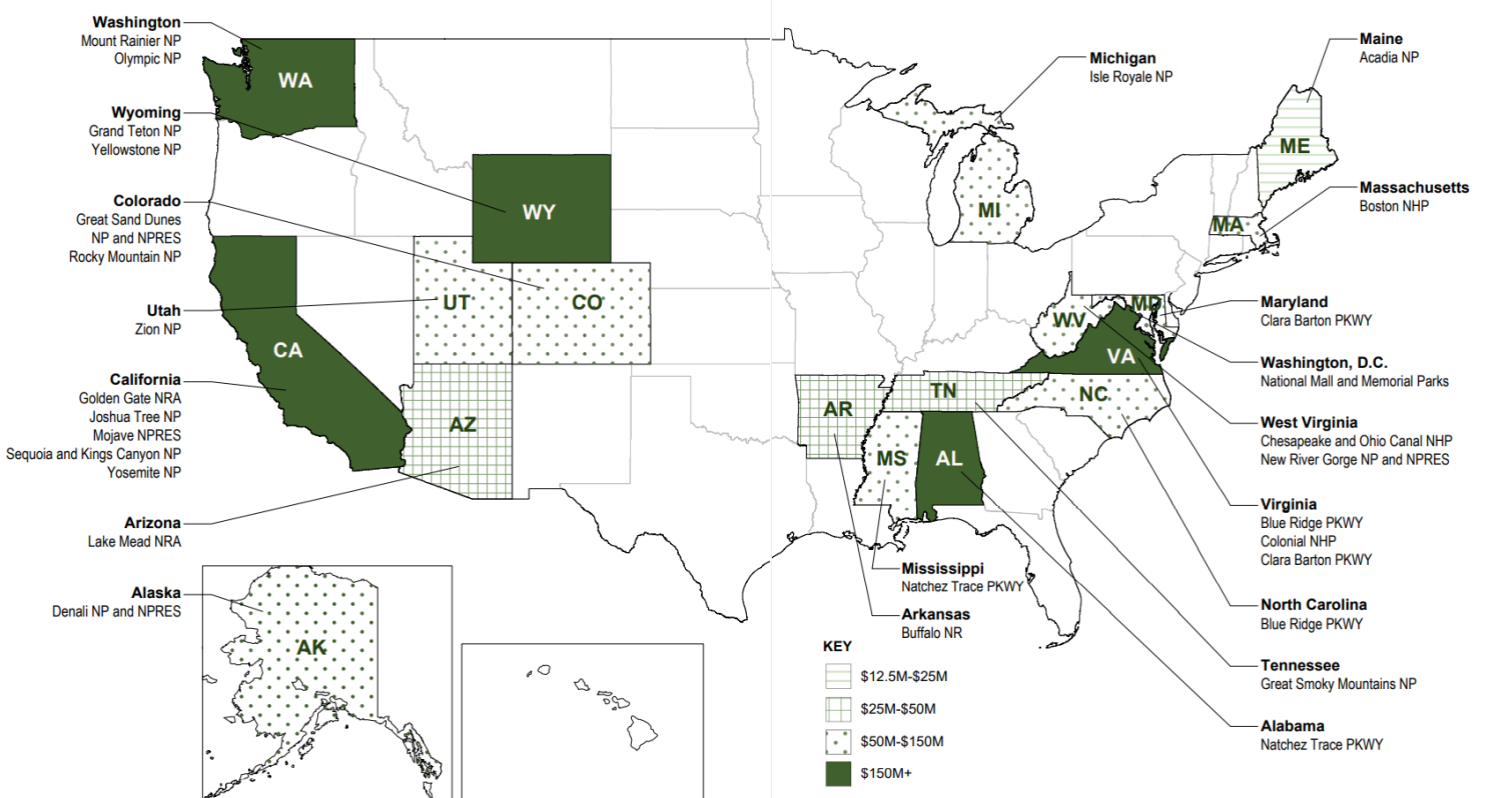
4.4 Major Project Needs

When transportation assets reach the end of their useful life, they may require a major project to recapitalize or replace the asset, or to alter it to meet modern standards. Examples of this project type include bridge replacements, full-depth roadway reconstruction projects, vessel replacements, and occasionally the construction of a new transportation asset. These kinds of projects are rare in the National Park Service, but with an aging transportation asset portfolio, they are anticipated to come up more frequently as time goes on.

Major projects are challenging to fund, and beyond the capacity of Annual funding programs, requiring One-Time funding from grants, partnerships, or special appropriations to accomplish. These project needs are also difficult to forecast because the unique details of these projects have a large impact on eventual project costs. Figure 15 shows a map of major project needs that the National Park Service has identified, and Appendix A provides additional information about these needs. The National Park Service is working to better understand these and other major project needs, and will continue to update information in this area as needs estimates are improved.



Figure 15: Map of NPS Transportation Legacy Investment Projects



Source: [2024 NPS National Transportation Strategy](#)

4.5 Improving Safety

Motor vehicle crashes are the leading cause of unintentional deaths in NPS units. The NPS [Servicewide Mortality Dashboard](#) identified 163 deaths in motor vehicle crashes on roads within NPS units from 2014–2016. On average, one person dies in a motor vehicle crash every week on NPS roadways (annual comprehensive crash cost of \$613,716,733 given the cost of a fatal injury, \$11,295,400 in 2016 Dollars, from FHWA’s [Crash Costs for Highway Safety Analysis](#)). Figure 16 shows NPS crash reports by posted speed and severity from 1990–2021.

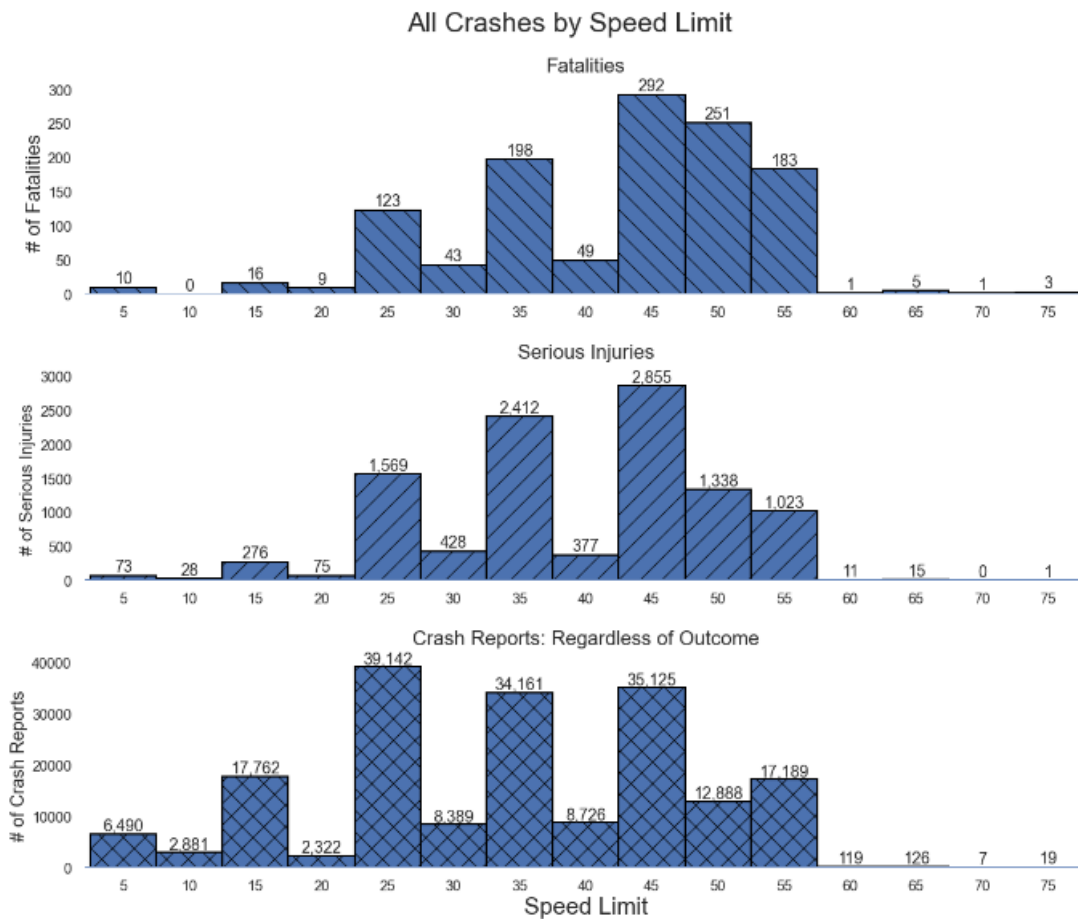
Though NPS receives funding through the FLTP which can be expended to improve safety performance, and though State DOTs may use Highway Safety Improvement Program (HSIP) funds [for infrastructure improvements that address safety concerns on NPS owned public roads](#), funding required to eliminate transportation related fatalities exceeds available resources. This is exacerbated by NPS ineligibility for competitive funding opportunities such as the [Safe Streets and Roads for All \(SS4A\) Grant Program](#).

The NPS Transportation Safety Program (TSP) is the multidisciplinary, decentralized, and coordinated effort guided by an executive committee to reduce the number and severity of traffic crashes by ensuring that opportunities to improve roadway safety are identified, considered, implemented, and evaluated, as appropriate, during all phases of highway planning, design, construction, operation and maintenance. The TSP is responsible for the Transportation Safety Management System required under 23 USC 201(c)(5), 23 USC 203 (b)(2)(B)(III), and 23 CFR 970. In line with sentiments in the [National Roadway Safety Strategy](#) that “zero is the only acceptable number of deaths and serious injuries on our roadways,” NPS Management Policies 2006 and NPS Director’s Order 50C address visitor safety in stating that the NPS “strives to protect human life and provide for injury-free visits” and “It is the intent of the National Park Service that all visitors have an injury-free park experience” respectively.



Driver error and behavioral factors that lead to crashes on NPS roadways cannot be completely addressed with only engineering mitigations. These require a multidisciplinary, multi-faceted approach to include behavioral programs (enforcement, education, and emergency response strategies). NPS does not receive dedicated funding to support targeted behavioral programs (e.g., education) in parks or highway safety data and traffic records systems. Though NHTSA has [recently clarified](#) (see question 30) that NPS may receive subawards for funding under highway safety programs 23 U.S.C 402 and national priority safety programs 23 U.S.C. 405, at issue is that NPS can only be a subrecipient of a state receiving funds and not a direct recipient.

Figure 16: NPS Crash Reports by Posted Speed, Compared by Severity, 1990-2021



Source: NPS Crash Data System and DOI’s Incident Management, Analysis and Reporting System

National and NPS datasets show frequency and severity of crashes increase as speed increases, and unsafe speeds are a well-documented and understood factor in death and injury, per the [National Roadway Safety Strategy](#). Given the established relationship between posted speed and severity, and the emphasis on Safe Speeds in the National Roadway Safety Strategy, it is important for NPS to pursue [proven safety countermeasure](#) such as automated speed enforcement. While 36 CFR 4 is silent on NPS use of automated speed enforcement, and applicable state law is adopted by reference, state law related to automated enforcement varies considerably nationally. Internal NPS procedures and policy related to automated enforcement have yet to be established.



Safety Project Examples

Mojave National Preserve Safety Implementation Plan

Carrying out recommendations from a multidisciplinary transportation safety implementation plan, Mojave National Preserve coordinated short-term education and enforcement strategies, in an attention-grabbing “Drive Like A Tortoise” campaign. The campaign sought to reduce fatalities and serious injuries associated with excessive speed and roadway departure while educating the public about the associated risks for the iconic, charismatic, and federally protected desert tortoise.



Safety Implementation Plan team at Mojave National Preserve



A head-on, serious collision in Mojave National Preserve, Nov 15, 2021

NPS Active Transportation Guidebook

The National Park Service (NPS) Active Transportation Guidebook aims to assist and inspire parks and their partners to identify and pursue opportunities that enhance active transportation, particularly walking and biking, to and within national parks. Originally published in 2018, NPS updated the Guidebook in 2023 to include the latest active transportation information, examples, and guidance. The updated Guidebook includes new and updated considerations and resources for key topic areas, including active transportation safety, advancing equity and inclusion, electric bicycle use, and emerging mobility technologies to enhance walking and biking.

The NPS Active Transportation Guidebook acknowledges key national safety initiatives such as the [Safe System Approach](#) and the [National Roadway Safety Strategy](#). A section on Safe Speeds highlights proven strategies to lower traffic speeds including setting speed limits unlikely to result in crash impact forces beyond what the human body can tolerate, as well as education, enforcement, and roadway design and infrastructure changes to deter excessive speeding (such as [automated enforcement](#)).



NPS Active Transportation Guidebook Cover



4.6 Preparing for the Future of Transportation

The transportation industry is evolving rapidly, aided by advancements in mobile communications and battery technology, new shared mobility business models, and vehicle electrification and automation. These emerging mobility trends present opportunities and challenges for the National Park Service and its resources. Keeping pace with the changing transportation landscape will be necessary to ensure the future of transportation in parks remains safe, accessible, and equitable. As an active participant in developing and testing new mobility technologies and services through pilot projects, partnerships, and information sharing, the National Park Service can help parks enhance visitor experience and connect diverse communities by encouraging car-free trips, protecting natural and cultural resources, and developing a more efficient and nimble transportation system.

DOI and DOT signed a Memorandum of Understanding (MOU) in 2021 to continue working together to proactively address emerging transportation trends and innovations. Through this partnership, the National Park Service showcases new transportation innovations to the public with the potential to enhance equitable access, support car-free trips, and improve the visitor experience. Emerging technologies and innovations may be key to finding solutions to these areas of emphasis.

The National Park Service is exploring five key transportation trends that are currently impacting or expected to affect NPS and visitors:



Electric Vehicles, including electrification of transit fleets and installation of charging stations



Micromobility, which includes shared or private scooters, bikeshare, or other small, lightweight, wheeled conveyances.



Ridehailing like Uber and Lyft, which can provide additional options and enhanced access, especially for car-free trips.



Traveler Information Technologies that can provide visitors with information about travel conditions, congestion, parking, and trip planning to help them make more informed travel decisions.



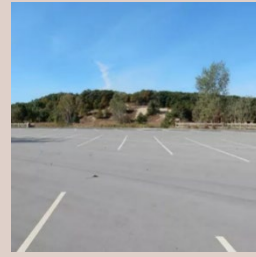
Automated Vehicle Technologies, which range from driver-assistance features to highly-automated vehicle capabilities.



Emerging Mobility Project Examples

Parking Space Availability Tracking at Indiana Dunes National Park

Parks often have more visitation demand than available parking spaces during peak seasons. To help the public understand parking availability prior to arriving and make informed transportation decisions, Indiana Dunes National Park installed sensors that monitor parking lot usage.



Automated Shuttle Pilots at Yellowstone National Park and Wright Brothers National Memorial

The National Park Service conducted automated shuttle pilots in 2021 at two units: Yellowstone National Park and Wright Brothers National Memorial. These pilots provided the National Park Service and industry with information about how automated shuttles perform in park settings and helped evaluate the infrastructure requirements, costs, and benefits of integrating automated shuttles into parks.



Credit: MelissaMN - stock.adobe.com

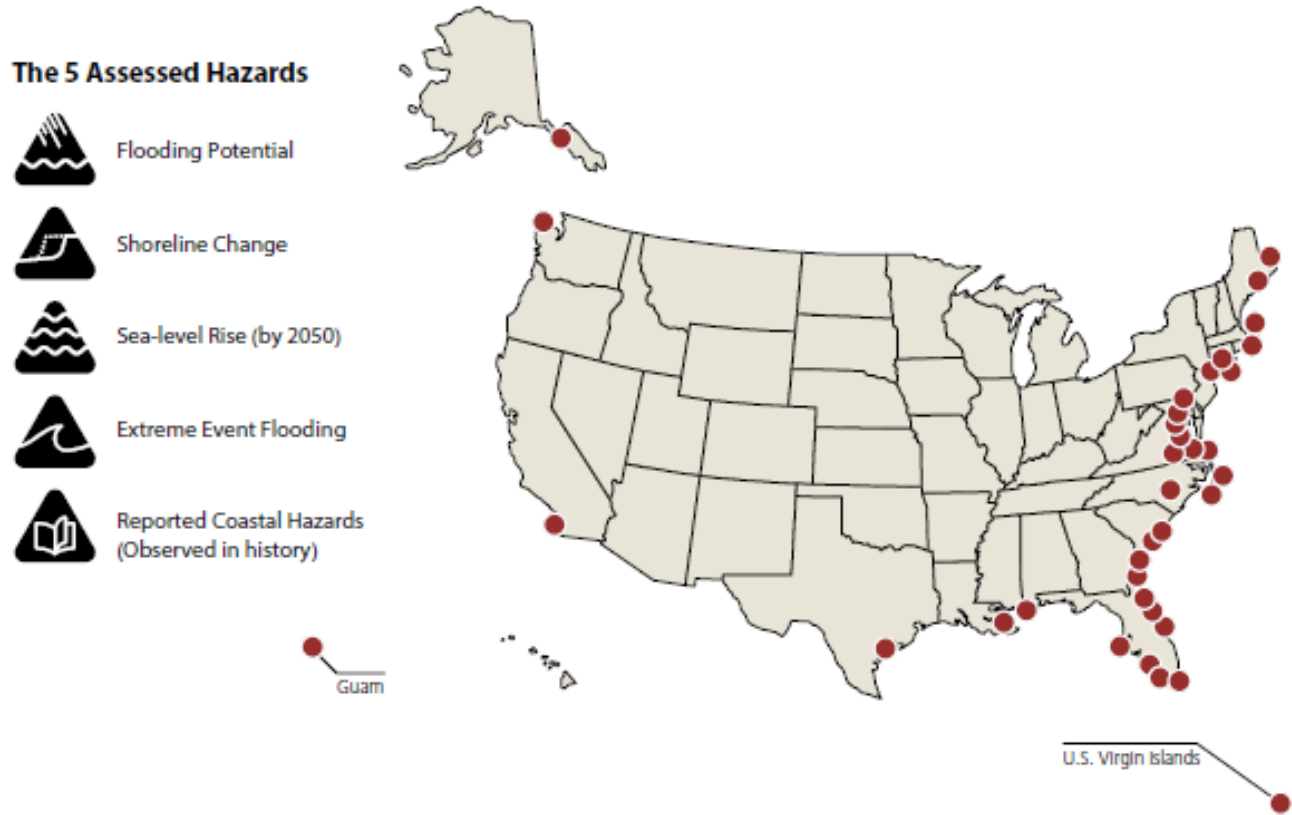
4.7 Adapting to Climate Change and Extreme Weather

Even as the National Park Service works to mitigate the intensification of climate change in the future, transportation systems are experiencing climate impacts today. Many NPS units are located in vulnerable locations such as coastal areas, river valleys, islands, deserts, and mountains. Climate change creates increased risks of heavy precipitation, coastal flooding, heat, wildfires, and changes in average temperature which will drive more frequent disruption and damage to transportation systems.⁶

Climate change presents a wide array of consequences that affect National Park Service units differently. For example, rising global temperatures drive sea level rise, a significant issue at coastal park units. In response, the National Park Service has conducted vulnerability assessments at several of these units (Figure 17). These assessments consider factors related to sea level rise such as storm surge and shoreline erosion, each presenting its own unique hazards. Roads, visitor centers, historic structures, and other park facilities are of particular concern, as they are often fixed in place, provide important services, and represent significant investments. Additional vulnerability assessment studies are underway, but there is much work to be done to fully understand the scope and scale of potential climate risks to NPS transportation infrastructure, and to identify adaptation options.

⁶ 2018 National Climate Assessment, Chapter 14: Transportation, Key Message 1

Figure 17: Completed NPS Vulnerability Assessments



Emergency Relief and Adaptation Project Examples:



Flood Recovery at Yellowstone National Park

In June 2022, Yellowstone National Park experienced the worst flood in the history of the park. Extraordinarily heavy precipitation combined with rapid snowmelt resulted in riverine flooding that damaged several roads, bridges, and trails, in addition to other critical infrastructure. In partnership with FHWA, the National Park Service responded with emergency repairs that restored access to the park within four months, but long-term recovery will take years.



Gulf Islands National Seashore Ferry System

The Gulf Islands National Seashore in Florida utilizes a ferry system to transport visitors from the city of Pensacola to Fort Pickens as a transportation alternative. The ferry system was put in place as a result of sea level rise and weather-related erosion along the roadway that connects the automobile bridge to the fort.



4.7.1 Emergency Relief for Federally Owned Roads (ERFO)

The FHWA Emergency Relief for Federally-Owned Roads (ERFO) program has provided critical funding and resources to assist with repairing and restoring transportation access in National Park Units after damage from extreme weather events. ERFO funded \$68.9 million of NPS emergency restoration projects from FY16-21, and an additional \$101.6 million in FY22. Continuing access to ERFO funding, including “quick-release” funds is an essential part of maintaining NPS transportation infrastructure.

4.8 Reducing NPS Transportation Impacts on Wildlife and the Environment

The National Park Service works to avoid and minimize transportation-related resource impacts whenever possible, prioritizing sustainability in infrastructure investments while also honoring the core mission of protecting and preserving natural resources in harmony with nature.

A substantial portion of the National Park Service’s transportation infrastructure was constructed prior to the modern environmental conservation and historic preservation movements, and resource impacts may have been managed differently at that time than they are today. Understanding how transportation infrastructure impacts natural resources is essential, and the National Park Service will continue to work to reduce impacts from both new and legacy infrastructure. The NPS National Transportation Strategy identifies strategies for managing transportation impacts on natural resources:

- **Manage Impacts on Terrestrial and Aquatic Species:** The National Park Service will improve its understanding and prioritize reduction of transportation impacts on terrestrial and aquatic species in NPS units by using habitat maps, species movement patterns, established wildlife corridors, threatened and endangered species “take” information, carcass data, and crash report data.
- **Prioritize Context-Sensitive Design:** The National Park Service will prioritize context-sensitive design to incorporate technologies such as quieter pavement, permeable paving, and bioswales.
- **Design Roads for Lower Operating Speeds:** The National Park Service will design roads for relatively lower operating speeds. A design speed of 25 mph should be the goal, which will likely lessen transportation impacts on cultural and natural resources.
- **Protect Natural Night Lighting Environment:** The National Park Service will consider the need for lighting on new transportation projects more critically and when possible, use streetlights that have controls such as timers, dimmers, and are lower in intensity, and warmer in color (less than 3,000 Kelvin). Remove or retrofit existing lighting that deteriorates the natural night environment in order to reduce impacts on wildlife and improve visitor experience.
- **Emphasize Broader Planning Tools:** The National Park Service will emphasize comprehensive planning processes that help park managers better understand the potential impacts of an entire suite of transportation related actions on park resources, rather than case-by-case decisions for portions of the transportation system.

Environmentally Friendly Design Project Examples:



Death Valley Quieter Pavement

A study in Death Valley National Park in southeastern California examined alternative surface pavement treatment types with the goal of mitigating roadway noise. For roads with speed limits over 45 mph, use of alternative pavement surfaces could result in significantly less human and wildlife perception of traffic noise.



Big Cypress National Preserve Culvert Design

Through stakeholder engagement, Big Cypress National Preserve, located adjacent to the Everglades National Park in southern Florida, has developed a hydrologic restoration management plan, enabling the natural topography to dictate water flow in the swamp landscape. This includes installing plugs and flow management through culverts to improve hydrology, as demonstrated on Turner River Road.



5 NPS Transportation Program Improvements

The National Park Service has many more needs to sustain and modernize its transportation infrastructure than available dollars. This is exacerbated by high construction cost inflation and the advancing age of large portions of NPS transportation infrastructure now in need of major rehabilitation or replacement. In order to effectively address key priorities and reach the systemwide condition goals, NPS has identified legislative changes that would improve its ability to provide transportation access to NPS units, including:

1. Continuation and expansion of existing programs that are specifically tailored to the NPS and other federal land management agencies (i.e., FLTP, NSFLTP, and ERFO).
2. Expansion of NPS eligibility for the full range of U.S. DOT discretionary grants and formula programs (e.g., SS4A, PROTECT).
3. Create funding efficiencies and clarify transfer authorities.
4. Authorize the transfer of jurisdiction to and/or cooperative management of NPS transportation facilities with state and local partners.

5.1 Reauthorize and Improve FLTP, NSFLTP, and ERFO

Reauthorize NPS funding for FLTP; clarify eligibility of transit

- NPS estimates that it needs \$458 million per year to maintain its transportation assets (roadway, bridge, transit, transportation trails, and other multimodal transportation systems) at current condition levels. NPS estimates an additional \$272 million per year is needed to bring these assets into average “good” condition. These estimates do not account for inflation since 2022. FLTP (23 USC §203) funding levels under IJA/BIL is insufficient to maintain the condition of the NPS asset portfolio at current levels and condition is likely to decline significantly without program increases.
- Inflation has significantly reduced the buying power of FLTP in recent years. FHWA’s National Highway Construction Cost Index increased by more than 50% in just over two years (2021-2023), showing the dramatic impact that record high inflation has had on the program. Consequently, NPS estimates that the current buying power of its FLTP allocation is the lowest it has been in at least 10 years. Future FLTP allocations should account for recent high inflation and anticipate future inflation so that the buying power of the program is sustained or increased.
- The annual obligation limitation (sometimes referred to as the “obligation ceiling” or “lop-off”) reduces the funding that NPS receives from the FLTP by approximately 9.5 percent annually. Exempting the FLTP from the obligation limitation would increase the contract authority available to NPS without increasing the level of authorized appropriations in the reauthorization bill. In addition, FLMAs would receive full funding at the beginning of the fiscal year, decoupling the program funding from the legal mechanics of lop-off. This protects the program from delays in carryover funding being restated across continuing resolutions. There is precedent for certain programs being exempted from the obligation limitation, such as those listed in P.L. 114-94 §1102(b).
- Although part of the Highways title, public transit capital, operations, and maintenance costs are eligible for FLTP (23 USC §203(a)(1)(B), including assets like maintenance facilities that are not open to the public but



are critical to operate these systems. The next authorization could further clarify that NPS transit systems qualify as “public transportation” as defined in Title 49, and that NPS transit systems are eligible to receive funding from Title 49 programs, subject to the rules of those programs.

Reauthorize the Nationally Significant Federal Lands and Tribal Projects (NSFLTP) Program; eliminate the 3 million visitation park provision; fund through highway trust fund or with advance appropriations.

- In IJJA/BIL, Congress partially funded the NSFLTP (FAST Act §1123 as amended by BIL §11127) from the Highway Trust Fund (HTF) for the first time (\$55M/year) and increased the annual general fund authorization ceiling to \$300M per year. However, annual appropriations averaged \$93.33 million for the first three years of IJJA/BIL, and tribal governments receive at least half of the available funds. Congress set up NSFLTP as a parallel to major discretionary programs targeted to State and local governments, such as RAISE, INFRA, RURAL, BIP, and others. However, the funding for NSFLTP has lagged well below the proportionate funding levels for these programs, less than 20 percent was HTF-funded, and the program did not receive advance appropriations like many other BIL grant programs. Without significant increases in the program, NPS will be unable to fund many of its large capital improvement project needs. Whatever the funding level of NSFLTP in the next authorization, funding the full program from the HTF or through advance appropriations will ensure the envisioned funding amounts are available to FLMAs and tribal governments.
- The NPS transportation program has identified over 40 Transportation Legacy Investment Projects (TLIP) in 18 States, with a total estimated cost of \$2.4 billion (see Appendix A). These projects address large end-of-lifecycle transportation assets and modernization needs that far exceed the capacity of the NPS FLTP allocation to address. This includes several large and complex bridges such as the Tennessee River Bridge on the Natchez Trace Parkway (over \$250 million), Colonial Parkway bridges (between \$50-\$150 million), and the cantilevered section of the Clara Barton Parkway (between \$50-\$150 million). At current funding levels, NPS could fund less than three percent of these needs over five years if NPS received the maximum NSFLTP awards possible (50 percent of the total NSFLTP funding available).
- The provision that one NSFLTP project must go to a NPS park unit with at least 3 million in annual visitation (FAST Act §1123(h)(2) as amended by BIL §11127) limits the benefit of this provision to a handful of parks. Many parks with less than 3 million in annual visitation have major project needs. Lowering or removing the visitation threshold would ensure that all projects on the NPS TLIP list could be eligible for NSFLTP.
- Congress has authorized the development of major roads, parkways, trails, and transit systems which have not been completed due to a lack of funding improvements (e.g., electrification of major transit fleets). NPS FLTP funding is needed to maintain the existing NPS transportation system while NSFLTP is used for capital improvements that are beyond the core program. For Tribal Bridges, similar needs are met using general funds based on U.S. DOT annual appropriations set-asides from the Bridge Formula Program (BIL Division J, title VIII, HIP heading, paragraph (4), first proviso and paragraph (1), third proviso) and Bridge Investment Program (BIL §11118; 23 USC §124(q)(1)).

Ensure the availability of “quick release” funding for the Emergency Relief for Federally Owned Roads (ERFO) program and allow resiliency enhancements to better respond to extreme weather events and natural disasters.

- As the frequency of extreme weather and natural disasters with severe impacts on public lands transportation facilities has increased, so too has the need for ERFO (23 USC §125(e)) assistance. NPS



units have endured a series of damaging events which created cascading issues across multiple fund sources. The current ERFO funding level of \$100M/year was last increased in 1980 (23 USC §125(c)(2)(A)). To ensure available ERFO funding meets today's needs, a request can be made to reassess the \$100M/yr amount to historical data to meet the needs of today and the future.

- Quick release funds are critical to the NPS. These funds were essential toward the recovery of Yellowstone from a 500-yr flood event in 2022 as well as Death Valley, Sequoia Kings, and others in 2023. The \$80M+ quick release funding in the past three years has averted major FLTP program disturbances. Ensuring the use of these quick release funds is imperative for the years ahead.
- The ERFO betterments process is complex and hard to get approved. A streamlined approach to use ERFO funding for betterments to enhance resiliency of transportation facilities is important as the US tackles the term resiliency in infrastructure. Betterments are allowed if they are “economically justifiable... to mitigate the risk of recurring damage from extreme weather, flooding, and other natural disasters” (23 USC §125(d)(2)(A)(ii)). However, under FHWA’s current program rules, justifying resilience betterments requires completion of a technically complicated, eight-step lifecycle cost analysis to prove that betterments will reduce future eligible ERFO damage. By definition, ERFO-funded projects are responding to emergencies to repair in kind replacements. However, this is not always the case and resources are often not available to complete complex lifecycle analysis before projects need to proceed in response to emergency conditions. This sometimes results in vulnerable infrastructure being rebuilt as it was prior to the extreme weather event or natural disaster and likely leads to higher long-term ERFO program costs with repeated damage. An amendment could be made to 23 USC §125(d)(2) to specify a less complex and better-defined betterments analysis process so that it can be completed expeditiously during times of emergency. The authorization could also identify common types of betterments that enhance resiliency which should be assumed to provide a long-term cost savings by reducing the likelihood of future damage and exempt them from the lifecycle cost analysis process entirely.

5.2 Designate federal land management agencies (FLMAs) as eligible applicants and recipients of additional U.S. DOT discretionary grant programs.

Make projects on Federal lands directly and explicitly eligible for RAISE, SS4A, RURAL, highway safety programs (402), national priority safety programs (405), and other formula and discretionary programs

- NPS is not directly and/or explicitly eligible to apply for these programs and in some cases grant programs have precluded State and local partners from spending money on Federal lands. Tribal governments are typically eligible for these programs.
- These programs could explicitly identify projects on Federal lands as eligible to be funded by these and all other U.S. DOT formula and discretionary grant programs. Furthermore, NPS could be a direct recipient for all U.S. DOT discretionary grant programs, and requirements for sponsorship from a State DOT removed. State DOTs, understandably, are hesitant to sponsor grant applications for projects on Federal lands because they assume this will reduce their chances of receiving funding for other projects in the State. If Congressional intent is that these discretionary programs be a source for addressing major project needs for NPS infrastructure, NPS would need to be eligible to apply for and receive funds directly, without requirement for sponsorship, partnership, or joint application from or with a State DOT.
- In particular, Safe Streets for All (SS4A; BIL §24112), PROTECT (23 USC §176), highway safety programs (23 U.S.C §402), and national priority safety programs (23 U.S.C. §405) could be key funding sources, if NPS was eligible to apply directly and without State sponsorship.



- Many NPS park units were redesigned in the mid-20th century to facilitate automobility – in much the same way that cities were. This increased access for motorists, but created the same kinds of safety challenges that cities experience. NPS has numerous identified needs for complete streets improvements but is limited in addressing them due to lack of funding. Expanding eligibility for SS4A would allow NPS to improve access and safety for pedestrians and cyclists (and motorists) where these investments are needed.
- NPS park units are on the front lines of climate change. NPS transportation infrastructure is often built in areas that are subject to extreme weather conditions and with climate change they are increasingly subject to damaging events. NPS parks are working to identify adaptation options to retain access for visitors in light of these challenging conditions, but NPS is unlikely to be able to implement many improvements due to lack of funding. Expanding eligibility for PROTECT funding would enable NPS to set a national example for climate adaptation of transportation infrastructure, leveraging deep knowledge and expertise of NPS scientists and natural resources specialists, and working with USDOT planning, engineering, and project delivery partners.

5.3 Create Funding Efficiencies and Clarify Transfer Authorities

Create a Federal Lands Transportation Working Capital Fund.

- Although FLTP funds are authorized on a multi-year basis and funded from the Highway Trust Fund, they are subject to annual budgeting processes which create inefficiencies in how they can be used. Unobligated funding must often be returned at the end of each fiscal year. This is particularly inefficient in the event of continuing resolutions or short-term authorizations, which significantly delay the timing for when funds are available in the next fiscal year, often leaving a very short window of time within which NPS and other FLTP partners can obligate funding to construction contracts. To address these challenges, a Working Capital Fund could be created, to which FLTP funding (and other funding) can be transferred pursuant to agreements between NPS (or other FLTP partners) and FHWA. Once transferred into the Working Capital Fund, the funds would be considered obligated and remain available without regard to fiscal year limitation. Funds could only be spent on the activities detailed in the agreement to which the funds are obligated. This is similar to the authority provided to other parts of U.S. DOT (49 USC §328).

Clarify statutory funding transfer authority between U.S. DOT and FLMAs.

- U.S. DOT lacks clear statutory authority to transfer federal aid highway and transit funds to the NPS across all funding programs. This includes programs that are specifically allocated to NPS at a national level (FLTP), programs which are formulated to the states but for which NPS has a direct allocation or is an eligible applicant (e.g., Ferryboat Program and the Transportation Alternatives Set-Aside), and an array of discretionary grant programs for which NPS is directly eligible for or may be best equipped to deliver projects on behalf of partners. Direct transfer authority would improve the efficiency and effectiveness of program execution by removing a significant source of funding delay.

5.4 Authorize transfer of jurisdiction to and/or cooperative management of NPS transportation facilities by state and local partners

- NPS owns and operates Washington, D.C. gateway parkways identified on the National Highway System in the



National Capital Region which represents a significant operational burden for the agency. While the average NPS road in other parts of the country may only carry 1,000 to 2,000 vehicles per day, multiple parkways in the National Capital Region experience traffic demands in the range of 50,000 to 100,000 vehicles per day and they represent 42% of all vehicle miles traveled in the National Park System. Although less common, similar situations exist in other states, where NPS roads serve primarily non-visitor traffic. NPS does not have authority to toll or otherwise manage traffic demand on its roads and parkways. NPS also lacks administrative flexibilities and mechanisms to transfer ownership and operation of these facilities to partner jurisdictions if they wish to assume responsibility for them due to their importance for regional travel not related to park visitation.

- Reauthorization could explicitly clarify that the National Park Service has the authority to enter into long term cooperative operations and/or maintenance agreements for transportation facilities funded by the Federal Lands Transportation Program, similar to the cooperative agreements authority for protecting natural and cultural resources provided under 54 USC §101702.

Appendix A: Transportation Legacy Investment Project Needs

NPS Transportation Legacy Investment Projects				NPS Transportation Priorities		
State	Park	Project	Estimated Cost			
Alabama	Natchez Trace PKWY	TN River Bridge Reconstruction	\$\$\$\$	✓		✓
Alaska	Denali NP and NPRES	Replace Ghiglione Bridge	\$		✓	
Alaska	Denali NP and NPRES	Restore Denali Park Road Deferred Maintenance - Mile 43 to 92	\$		✓	
Alaska	Denali NP and NPRES	Reconstruct Toklat Bridges & Causeway	\$\$\$	✓	✓	✓
Arizona	Lake Mead NRA	Rehabilitate and Realign Willow Beach Road*	\$\$	✓		✓
Arkansas	Buffalo NR	Improve Resiliency of Gravel Roads through Paving	\$\$	✓	✓	✓
California	Golden Gate NRA	Improve Multimodal Connectivity Across Golden Gate	\$\$		✓	
California	Joshua Tree NP	Enhance Non-Motorized Connectivity Between Primary Park Destinations	\$\$		✓	✓
California	Mojave NPRES	Convert Morningstar Mine Road to Native Surface to Protect Desert Tortoise	\$	✓		
California	Mojave NPRES	Rehabilitate South Kelbaker and Kelso-Cima Road*	\$\$\$			✓
California	Sequoia and Kings Canyon NP	Rehabilitate Mineral King Road to Improve Resiliency and Protect Sequoias*	\$\$			✓
California	Yosemite NP	Electrify Valley Shuttles through Fleet Replacement and Construction of Charging Infrastructure	\$\$	✓		✓
California	Yosemite NP	Rehabilitate Big Oak Flat Road*	\$\$			✓
Colorado	Great Sand Dunes NP and NPRES	Improve Multimodal Transportation Infrastructure to Enhance Visitor Access*	\$\$		✓	✓
Colorado	Rocky Mountain NP	Repair Trail Ridge Road Scenic Byway	\$\$	✓		✓
Maine	Acadia NP	Improve Hulls Cove Transportation Center & Electrify Fleet	\$		✓	
Maryland	Clara Barton PKWY	Reconstruct Cantilever Bridge*	\$\$\$		✓	✓
Massachusetts	Boston NHP	Boston Harbor Blue Infrastructure - Island/Boston Gateway Dock and Pier Improvements	\$\$\$	✓	✓	✓
Michigan	Isle Royale NP	Replace Ranger IV Ferry Vessel	\$\$\$	✓	✓	✓
Mississippi	Natchez Trace PKWY	Reconstruct Ridgeland Parkway Motorroad from Milepost 86 to 114.6	\$\$\$			✓
North Carolina	Blue Ridge PKWY	Rehabilitate Sections 2U, 2V, 2X, 2Y & 2Z	\$\$\$			✓
North Carolina, Virginia	Blue Ridge PKWY	Rehabilitate Deficiencies on 33 Bridges	\$\$	✓		✓

* Project is partially funded through existing appropriations.

NPS Transportation Legacy Investment Projects

NPS Transportation
Priorities

State	Park	Project	Estimated Cost			
Tennessee	Great Smoky Mountains NP	Improve Safety on Gatlinburg Spur Road	\$\$			
Utah	Zion NP	Repair SR9 from Canyon Junction to East Entrance	\$\$\$			
Virginia	Colonial NHP	Rehabilitate Colonial National Historical Parkway	\$\$\$			
Virginia	George Washington Memorial PKWY	GWMP South Section (Mount Vernon Parkway) Rehabilitation and Bridges and Mount Vernon Trail South Rehabilitation	\$\$\$\$			
Virginia	George Washington Memorial PKWY	Improve South GWMP (Old Town Alexandria to Mount Vernon Estate) and Mount Vernon Trail South	\$\$			
Virginia	George Washington Memorial PKWY	Rehabilitate Mid-GWMP and Reconstruct Boundary Channel Bridge	\$\$\$			
Washington	Mount Rainier NP	Replace Fryingpan Creek Bridge*	\$			
Washington	Mount Rainier NP	Maintain Visitor Access and Increase Resiliency on SR410	\$\$			
Washington	Mount Rainier NP	Replace and Repair Four Bridges to Maintain Access and Increase Resiliency	\$\$			
Washington	Olympic NP	Restore Visitor Access and Increase Resiliency of Elwha/Olympic Hot Springs Road	\$\$			
Washington	Olympic NP	Rehabilitate Route Sol Duc Road	\$\$			
Washington, D.C.	National Mall and Memorial Parks	Rehabilitate Lincoln Circle, Jefferson and Madison Dr., Maine Ave. and 12th Street	\$			
West Virginia	Chesapeake and Ohio Canal NHP	Improve Paw Paw Bends Trail	\$\$			
West Virginia	New River Gorge NP and NPRES	Conduct Critical Repairs and Improvements to Rensselaer Trail and Bridges	\$			
Wyoming	Grand Teton NP	Replace Buffalo Fork Bridge to Improve Wildlife Crossings and Resiliency	\$\$			
Wyoming	Grand Teton NP	Repair and Widen Gros Ventre Road for Resiliency	\$			
Wyoming	Yellowstone NP	Reconstruct Norris to Golden Gate Road Phase 3*	\$\$\$			
Wyoming	Yellowstone NP	Reconstruct the Old Faithful Roads to Protect Thermal Features	\$\$\$			
Wyoming	Yellowstone NP	Rehabilitate Gardner River High Bridge	\$\$			

Estimated Costs Key

\$ \$12.5M - \$25M \$\$ \$25M - \$50M \$\$\$ \$50M - \$150M \$\$\$\$ \$150M+



National Park Service

www.nps.gov/subjects/transportation

2024

