



Cuyahoga Valley National Park



Isle Royal National Park



Crater Lake National Park

NPS National Transit Inventory and Performance Report, 2024

Cover photos:

Upper left: Cuyahoga Valley Scenic Railroad, Cuyahoga Valley National Park (photo: Cuyahoga Valley Scenic Railroad)

Lower left: Royale Air Service Inc. Float Plane, Isle Royal National Park (photo: NPS)

Bottom: Crater Lake Boat Tour, Crater Lake National Park (photo: NPS)

Executive summary photo:

History of Valley Forge Trolley Tour, Valley Forge National Historical Park (photo: NPS)



As the nation's principal conservation agency, the Department of the Interior has the responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our parks and historic places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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Valley Forge National Historical Park

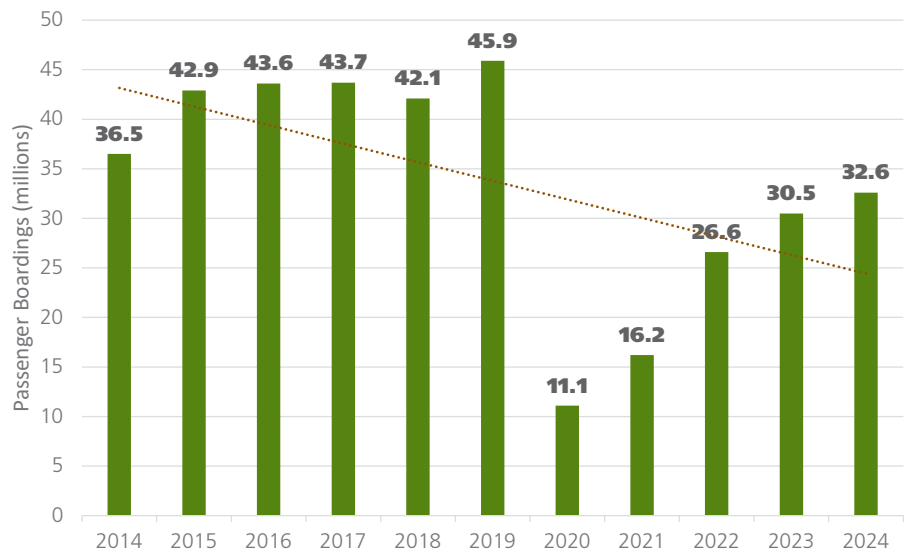
This is a summary of the 2024 National Park Service Transit Inventory and Performance Report. This effort:

- 1. identifies NPS transit systems across the country,
- 2. tracks the operational performance (e.g., boardings) of each system, and
- 3. inventories NPS- and non-NPS-owned transit vehicles and vessels and collects detailed vehicle information.

32.6 Million Passenger Boardings

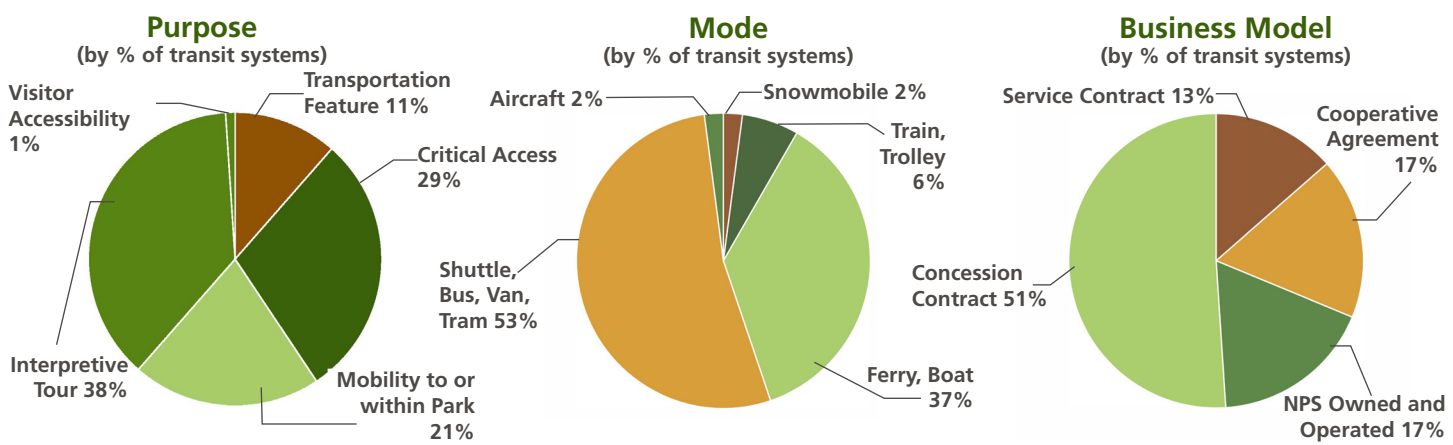
96 Transit Systems
58 Parks Represented
897 Vehicles & Vessels

*Reflects systems that operated during the fiscal year 2024 only



Of the 96 transit systems, the top 10 transit systems accounted for 82% of the passenger boardings in 2024. The systems with over a million boardings are located at Statue of Liberty National Monument, Zion National Park, Grand Canyon National Park, Alcatraz (Golden Gate National Park), and Pearl Harbor National Memorial.

The National Park Service owns vehicle fleets for 34 systems and operated 20 of those systems in 2024. NPS-operated systems accounted for 482,903 passenger boardings—about 1.5% of total boardings.





12.1 million passenger vehicle trips were diverted. Transit use in parks reduced the number of miles driven by visitors in park, equating to 234 million fewer miles driven.

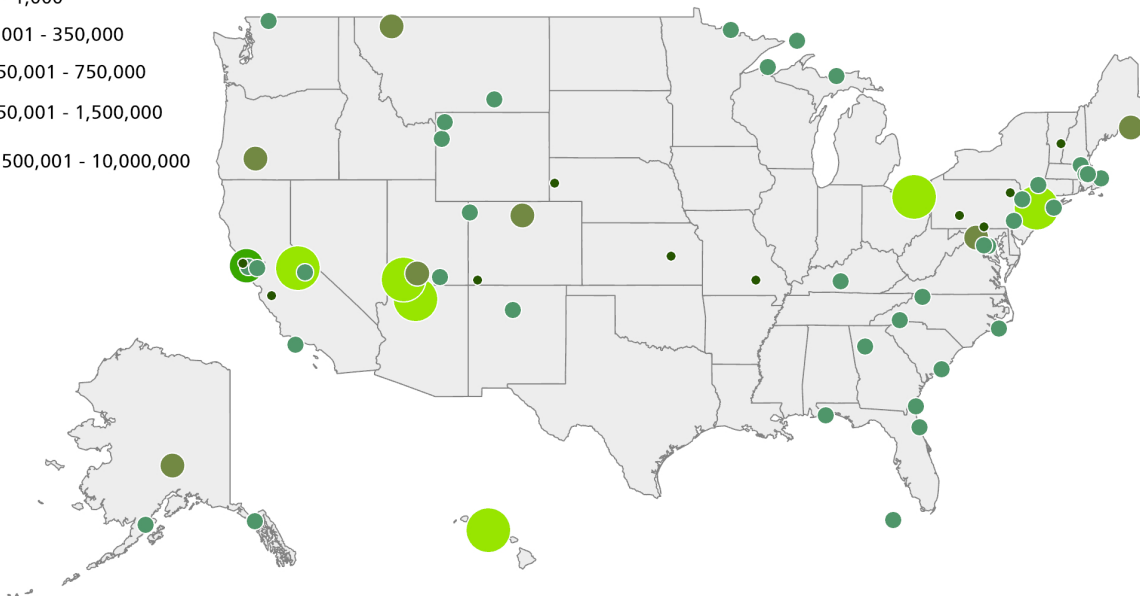


96 NPS transit systems operated in fiscal year 2024. Of those, 56 operated for six months or more, and of those, 26 operated year-round.

Passenger Boardings by Park

Passenger Boardings by Park

- 0 - 1,000
- 1,001 - 350,000
- 350,001 - 750,000
- 750,001 - 1,500,000
- 1,500,001 - 10,000,000



Performance Measures

Visitor Experience

The majority of the NPS-owned transit system vehicles and vessels are accessible for people with mobility impairments. In 2024, 63% of NPS-owned vehicles were accessible to people with mobility impairments (e.g., require a wheelchair lift).

Operations

The National Park Service partners with the private sector to provide the majority of transit services. In 2024, non-NPS entities operated 65% of NPS transit systems, which accounted for 58% of passenger boardings servicewide. The National Park Service owned and operated the remaining 35% of transit systems, which accounted for the remaining 42% of passenger boardings.

Asset Management

National Park Service-owned vehicles and vessels have an estimated \$138 million in recapitalization needs between 2025 and 2035. Parks with estimated transit vehicle replacement costs over \$5 million during the next five years include Acadia National Park, Grand Canyon National Park, Harpers Ferry National Historical Park, and Yosemite National Park.

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NPS NATIONAL TRANSIT INVENTORY AND PERFORMANCE REPORT, 2024

INTRODUCTION

The *2024 NPS Transit Inventory and Performance Report* communicates the servicewide outcomes and status of National Park Service (NPS) transit systems. This comprehensive listing has been compiled annually in this format since 2012 and covers on- and off-road, waterborne, and airborne systems. The inventory establishes a working definition of NPS transit systems for the purpose of this document; helps the National Park Service comply with 23 United States Code (USC) 203(c),¹ which requires “a comprehensive national inventory of public Federal lands transportation facilities”; and fulfills other internal needs.

The 2024 inventory is meant to assist the National Park Service with the following:

- Measure NPS transit performance.
- Capture asset management and information not tracked in current NPS systems of record.
- Integrate transit data with NPS systems of record, including asset management data in the Financial and Business Management System for NPS-owned vehicles.
- Provide key transit statistics that track progress toward goals identified in the National Transportation Strategy, identify and fix programmatic issues, and meet reporting requirements.
- Communicate program information and projected vehicle recapitalization needs.

DATA COLLECTION AND METHODOLOGY

Only parks with transit systems that meet each of the three criteria listed below are included in this effort (see [appendix A](#) for more information).

1. The NPS transit system moves people by motorized vehicle on a regularly scheduled service.²
2. The NPS transit system operates under one of the following business models: concessions contract; service contract; partner agreement, including memorandum of understanding, memorandum of agreement, or cooperative agreement (commercial use agreements are not included); or NPS-owned and operated.³

1. 23 USC 203 Federal Lands Transportation Program: <https://www.gpo.gov/fdsys/pkg/USCODE-2014-title23/pdf/USCODE-2014-title23-chap2-sec203.pdf>.

2. This criterion includes services with a posted schedule and standard operating seasons / days of week / hours. Services that do not operate on a fixed route—charter services for individual groups or services that exist for the sole purpose of providing access to persons with disabilities—are not included.

3. This report does not distinguish between a memorandum of understanding, memorandum of agreement, or cooperative agreement. All are recorded as “cooperative agreement.”

3. All routes and services at a given park that are operated under the same business model by the same operator are considered a single NPS transit system.

The 2024 NPS transit inventory is limited to systems in which the National Park Service either has a direct financial stake or has committed resources to develop a formal contract or agreement.

The following information was collected for the 2024 fiscal year:

- transit system name and description
- passenger boardings
- business model
- system purpose
- system type/mode
- system-level safety metrics (crash occurrence and property damage)
- vehicle information including vehicle type, identifying numbers, capacity, service miles, service hours, number of runs completed, engines, horsepower, accessibility, and age
- In 2024, the National Park Service renewed its focus on collecting and verifying annual miles traveled, annual number of runs completed, and number on engine-on hours. These performance measures help assess the operational and financial health of transit systems.
- owner and operator type (NPS or non-NPS) and contact information
- operating schedule
- participation of a local transit agency in the service

The National Park Service has 103 transit systems at 62 parks. For the 2024 inventory, 62 of 63 parks provided information on their transit systems. Some parks report incomplete information because they do not track the requested service information, or they could not provide the information before the end of the data collection period. For the purposes of this report, 96 of 103 identified transit systems operated in fiscal year 2024. The 7 park transit systems that did not operate this fiscal year have been excluded from this report: Hiker Shuttle (DEWA), Fort Pickens Tram Service (GUIS), TAPR Bus Tours (TAPR), Val-Kill Tram (HOFR), Long House Trailhead tram and half-day ranger-guided (MEVE), Akers Ferry (OZAR), and Pinnacle Shuttle (PINN).⁴ Nonoperational systems listed driver availability, permitting, vehicle issues, expired or terminated contracts, and other issues as the reasons they did not operate.

[Appendix B](#) includes a full list of operational transit systems surveyed by region.

4. Systems that did not operate but intend to operate in the future remained part of the inventory but were excluded from this report. One shuttle system at Eisenhower National Historic Site (ESIE) asked to be removed from the inventory.

INVENTORY RESULTS

Detailed findings of the 2024 inventory are presented in the [Vehicles and Vessels](#), [System Characteristics](#), and [Passenger Boardings](#) sections below.

Table 1 summarizes the differences in key results of the NPS transit inventories over the last five years.

Table 1. NPS Transit Systems Changes Between Inventories (2021–2024)

Key Findings	2021	2022	2023	2024
Total number of systems	97	101	102	103
• Number of systems operational	63	81	92	96
Number of parks represented	62	63	63	62
Passenger boardings (millions)	16.2	26.6	30.5	32.6
• Excluding 10 highest-ridership systems	2.3	4.7	4.6	6
Number of vehicles	865	874	862	897
• NPS-owned vehicles	215	244	267	297
• Non-NPS vehicles	508	546	559	600
Systems operated by local transit agency	5	5	5	7 [†]

Source: 2021–2024 NPS transit inventory data

† The seven systems that were operated by a local transit authority are the DC Circulator, Giant Forest Shuttle, Fairfax Connections Wolf Trap Express, Hiker Shuttle & River Runner (Delaware Water Gap National Recreation Area), Gateway Shuttle, and Island Explorer & Bicycle Express

The River Runner Shuttle at Delaware Water Gap National Recreation Area was the only system added in 2024. The 2024 inventory included a total of 96 systems.

Passenger boardings increased by 2.1 million (6.9%), reflecting increased transit system operations, visitation, and public use of transit systems. Visitation across the national park system increased 2%; 332 million recreation visits were recorded in 2024, compared to 325 million recreation visits in 2023.⁵ The increase in boardings indicates that visitors are returning to transit system use if it is available. The increase also reflects growing reliance on mandatory transit use in some parks for congestion management.

5. In 2024, the National Park Service received 332 million recreation visits, up 6.36 million visits (2%) from 2023. Servicewide visitation has essentially recovered to pre-pandemic levels. The year 2024 is very much like years immediately before the NPS centennial in 2016 and is more than 2.7% higher than that all-time record year.

System Characteristics

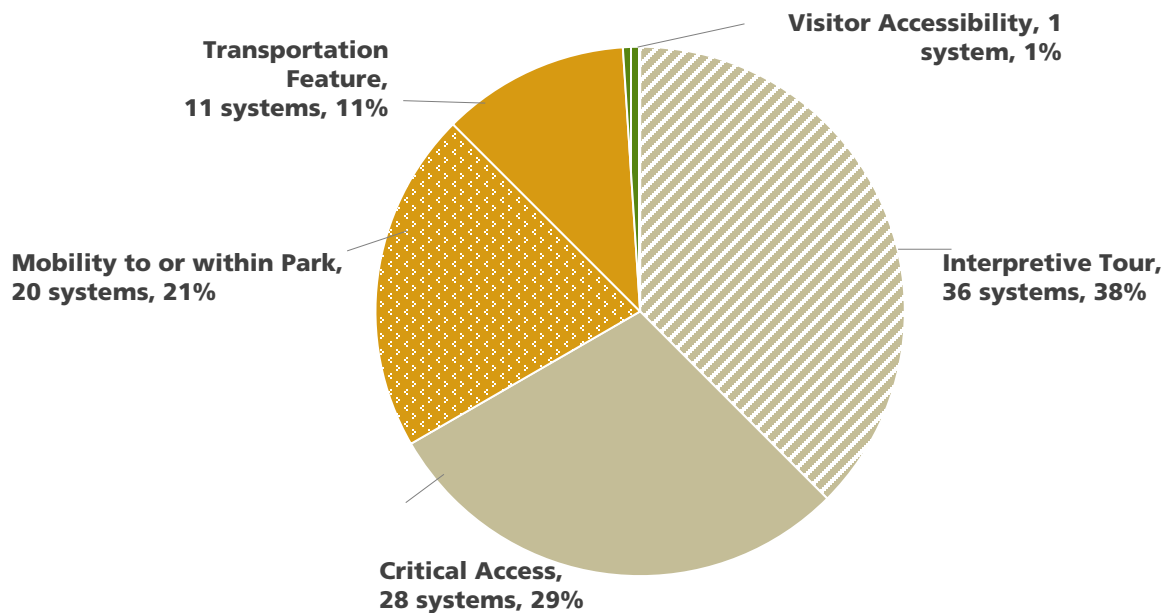
The 2024 inventory identified 96 systems in 58 parks. Figures 1 and 2 place these systems in the context of the primary system purpose, mode, and business model. Results for system characteristics in 2024 are similar to the results reported in 2023.

System Purpose

Park staff categorized each of their transit systems into one of the five following primary purposes ([appendix A](#)).

- 36 systems are guided **interpretive tours**.
- 28 systems provide **critical access** to a park that is not readily accessible to the public due to geographic constraints, park resource management decisions, or parking lot congestion.
- 20 systems provide **mobility to or within a park** as a supplement to private automobile access.
- 11 systems are considered a **transportation feature** (a primary attraction of the park).
- 1 system is primarily designed to meet the **visitor accessibility**.

Figure 1. Systems by Primary Purpose



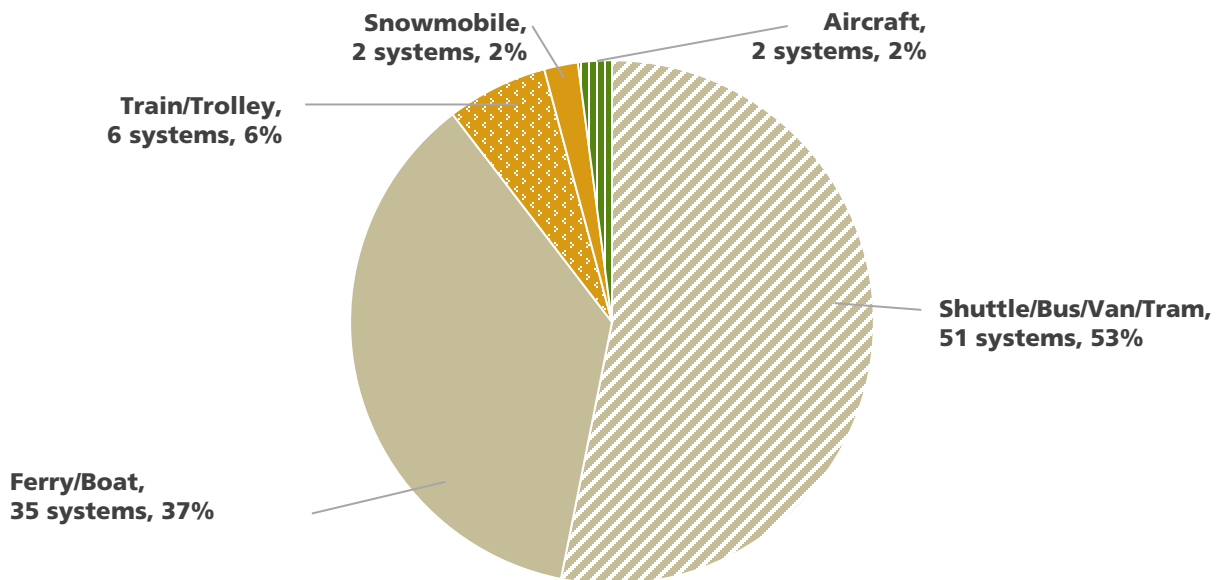
Note: N = 96 systems

Source: 2024 NPS transit inventory data

Mode

The 2024 transit inventory identified four modes of NPS transit systems. Most of the transit systems are shuttle/bus/van/tram systems (51 systems, 53%), followed by ferry/boat (35 systems, 37%), train/trolley (6 systems, 6%), aircraft (2 systems, 2%), and snowmobile/snowcoach (2 systems, 2%) (figure 2).

Figure 2. Systems by Vehicle Mode



Note: N = 96 systems

Source: 2024 NPS transit inventory data

Business Models

NPS transit systems operate under one of four types of business models (table 2 and figure 3).

- **Concession contracts:** In 2024, 49 of the transit systems operated through concession contracts in which a private concessioner pays the National Park Service a franchise fee to operate inside a park. Seven concession contract systems used vehicle fleets exclusively owned by the National Park Service. Two systems have a mixed-ownership fleet.
- **Service contracts:** Transit systems that are owned and/or operated by a private firm use service contracts. In 2024, 13 transit systems operated under a service contract. Out of the 13 service contract systems, 6 service contract systems used vehicle fleets owned by the National Park Service.

- **Cooperative agreements:**⁶ In 2024, 17 transit systems operated under an agreement. None of those systems are owned by the National Park Service.
- **NPS-owned and operated:** In 2024, the National Park Service owned vehicle fleets for 17 systems. These owned-and-operated systems tend to be small and provide critical access to a park or park site or are interpretive tours.

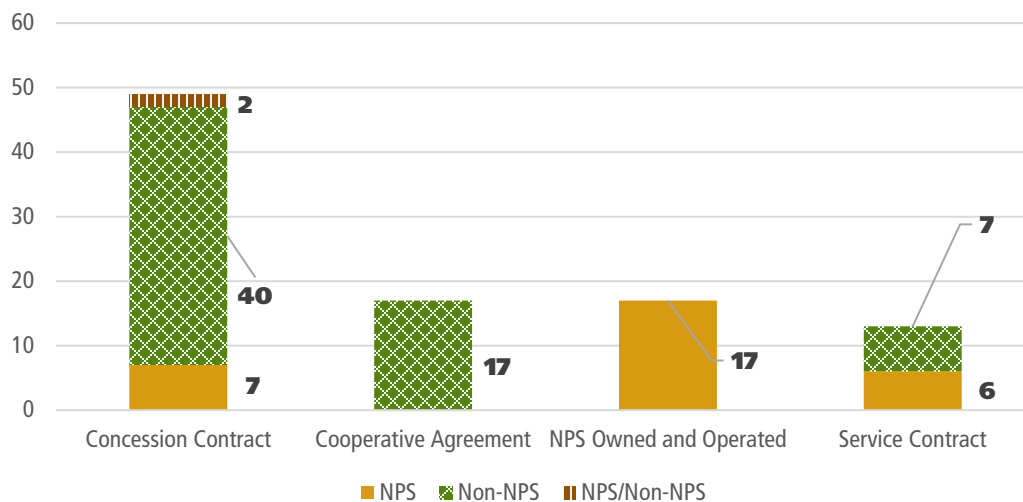
Table 2. Systems by Primary Purpose

System Purpose	Concession Contract	Cooperative Agreement	NPS-Owned and Operated	Service Contract	Total
Critical access	12	7	5	4	28
Interpretive tour	26	3	5	2	36
Mobility to or within park	5	5	5	5	20
Visitor accessibility	0	0	1	0	1
Transportation feature	6	2	1	2	11
Total	49	17	17	13	96

Note: N = 96 systems

Source: 2024 NPS transit inventory data

Figure 3. Fleet Ownership by Business Model



Notes: N = 96 systems

Source: 2024 NPS transit inventory data

6. This report uses “cooperative agreement” as a general term, encompassing all qualifying partner agreements (memorandum of understanding, memorandum of agreement, and cooperative agreement).

Passenger Boardings

In 2024, over 32.6 million passenger boardings occurred across all NPS transit systems.⁷ If the 96 systems were considered one enterprise and compared to public transit agencies across the country, its boardings would be comparable to transit systems in medium-sized US cities, such as Pittsburgh, Pennsylvania.⁸ Excluding concession contracts and cooperative agreements, NPS-owned and operated systems and service contract systems reported 13.4 million trips (40% of total boardings) in 2024.

Parks use various methodologies to count boardings. Most systems indirectly record passenger boardings through ticket sales (12 million) or directly through manual counts (9 million). Estimated, automated, and other counter methodologies account for the remaining approximately 11.5 million passenger boardings.

Table 3. Count Methodology

Count Methodology	Number of Systems	Passenger Boardings
Ticket sales	47	12,006,992
Manual	40	9,043,839
Estimated	6	2,190,367
Automatic	6	7,851,655
Other	5	1,526,820

Source: 2024 NPS transit inventory data

Approximately 82% (27 million) of boardings on NPS transit systems in 2024 are attributable to 10 systems with the highest ridership (table 4). Three systems from the 2023 top 10 list did not make the top 10 list in 2024.⁹ The Giant Forest Shuttle (Sequoia and Kings Canyon National Parks), Missouri/PHAM Shuttle (Pearl Harbor National Memorial) and Grand Canyon Railway (Grand Canyon National Park) are new to the top 10 list in 2024. Boardings increased in 2024 for all of the 10 highest-use systems.

7. A “passenger boarding” or “unlinked trip” occurs each time a passenger boards a vehicle. This is an industry-standard measure used in the Federal Transit Administration’s National Transit Database.
 8. “Public Transit Ridership Report Third Quarter 2024.” American Public Transportation Association. November 22, 2022. Retrieved February 9, 2024. <https://www.apta.com/wp-content/uploads/2024-Q3-Ridership-APTA.pdf>.
 9. The Island Explorer & Bicycle Express (Acadia National Park), Bryce Canyon Shuttle and Rainbow Point Shuttle (Bryce Canyon National Park) and Visitor Shuttle (Rocky Mountain National Park) were not in the top 10 list in 2024.

Table 4. Passenger Boardings for the 10 Highest-Use Transit Systems

Rank	Park	System Name	2024 Boardings	Business Model	System Purpose
1	STLI	Statue of Liberty Ferries	8,858,552	Concession contract	Critical access
2	ZION	Zion Shuttle	5,178,059	Service contract	Critical access
3	GRCA	South Rim Shuttle Service	5,045,509	Service contract	Mobility to or within park
4	YOSE	Yosemite Valley Shuttle	1,722,386	Concession contract	Mobility to or within park
5	GOGA	Alcatraz Cruises Ferry	1,482,378	Concession contract	Critical access
6	PERL	USS Arizona Memorial Tour	1,123,869	Cooperative agreement	Interpretive tour
7	SEKI	Giant Forest Shuttle	937,086	Cooperative agreement	Critical access
8	PERL	Missouri/PHAM Shuttle	912,240	Cooperative agreement	Transportation feature
9	GRCA	Grand Canyon Railway	738,932	Concession contract	Mobility to or within park
10	YOSE	Mariposa Grove Transportation Service	710,638	Service contract	Critical access

Source: 2024 NPS transit inventory data

Park key: GOGA = Golden Gate National Recreation Area; GRCA = Grand Canyon National Park; PERL = Pearl Harbor National Memorial; SEKI = Sequoia & Kings Canyon National Parks; STLI = Statue of Liberty National Monument; YOSE = Yosemite National Park; ZION = Zion National Park

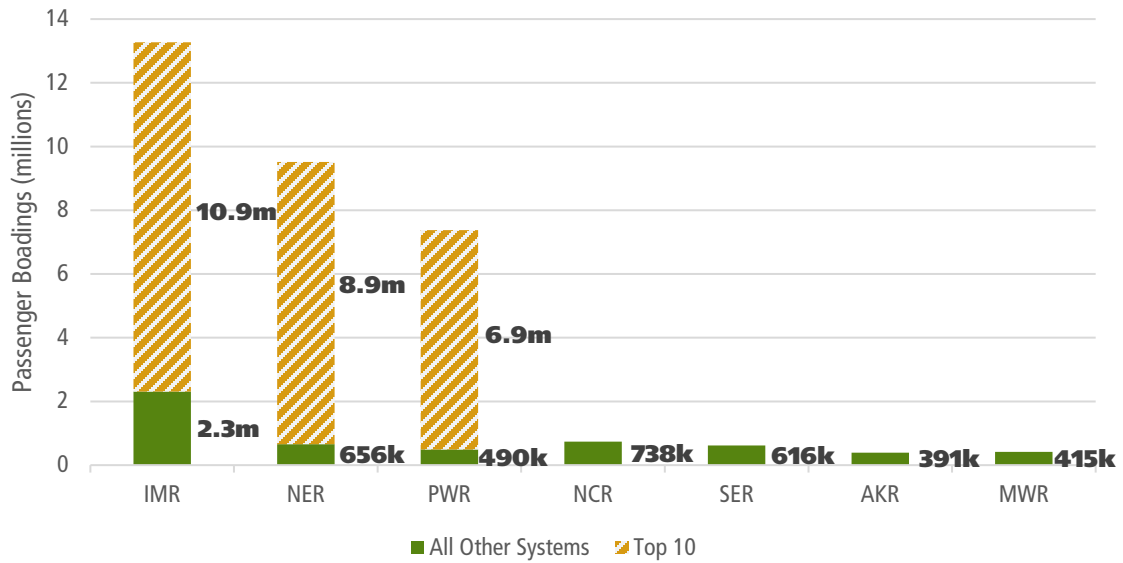
High-ridership shuttle systems are typically provided via service contracts and cooperative agreements. A greater proportion of the water-based systems are provided through concession contracts and either provide critical access to parks and park sites or serve as interpretive tours.

The National Park Service partnered with six local transit agencies in 2024. Those partnerships accounted for 1,574,962 passenger boardings in that year.¹⁰ Passenger boardings among NPS-owned and operated systems (17 systems) accounted for 482,903 passenger boardings.

The Intermountain, Northeast, and Pacific West Regions each reported more than 7 million passenger boardings in 2024, exceeding other regions. However, if the 10 highest-use systems are excluded, each region ranged from 391,394 to 2.3 million passenger boardings in 2024 (figure 4).

10. The Island Explorer & Bicycle Express (Acadia National Park), Hiker Shuttle & River Runner (Delaware Water Gap National Recreation Area), DC Circulator (National Mall & Memorial Parks), Gateway Shuttle (Sequoia & Kings Canyon National Parks), Giant Forest Shuttle (Sequoia & Kings Canyon National Parks), and Fairfax Connections Wolf Trap Express (Wolf Trap National Park for the Performing Arts) are the seven systems that were operated by a local transit authority.

Figure 4. Passenger Boardings by NPS Region

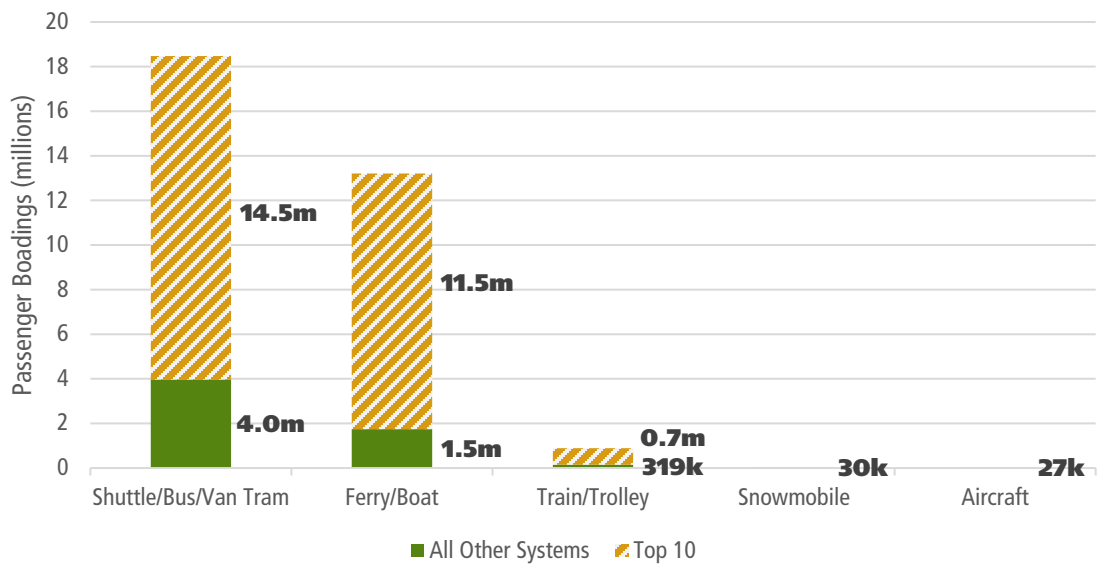


Source: 2024 NPS transit inventory data

Region key: IMR = Intermountain; NER = Northeast; PWR = Pacific West; NCR = National Capital; SER = Southeast; MWR = Midwest; AKR = Alaska

Over half (54%) of passenger boardings were on systems that use shuttles, buses, vans, or trams, and 36% were in water-based systems that use boats and ferries. Trains, trolleys, snowmobiles, snowcoaches, and aircraft accounted for 10% of all passenger boardings (figure 5).

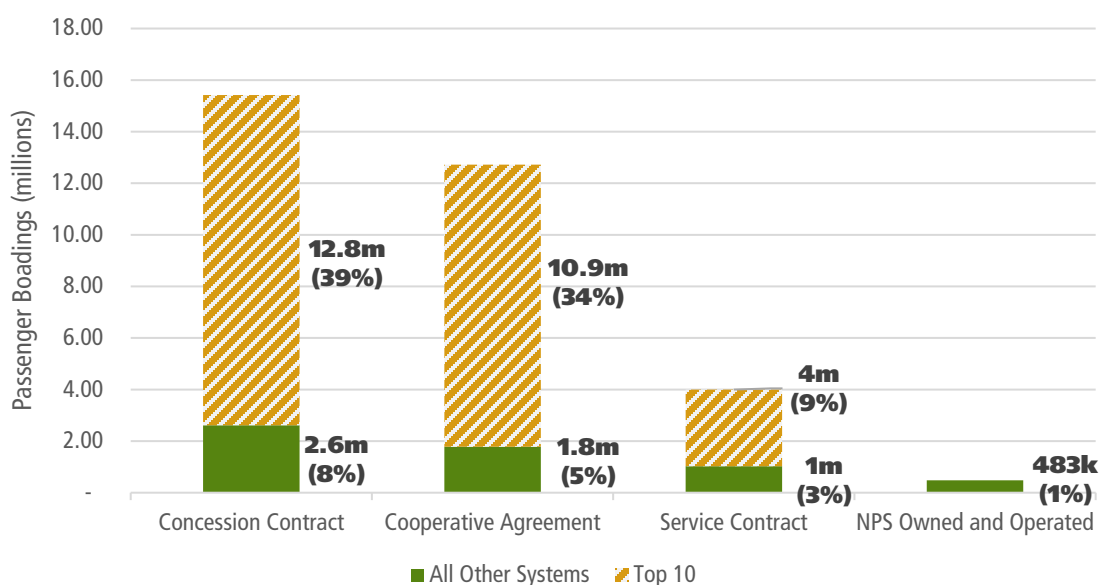
Figure 5. Passenger Boardings by Mode



Source: 2024 NPS transit inventory data

Almost half of passenger boardings (47%) took place on systems operated using concession contracts. Service contracts carried 12% of passenger boardings and 39% used cooperative agreements. NPS-owned and operated systems carried 1% of boardings (figure 6). Excluding the 10 highest-use systems, concession contracts accounted for the most boardings (8%), followed by service contracts (5%), cooperative agreements (3%), and NPS-owned and operated (1%).

Figure 6. Passenger Boardings by Business Model



Source: 2024 NPS transit inventory data

Service Schedule

The 2024 inventory analyzed the reported service schedules of the 96 operating systems to understand the general calendar spread of NPS transit systems. Although most seasonal service dates ranged primarily over the summer and into early autumn (June–October), very few operated in the winter (December–February), with 32% of systems (25 systems) operating year-round (figure 7).

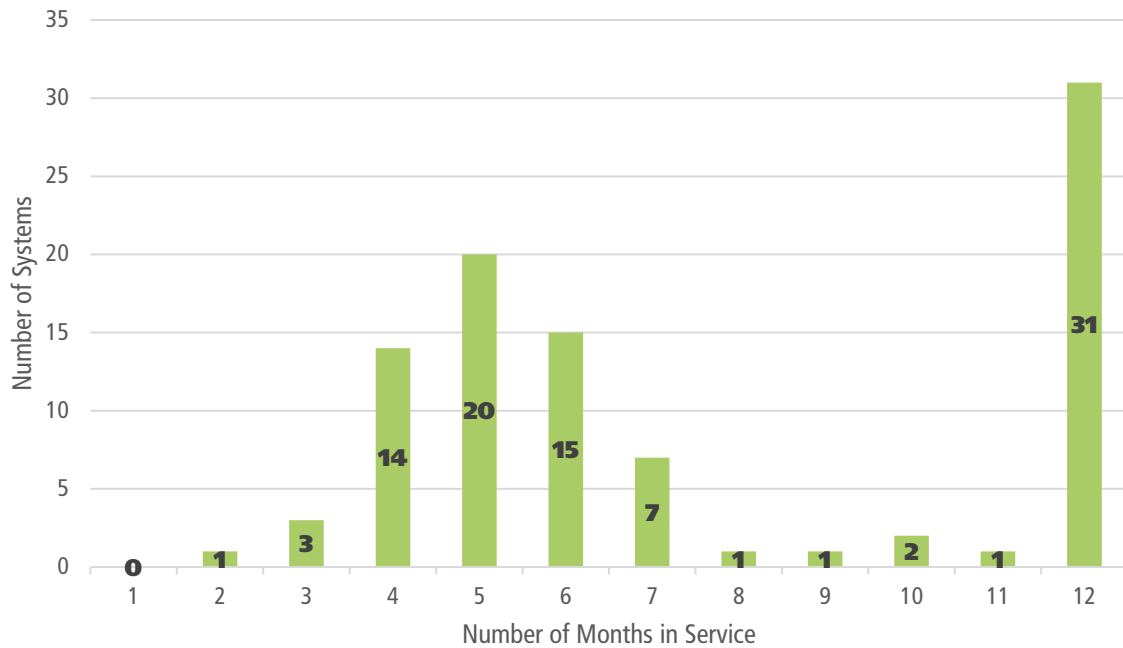
Peak season is defined as the period when the scheduled transit service is operating at its greatest frequency. The most common peak season months are July and August, with shoulder peak seasons extending from May through September. For year-round systems, many parks report peak seasons beginning as early as March and extending into October.

Systems operating year-round are among those with the highest annual ridership, representing 85% of total boardings. Of the 31 systems that operated year-round, 8 provide critical access, 11 are interpretive tours, 7 provide mobility within the park, 4 are transportation features, and 1 is primarily for visitor accessibility. The next most common service period is 5 months out of the year (20 systems), followed by systems that are in service for 6 months (15 systems each).

Transit systems in colder climates tend to operate for shorter seasons than those in warmer areas. For example, systems in Alaska operate through September. Conversely, many of the year-round

systems are in the southern and western parts of the country, where climates are milder. The wide range of climates in the Pacific West Region—from Yosemite to Hawaii—leads to a wide range of schedules.

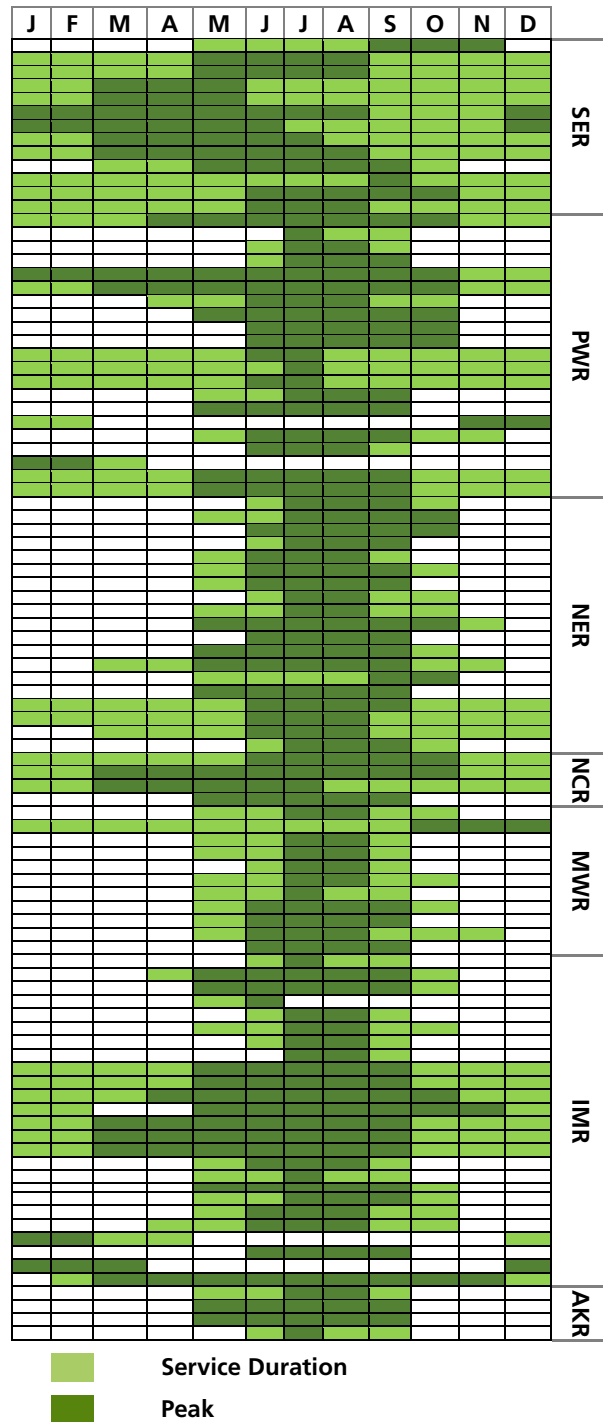
Figure 7. Distribution of Service Duration by Number of Months



Note: N = 96 systems

Source: 2024 NPS transit inventory data

Figure 8. Distribution of Service Duration by Month



Note: N = 96 systems

Source: 2024 NPS transit inventory data

Vehicles and Vessels

Vehicle Fleets

Half of the transit systems in 2024 (49 systems, or 51%) were under concession contracts, of which 7 used fleets owned by the National Park Service and 2 used fleets of mixed ownership (both NPS-owned and non-NPS-owned). The National Park Service owned and operated 17 transit systems (17.7%); these tend to be small and provided critical access, interpretive tours, or mobility to or within the park in ways not easily provided by a private operator. Systems managed through cooperative agreements account for 17 of the systems (17.7%). The remaining 13 transit systems (13.5%) operate under service contracts; of these, most use vehicle fleets owned by the National Park Service, including the large systems at Grand Canyon National Park and Zion National Parks.

The following data are for the operating fleet reporting in 2024:

- NPS-owned:
 - 17 systems used NPS-owned fleets.
 - 126 vehicles were reported to the inventory. Of the systems with NPS-owned fleets, 5 systems had a capacity for no more than 10 passengers, 9 systems had a capacity for 11–20 passengers, 11 systems had a capacity for 21–40 passengers, and 9 systems had a capacity for more than 40 passengers.¹¹
- Non-NPS-owned:
 - 55 systems had non-NPS-owned and 2 mixed-ownership fleets.
 - 585 vehicles were reported to the inventory. Of the systems with non-NPS-owned or mixed-ownership fleets, 4 systems had a capacity for no more than 10 passengers, 12 systems had a capacity for 11–20 passengers, 17 systems had a capacity for 21–40 passengers, and 33 systems had a capacity for more than 40 passengers.¹²

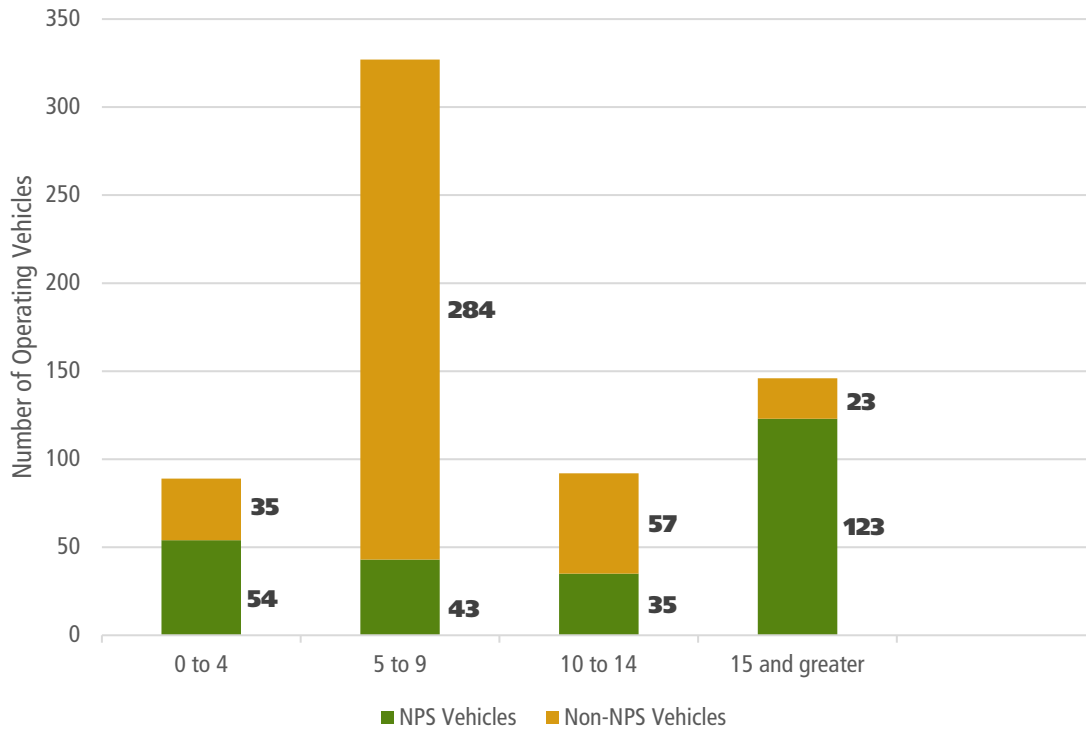
Age of Vehicles

Vehicle age data were provided by 297 NPS-owned vehicles and 600 non-NPS-owned vehicles. The age analysis excludes the 33 Red Bus Tour vehicles (Glacier National Park), which have been retrofitted using the original 1936 exteriors and newer chassis. Given these parameters, the age analysis includes 864 vehicles (96% of reported vehicles).

11. The capacity for 26 NPS vehicles was not reported in 2024.

12. Glacier National Park uses some vehicles in multiple systems, and they may have been counted twice.

Figure 9. On-Road Vehicles by Age Class (in Years)



Note: N = 654 vehicles

Source: 2024 NPS transit inventory data

Table 5. On-Road Vehicle Ownership by Age Class

Vehicle Type and Ownership	0–4 Years Old	5–9 Years Old	10–14 Years Old	15 Years and Older	Total
Heavy-duty transit	13 (2%)	83 (12.7%)	29 (4.4%)	35 (5.4%)	160 (24.4%)
• NPS vehicles	8 (1.2%)	7 (1.1%)	10 (1.5%)	34 (5.2%)	59 (9%)
• Non-NPS vehicles	5 (.8%)	76 (11.6%)	19 (2.9%)	1 (0.2%)	101 (15.4%)
Medium-duty transit	13 (2%)	34 (5.2%)	16 (2.4%)	24 (3.6%)	87 (13.3%)
• NPS vehicles	13 (2%)	2 (0.3%)	8 (1.2%)	24 (3.6%)	47 (7.2%)
• Non-NPS vehicles	–	32 (4.9%)	8 (1.2%)	–	40 (6.1%)
School bus	–	97 (14.8%)	5 (0.8%)	9 (1.4%)	111 (17%)
• NPS vehicles	–	–	4 (.6%)	3 (0.5%)	7 (1.1%)
• Non-NPS vehicles	–	97 (14.8%)	1 (0.2%)	6 (0.9%)	104 (15.9%)
Medium-duty shuttle	14 (2.1%))	25 (3.8%)	8 (1.2%)	18 (2.8%)	65 (10%)
• NPS vehicles	–	17 (2.6%)	3 (0.5%)	17 (2.6%)	37 (5.7%)
• Non-NPS vehicles	14 (2.1%)	8 (1.2%)	5 (.8%)	1 (0.2%)	28 (4.3%)
Light-duty shuttle	12 (1.8%)	10 (1.5%)	4 (0.6%)	16 (2.4%)	42 (6.4%)
• NPS vehicles	10 (1.5%)	7 (1.1%)	4 (0.6%)	16 (2.4%)	37 (5.6%)
• Non-NPS vehicles	2 (0.3%)	3 (.5%)	–	–	5 (.8%)
Passenger van	2 (0.3%)	69 (10.6%)	25 (3.8%)	21 (3.2%)	117 (17.9%)
• NPS vehicles	–	3 (.5%)	1 (0.2%)	15 (2.3%)	19 (2.9%)
• Non-NPS vehicles	2 (0.3%)	66 (10.1%)	24 (3.6%)	6 (0.9%)	98 (15%)
Van	1 (.2%)	3 (0.5%)	3 (.5%)	–	7 (1.1%)
• NPS vehicles	1 (.2%)	1 (.2%)	3 (.5%)	–	5 (0.8%)
• Non-NPS vehicles	–	2 (0.3%)	–	–	2 (0.3%)
Tram/golfcart	13 (2%)	8 (1.2%)	2 (0.3%)	1 (0.2%)	24 (3.7%)
• NPS vehicles	1 (0.2%)	8 (1.2%)	2 (0.3%)	–	11 (1.7%)
• Non-NPS vehicles	12 (1.8%)	–	–	1 (0.25)	13 (2%)
Snowmobile/ Snowcoach	–	–	–	20 (3%)	20 (3%)
• NPS vehicles	–	–	–	12 (1.8%)	12 (1.8%)
• Non-NPS vehicles	–	–	–	8 (1.2%)	8 (1.2%)
Total	89 (13.6%)	327 (50%)	92 (14.1%)	146 (22.3%)	654 (100%)
• NPS vehicles	54 (8.3%)	43 (6.1%)	35 (4.7%)	123 (18%)	255 (39%)
• Non-NPS vehicles	35 (5.3%)	284 (39.1%)	57 (8.2%)	23 (11.3%)	399 (61%)

Of the NPS-owned fleet, 36% is 10 years old or older, and many of the vehicles are in the latter portion of their service lives. In previous years, more than 80% of the NPS fleet was 10 years old or older. While vehicle replacements have occurred, there is still a need for vehicle replacements in the next 10 years. In addition, parks must invest in the maintenance of older vehicles not only to keep them operating but to extend their service life.

Two new performance measures were developed for the 2024 year to better compare the age of NPS-owned vehicles to their expected service life. The Useful Life Benchmark and Weighted Useful Life Benchmark allow the tracking of NPS-owned asset vehicles classes and help determine when capital asset vehicles have reached the end of their economic useful life.

The total weighted useful life benchmark for the FY 2024 fleet of 230 vehicles is -19.57%. A lower measured value (or one below 0) would indicate the asset has not exceeded its useful life. A breakdown of the Useful Life Benchmark for each asset can be found in the [Asset Management](#) section.

Table 6. Weighted Useful Life Benchmark

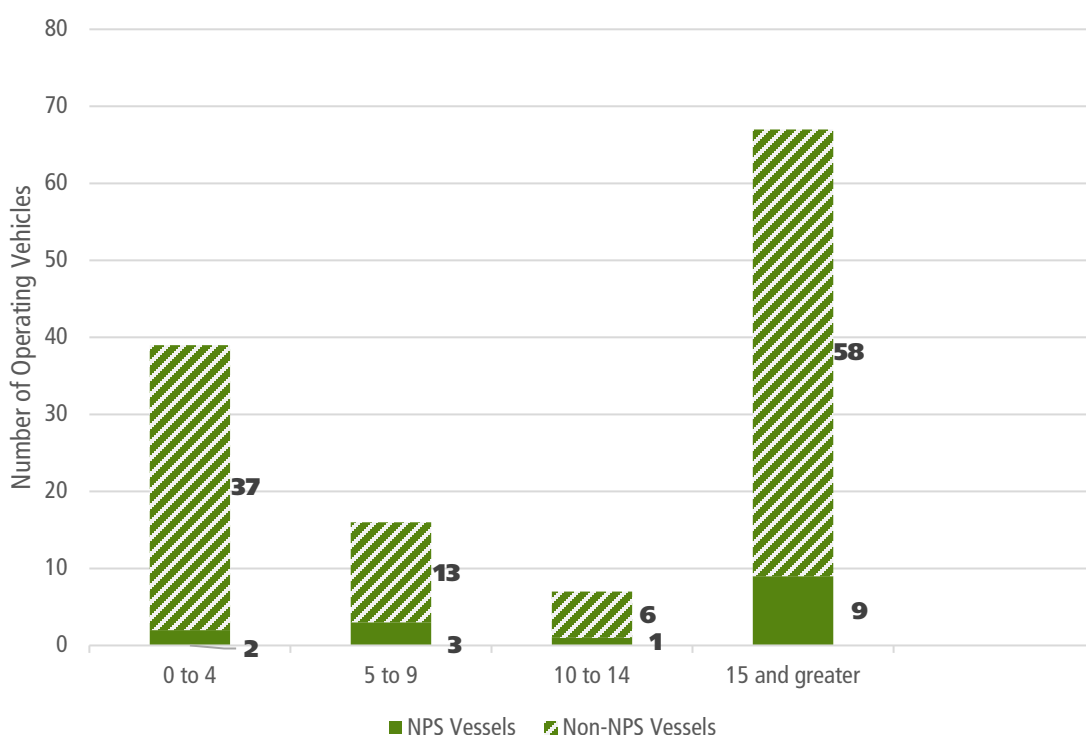
Vehicle Type	Total Vehicle Count	Weight (Count/ Total Count)	Useful Life Benchmark	Weighted Useful Life Benchmark	Percent
Heavy-duty transit	59	0.26	-0.39	-0.10	-9.98
Light-duty shuttle	39	0.17	-0.33	-0.06	-5.65
Medium-duty shuttle	37	0.16	-0.20	-0.03	-3.22
Medium-duty transit	64	0.28	-0.27	-0.07	-7.42
Passenger van	19	0.08	0.60	0.05	4.96
School bus	7	0.03	0.00	0.00	0.00
Van	5	0.02	0.80	0.02	1.74
Total	230	1	0.21	-0.20	-19.57

The non-NPS fleet is decidedly newer. The larger proportion of newer non-NPS vehicles suggests that older vehicles have been retired at a higher rate in recent years. The replacement of older vehicles may reflect contract language requiring vehicles to be within a certain age range.

Transit vehicles operating in the parks are not used in the same way as transit vehicles used in a municipal context. Park transit vehicles are typically not used for the entire year, nor are they used as intensively as vehicles operated in an urban environment. As a result, they may be in service for considerably longer lifespans, and recapitalization estimates should rely on park-specific estimates that depend on their specific use (see the [Asset Management](#) section and [appendix C](#)).

Vessels and Off-Road Vehicles

Figure 10. Vessels by Age Class (in Years)



The National Park Service had 35 systems that use ferries or boats: 13 are for critical access to park sites, 14 are for interpretive tours, 5 are transportation features, and 3 provide mobility to or within the park. The National Park Service owns 15 of these vessels, and there are 114 non-NPS-owned ferries or boats. Vessels typically have a life cycle of 40–50 years.

Table 7. Vessels and Off-Road Vehicle Ownership by Age Class

Vehicle Type And Ownership	0–4 Years Old	5–9 Years Old	10–14 Years Old	15 Years and Older	Total
Ferry/boat	39 (24.1%)	16 (9.9%)	7 (4.3%)	66 (40.7%)	128 (79.0%)
• NPS vehicles	2 (1.2%)	3 (1.9%)	1 (.6%)	8 (4.9%)	14 (8.6%)
• Non-NPS vehicles	37 (22.8%)	13 (8.0%)	6 (3.7%)	58 (40.8%)	114 (70.4%)
Train/streetcar	16 (9.9%)	1 (0.6%)	–	11 (6.8%)	28 (17.3%)
• NPS vehicles	–	1 (0.6%)	–	5 (3.1%)	6 (3.7%)
• Non-NPS vehicles	16 (9.9%)	–	–	6 (3.7%)	22 (13.6%)
Seaplane	6 (3.7%)	–	–	–	6 (3.7%)
• NPS vehicles	–	–	–	–	–
• Non-NPS vehicles	6 (3.7%)	–	–	–	6 (3.7%)
Total	61 (37.7%)	17 (10.50%)	7 (4.3%)	77 (47.5%)	162 (100%)
• NPS vehicles	2 (1.2%)	4 (2.5%)	1 (0.6%)	13 (8.0%)	20 (12.3%)
• Non-NPS vehicles	59 (36.4%)	13 (8.0%)	6 (3.7%)	64 (39.5%)	142 (87.7%)

PERFORMANCE MEASURES

The National Park Service’s Multimodal Strategy and Innovation Program (MS&I) seeks to use meaningful, reliable data. The objective is to use measurable, applicable, and achievable performance measures and metrics to guide and support decision-making and the management of NPS transit systems.

The performance measures below are split into the following sections that correspond to MS&I goals and the NPS *National Long Range Transportation Plan*:¹³ visitor experience, operations, and asset management.

Visitor Experience

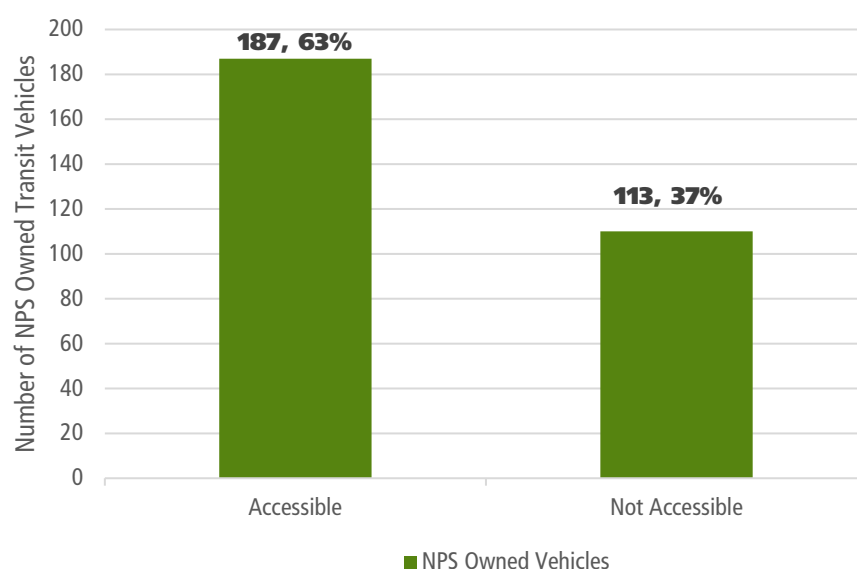
This performance area addresses how park transportation systems enhance the visitor experience. For 2024, the visitor experience performance measure includes accessibility for mobility-impaired park visitors.

13. The long-range transportation plan can be accessed at <https://parkplanning.nps.gov/document.cfm?parkID=551&documentID=82749>.

Accessibility for Visitors with Disabilities

In 2024, 63% of 297 NPS-owned vehicles and vessels were accessible for people with mobility impairments (figure 11). This number is similar to what was reported in 2022. Overall, 63.1% of the 297 NPS-owned vehicles and vessels are accessible.

Figure 11. Accessibility of NPS-Owned Transit Vehicles



Note: N = 297 vehicles and vessels

Source: 2024 NPS transit inventory data

Operations

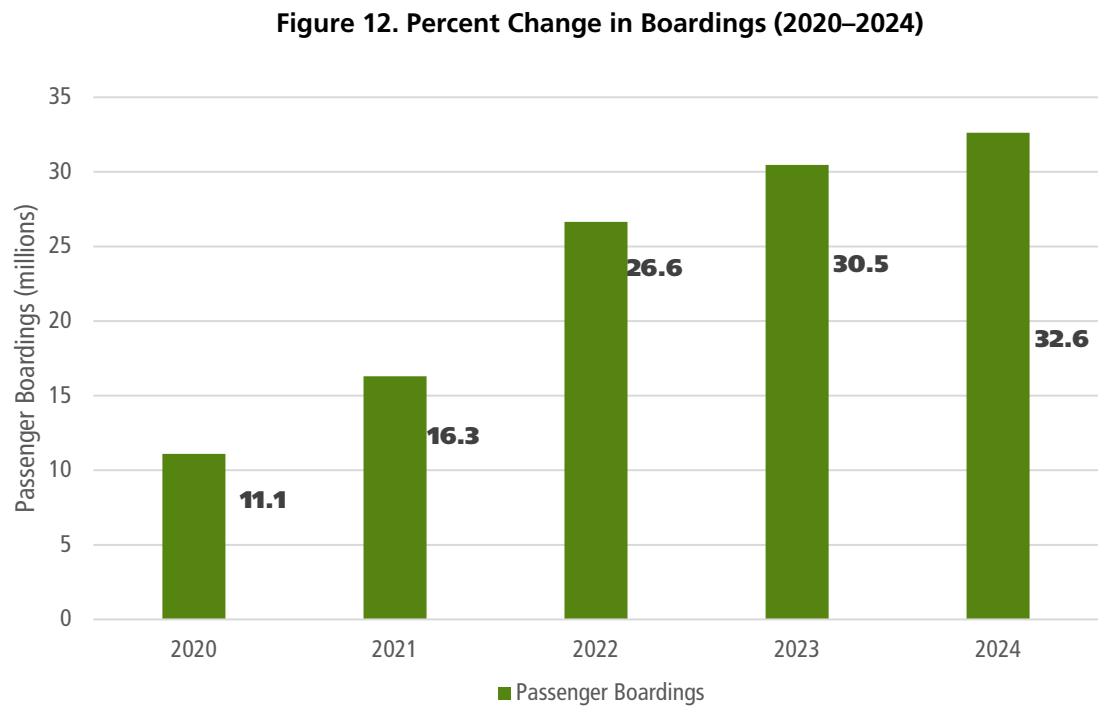
This section evaluates the operational performance of the NPS transit systems by measuring the annual percent change in boardings over the last five years. In 2020 and 2021, the reduced number of boardings is attributed to park closures and limited or no transit system operations due to the COVID-19 pandemic. While boardings are continuing to increase, transit use has not returned to pre-pandemic numbers.

Year-to-Year Trends in Boardings

Figure 12 shows the percent change in boardings from 2020 to 2024, illustrating pre-pandemic versus post-pandemic visitor trends. Ridership declined dramatically in 2020 due to the pandemic but has steadily increased as more systems come back online and visitors feel more comfortable riding transit. However, not all systems have returned or are fully operational. The rate of increase for passenger boardings decreased by almost 50%.

In 2024, the National Park Service received 332 million recreation visits, up 7 million visits (2%) from 2023. Servicewide visitation is higher than in 2022 and 2023 and has essentially recovered to pre-pandemic levels. Visitation in 2024 is similar to the years immediately before the NPS centennial in 2016 and breaks the record year (331 million visitors in 2016). Overall, 36 parks set new

visitation records in 2024, 5 of which have transit systems. Two of the parks that set records are within the same park unit, National Mall and Memorial Parks.



Source: 2019–2024 NPS transit inventory data

Table 8. Comparison of Systems and Boardings (2021–2024)

Metrics	2021	2022	2023	2024
Number of systems in inventory (and % change from previous year)	97 (1%)	101 (4.1%)	104 (2.9%)	104 (0%)
Number of systems (and % change from previous year)	63 (-4.5%)	81 (28.6%)	92 (13.5%)	96 (4.3%)
Number of systems new to inventory	1	4	3	1
Boardings (and % change from previous year)	16,300,849 (46.9%)	26,644,865 (63.5%)	30,468,988 (14.4%)	32,619,673 (7.1%)

Source: 2020–2024 NPS transit inventory data

Safety

The 2024 survey of transit system operators included questions regarding safety at the system level. Visitor and workforce safety are among the highest NPS priorities, and transportation, including transit systems and privately owned vehicles, presents a safety risk to staff and visitors. Collecting

safety and crash information for transit systems informs the National Park Service’s transportation safety goals and performance metrics.

In 2024, the number of NPS transit systems that reported safety incidents increased from 3 parks (3 crashes) in 2023 to 8 parks (34 accidents). Only one of the crashes reported in 2024 had no passengers on board. None of the crashes involved pedestrians or bicyclists or resulted in an injury or fatality (table 9). All but two systems reported vehicle damage from the incidents reported.

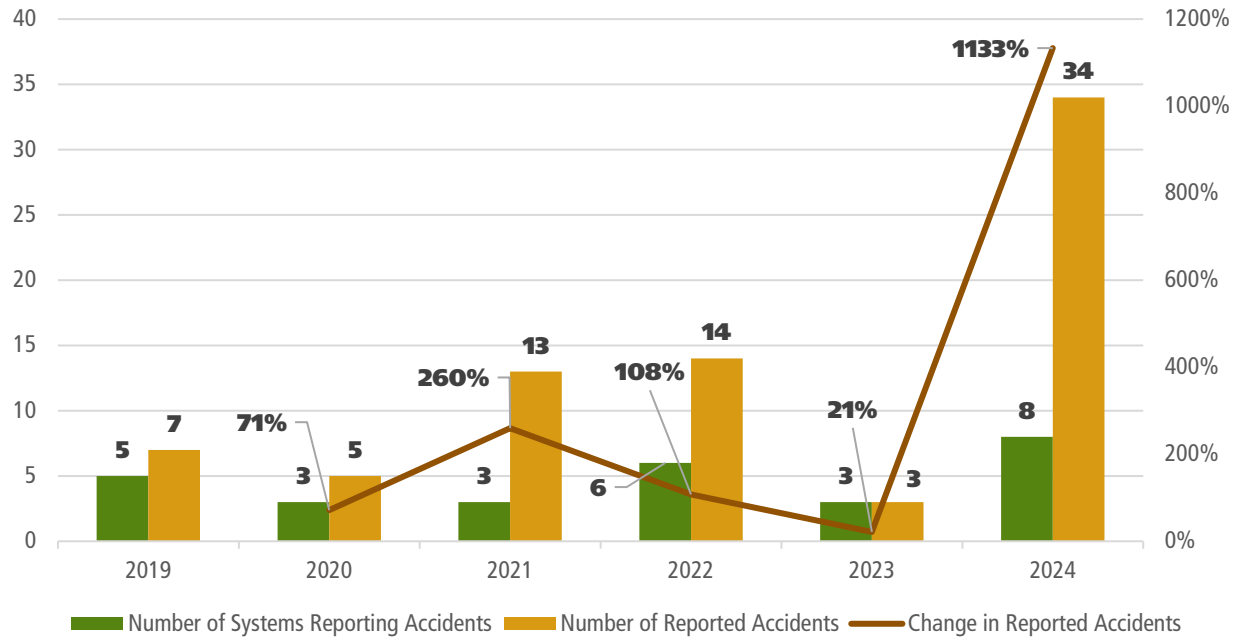
Table 9. Responses to Safety and Operational Questions

Park	System Name	Number of Crashes	Passengers on Board	Injuries or Fatalities	Bicycles or Pedestrians	Crash Occurred on Route	Result of Driver Error	Real Property Damaged
ACAD	Island Explorer & Bicycle Express	6	Yes	No	No	Yes	No	No
DENA	Bus Tours and Shuttle System	1	Yes	Yes	No	Yes	No	Yes
GLAC	Visitor Transportation System	16	Yes	No	No	Yes	No	Yes
HAFE	Shuttle Transport	1	No	No	No	Yes	Yes	Yes
MACA	Cave Tour Shuttle Bus	1	Yes	No	No	Yes	No	Yes
NAMA	DC Circulator	2	Yes	No	No	Yes	Yes (1) No (1)	No
PIRO	Pictured Rock Cruises	1	Yes	No	No	Yes	Yes	Yes
YOSE	Tram Tours and Hiker Shuttle	2	Yes	No	No	Yes	No	Yes
YOSE	Yosemite Valley Shuttle	4	Yes	No	No	Yes	Yes (2) No (2)	Yes

Source: 2024 NPS transit inventory data

Park key: ACAD = Acadia National Park; DENA = Denali National Park and Preserve; GLAC = Glacier National Park; HAFE = Harpers Ferry National Historical Park; MACA = Mammoth Cave National Park; NAMA = National Mall and Memorial Parks; PIRO = Pictured Rocks National Lakeshore; YOSE = Yosemite National Park

Figure 13. Year-to-Year Comparison of Reported Incidents



Source: 2020–2024 NPS transit inventory data

Data Gaps and Discrepancies

The transit activity data used for this analysis had the following gaps compared to previous comparison years:

- 1) There were no entries for NPS transit vehicle activity data for the Alaska Region.
- 2) The median age of transit vehicles increased from 13 to 15 years.
- 3) Ferry activity increased by 42%, 55%, and 59% in the Northeast, Southeast, and Midwest Regions, respectively, in 2024 compared to 2023. Ferry activity decreased by 42% in the Intermountain Region. These activity changes indicate that transit system activity was more consistent with previous years compared to older year-over-year comparisons.

Transit Activity Data

Transit system activity started to rebound from the COVID-19 pandemic in 2022. On-road vehicle activity decreased substantially in 2023 but rebounded again in 2024. Total vehicle miles traveled across all regions increased 40% percent from 2023 levels. Total vehicle miles traveled decreased 64% from 2022 levels.

Table 9 shows transit system vehicle miles traveled and ferry hours by region in 2024. The sections below describe passenger vehicle trips avoided as a result of transit use.

Table 10. Total Transit System Vehicle Miles Traveled and Ferry Hours by Region

Region	Vehicle Miles Traveled	Ferry Hours
Intermountain	3,246,701	13,929
National Capital	348,071	–
Midwest	106,250	9,205
Southeast	151,651	12,453
Alaska	678,853	832
Northeast	715,494	11,294
Pacific West	1,878,244	13,929
Total	7,125,263	65,039

Diverted Passenger Vehicle Trips

The benefits of using transit include:

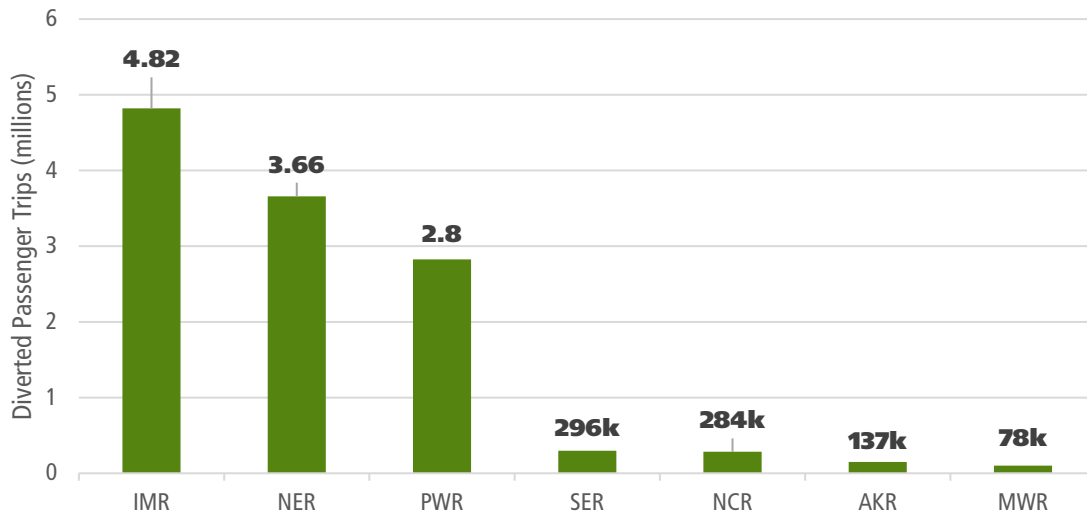
- a reduction of the number of vehicle trips in parks,
- congestion relief on park roads by carrying more people per square foot of road space,
- the elimination of associated fuel-inefficient driving behaviors such as extended idling and stop-and-go,
- the potential to influence how visitors spend their time in the park, and
- the removal of long lines of cars from viewsheds.

Transit systems and transit use in parks generally have a net positive effect on the visitor experience. Transit use reduces the number of passenger vehicle trips in parks; for example, transit buses carry more people per mile of road, relieving traffic congestion and eliminating vehicle idling and stop-and-go behavior. In addition, transit systems can influence how visitors spend their time in parks and help remove long lines of cars from viewsheds.

Figure 14 shows the estimated number of vehicle trips eliminated as a result of transit use in each region. The number of passenger vehicle trips diverted is calculated by dividing the total number of passenger boardings by the average occupancy of visitors' personal vehicles (assumed to be 2.6).

National Park Service transit services eliminated an estimated 12.1 million passenger vehicle trips in 2024, which equates to 234 million fewer miles driven. Regions with higher transit use and more boardings, namely the Intermountain and Northeast regions, experience more personal vehicles diverted from the road.

Figure 14. Vehicle Trips (in Millions) Avoided Because of NPS Transit Systems



Source: 2024 NPS transit inventory data

Region key: IMR = Intermountain; NER = Northeast; PWR = Pacific West; SER = Southeast; NCR = National Capital; AKR = Alaska; MWR = Midwest

Table 11. Diverted Passenger Trips by Region

	IMR	NER	PWR	SER	NCR	AKR	MWR
Diverted passenger vehicle trips	4,820,103	3,659,106	2,825,238	296,928	284,201	150,536	100,983

Source: 2024 NPS transit inventory data

Table 12. Comparison Mileage and Hours

Metrics	2022	2023	2024	Change from 2023 to 2024	Change from 2022 to 2024
Number of systems	81	91	84	-7%	3%
Count of vehicles	817	807	841	4%	3%
Miles traveled	19,953,523	5,102,180	7,125,263	40%	64%
Ferry hours	43,857	63,041	65,039	3%	64%

Source: 2022–2024 NPS transit inventory data

Table 13. Distribution of Miles by Vehicle Ownership

Ownership	Vehicles (number)	Vehicles (percent)	Miles Traveled	Miles (percent)
NPS owned	286	34%	2,749,991	39%
Non-NPS owned	555	66%	4,375,272	61%
Total	841	100%	7,125,263	100%

Source: 2024 NPS transit inventory data

Vehicle miles traveled across all regions decreased 74% from 2022 from improvements in data collection and increased 3.5% from 2021 levels.

Asset Management

Performance measurement for assets helps support the long-term financial viability of transit systems through tracking the age of NPS-owned vehicle fleets and estimating fleet recapitalization costs. In this context, “vehicles” refers only to on-road motorized vehicles and excludes non-road transportation, such as ferries, locomotives, snowmobiles, snowcoaches, and aircraft. Any of those described in table 14 are shown only for reference and were not analyzed for recapitalization estimates.

Average Age of NPS Vehicles

Table 14 reports the aggregate average age for NPS-owned transit vehicles servicewide. The average age of each NPS vehicle type is below the service life for most vehicle types, but many categories include vehicles older than their typical lifespan. Notably, 70 vehicles will exceed their service life in next five years; of these, 37 are heavy-duty transit or medium-duty shuttles. On average, heavy- and medium-duty shuttle buses are the newest vehicles in the NPS-owned fleet, which is reflective of the fleet replacements occurring at Glacier, Grand Canyon, Yosemite, and Zion National Parks.

Table 14. Vehicle Age for NPS Transit Vehicle Types

Vehicle Type	Average Age	Number of Vehicles	Service Life (in years)	Number of Vehicles Beyond Service Life*	Number of Vehicles Exceeding Service Life in Next 10 Years*
Tram/golf cart	7	11	11	2	9
Passenger van	16	19	10	16	3
Light-duty shuttle	10	39	15	11	17
Medium-duty shuttle	12	37	15	13	17
Medium-duty transit	11	64	18	24	8
Heavy-duty transit	13	59	18	14	30
Ferry/boat	29	15	N/A	N/A	0
Train/streetcar	56	5	N/A	N/A	0
School bus	18	7	18	1	6
Snowmobile/snowcoach	55	12	N/A	N/A	0
Van	9	5	5	4	1
Total	–	273	–	85	91

Note: N = 273 vehicles and vessels¹⁴

Source: 2024 NPS transit inventory data

* Number of vehicles beyond service life in the next 10 years is a total of 176 vehicles. This includes 85 vehicles that are beyond their estimated service life in 2024 and 91 vehicles exceeding service life in the next 1–10 years (2025–2034). These columns are calculated using the vehicle's age and estimated service life.

Note: The 2020 recategorization of the NPS fleet vehicles resulted in new categories and shifting vehicles to more appropriate vehicle type categories compared to past inventories. See [appendix D](#) for more information.

Useful Life Benchmark

The useful life benchmark was developed for the 2024 report to better compare the age of NPS-owned vehicles to their expected service life. This benchmark is the value of the difference between average vehicle age and expected service life divided by service life. The closer the value is to zero, the closer the average age is to expected service life; if the value is negative, the average age is below the expected service life.

14. The Glacier National Park Red Bus Tours vehicles were excluded from this analysis, as they have been extensively retrofitted during their 80-plus years in service.

Table 15. Summary of Useful Life Benchmark

Vehicle Type	Total Vehicle Count	% of Fleet Composition	Service Life	Average Age	% Beyond Useful Life	Average Age beyond Service Life	Useful Life Benchmark
Heavy-duty transit	59	26%	18	11	23.7	-7	-0.39
Light-duty shuttle	39	17%	15	10	28.2	-5	-0.33
Medium-duty shuttle	37	16%	15	12	35.1	-3	-0.20
Medium-duty transit	64	28%	15	11	37.5	-4	-0.27
Passenger van	19	8%	10	16	84.2	6	0.60
School bus	7	3%	18	18	14.3	0	0.00
Van	5	2%	5	9	0.8	4	0.80

Estimated Vehicle Recapitalization Needs

The National Park Service is addressing fleet recapitalization through reviews of fleet vehicles nearing the end of their service life. Estimates of NPS-owned vehicle replacement needs begin with vehicle ages, along with the associated replacement costs and service life assumptions shown in [appendix D](#). Each park is responsible for determining when a vehicle needs to be replaced, which is dependent on funding availability and other factors. Service life is highly dependent on vehicle use, in addition to vehicle age; therefore, more detailed information is needed before determining whether a vehicle is truly due for replacement.

Based on an analysis using the methodology outlined in [appendix D](#), the National Park Service is facing a large fleet replacement need of 158 vehicles over the next 10 years and an estimated \$158 million in NPS-owned transit vehicle capital costs. These fleet replacements include legacy transit systems at Acadia, Yosemite, and Grand Canyon National Parks. The 10-year estimated cost does not include the ongoing fleet replacement at Zion National Park. Projected costs and escalation are calculated based on 2024 dollars and may vary from year to year as vehicles from different systems are replaced or rehabilitated to extend their service life.

NEXT STEPS

The inventory continues to provide essential information on NPS transit systems at the park, regional, and national levels. This effort allows stakeholders to understand the basic characteristics of NPS transit systems, including how many visitors are served, the number and types of transit systems, vehicle service life and fuel types, business models under which these systems operate, and performance measures.

The transit inventory collects annual operational information to supplement other data initiatives that focus on NPS fixed real property assets. This effort provides a consistent platform to efficiently gather information that can be compared through time and enables the National Park Service to examine disparate transit systems as a whole and evaluate their benefits and impacts. As visitation at national parks increases, transit systems remain important assets for reducing resource impacts from personal vehicles while improving access and enhancing visitor experience.

The following lessons will be incorporated to improve future transit data calls:

- **Promote continued coordination with relevant NPS stakeholders:** Continue sharing data and identifying ways the transit data can be used to support program missions, goals, and outcomes across the National Park Service. Consider stronger coordination with concessions and service contracts to include data requirements in new contracts.
- **Create new and/or refine existing data elements:** Continue to refine the number of fields in the data call, adding or removing data fields as necessary to gather only necessary information while limiting the burden of data collection on park staff.
- **Improve the data collection online tool:** The online data collection tool moved to the Microsoft PowerApps platform in 2019. A limitation of this tool is that it is restricted to NPS users only, and concessioners are not able to access it. The National Park Service anticipates updating the data collection tool and data storage for performance enhancements for the 2025 data collection.
- **Expand performance measures analysis and performance metrics:** Utilize additional performance measures to track the progress of NPS transit systems over time and add them to future transit inventory and performance reports, including the following actions:
 - Collaborate with other NPS planning efforts to provide measurable data.
 - Shift safety questions to quantitative input and collaborate with the transportation safety program manager for reporting.
 - Develop a fleet replacement metric—a vehicle lifecycle metric derived from vehicle type, vehicle age, and expected service life.
 - Develop financial metrics that are internal to the National Park Service and are system-specific, derived from transit system costs, miles travelled, passenger boardings, and runs completed showing cost per boarding, cost per route mile, and passenger per route mile for the large surface systems where the National Park Service uses fees to operate.

- Develop a real property metric based on the Alternative Transportation Lifecycle Asset Management (ATSLAM) data proportioned to transit systems and the Facility Condition Index.
- **Communicate the benefit and impact of NPS transit systems to visitors:** Consider communicating to visitors how their choice to use transit has a positive impact on park resources by reducing congestion and diverting trips in private vehicles. The positive impacts of transit use could be communicated in a variety of ways, such as consistent signage throughout the national park system, social media, or the NPS website.
- **Consider multimodal connections to transit:** The transit inventory could be expanded to include connections to transportation trails.¹⁵ Considering opportunities for bicycling and walking in national parks and connections to transit could give a better picture of the opportunities for exploring national parks without using a private vehicle.
- **Explore count methodology standardization:** Eighty-two percent of boardings are attributed to 10 systems. Understand the count methodology for these 10 systems and develop standardization in count methodology. Consider developing standard operating procedures/business practices for the remaining types of count methodologies or consider automating manual counts where appropriate.

15. NPS definition of a “transportation trail”: Multimodal trail that accommodates pedestrians and/or bicycles and connects to a larger transportation system, including land- and water-based transit and/or regional trail systems or direct connections to a community (not solely recreational trails).

APPENDIX A: DEFINITION OF TRANSIT

The National Park Service Multimodal Strategy & Innovation Program (MS&I) developed a definition for an “NPS transit system” prior to conducting the first transit inventory in 2012. Only parks with systems that met each of the following three criteria were considered for the inventory:

1. moves people by motorized vehicle on a regularly scheduled service;¹⁶
2. operates under one of the following business models: concession contract; service contract; partner agreement including memorandum of understanding, memorandum of agreement, or cooperative agreement (commercial use agreements are not included) or is NPS-owned and operated;¹⁷ and
3. all routes and services at a given park that are operated under the same business model by the same operator are considered a single NPS transit system.

This definition was based on a review of past efforts, analysis of the existing transit portfolio, and individual and group conversations with the Regional Transportation Program coordinators and the Federal Lands Highway Program Servicewide Maintenance Advisory Committee. In response to challenges encountered during the course of the inventory, small changes were made to the original draft definition to improve clarity. The definition was uniformly applied to all potential systems to determine whether each should be included in the inventory.

The National Park Service investigated several potential criteria that stemmed from existing MS&I documents and conversations with MS&I stakeholders, as follows.

Provides transit service: An NPS transit system should provide transit service. In the glossary of the National Transit Database, the Federal Transit Administration defines transit as synonymous with public transportation; public transportation is defined as follows in the Federal Transit Act: “... transportation by a conveyance that provides regular and continuing general or special transportation to the public, but does not include school bus, charter, or intercity bus transportation or intercity passenger rail transportation provided by [Amtrak].” Conversations with NPS regional transportation coordinators further specified transit service should be limited to motorized conveyances. Based on this information, the National Park Service proposed the following criterion: **“moves people by motorized vehicle on a regularly scheduled service.”**

Is important to the NPS mission: The importance of transit systems to fulfilling the NPS mission is a core tenet of the Multimodal Strategy and Innovation Program, as established in previous program plans and extensively discussed at program meetings. However, the simple question of “Is this system important to the NPS mission?” is subjective and would return

16. This criterion includes services with a posted schedule that have standard operating seasons / days of week / hours. Services that do not operate on a fixed route, are charter services for individual groups, or exist for the sole purpose of providing access to persons with disabilities are not included.

17. For the purposes of this inventory, no distinction was drawn between a memorandum of understanding, memorandum of agreement, or cooperative agreement. All were recorded as “cooperative agreement.”

inconsistent results. For many systems, particularly those for which the National Park Service has a financial stake or a formal contract or agreement in place, the answer seems clear: because the National Park Service has made an effort to provide the service, the service is assumed to be important to the mission. Other services, particularly those that operate under a commercial use agreement (CUA), are not as clearly essential to the mission. Thus, the National Park Service proposed the following criterion: **“operates under one of the following business models: concessions contract; service contract; partner agreement including memorandum of understanding, memorandum of agreement, or cooperative agreement (commercial use agreements are not included); or NPS-owned and operated systems.”** The National Park Service used “cooperative agreement” as a general term, encompassing all qualifying partner agreements (memorandum of understanding, memorandum of agreement, and cooperative agreement).

Concession contracts were included because they require resources and desire by the National Park Service to initiate. Also, after the bid and award process, concession contracts limit competition with other private operators and thus generally result in close working relationships with the National Park Service. Commercial use agreements are not included because prospective CUA operators request permission from the National Park Service to operate. These agreements are not initiated by the National Park Service, and the resulting services are inherently not “NPS” systems.

Commercial use agreements were not included because these services are owned and operated by private operators, and the National Park Service only provides oversight to ensure that the services are operated in accordance with NPS policies and requirements. Hundreds of commercial use agreement exist servicewide that provide visitors tours and transportation. Collecting and reporting information on all these systems could be burdensome to parks and regions. If information were to be collected and reported on CUA services at all, an objective measure of importance would need to be identified and two key questions would need to be addressed. First, how does one objectively determine whether a service operated under a commercial use agreement is important versus nonessential to the NPS mission? This effort found only one subcategory of commercial use agreement that could be considered objective: services that provide sole access to an NPS resource. Second, should the National Park Service represent as its own services for which it has no role in acquisition, operations, or maintenance activities? Even for commercial use agreements that provide sole access, this effort suggests not. This determination is not to suggest that the service is not important to the National Park Service but rather to acknowledge that the service is not the responsibility of the National Park Service; in other words, the service is not an NPS transit system. These systems could be tracked separately but would not be included in the inventory.

Reduces vehicle miles traveled (VMT): The question “Does a system reduce VMT?” was tested on candidate NPS transit systems, and answers tended to be complex and debatable. The National Park Service determined that “reduces VMT” is not an objective criterion. Although reducing VMT can be a goal of NPS transit systems, it should not be a defining characteristic.

Provides critical access: The question “Does a system provide critical access?” was tested on candidate NPS transit systems. However, not all NPS transit systems provide critical access,

and not all systems that provide critical access meet other likely criteria of a definition, such as the National Park Service having a financial stake. Thus, this criterion would not contribute to a simple, clear definition.

Tours versus transportation: A distinction exists between interpretive tours and transportation, the former being a recreational activity and the latter being the conveyance of a passenger to or between activities. Whether a system is a tour or provides transportation was tested on candidate NPS transit systems. The distinction was often ambiguous. Many “transportation services” also provide interpretation or offer an experience onboard. Many “tours” transport people to activities, allow people to get on and off, and/or take passengers to places in national parks they could not access in their cars (for example, to a point on a body of water). Furthermore, both tours and transportation services further the visitor experience component of the NPS mission, and the National Park Service sought not to prioritize one over the other. While in daily life a transportation trip (often thought to be mandatory, e.g., to the grocery store) might be more important than a tour trip (often thought to be discretionary, e.g., a historical tour of a battlefield), in a recreational setting such as a national park, both types of trips may be vital to providing high-quality visitor experiences.

Is part of a connected, multimodal network: Several stakeholders suggested this criterion. However, it is vague and requires further definition of the term “connected, multimodal network.”

Is identified as a unique system: In order to be consistent servicewide in counting the number of transit systems, the National Park Service investigated methods for defining where one transit system stops and another starts and tested these with candidate NPS transit systems, particularly at parks thought to have more than one system. Based on this investigation, the National Park Service proposed a final criterion: **“all routes and services operated by the same operator under the same business model at a given park are considered a single transit system.”**

Once developed, the pilot definition was shared individually with the transportation program coordinators from each of the seven NPS regions. Feedback from each region was generally supportive. The definition was also presented at the May 2012 Federal Lands Highway Program Servicewide Maintenance Committee. Again, reaction by meeting participants was generally supportive. The associate director of Park Planning, Facilities, and Lands formalized the draft definition in August 2012 in a memo titled, “National Park Service Transit Inventory Definition and Next Steps.”

APPENDIX B: 2024 NPS NATIONAL INVENTORY SYSTEM LIST

NORTHEAST REGION

Park Code	System Name	Vehicle Type	2024 Passenger Boardings	Vehicle Ownership	Agreement Type	Purpose
ACAD	Island Explorer & Bicycle Express	Shuttle/bus/van/tram	497,170	Non-NPS	Cooperative agreement	Mobility to or within park
ACAD	Isle au Haut Ferry	Ferry/boat	5,796	Non-NPS	Cooperative agreement	Critical access
ADAM	Adams Trolley	Shuttle/bus/van/tram	7,271	NPS	Service contract	Critical access
BOHA	Boston Light Tour	Ferry/boat	1,478	Non-NPS	Cooperative agreement	Interpretive tour
BOHA	Thompson Island Ferry	Ferry/boat	5,296	Non-NPS	Cooperative agreement	Mobility to or within park
CACO	Coastguard Beach Shuttle	Shuttle/bus/van/tram	53,247	NPS	NPS-owned and operated	Critical access
DEWA	DEWA Hiker Shuttle	Shuttle/bus/van/tram	972	Non-NPS	Cooperative agreement	Critical access
FIIS	Sailors Haven Ferry	Ferry/boat	21,935	Non-NPS	Concession contract	Critical access
FIIS	Watch Hill Ferry	Ferry/boat	19,843	Non-NPS	Concession contract	Critical access
HOFR	FDR Tram	Shuttle/bus/van/tram	5,510	NPS	NPS-owned and operated	Mobility to or within park
JOFL	Lakebed Tours	Shuttle/bus/van/tram	257	NPS	NPS-owned and operated	Interpretive tour
LOWE	Canal Tours	Ferry/boat	3,279	NPS	NPS-owned and operated	Interpretive tour
LOWE	LOWE Historic Trolley	Train/trolley	21,360	NPS	NPS-owned and operated	Mobility to or within park

Park Code	System Name	Vehicle Type	2024 Passenger Boardings	Vehicle Ownership	Agreement Type	Purpose
MABI	Full Circle Trolley	Train/trolley	400	NPS	NPS-owned and operated	Critical access
SHEN	Rapidan Camp Bus	Shuttle/bus/van/tram	2,005	NPS	NPS-owned and operated	Interpretive tour
STEA	Scranton Limited & Live Steam Excursions	Train/trolley	Did not report	NPS	NPS-owned and operated	Interpretive tour
STLI	Statue of Liberty Ferries	Ferry/boat	8,858,552	Non-NPS	Concession contract	Critical access
VAFO	History of Valley Forge Trolley Tour	Shuttle/bus/van/tram	9,304	Non-NPS	Cooperative agreement	Interpretive tour

NATIONAL CAPITAL REGION

Park Code	System Name	Vehicle Type	2024 Passenger Boardings	Vehicle Ownership	Agreement Type	Purpose
HAFE	HAFE Shuttle Transport	Shuttle/bus/van/tram	416,324	NPS	Service contract	Mobility to or within park
NAMA	Big Bus Tours Washington DC	Shuttle/bus/van/tram	190,263	Non-NPS	Concession contract	Interpretive tour
NAMA	DC Circulator	Shuttle/bus/van/tram	123,607	Non-NPS	Cooperative agreement	Transportation feature
WOTR	Fairfax Connectors Wolf Trap Express	Shuttle/bus/van/tram	8,728	Non-NPS	Service contract	Mobility to or within park

SOUTHEAST REGION

Park Code	System Name	Vehicle Type	2024 Passenger Boardings	Vehicle Ownership	Agreement Type	Purpose
BLRI	Sharp Top Mountain Shuttle	Shuttle/bus/van/tram	3,705	Non-NPS	Concession contract	Transportation feature
CALO	CALO Ferry Service	Ferry/boat	99,036	Non-NPS	Concession contract	Critical access
CARL	Visitor Shuttle	Shuttle/bus/van/tram	6,687	NPS	NPS-owned and operated	Visitor accessibility
CUIS	CUIS Ferry Service	Ferry/boat	38,262	Non-NPS	Concession contract	Critical access
CUIS	Land and Legacies Tour	Shuttle/bus/van/tram	3,797	NPS	Concession contract	Interpretive tour
DRTO	DRTO Ferry Service	Ferry/boat	53,965	Non-NPS	Concession contract	Critical access
DRTO	Key West Seaplane Adventures	Aircraft	20,584	Non-NPS	Concession contract	Interpretive tour
FOMA	FOMA Ferry Service	Ferry/boat	102,642	NPS	NPS-owned and operated	Critical access
FOSU	FOSU Ferry Service	Ferry/boat	277,230	Non-NPS	Concession contract	Critical access
GUIS	Ship Island Ferry	Ferry/boat	37,808	Non-NPS	Concession contract	Transportation feature
GUIS	GUIS Ferry Service	Ferry/boat	24,549	NPS	Concession contract	Transportation feature
KEMO	KEMO Shuttle Bus	Shuttle/bus/van/tram	7,654	NPS	Service contract	Transportation feature
MACA	Cave Tours Bus Shuttle	Shuttle/bus/van/tram	192,040	NPS	Concession contract	Interpretive tour
MACA	Green River Ferry	Ferry/boat	40,959	NPS	NPS-owned and operated	Transportation feature

MIDWEST REGION

Park Code	System Name	Vehicle Type	2024 Passenger Boardings	Vehicle Ownership	Agreement Type	Purpose
APIS	Excursion boat	Ferry/boat	53,198	Non-NPS	Concession contract	Interpretive tour
CUVA	Cuyahoga Valley Scenic Railroad	Train/trolley	121,500	Non-NPS	Cooperative agreement	Mobility to or within park
ISRO	MV Isle Royale Queen IV	Ferry/boat	15,232	Non-NPS	Concession contract	Critical access
ISRO	MV Voyageur II and Sea Hunter III	Ferry/boat	7,952	Non-NPS	Concession contract	Critical access
ISRO	Royale Air Service Inc. float plane	Aircraft	8,453	Non-NPS	Concession contract	Critical access
ISRO	MV Sandy Tour	Ferry/boat	3,837	Non-NPS	Concession contract	Interpretive tour
ISRO	MV Ranger III	Ferry/boat	5,205	NPS	NPS-owned and operated	Critical access
PIRO	Pictured Rocks Cruises	Ferry/boat	183,907	Non-NPS	Concession contract	Interpretive tour
SCBL	SCBL Free Shuttle Service	Shuttle/bus/van/tram	46	NPS	NPS-owned and operated	Mobility to or within park
SLBE	Manitou Island Transit	Ferry/boat	7,331	Non-NPS	Concession contract	Transportation feature
VOYA	VOYA Tour Boat	Ferry/boat	9,031	NPS	NPS-owned and operated	Interpretive tour

INTERMOUNTAIN REGION

Park Code	System Name	Vehicle Type	2024 Passenger Boardings	Vehicle Ownership	Agreement Type	Purpose
BAND	Bandelier National Monument	Shuttle/bus/van/tram	32,846	Non-NPS	Cooperative agreement	Critical access
BRCA	Bryce Canyon Shuttle and Rainbow Point Shuttle	Shuttle/bus/van/tram	585,618	Non-NPS	Service contract	Mobility to or within park
DINO	Tram Transit	Shuttle/bus/van/tram	130,674	Non-NPS	Service contract	Critical access
GLAC	Glacier Park Boat Company interpretive boat tours	Ferry/boat	187,790	Non-NPS	Concession contract	Interpretive tour
GLAC	Sun Tours	Shuttle/bus/van/tram	6,135	Non-NPS	Concession contract	Interpretive tour
GLAC	Red Bus Tours	Shuttle/bus/van/tram	54,104	NPS	Concession contract	Interpretive tour
GLAC	GLAC Hiker Shuttle	Shuttle/bus/van/tram	6,145	NPS	NPS-owned and operated	Mobility to or within park
GLAC	Visitor Transportation System	Shuttle/bus/van/tram	224,925	NPS	NPS-owned and operated	Mobility to or within park
GLCA	Antelope Point	Ferry/boat	27,985	Non-NPS	Concession contract	Interpretive tour
GLCA	Boat Tours	Ferry/boat	2,286	Non-NPS	Concession contract	Interpretive tour
GLCA	Flatwater Tour	Ferry/boat	20,890	Non-NPS	Concession contract	Interpretive tour
GLCA	SR276 Passenger Ferry	Ferry/boat	1,882	Non-NPS	Service contract	Transportation feature
GRCA	South Rim Bus Tours	Shuttle/bus/van/tram	72,878	Non-NPS	Concession contract	Interpretive tour

Park Code	System Name	Vehicle Type	2024 Passenger Boardings	Vehicle Ownership	Agreement Type	Purpose
GRCA	Grand Canyon Railway	Train/trolley	738,932	Non-NPS	Concession contract	Mobility to or within park
GRCA	South Rim Shuttle Service	Shuttle/bus/van/tram	5,045,509	NPS	Service contract	Mobility to or within park
GRTE	Jenny Lake Shuttle Boat	Ferry/boat	273,831	Non-NPS	Concession contract	Mobility to or within park
LIBI	LIBI Bus Tours	Shuttle/bus/van/tram	3,123	Non-NPS	Concession contract	Interpretive tour
ROMO	Rocky Mountain National Park Visitor Shuttle	Shuttle/bus/van/tram	619,227	Non-NPS	Service contract	Mobility to or within park
YELL	Xanterra Parks & Resorts interpretive snow coaches tours	Snowmobile/snowcoach	15,018	Non-NPS	Concession contract	Interpretive tour
YELL	Historic Yellow Bus Tours	Shuttle/bus/van/tram	8,851	NPS	Concession contract	Interpretive tour
YELL	YELL Boat	Ferry/boat	16,676	NPS	Concession contract	Interpretive tour
YELL	Xanterra Parks & Resorts interpretive bus tours	Shuttle/bus/van/tram	16,852	NPS; non-NPS	Concession contract	Interpretive tour
YELL	YELL Snow Coaches	Snowmobile/snowcoach	17,641	NPS; non-NPS	Concession contract	Interpretive tour
ZION	Zion Shuttle	Shuttle/bus/van/tram	5,178,059	NPS	Service contract	Critical access

PACIFIC WEST REGION

Park Code	System Name	Vehicle Type	2024 Passenger Boardings	Vehicle Ownership	Agreement Type	Purpose
CHIS	Island Packers	Ferry/boat	163,398	Non-NPS	Concession contract	Critical access
CRLA	Crater Lake Boat Tour	Ferry/boat	25,751	Non-NPS	Concession contract	Interpretive tour
CRLA	Rim Drive Trolley Tour	Shuttle/bus/van/tram	8,526	Non-NPS	Concession contract	Interpretive tour
DEPO	Reds Meadow Shuttle Bus	Shuttle/bus/van/tram	77,527	Non-NPS	Cooperative agreement	Critical access
EUON	NPS Shuttle	Shuttle/bus/van/tram	1,205	NPS	NPS-owned and operated	Critical access
GOGA/ ALCA	Alcatraz Cruises Ferry	Ferry/boat	1,482,378	Non-NPS	Concession contract	Critical access
MUWO	Muir Woods Shuttle	Shuttle/bus/van/tram	30,150	Non-NPS	Cooperative agreement	Mobility to or within park
NOCA/ LACH	Concession Shuttle	Shuttle/bus/van/tram	4,327	Non-NPS	Service contract	Interpretive tour
NOCA/ ROLA	Rainbow Falls Tours	Shuttle/bus/van/tram	1,426	NPS	Concession contract	Interpretive tour
NOCA/ ROLA	Ross Lake Hiker Shuttle	Shuttle/bus/van/tram	3,130	Non-NPS	Concession contract	Transportation feature
PERL	Ford Island Bus Tour	Shuttle/bus/van/tram	3,591	Non-NPS	Service contract	Interpretive tour
PERL	Missouri/ PHAM Shuttle	Shuttle/bus/van/tram	912,240	Non-NPS	Cooperative agreement	Transportation feature
PERL	USS Arizona Memorial Tour	Ferry/boat	1,123,869	Non-NPS	Cooperative agreement	Interpretive tour
SEKI	Gateway Shuttle	Shuttle/bus/van/tram	6,427	Non-NPS	Cooperative agreement	Critical access
SEKI	Giant Forest Shuttle	Shuttle/bus/van/tram	937,086	Non-NPS	Cooperative agreement	Critical access

Park Code	System Name	Vehicle Type	2024 Passenger Boardings	Vehicle Ownership	Agreement Type	Purpose
SEKI	Winter Giant Forest Shuttle	Shuttle/bus/van/tram	32,431	Non-NPS	Cooperative agreement	Critical access
YOSE	Tram Tours and Hiker Shuttle	Shuttle/bus/van/tram	50,957	Non-NPS	Concession contract	Interpretive tour
YOSE	Winter Ski Shuttle	Shuttle/bus/van/tram	2,096	Non-NPS	Concession contract	Mobility to or within park
YOSE	YARTS: Yosemite Area Regional Transportation System	Shuttle/bus/van/tram	79,360	Non-NPS	Cooperative agreement	Mobility to or within park
YOSE	Mariposa Grove Transportation Service	Shuttle/bus/van/tram	710,638	NPS	Service contract	Critical access
YOSE	Yosemite Valley Shuttle	Shuttle/bus/van/tram	1,722,386	NPS	Concession contract	Mobility to or within park

ALASKA REGION

Park Code	System Name	Vehicle Type	2024 Passenger Boardings	Vehicle Ownership	Agreement Type	Purpose
DENA	Bus tours and shuttle service	Shuttle/bus/van/tram	369,901	Non-NPS	Concession contract	Critical access
GLBA	Day boat tour	Ferry/boat	5,991	Non-NPS	Concession contract	Interpretive tour
GLBA	Airport shuttle	Shuttle/bus/van/tram	13,615	Non-NPS	Concession contract	Transportation feature
KATM	KATM Bus Tour	Shuttle/bus/van/tram	1,887	Non-NPS	Concession contract	Interpretive tour

APPENDIX C: CHANGE IN VEHICLE TYPES

Table 16. Recategorization of Vehicle Types

Vehicle Type	2023 Vehicles	2024 Vehicles	Difference
Ferry/boat	115	116	+1
• NPS owned	16	14	-2
• Non-NPS owned	99	102	+3
Van/SUV/sedan	6	6	0
• NPS owned	3	4	+1
• Non-NPS owned	3	2	-1
Passenger van	119	62	-57
• NPS owned	20	19	-1
• Non-NPS owned	99	43	-56
Light-duty shuttle	59	69	+10
• NPS owned	29	39	+10
• Non-NPS owned	30	30	0
Medium-duty shuttle	100	96	-4
• NPS owned	70	68	-2
• Non-NPS owned	30	28	-2
Medium-duty transit (bus)	83	107	+24
• NPS owned	39	64	+25
• Non-NPS owned	44	43	-1
Heavy-duty transit (bus)	207	202	-5
• NPS owned	65	59	-6
• Non-NPS owned	142	143	+1
School bus	115	113	-2

Vehicle Type	2023 Vehicles	2024 Vehicles	Difference
• NPS owned	7	7	0
• Non-NPS owned	108	106	-2
Snowmobile/snowcoach	20	0	-20
• NPS owned	12	0	-12
• Non-NPS owned	8	0	-8
Tram/golf cart	20	21	+1
• NPS owned	11	8	-3
• Non-NPS owned	9	13	+4
Train/trolley/streetcar	22	16	-6
• NPS owned	5	3	-2
• Non-NPS owned	17	13	-4
Aircraft	6	6	0
• NPS owned	0	0	0
• Non-NPS owned	6	6	0
Total	872	814	-58
• NPS owned	277	285	+8
• Non-NPS owned	595	529	-66

Source: 2023–2024 NPS transit inventory data

Note: Fleet data for 2024 only includes actively operating systems. Data from 2023 includes all fleet data regardless of operational status.

APPENDIX D: VEHICLE REPLACEMENT ASSUMPTIONS

Uniform vehicle replacement costs and expected service lives were used to provide servicewide consistency in estimates of vehicle age, remaining service life, and recapitalization costs. The assumptions below provided the basis for the recapitalization analysis, which was also validated by regional staff to reflect variations in timelines, vehicle types purchased, and growth in vehicle fleets. These assumptions were updated for the 2015 inventory from previous inventories¹⁸ to reflect the usage and operating characteristics of NPS vehicles (tables 10 and 11). National Park Service vehicles are not used in the same way that city transit vehicles are used; they are typically not used for the entire year and are not used as intensively as transit vehicles in an urban environment. Vehicle cost estimates were mostly taken from the General Service Administration's AutoChoice Database.

In January 2022, the National Park Service requested an updated expected service life for vehicles on public lands and a discussion on shuttle bus versus transit bus configurations from the Volpe Center (US Department of Transportation).

SHUTTLE BUS VERSUS TRANSIT BUS CONFIGURATIONS AND EXPECTED SERVICE LIFE

The on-road vehicle types common to the NPS transit systems are passenger vehicles, passenger vans, light- and medium-duty shuttle buses, medium- and heavy-duty transit buses, and school buses.

Table 17 shows common transit vehicle types and essential information on size, cost, and life expectancy. The general information and delineations between categories discussed below are generic descriptions for vehicle type classification.

A key distinction between light- and medium-duty buses is the "shuttle" versus "transit" configuration.

SHUTTLE BUS CONFIGURATION

A shuttle bus is built of a mass-produced "stripped chassis" or "cutaway" platform that is derived from a domestic truck or van chassis (such as Dodge, Ford, General Motors). These chassis include a cab, powertrain, frame, suspension, wheels, brakes, and driveline but do not have a typical truck or van body built over the back of the frame. Instead, a specialty manufacturer will build a shuttle bus passenger compartment on the stripped chassis. Shuttle buses are sometimes referred to as "high floor buses" or "cutaways" due to having the passenger compartment built on top of the stripped chassis.

The raised passenger compartment requires steps to enter and exit, and accessibility compliance is commonly achieved with a wheelchair lift at the back of the vehicle. The shuttle bus typically has a shorter rated life expectancy than an equivalent capacity transit bus

18. The 2014 inventory used replacement costs and expected life assumptions based on the Federal Transit Administration: Useful Life of Transit Buses and Vans – April 2007.

option. However, the shuttle bus options are less expensive to build and buy, offering an economical choice for transit systems.

TRANSIT BUS CONFIGURATION

The transit bus is built as a dedicated platform by the vehicle manufacturer for transit operations. Typical manufacturers include Build Your Dream, El Dorado, Gillig, Bluebird, New Flyer, NA Bus Industries, and Proterra. The frame, engine, drivetrain, suspension, brakes, and other significant components as well as detail components like doors and electronics are built to a more robust standard to survive operations in urban, continuous transit environments.

The frame and chassis are more costly to build due to their lower volume,¹⁹ dedicated design, robust construction, and “low floor” configuration. The lower floor provides access to the vehicle for most uses, and most vehicles have a deployable accessible ramp. As a result of their construction, transit buses are nearly twice as expensive as an equivalently sized shuttle bus. However, transit buses have a longer rated life expectancy and can survive harder, more continuous use.

Some vehicles may cross boundaries between categories. For example, some passenger vans are built with a transit chassis, and configurations and smaller “light-duty” shuttle bus categories are built with transit-style features and even dedicated chassis for battery-electric options.

Table 17. Summary of Vehicles on Public Lands

Vehicle Type	Purchase Cost	Rated Life	Expected Life in Public Lands (in years)	Capacity
Electric/small tram	\$25,000 – \$35,000	N/A	3–5	6–12
Passenger van, car, truck, SUV	\$25,000 – \$85,000	5 years 100,000 miles	5–10	6–15
Light-duty shuttle	\$75,000 – \$120,000	7 years 200,000 miles	7–10	12–28
Light-duty low-floor	\$400,000 – \$475,000	7 years 200,000 miles (anticipated)	8–10	25–31
Medium-duty shuttle	\$100,000 – \$175,000	7 years 200,000 miles	7–10	28–36
Medium-duty transit	\$200,000 – \$300,000	10 years 350,000 miles	15–20	28–40

19. Lower production volumes compared to commercial trucks.

Vehicle Type	Purchase Cost	Rated Life	Expected Life in Public Lands (in years)	Capacity
Heavy-duty transit	\$475,000 – \$1,200,000	12 years 500,000 miles	12 – 20+	35–45

Source: Transit standards²⁰ updated to reflect NPS typical usage and operating characteristics

Concurrently, a review of vehicle costs on the General Services Administration was completed to look for current actual costs of vehicles. A comparison with Volpe’s findings was completed, and the conservative life expectancies and costs were used in the national transit inventory and are included in tables 18 and 19.

Table 18. Vehicle Replacement Costs (in 2024 Dollars)

Vehicle Type	Replacement Cost	Expected Life (in years)
Passenger van, car, truck, and SUV	\$28,000 – \$95,000	5–10
Light-duty shuttle	\$128,00 – \$282,240	7–10
Medium-duty shuttle	\$198,450 – \$560,000	7–10
Medium-duty transit	\$371,450– \$1,475,000	15–20
Heavy-duty transit	\$645,300– \$1,750,500	20+
School bus	\$170,775 – \$560,000	15–20
Tram/golf cart	\$27,000 – \$44,800	3–11

Source: Transit standards²¹ updated to reflect NPS typical usage and operating characteristics.

A major recapitalization baselining effort was undertaken as part of the 2019 transit inventory. The National Park Service vehicle data were exported from the inventory to determine a calculated replacement year based on the life expectancy and age of each vehicle. From there, the Parks Transportation Allocation and Tracking System and Project Management Information System was reviewed for planned replacement and/or

20. Ibid.

21. Ibid.

refurbishment projects (table 18). Regional coordinators reviewed the plan and consulted on the draft recapitalization plan presented in this report.

Table 19. Recapitalization Totals by Year

Year	Total Vehicles	Cost
2025	25	\$34,849,987.92
2026	22	\$25,200,236.71
2027	21	\$26,370,338.66
2028	38	\$26,370,338.66
2029	20	\$13,884,494.78
2030	17	\$11,135,911.28
2031	7	\$7,386,629.48
2032	4	\$1,209,0315.57
2033	3	\$1,874,065.38
2034	1	\$380,894.11
2035	2	\$4,938,917.44
Total	158	\$157,961,563.47

Sources: Estimated recapitalization needs based on transit inventory data, transit standards, Project Management Information System, Parks Transportation Allocation and Tracking System, and region and park input.