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Federal Railroad Administration

Interim Report to Congress

Amtrak Daily Long-Distance Service Study Interim Report to Congress



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Acronyms and Abbreviations

ACRP	Airport Cooperative Research Program
APP	Area of Persistent Poverty
ASWC	Amtrak Service Workers Council
BLET	Brotherhood of Locomotive Engineers and Trainmen
BTS	Bureau of Transportation Statistics
CID	Corridor Identification and Development
CPKC	Canadian Pacific Kansas City
CRISI	Consolidated Rail Infrastructure and Safety (USDOT Grant)
DOT	United States Department of Transportation
FHWA	Federal Highway Administration
FRA	Federal Railroad Administration
FY	Fiscal Year
GAO	United States General Accounting Office
IJA	Infrastructure Investment and Jobs Act
MPO	Metropolitan Planning Organization
MSA	Metropolitan Statistical Area
NEC	Northeast Corridor
NextGen	Next-Generation
O-D	Origin-Destination
OTP	On-Time Performance
PIP	Performance Improvement Plan
PRIA	Passenger Rail Investment and Improvement Act
RAISE	Rebuilding American Infrastructure with Sustainability and Equity (USDOT Grant)
RPA	Rail Passengers Association
SAIPRC	State-Amtrak Intercity Passenger Rail Committee
SMART-TD	International Association of Sheet Metal, Air, Rail and Transportation Workers - Transportation Division
TIGER	Transportation Investment Generating Economic Recovery (USDOT Grant)
TRB	Transportation Research Board
U.S.C.	United States Code

Executive Summary

IIJA Section 22214 – Amtrak Daily Long-Distance Service Study

This Interim Report to Congress presents an overview of progress and findings as of June 2023 for the Federal Railroad Administration (FRA) Amtrak Daily Long-Distance Service Study (the Study). FRA was tasked to conduct the Study in Section 22214 of the Infrastructure Investment and Jobs Act (IIJA) of 2021 (Pub. L. 117-58). The Study evaluates the restoration of daily intercity rail passenger service along Amtrak long-distance routes that occur on a non-daily basis or have been discontinued. Long-distance passenger rail service is defined by statute as routes of more than 750 miles between endpoints operated by Amtrak (49 U.S.C. Section 24102(5)).

The legislation provides for FRA to evaluate potential new Amtrak long-distance routes, with specific attention to routes in service as of April 1971 but not continued by Amtrak. For potential new routes, the legislation directs FRA to consider whether new routes connect large and small communities, advance the well-being of rural areas, enhance connectivity, and reflect public engagement and support for restored passenger rail service.

Section 22214 directs FRA to submit a report to Congress not later than two years after the date of enactment of the IIJA (November 15, 2021). FRA has been working diligently on the Long-Distance Service Study and has produced this Interim Report to Congress as an overview of progress and findings for the Study as of June 2023. In the coming months, FRA will host 12 additional working group meetings across six regions of the country and continue to reach out to stakeholders and post all working group meeting materials on the study website. To ensure the final report is thorough and that we meet this important moment in passenger rail, FRA anticipates completing the final Report to Congress in 2024.

In the final Report to Congress, FRA must identify preferred options and a prioritized inventory of capital projects for restoring or enhancing service, as well as funding sources and estimated costs and public benefits.

The final Report to Congress must also include recommendations for how Amtrak could work with local communities and organizations to continuously improve public use of passenger rail service along each route. In conducting the Study, FRA is required, through working groups or other forums, to consult with Amtrak, states along relevant routes, regional planning organizations, municipalities and communities along relevant routes, host railroads, organizations representing onboard Amtrak employees, nonprofit organizations representing Amtrak passengers, relevant regional passenger rail authorities, and federally recognized Indian tribes.

Study Progress

This Interim Report to Congress, a snapshot of the Study's progress as of June 2023 that will serve as a foundation upon which FRA will build the recommendations in its final Report to Congress, includes the following chapters:

- Chapter 1 summarizes the purpose of this Interim Report to Congress, the IIJA legislation directing FRA to conduct the Study, and the elements of the Study that have been completed to date.
- Chapter 2 documents routes over 750 miles in length that were discontinued by Amtrak between 1971 and 2020, as well as those operating as of April 1971 but not continued by Amtrak thereafter.
- Chapter 3 highlights service and performance characteristics of Amtrak's 15 current long-distance routes and the market opportunities for long-distance passenger rail service, providing a foundation for analyzing potential future Amtrak long-distance routes and services.
- Chapter 4 includes an analysis for potentially expanding the Cardinal and Sunset Limited routes to daily service.
- Chapter 5 documents FRA's stakeholder engagement efforts throughout the Study. Section 22214 of the IIJA directs FRA to consult with a wide range of stakeholders through working groups or other forums. Throughout the Study FRA has prioritized engagement with these stakeholders, including four rounds of working group meetings held in six regions across the country to share study data and analysis and to gain stakeholder feedback and insights. FRA also has reached out to 347 federally

recognized Indian tribes and provided presentations and study updates to host railroads, non-profit organizations representing Amtrak employees, and organizations representing onboard Amtrak employees.

- Chapter 6 explains FRA’s approach to developing institutional improvements for improving public use of passenger rail services.
- Chapter 7 presents issues for Congressional awareness.
- Chapter 8 identifies next steps in the Study.

For updated information on the Study, including materials presented at regional working group meetings in July 2023, please see the Study website – fralongdistancerailstudy.org.

1 Introduction

Amtrak provides passenger rail service across the nation, serving more than 500 destinations in 46 states. Figure 1-1 shows the current Amtrak network across Amtrak’s three operating business lines:

- **Northeast Corridor (NEC)** provides service between Boston, Massachusetts, and Washington, DC.
- **State-Supported** provides service on routes of not more than 750 miles through cost-sharing agreements with state partners.
- **Long-Distance** includes routes over 750 miles nationwide.

Long-distance routes are defined by statute (49 United States Code [U.S.C.] Section 24102(5)) as passenger rail routes of more than 750 miles between endpoints operated by Amtrak, and the Federal Railroad Administration (FRA) adopted this definition in this Amtrak Daily Long-Distance Service Study (the Study). Long-distance routes are part of Amtrak’s national network, which includes all routes outside of the NEC and operating almost entirely over host railroad tracks. Amtrak currently operates 15 long-distance routes; 13 routes provide daily service in each direction, and 2—the Cardinal and Sunset Limited—operate three trains per week in each direction.

1.1 Overview of Long-Distance Service Study

Section 22214 of the Infrastructure Investment and Jobs Act (IIJA) of 2021 (Pub. L. 117-58), also known as the Bipartisan Infrastructure Law, directs FRA to conduct a Study to evaluate:

- Any Amtrak long-distance routes that, as of the date of enactment of the IIJA, were discontinued.
- Any Amtrak long-distance routes that, as of the date of enactment of the IIJA, operate on a non-daily basis.

FRA may evaluate potential new Amtrak long-distance routes, with specific attention given to routes in service as of April 1971 but not continued by Amtrak. When evaluating these routes, FRA will take into consideration whether those new routes would:

- Link and serve large and small communities as part of a regional rail network.
- Advance the economic and social well-being of rural areas of the United States.
- Provide enhanced connectivity for the national long-distance passenger rail system.
- Reflect public engagement and local and regional support for restored passenger rail service.

The legislation directs FRA to recommend methods by which Amtrak could work with local communities and organizations to develop activities and programs to continuously improve public use of passenger rail service along each route.

In conducting the Study, FRA is required to consult through working groups or other forums with a wide range of stakeholders, including:

- Amtrak;
- Each state along a relevant route;
- Regional transportation planning organizations and metropolitan planning organizations; (MPOs); municipalities, and communities along those relevant routes, to be selected by FRA;
- Host railroads the tracks of which may be used, for a service;
- Organizations representing onboard Amtrak employees;
- Nonprofit organizations representing Amtrak passengers;
- Relevant regional passenger rail authorities;
- Federally recognized Indian tribes; and
- Other entities as FRA may select.

Figure 1-1. Current Amtrak Routes



Source: Amtrak (Amtrak 2022f)

Note: Some current Amtrak long-distance routes have overlapping segments, especially those that operate along the East Coast between New York City and Washington, DC (Crescent, Cardinal, Palmetto, Silver Meteor, and Silver Star) and between Washington, DC, and Florida (Palmetto, Silver Meteor, and Silver Star). The map shows Auto Train overlapping with other routes between Virginia and Florida.

At the conclusion of the Study, FRA is directed to submit a final Report to Congress that includes:

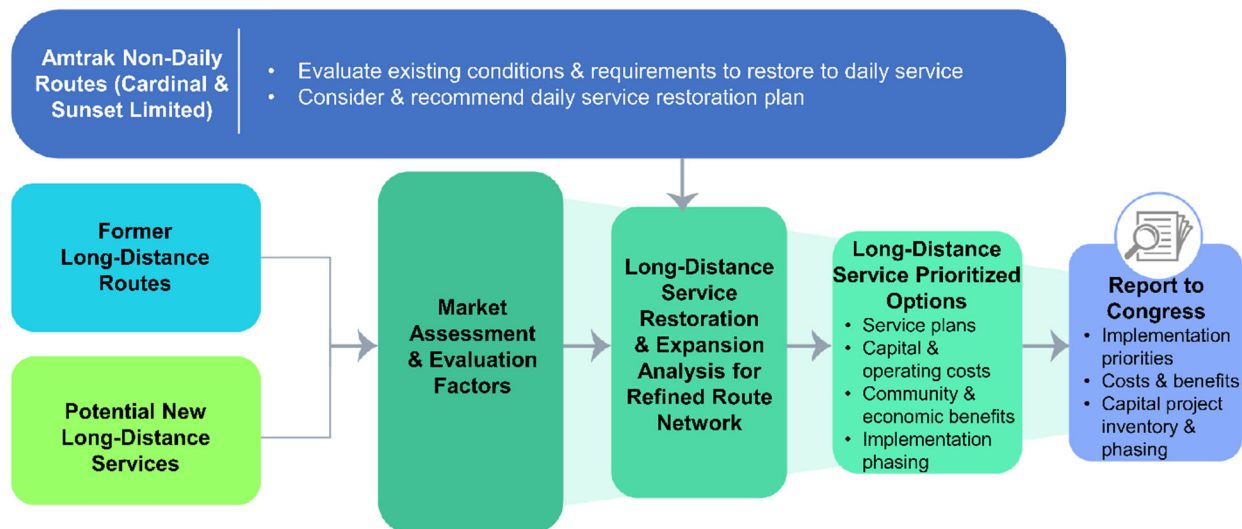
- Preferred options selected for restoring or enhancing Amtrak long-distance routes, including the reasons for selecting each option;
- Prioritized inventory of capital projects and other actions required to restore or enhance Amtrak long-distance service, including cost estimates for those projects and actions;
- Identified federal and non-federal funding sources required to restore or enhance Amtrak long-distance service;
- Estimated costs and public benefits of restoring or enhancing intercity passenger rail transportation in the region impacted for each relevant Amtrak route; and
- Any other information the Secretary determines to be appropriate.

This Interim Report to Congress presents an overview of progress and findings as of June 2023 for the Study. The information provided in this Interim Report is the foundation upon which FRA will build the recommendations in its final Report to Congress.

1.1.1 Study Approach

FRA initiated the Study with a review and analysis of discontinued and current long-distance routes and their respective travel markets. This analysis is the basis for the methods and tools that are being developed to evaluate concepts to restore or expand long-distance service. The Study will conclude with the development of preferred options for restoring or enhancing service, an inventory of capital projects, estimated costs, and potential funding sources. Once completed, these results will inform the final recommendations and implementation strategies. Figure 1-2 provides an overview of the Study approach.

Figure 1-2. Study Approach



Source: FRA 2022a

When complete, FRA believes that this Study will accomplish the following:

- Identify and describe a comprehensive vision for long-distance passenger rail service and the capital projects needed to implement that vision based on existing conditions, projections of future travel demand, and the role of passenger rail in linking communities across the country. The vision for an enhanced long-distance passenger rail network will illustrate the role of long-distance passenger rail in linking large and small communities, advancing the economic and social well-being of rural areas, and providing enhanced connectivity for a national passenger rail network.

- Identify the potential institutional arrangements, financial requirements, and planning and development activities needed to implement the vision.
- Identify internal and external strategies for Amtrak and other key stakeholders to coordinate the development and implementation of long-distance routes and services. These strategies will include identifying potential opportunities and efficiencies in Amtrak’s management and implementation of long-distance routes and services.

This Study considers existing U.S. railroad infrastructure but does not consider right-of-way or trackage abandoned by railroad owners or converted to recreational use (e.g., Rails to Trails). Amtrak primarily operates long-distance services on tracks owned by host railroads. Amtrak does own some rights-of-way including portions of the NEC; a 97.3-mile segment in southwestern Michigan; and terminal trackage in Chicago, Illinois, and New Orleans, Louisiana.

1.1.2 Other IIJA Provisions Supporting Amtrak Long-Distance Service

The following provisions of the IIJA, other than appropriations and authorizations of appropriations, support Amtrak long-distance service:

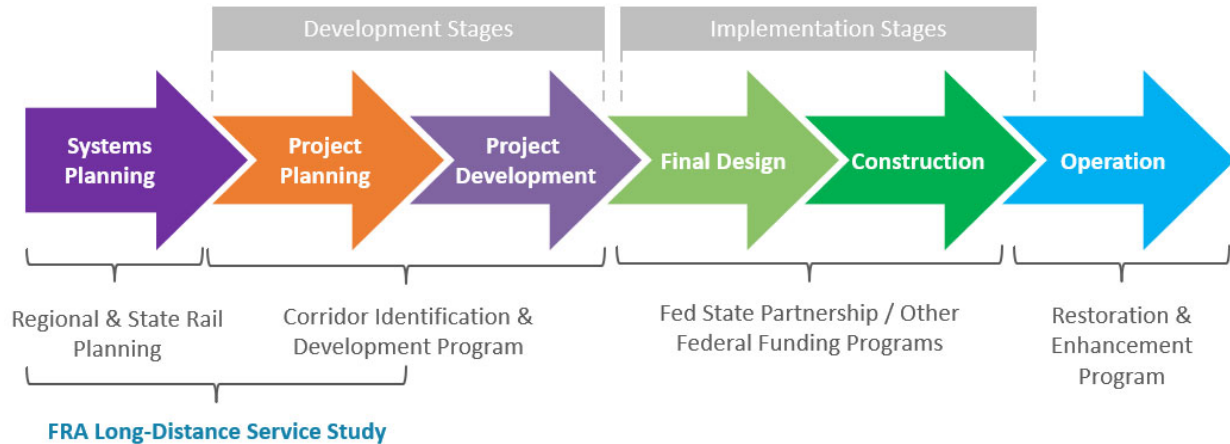
- **Section 22210(b), Protecting Amtrak Routes Through Rural Communities:** Amtrak may not discontinue, reduce the frequency of, suspend, or substantially alter the route of rail service on any segment of any long-distance route in any fiscal year in which Amtrak receives adequate federal funding for such route on the national network.
- **Section 25101(h), Corridor Identification and Development (CID) Program:** This is a planning and development program that guides intercity passenger rail development throughout the country. In this section, the term “intercity passenger rail corridor” means--
 - a new intercity passenger rail route of less than 750 miles.
 - enhancement of an existing intercity passenger rail route of less than 750 miles.
 - restoration of service over all or portions of an intercity passenger rail route formerly operated by Amtrak.
 - increase of service frequency of a long-distance intercity passenger rail route.
- **Section 24911(d)(3)(a). Federal-State Partnership for Intercity Passenger Rail Grants:** The Secretary shall reserve not less than 45 percent of the amounts appropriated for grants under this section for projects not located along the NEC, of which not less than 20 percent shall be for projects that benefit (in whole or in part) a long-distance route.
- **Section 22201(a)(4), Amtrak Findings, Mission, and Goals:** Amended to include, “Long-distance routes are valuable resources of the United States that are used by rural and urban communities.”
- **Section 22201(b)(4), Amtrak Findings, Mission, and Goals:** Amended to include, “support and maintain established long-distance routes to provide value to the Nation by serving customers throughout the United States and connecting urban and rural communities.”
- **Section 22202(a)(4)(b)(i), Composition of Amtrak’s Board of Directors:** Amended to include representation from individuals who reside in states served by a long-distance route operated by Amtrak.

1.1.3 Long-Distance Service Study in the FRA Project Lifecycle

In January 2023, FRA published *Guidance on the Development and Implementation of Railroad Capital Projects* (88 *Federal Register* 2163). This guidance assists project sponsors in developing effective capital projects and defining the stages in the railroad capital project lifecycle and project development process from inception to operation. The project lifecycle described in the guidance (Figure 1-3) has six stages, beginning with the identification of a railroad capital project during systems planning, followed by project planning and project development in the development stages, and final design and construction in the implementation stage to project completion and operation. The lines below the arrows in Figure 1-3 are passenger rail efforts and funding programs that support the identification and completion of the lifecycle stages.

The Study, while focusing on systems planning studies, also includes initial project planning efforts to identify critical early elements of any future routes. Further project planning and project development analysis will be required before initiating the implementation stages of final design and construction.

Figure 1-3. FRA Project Lifecycle



Source: FRA 2022a



1.2 Overview of Amtrak Long-Distance Passenger Rail

Amtrak was established by the Rail Passenger Service Act in 1970, which removed the requirement for U.S. railroads to provide passenger rail service and created Amtrak to fulfill that role instead. In 1971, the U.S. Department of Transportation (DOT) designated 21 city pairs between which passenger trains should operate, and Amtrak began service between those cities later that year.

Amtrak currently operates 15 long-distance routes in 39 states, primarily over rights-of-way owned by host railroads. Figure 1-1 shows Amtrak’s long-distance, state-supported, and NEC routes. Aside from Auto Train, each long-distance route has connections to other passenger rail services (NEC and state-supported routes), and some also connect to commuter rail services (rail service between cities’ urban cores and outlying communities). Auto Train is a unique nonstop service that transports passengers and their vehicles between Sanford, Florida, and Lorton, Virginia (FRA 2022b).

Although long-distance routes are over 750 miles, Coach Class trips – which average just under 450 miles – comprised 82 percent of long-distance trips in Fiscal Year (FY) 2019, while Sleeper Class comprised 15 percent of long-distance trips – the remainder, 3 percent, were Business Class, which is currently only available on the Coast Starlight and Palmetto. In FY 2019, the average Coach Class trip length (excluding Auto Train) was 446 miles (Amtrak 2022d). Eight percent of long-distance trips are across the entire route (FRA 2022b)—most trips are shorter, as reflected in the average Coach Class trip length. Long-distance routes comprise many different origin-destination pairs between and among large and small communities.

Figure 1-4. Long-Distance Ridership Characteristics (FY 2019)

Amtrak Service Class	Percent of Long-Distance Rail Ridership	Average Trip Length
 COACH	82%	446 miles
 SLEEPER	15%	1,015 miles

Source: Amtrak ridership data (Amtrak 2022d)

Chapter 3 contains more information on Amtrak’s current long-distance routes.

1.3 Study Elements Completed to Date

1.3.1 Assessment of Previously Discontinued Long-Distance Routes

FRA assessed long-distance routes discontinued by Amtrak, as well as routes over 750 miles in operation in April 1971, but not continued by Amtrak (FRA 2023a). It describes each route, including a brief history of routes and services provided pre-Amtrak (if applicable), key operating metrics associated with the most recent service along the route, and information on the route's performance and discontinuance, to the extent available. Chapter 2 contains more information on the assessment of previously discontinued long-distance routes.

1.3.2 Assessment of Current Long-Distance Services and Travel Market

FRA documented current services and travel markets, detailing performance characteristics of Amtrak's current long-distance routes, and summarizing long-distance travel markets for competing modes (automobile, air, and intercity bus) to assess market opportunities for long-distance passenger rail service (see Chapter 3).

1.3.3 Assessment of Non-daily Amtrak Long-Distance Routes

FRA evaluated the two current Amtrak long-distance routes that operate non-daily—the Cardinal and Sunset Limited—for potential daily service. Chapter 4 discusses the evaluation of daily service for these routes.

1.3.4 Stakeholder Engagement

Section 22214 of the IIJA requires that FRA consult, through working groups or other forums, with various interested groups, including Amtrak, states, regional transportation planning organizations, MPOs, municipalities, host railroads, Amtrak labor organizations, passenger organizations, and relevant regional passenger rail authorities and federally recognized Indian tribes.

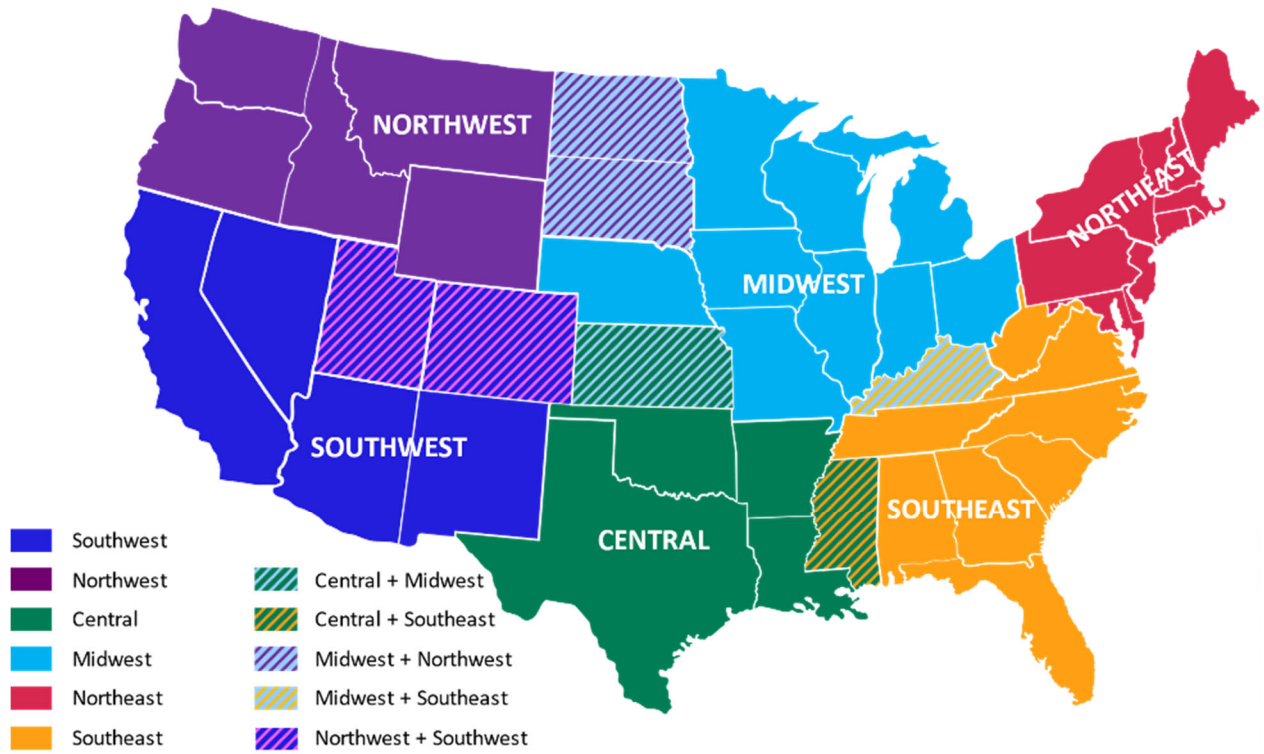
FRA developed an Agency, Stakeholder, and Public Engagement Plan in October 2022 to determine the program and schedule for engagement and communication throughout the Study. This plan identified the goals, tools, tactics, and audiences for engagement (FRA 2022a).

FRA initiated its external stakeholder engagement process with a press release and social media posts and a simultaneous launch of a Study website – fralongdistancerailstudy.org – in October 2022. To date, more than 13,000 unique visitors have engaged with the material and information on the Study website, and more than 1,200 individuals have signed up to receive Study updates via email.

Stakeholder engagement and participation across the 48 contiguous states is critical to the success of the Study. FRA divided the 48 states into six regions (Figure 1-5)—Northeast, Southeast, Central, Midwest, Northwest, and Southwest—and invited state DOTs, MPOs, passenger rail advocacy groups, federally recognized Indian tribes, host railroads, Amtrak, and others to participate in regional working groups. FRA invited representatives from states bordering two regions to participate in more than one regional working group. FRA provided stakeholders with an overview of the Study scope and schedule as well as a review of previously discontinued long-distance routes in Round 1 of the regional working groups in January and February 2023. FRA has connected with more than 250 stakeholder organizations and received more than 1,200 comments from the public through these regional working group meetings.

The second round of regional working group meetings was completed in July 2023. FRA plans to conduct two additional rounds of regional working group meetings during the Study. These four rounds of regional working groups are essential to engage and gather information from stakeholders. Concurrent with these regional working groups, FRA is also meeting with representatives from host railroads, federally recognized Indian tribes, and Amtrak labor unions (see Chapter 5).

Figure 1-5. FRA Long-Distance Service Study Regions



Source: FRA 2022a

2 Assessment of Previously Discontinued Long-Distance Routes

2.1 Summary of History and Previous Network Assessments

Prior to 1971 and the formation of Amtrak, privately owned rail carriers throughout the United States operated long-distance passenger rail service. Decades of federal and state outlays for competing road/highway and airport/airway infrastructure, combined with the taxation of private railroad infrastructure (that, by the mid-20th century, the railroads were financing entirely by themselves), created a vast imbalance between passenger rail and other transportation modes in U.S. public policy. President Nixon’s signing of the Rail Passenger Service Act in 1970 was recognition of this imbalance and of the need to preserve passenger rail service as an important part of the transportation system. The Act created the National Railroad Passenger Corporation, known as Amtrak, both to relieve existing rail operators (i.e., private carriers) of their common carrier obligation to provide passenger rail service and to create a national intercity passenger rail. Those railroads deciding to transfer their passenger rail responsibilities to Amtrak paid an amount equal to one-half their financial losses during a single year (1969) to Amtrak. In 1971, DOT identified 21 city pairs between which passenger trains should operate, and Amtrak began those services later that year.

The first examination of long-distance routes (explicitly defined in 2008 under the Passenger Rail Investment and Improvement Act [PRIIA] as routes over 750 miles, operated by Amtrak) occurred during the formation of Amtrak in 1970 as detailed in the *Final Report on the Basic National Rail Passenger System* (Volpe 1971), referred to hereinafter as “DOT’s 1970 review,” which decided which route endpoints would remain in service or be discontinued with the formation of Amtrak. Subsequently, under the Amtrak Improvement Act of 1978, the Secretary of Transportation, in cooperation with Amtrak, examined a preliminary route system that optimized future market and population requirements. DOT then re-examined Amtrak’s routes, at the request of Congress, in *A Reexamination of the Amtrak Route Structure* (DOT 1978), which considered termination of Amtrak. This proposal was rejected in hopes that DOT’s planned restructuring would improve system efficiency and operations. DOT’s re-examination found that labor and other costs involved in shutting down Amtrak and rail transportation’s energy efficiency benefits during fuel shortages in the 1970s also supported maintaining Amtrak’s operations (DOT 1978).

In 1996, Amtrak undertook a review of its route structures and looked to find opportunities to improve its financial performance (GAO 1998). The review concluded that more effective use of its locomotives and passenger cars could raise revenues by restoring daily service to three routes while closing two poorly performing routes (Desert Wind and Pioneer).

In 2008, Amtrak reauthorization under PRIIA included requirements to improve service, operations, and facilities in coordination with transportation agencies, states, and other stakeholders. Section 210 of PRIIA required Amtrak to develop performance improvement plans for existing long-distance routes, while Sections 224 and 226 required Amtrak to study reinstating service along certain discontinued routes.

Table 2-1 provides a high-level summary of selected elements of Amtrak’s history and previous network assessments related to Amtrak long-distance routes.

Table 2-1. Selected Amtrak Long-Distance Service Timeline (1970–Present)

Date	Event
1970	President Nixon signed the Rail Passenger Service Act in 1970 to preserve passenger rail service as an important part of the Nation's transportation system.
January 1971	DOT studied the basic national passenger rail network (Volpe 1971) and designated 21 city pairs between which Amtrak trains should operate.
April 1971	Amtrak was created with the purpose to implement passenger rail service in the United States until at least July 1, 1973.
May 1971	DOT and the Interstate Commerce Commission established the basic system, establishing which routes in operation prior to May 1971 were to be continued by Amtrak. "Long-distance" routes (routes over 750 miles, operated by Amtrak) were statutorily defined in 2008 by PRIIA.
1971-1977	Several additional long-distance routes over 750 miles were added to Amtrak at Congress's behest.
1978-1979	The Amtrak Improvement Act directed DOT to propose a restructured system. DOT recommended eliminating 40 percent of Amtrak route mileage. Congress adopted new criteria for route discontinuance that preserved additional routes; Amtrak route system was reduced by 20 percent.
1981	Federal operating and capital grants to Amtrak were reduced in FY 1981 to FY 1982 by \$351 million. One long-distance route was eliminated; another was truncated.
1995	Federal operating and capital grants to Amtrak were reduced in FY 1995 to FY 1996 by \$222 million. Amtrak restructuring eliminated three routes over 750 miles and reduced service frequency on others; Amtrak ridership dropped 20 percent.
1996	Amtrak internally reviewed route structures and financial performance, resulting in more effective use of equipment.
1997	Two long-distance routes, the Desert Wind and Pioneer, were eliminated.
2003-2005	Four routes were eliminated or truncated.
2005	Sunset Limited was indefinitely suspended east of New Orleans post-Hurricane Katrina.
2008	PRIIA statutorily defined "long-distance" routes as those over 750 miles in length and operated by Amtrak. PRIIA defined Amtrak's three service lines: NEC, state-supported, and long-distance services.
2009-2012	Amtrak conducted PRIIA Performance Improvement Plans (PIPs) for existing long-distance routes (Section 210) ^{a,b} and service restoration studies (Section 224) ^c for several discontinued long-distance routes.
2014	PRIIA Section 210 PIP Recommendation, Silver Meteor/Silver Star/Palmetto: added new pilot Amtrak Thruway bus service connecting Wilson, North Carolina, with eastern North Carolina points.
2015	PRIIA Section 210 PIP Recommendation, Southwest Chief: established Amtrak Thruway bus between Newton, Kansas; Wichita, Kansas; and Oklahoma City, Oklahoma.
2017	PRIIA Section 210 PIP Recommendation, City of New Orleans: implemented new station stop at Marks, Mississippi.
2017-2018	Section 11307 of the FAST Act required FRA to establish a Competitive Passenger Rail Service Pilot Program for competitive selection of eligible petitioners (in lieu of Amtrak) to operate not more than three long-distance routes, for a period of four years. If selected, the winning bidders would have received up to 90 percent of the operating subsidy Amtrak needed for that route in the prior fiscal year, as well as access to Amtrak's reservation systems, stations, and operations-related facilities. FRA established this Pilot Program, but did not receive any bids.
2019	PRIIA Section 210 PIP Recommendation, City of New Orleans: added Amtrak Thruway bus between Jackson-Meridian, Mississippi (also for the Crescent) and Jackson-Vicksburg, Mississippi.
2020-2022	Amtrak reduced most long-distance routes to three days per week, beginning October 1, 2020, due to COVID-19. Auto Train continued daily service; Sunset Limited and Cardinal remained tri-weekly. Daily service was restored in summer 2021. Long-distance service was reduced again on nine long-distance routes in January 2022 due to COVID-19; daily service was restored to all nine of these routes by fall 2022.

Source: AECOM June 2023

◦ PRRA, Section 210 studies (existing routes): City of New Orleans, Empire Builder, Southwest Chief, Capitol Limited, California Zephyr, Sunset Limited/Texas Eagle (recommending daily service), Cardinal (recommending daily service), Crescent, Lake Shore Limited, Silver Meteor/Silver Star/Palmetto.

◦ PRRA Section 210 recommendations implemented since 2009: California Zephyr customer excellence program and station ADA compliance, Sunset Limited/Texas Eagle schedule adjustments, Silver Meteor stop added at Fredericksburg, Silver Meteor/Silver Star service terminated at Quantico.

◦ PRRA, Section 224 studies (discontinued routes): Pioneer (Seattle, Washington, to Chicago, Illinois, via Denver, Colorado, and Salt Lake City/Ogden, Utah), the North Coast Hiawatha (Chicago, Illinois, to Seattle, Washington, via southern Montana), and the Gulf Coast Service (New Orleans, Louisiana, to Sanford, Florida).

2.2 Long-Distance Routes in April 1971 Not Continued by Amtrak

Four routes over 750 miles were in operation in April 1971, but not continued by Amtrak. FRA considers these four routes long-distance routes for the purposes of this Study, even though the term “long-distance” was not statutorily defined until 2008.¹ The characteristics of these four long-distance routes not continued by Amtrak when DOT identified 21 city pairs between which passenger trains should operate are summarized in Table 2-2 and shown on Figure 2-1.

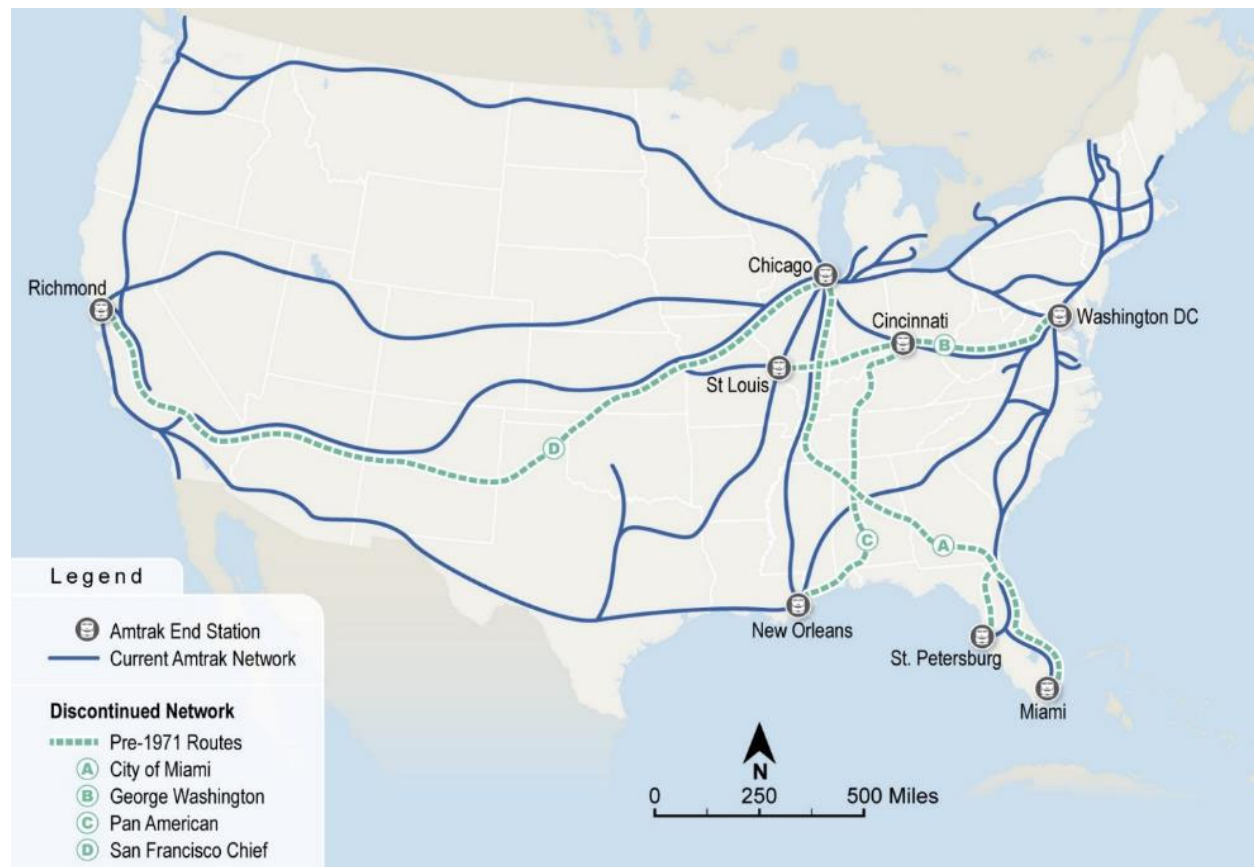
Table 2-2. List of Long-Distance Routes in 1971 Not Continued by Amtrak

Route Name	Railroad	West/ South Endpoint	East/ North Endpoint	Length (Miles)	Frequency (roundtrip)	Approximate Travel Time	On-Board Services Provided
City of Miami	Illinois Central	Chicago, Illinois	Miami, Florida St. Petersburg, Florida	1,544 1,402	3/week	33 hours	Baggage, Coach, Diner, Lounge, Sleeper
George Washington	Baltimore/ Chesapeake & Ohio	St. Louis, Missouri	Washington, DC	937	Daily	24 hours	Baggage, Coach, Diner, Lounge, Sleeper
Pan American	Louisville & Nashville	New Orleans, Louisiana	Cincinnati, Ohio	927	Daily	23 hours	Baggage, Coach, Diner, Lounge, Sleeper
San Francisco Chief	Atchison, Topeka & Santa Fe Railway	Richmond, California	Chicago, Illinois	2,537	Daily	50 hours	Baggage, Coach, Diner, Lounge, Sleeper

Source: Streamliner Schedules 2023a; American Rail source.

¹ Long-distance routes are defined by statute as passenger rail routes of more than 750 miles between endpoints operated by Amtrak (49 U.S.C. § 24102(5)).

Figure 2-1. Long-Distance Routes in April 1971 Not Continued by Amtrak



Source: Amtrak 2022f, Streamliner Schedules 2023a.

The routes passed through 22 states and served millions of people. Ridership on these routes varied, some increasing with destination events such as the 1939 New York World’s Fair or decreasing with the rise of motor vehicle and air travel. With the discontinuation of these routes, numerous cities were left without a connection to the national passenger rail network. Table 2-3 summarizes the number of stations served by each route and the number of stations that lost service after the discontinuance of these routes.

Table 2-3. States and Number of Stations Served by Long-Distance Routes in April 1971 Not Continued by Amtrak

Route Name	States Served by Route	Number of Stations Served	Number of Stations without Service After Route Discontinuance ^a
City of Miami	Illinois, Kentucky, Tennessee, Mississippi, Alabama, Georgia, Florida	50	24
George Washington	DC, Virginia, West Virginia, Kentucky, Ohio, Indiana, Illinois, Missouri	36	17
Pan American	Ohio, Kentucky, Tennessee, Alabama, Mississippi, Louisiana	30	25
San Francisco Chief	Illinois, Iowa, Missouri, Kansas, Oklahoma, Texas, New Mexico, Arizona, California	69	44

Source: Streamliner Schedules 2023a
^a Based on the 2023 Amtrak Network

2.3 Discontinued Amtrak Long-Distance Routes

This section profiles long-distance routes operated by Amtrak and since discontinued, except for those long-distance routes that Amtrak operated for only limited durations (i.e., less than a year) or that were implemented to address special circumstances. As noted in Section 2.2, the term “long-distance” was not statutorily defined until 2008, and this Study uses the statutory definition (routes over 750 miles, operated by Amtrak) when reviewing discontinued routes. The routes included in this section may partially overlap with routes currently in operation today but do not completely share the same routing as an existing long-distance route. These routes, listed by chronology of discontinuance in Table 2-4, are shown on Figure 2-2.

Table 2-4. Discontinued Amtrak Long-Distance Routes

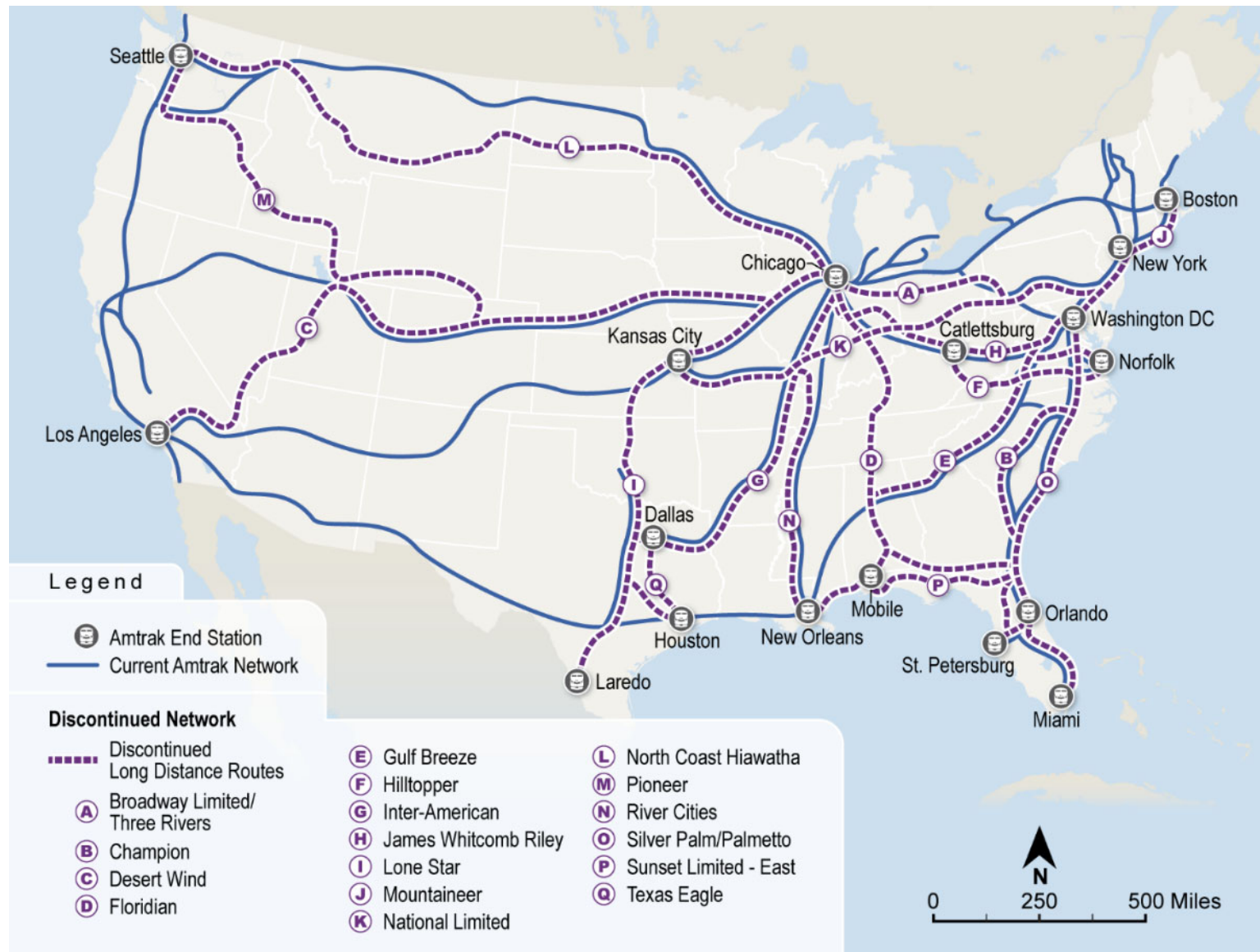
Route Name	West/South Endpoint	East/North Endpoint	Service Began	Year Discontinued	Weekly Frequency (roundtrip)	Approximate Travel Time	On-board Services Provided
James Whitcomb Riley	Chicago, Illinois	Washington, DC Newport News, Virginia	1971	1977	Daily	22-24 hours	Baggage, Coach, Diner, Lounge
Mountaineer	Chicago, Illinois	Norfolk, Virginia	1975	1977	Daily	27 hours	Baggage, Coach, Diner, Sleeper
Champion	St. Petersburg, Florida	New York, New York	1971	1979	Daily	27 hours	Baggage, Coach, Diner, Lounge, Sleeper
Floridian	St. Petersburg, Florida Miami, Florida	Chicago, Illinois	1971	1979	Daily	39 hours	Baggage, Coach, Diner, Lounge, Sleeper
Hilltopper	Ashland, Kentucky	Boston, Massachusetts	1977	1979	Daily	27 hours	Coach, Lounge
Texas Chief/Lone Star	Dallas, Texas Houston, Texas	Chicago, Illinois	1971	1979	Daily	22-28 hours	Baggage, Coach, Diner, Lounge, Sleeper
National Limited	Kansas City, Missouri	New York, New York Washington, DC	1971	1979	Daily	30 hours	Baggage, Coach, Diner, Lounge, Sleeper
North Coast Hiawatha	Seattle, Washington	Chicago, Illinois	1971	1979	3 trains/ week	48 hours	Baggage, Coach, Diner, Lounge, Sleeper
Inter-American	Laredo, Texas Houston, Texas	Chicago, Illinois	1973	1981	Daily	29-32 hours	Baggage, Coach, Lounge, Sleeper
River Cities	New Orleans, Louisiana	Kansas City, Missouri	1984	1993	Daily	22 hours	Coach
Gulf Breeze (Through Service via the Crescent)	Mobile, Alabama	New York, New York (Through service via Birmingham)	1989	1995	Daily	27 hours	Coach, Lounge (Mobile – Birmingham) Baggage, Coach, Diner, Lounge, Sleeper (Birmingham – New York)

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Route Name	West/South Endpoint	East/North Endpoint	Service Began	Year Discontinued	Weekly Frequency (roundtrip)	Approximate Travel Time	On-board Services Provided
Texas Eagle (Through Service between Dallas and Houston, Texas)	Houston, Texas	Chicago, Illinois (Through service via Dallas, Texas)	1988	1995	3 trains/week,	28 hours	Coach, Lounge, Sleeper
Desert Wind	Los Angeles, California	Chicago, Illinois	1979	1997	Daily (until 1995); 3 trains/week	51 hours	Baggage, Coach, Diner, Lounge, Sleeper
Pioneer	Seattle, Washington	Chicago, Illinois	1977	1997	Daily (until 1993); 3 trains/week	55 hours	Baggage, Coach, Diner, Sleeper
Silver Palm	Miami, Florida	New York, New York	1996	2004	Daily	29 hours	Baggage, Coach, Lounger
Sunset Limited, East	New Orleans, Louisiana	Orlando, Florida	1993	2005	3 trains/week	21 hours	Baggage, Coach, Diner, Lounge, Sleeper
Broadway Limited/ Three Rivers	Chicago, Illinois	New York, New York	1971	1995/2005	Daily	21 hours	Coach, Lounge, Sleeper

Source: Amtrak 2022f, Streamliner Schedules 2023b; American-Rails I

Figure 2-2. Discontinued Amtrak Long-Distance Routes



Source: Amtrak 2022f, Streamliner Schedules 2023b.

Service characteristics and ridership on these routes varied throughout the period of operation prior to discontinuance. The River Cities (between Kansas City and St. Louis, Missouri, and between Carbondale, Colorado, and New Orleans, Louisiana), the Gulf Breeze (between Manhattan, New York, and Birmingham, Alabama), and the Texas Eagle Through Service (between Chicago, Illinois, and Dallas, Texas) combined with others for a portion of their route. Additionally, the Desert Wind and Pioneer shared the same route as the California Zephyr west of Chicago to Salt Lake City, Utah, and Denver, Colorado, respectively, with the routes combining consists, also known as trainsets (locomotives plus rail cars), at various points in each route’s history. Table 2-5 shows the number of stations and states served by the route, and the number of stations that lost service after the discontinuance of the route. With the discontinuance of these routes, many Americans lost connections to the national passenger rail network.

Table 2-5. States and Number of Stations Served by Amtrak Discontinued Long-Distance Routes

Route Name	States Served	Number of Stations Served	Number of Stations that Lost Service After Route Discontinuance
James Whitcomb Riley	Washington, DC, Virginia, West Virginia, Kentucky, Ohio, Indiana, Illinois	21	4
Mountaineer	Virginia, West Virginia, Kentucky, Ohio, Indiana, Illinois	19	12
Champion	New York, New Jersey, Pennsylvania, Delaware, Maryland, Washington, DC, Virginia, North Carolina, South Carolina, Georgia, Florida	26	2
Floridian	Illinois, Indiana, Kentucky, Tennessee, Alabama, Georgia, Florida	34	15
Hilltopper	Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Washington, DC, Virginia, West Virginia, Kentucky	36	8
Texas Chief/Lone Star	Illinois, Iowa, Missouri, Kansas, Oklahoma, Texas	33	12
National Limited	New York, New Jersey, Washington, DC, Maryland, Pennsylvania, Ohio, Indiana, Illinois, Missouri	32	5
North Coast Hiawatha	Illinois, Wisconsin, Minnesota, North Dakota, Montana, Idaho, Washington	37	18
Inter-American	Illinois, Missouri, Arkansas, Texas	30	4
River Cities	Missouri, Illinois, Kentucky, Tennessee, Mississippi, Louisiana	27	6
Gulf Breeze (Through Service via the Crescent)	New York, New Jersey, Pennsylvania, Delaware, Maryland, Washington, DC, Virginia, North Carolina, South Carolina, Georgia, Alabama	33	7
Texas Eagle (Through Service between Dallas and Houston, Texas)	Illinois, Missouri, Arkansas, Texas	20	3

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Route Name	States Served	Number of Stations Served	Number of Stations that Lost Service After Route Discontinuance
Desert Wind	Illinois, Iowa, Nebraska, Colorado, Utah, Nevada, California, Wyoming	32	12
Pioneer	Illinois, Iowa, Nebraska, Colorado, Wyoming, Utah, Idaho, Oregon, Washington	42	19
Silver Palm	New York, New Jersey, Pennsylvania, Delaware, Maryland, Washington, DC, Virginia, North Carolina, South Carolina, Georgia, Florida	35	4
Sunset Limited, East	Florida, Alabama, Mississippi, Louisiana	19	12
Broadway Limited/ Three Rivers	New York, New Jersey, Pennsylvania, Ohio, Indiana, Illinois, Ohio	20	9

Source: timetables.org.

3 Assessment of Current Long-Distance Services and Travel Market

3.1 Current Amtrak Long-Distance Routes

Amtrak currently operates 15 long-distance routes in 39 states throughout the contiguous United States, all of which (except the Auto Train) have connections to other passenger rail services and some of which also connect to commuter rail services. The Auto Train is a unique nonstop service that transports passengers and their vehicles between two stations located in the Washington, DC, area, and Florida (FRA 2022b). Auto Train is not included in some comparisons of long-distance routes in this analysis because of how different its service is compared to other long-distance services. Amtrak Thruway bus services also connect communities to Amtrak's national passenger rail network, including its long-distance passenger rail network. Amtrak's long-distance routes offer an alternative to air, automobile, and intercity bus services. Figure 3-1 shows the long-distance passenger rail network with the NEC and state-supported routes. Table 3-1 provides an overview of Amtrak's current long-distance routes.

Figure 3-1. Amtrak's Passenger Rail Network



Data Source: Amtrak (Amtrak 2022f)

Note: Some current Amtrak long-distance routes have overlapping segments, especially those that operate along the East Coast between New York City and Washington, DC (Crescent, Cardinal, Palmetto, Silver Meteor, and Silver Star) and between Washington, DC, and Florida (Palmetto, Silver Meteor, and Silver Star). The map shows Auto Train overlapping with other routes between Virginia and Florida.

Table 3-1. Current Amtrak Long-Distance Routes

Route	Train Numbers	Route Distance (miles)	Endpoints	Frequency	Services Offered	FY 2019 Ridership
Auto Train	52, 53	855	Sanford, Florida – Lorton, Virginia	Daily	Coach Sleeper	236,041
California Zephyr	5, 6	2,438	Emeryville, California – Chicago, Illinois	Daily	Coach Sleeper	410,844
Capitol Limited	29, 30	780	Chicago, Illinois – Washington, DC	Daily	Coach Sleeper	209,578
Cardinal	50, 51	1,147	Chicago, Illinois – New York, New York	3 round trips per week	Coach Sleeper	108,935
City of New Orleans	58, 59	934	New Orleans, Louisiana – Chicago, Illinois	Daily	Coach Sleeper	235,670
Coast Starlight	11, 14	1,377	Los Angeles, California – Seattle, Washington	Daily	Coach Business Sleeper	426,029
Crescent	19, 20	1,377	New Orleans, Louisiana – New York, New York	Daily	Coach Sleeper	295,180
Empire Builder	7, 8 (to/from Seattle, Washington) 27, 28 (to/from Portland, Oregon)	2,205 (Seattle, Washington – Chicago, Illinois) 2,255 (Portland, Oregon – Chicago, Illinois)	Portland, Oregon / Seattle, Washington – Chicago, Illinois, via Spokane, Washington, where the Portland, Oregon, and Seattle, Washington, branches split	Daily	Coach Sleeper	433,372
Lake Shore Limited	48, 49 (to/from New York, New York) 448, 449 (to/from Boston, Massachusetts)	959 (Chicago, Illinois – New York, New York) 849 (Chicago, Illinois – Boston, Massachusetts)	Chicago, Illinois – New York, New York / Boston, Massachusetts, via Albany-Rensselaer, New York, where the New York City, New York, and Boston, Massachusetts, branches split	Daily	Coach Sleeper	357,682
Palmetto	89, 90	829	Savannah, Georgia – New York, New York	Daily	Coach Business	345,342
Silver Meteor	91, 92	1,389	Miami, Florida – New York, New York	Daily	Coach Sleeper	353,466
Silver Star	97, 98	1,522	Miami, Florida – New York, New York	Daily	Coach Sleeper	389,995
Southwest Chief	3, 4	2,265	Los Angeles, California – Chicago, Illinois	Daily	Coach Sleeper	338,180

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Route	Train Numbers	Route Distance (miles)	Endpoints	Frequency	Services Offered	FY 2019 Ridership
Sunset Limited	1, 2	1,995	Los Angeles, California – New Orleans, Louisiana	3 round trips per week	Coach Sleeper	92,827
Texas Eagle	21, 22 321, 322 421, 422	1,305 between San Antonio, Texas and Chicago, Illinois	Trains 21 and 22 operate between San Antonio, Texas, and Chicago, Illinois. Trains 321 and 322 operate between Chicago, Illinois, and St. Louis, Missouri. Trains 421 and 422 are through cars that operate between Los Angeles, California, and San Antonio, Texas, in combination with the Sunset Limited and with Texas Eagle Trains 21 and 22 between San Antonio, Texas, and Chicago, Illinois.	Daily	Coach Sleeper	321,694

Source: "Amtrak Route Performance Report: Year-to-Date September FY 2019" (Amtrak 2020). Latest available Amtrak schedule skeletons (Amtrak 2022g). Amtrak FY 2019 route ridership (Amtrak 2019).

3.1.1 Current Amtrak Long-Distance Service

Amtrak provides passenger rail service across the nation, serving more than 500 destinations in 46 states. It has three types of services: NEC service, provided between Boston, Massachusetts, and Washington, DC; state-supported service, provided on routes of not more than 750 miles through cost-sharing agreements with state partners; and long-distance service, which includes all routes over 750 miles nationwide. Of the 46 states in the Amtrak passenger rail network, long-distance routes operate in 39 states: 23 states are served only by long-distance routes, and 16 states are served by both long-distance routes and state-supported routes. In some of these 23 states, long-distance routes provide the only passenger rail service and access to the larger passenger rail network via connections to state-supported and other long-distance routes. In the contiguous United States, only Wyoming and South Dakota are entirely unserved by Amtrak passenger rail.

Amtrak services connect large and small communities throughout the United States. In many cases, Amtrak services are the only travel option available, particularly for otherwise underserved and/or underrepresented communities.

Although long-distance routes are over 750 miles, Coach Class comprises 82 percent of Amtrak long-distance trips, while Sleeper Class comprises 15 percent of long-distance trips – the remainder, 3 percent, are Business Class, which is only available on two Amtrak long-distance routes in 2023. In FY 2019, the average trip length across all Amtrak long-distance routes (not including Auto Train) was 446 miles for Coach Class and 1,015 miles for Sleeper Class (Amtrak 2022d). Only 8 percent of Amtrak long-distance trips are made end-to-end (FRA 2022b); most trips are shorter, as reflected in the average trip length for Coach Class.

3.1.2 Service Characteristics of Current Amtrak Long-Distance Routes

Amtrak currently operates 15 long-distance routes as listed in Table 3-2. All but two of these operate daily, with the Cardinal and Sunset Limited operating three times per week. The Auto Train operates a special service for passengers with vehicles serving two terminal stations in Sanford, Florida, and Lorton, Virginia, without intermediate stops or direct connections to other services. All routes but one, the Palmetto, run overnight and the four longest routes to the West Coast, the California Zephyr, Empire Builder, Southwest Chief, and Sunset Limited, travel for two nights.

Table 3-2. Current Amtrak Long-Distance Service Overview (2022)

Route	Endpoints	Frequency	Travel Period
Auto Train	Sanford, Florida, and Lorton, Virginia	Daily	One night
California Zephyr	Emeryville, California, and Chicago, Illinois	Daily	Two nights
Capitol Limited	Chicago, Illinois, and Washington, DC	Daily	One night
Cardinal	Chicago, Illinois, and New York City, New York, via Cincinnati, Ohio	3 trains/ week	One night
City of New Orleans	New Orleans, Louisiana, and Chicago, Illinois	Daily	One night
Coast Starlight	Los Angeles, California, and Seattle, Washington	Daily	One night
Crescent	New Orleans, Louisiana, and New York City, New York	Daily	One night
Empire Builder	Portland, Oregon/Seattle, Washington, and Chicago, Illinois	Daily	Two nights
Lake Shore Limited	Chicago, Illinois, and New York City, New York/Boston, Massachusetts, via Cleveland, Ohio, and Buffalo, New York	Daily	One night
Palmetto	Savannah, Georgia, and New York City, New York	Daily	Daytime
Silver Meteor	Miami, Florida, and New York City, New York, via Charleston, South Carolina	Daily	One night
Silver Star	Miami, Florida, and New York City, New York, via Columbia, South Carolina	Daily	One night
Southwest Chief	Los Angeles, California, and Chicago, Illinois	Daily	Two nights
Sunset Limited	Los Angeles, California, and New Orleans, Louisiana	3 times/ week	Two nights
Texas Eagle	San Antonio, Texas, and Chicago, Illinois	Daily	One night

Source: Schedule skeletons provided by Amtrak (Amtrak 2022g).

Table 3-3 lists the combinations of service—coach, business, and sleeper—that are offered on current Amtrak long-distance routes. Only two routes currently offer Business Class service: the Coast Starlight and the Palmetto, and all long-distance routes except for the Palmetto offer Sleeper Class service.

Two routes, the Empire Builder and Lake Shore Limited, operate branching service to serve multiple different end points by combining or splitting trains:

- **Empire Builder:** Separate eastbound Empire Builder trains begin in Seattle, Washington, and Portland, Oregon, and then combine in Spokane, Washington, as a single train to Chicago, Illinois, with the same pattern true in reverse for westbound departures.
- **Lake Shore Limited:** The eastbound Lake Shore Limited heads east from Chicago, Illinois, to Albany-Rensselaer, New York, where the service splits to separate trains to Boston, Massachusetts, and New York City, New York, with the same branching pattern happening in reverse for westbound trips.

Three times per week, the Texas Eagle out of Chicago, Illinois, heading south switches at least one coach and one sleeper car to the Sunset Limited in San Antonio, Texas, which then continues to Los Angeles, California. The same coach switching occurs in reverse for the northbound trip.

Table 3-4 shows the number of Amtrak connecting services available by route and type of service in FY 2019. Routes operating in California had higher numbers of Amtrak Thruway bus connections via a more robust “California Thruway” network. Auto Train does not offer any direct Amtrak connections from its terminal stations.

The NEC and various commuter rail services also provide connections to the Amtrak long-distance network. Table 3-4 does not present long-distance route connections to the NEC or commuter rail service, which include connections in Boston, Massachusetts; New York City, New York; Philadelphia, Pennsylvania; Washington,

DC; Chicago, Illinois; Denver, Colorado; Seattle, Washington; Portland, Oregon; San Jose, California; Los Angeles, California; and Dallas/Fort Worth, Texas.

Table 3-3. Amtrak Long-Distance Service Characteristics by Route (2022)

Route	Train Numbers	Route Length (miles)	Schedule Run Time (hh:mm)	Number of Stations	Types of Tickets Offered
Auto Train	52, 53	855	16:59	2	Coach, Sleeper, Vehicle
California Zephyr	5, 6	2,430	51:40	35	Coach, Sleeper
Capitol Limited	29, 30	780	17:25	16	Coach, Sleeper
Cardinal	50, 51	1,147	27:33	32	Coach, Sleeper
City of New Orleans	58, 59	934	19:14	20	Coach, Sleeper
Coast Starlight	11, 14	1,361	33:46	30	Coach, Business, Sleeper
Crescent	19, 20	1,377	31:59	33	Coach, Sleeper
Empire Builder	7/27, 8/28	2,583	54:20	45	Coach, Sleeper
Lake Shore Limited	48/448, 49/449	1,159	24:48	22	Coach, Sleeper
Palmetto	89, 90	829	15:36	25	Coach, Business
Silver Meteor	91, 92	1,388	27:08	33	Coach, Sleeper
Silver Star	97, 98	1,510	31:30	37	Coach, Sleeper
Southwest Chief	3, 4	2,264	42:55	32	Coach, Sleeper
Sunset Limited	1, 2	1,994	45:40	22	Coach, Sleeper
Texas Eagle	21, 22	1,305	30:44	29	Coach, Sleeper

Source: Schedule skeletons provided by Amtrak (Amtrak 2022g).

Table 3-4. Number of Connections from Amtrak Long-Distance Routes to Other Amtrak Services (Long-Distance, State-Supported, and Amtrak Thruway Bus) (2019)

Route (Connecting from)	Long-Distance	State-Supported	Thruway Services	Thruway Connections	Total	Stations
Auto Train	--	--	--	--	--	2
California Zephyr	8	9	8	21	38	35
Capitol Limited	11	11	5	11	33	16
Cardinal	11	16	5	7	34	32
City of New Orleans	9	7	3	10	26	20
Coast Starlight	4	4	9	28	36	30
Crescent	8	10	5	8	26	33
Empire Builder	8	8	16	31	47	45
Lake Shore Limited	11	17	10	18	46	22
Palmetto	6	9	4	7	22	25
Silver Meteor	6	9	7	7	22	33
Silver Star	6	10	6	6	22	37
Southwest Chief	9	9	9	23	41	32
Sunset Limited	5	1	4	9	15	22
Texas Eagle	8	9	7	15	32	29

Source: Amtrak FY 2019 transfers data (Amtrak 2022c).

3.1.3 Amtrak Long-Distance Route Performance

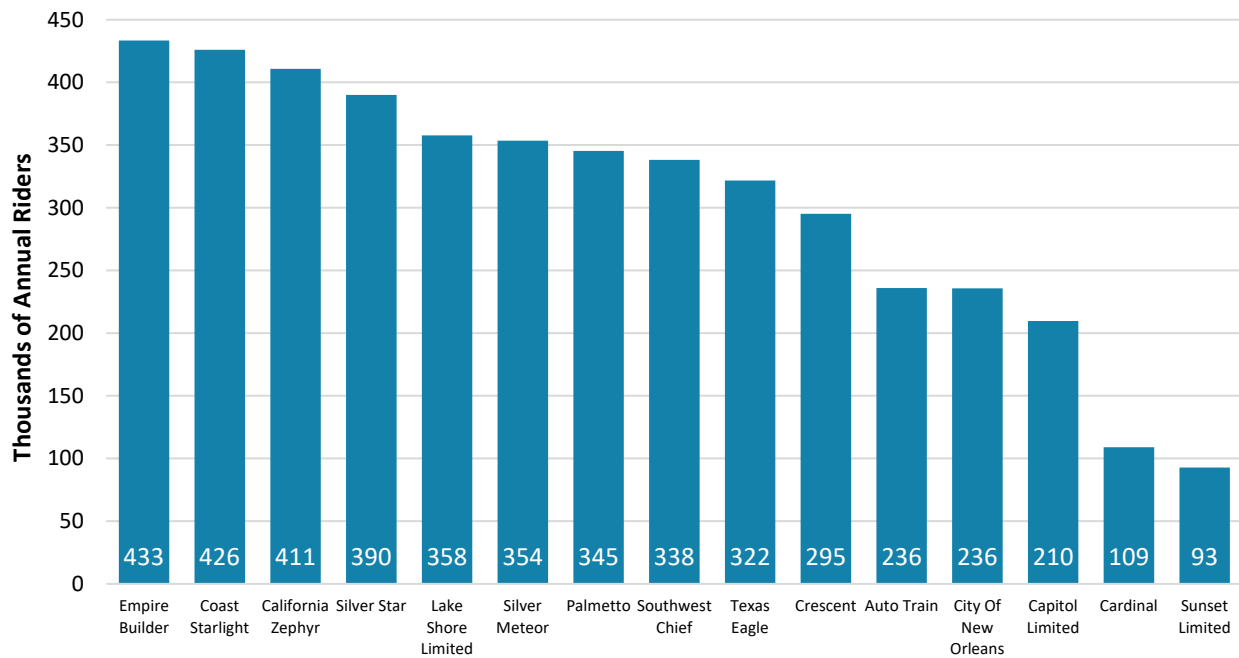
The following sections present information on route performance in terms of ridership, fares and trip types, customer satisfaction, customer on-time performance (OTP), and financial performance. Unless otherwise noted, the Auto Train is excluded. The Auto Train meets the statutory definition of long-distance passenger rail service (over 750 miles in length and offering service between endpoints that Amtrak operates). However, its passenger operations differ from other Amtrak long-distance routes in several substantial ways; the Auto Train

only tickets passengers with vehicles, only serves two stations (Sanford, Florida, and Lorton, Virginia), and has no direct Amtrak connections at the two terminal stations. The Auto Train is the only Amtrak long-distance route that provides transportation for vehicles, such as cars, vans, motorcycles, SUVs, or recreational vehicles. All other Amtrak long-distance routes offer connections to other Amtrak service at some stations and serve 16 or more stations.

3.1.3.1 Ridership and Passenger-Miles

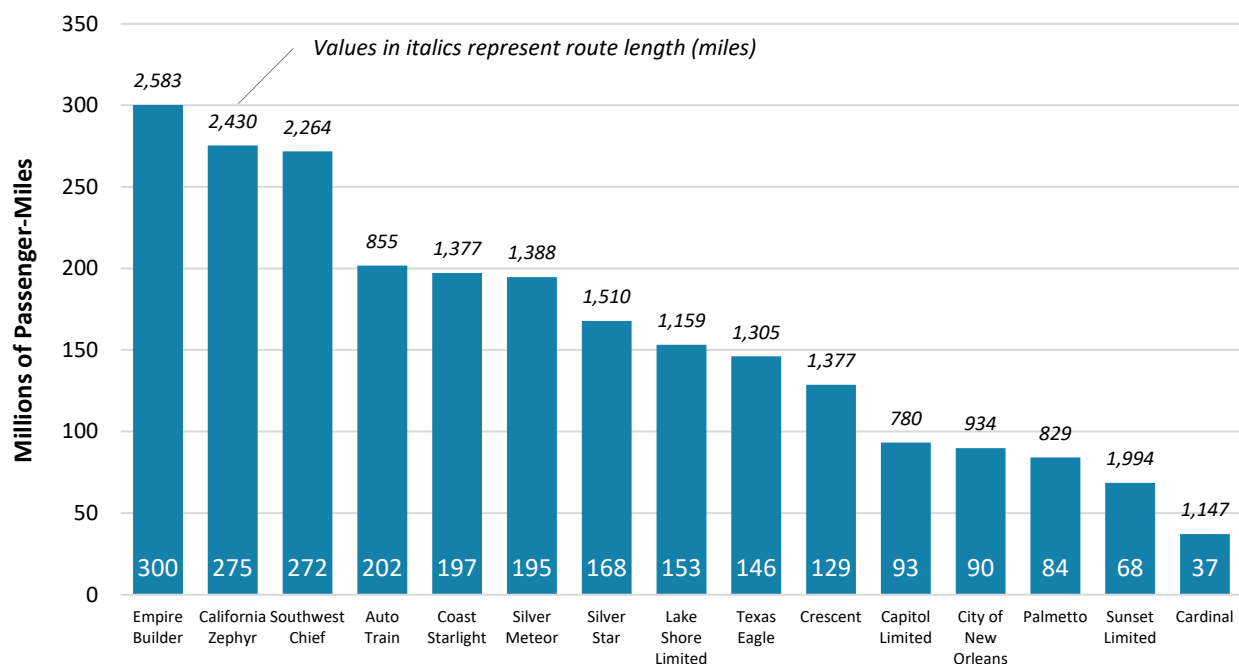
The highest ridership among Amtrak long-distance routes is on the Empire Builder, Coast Starlight, and California Zephyr, as shown on Figure 3-2. The Empire Builder, California Zephyr, and Southwest Chief have the highest number of route miles and annual passenger-miles. Figure 3-3 shows the relationship between route length and passenger-miles, where longer routes tend to result in greater passenger-miles overall. The routes with the lowest number of annual passenger-miles, the Cardinal and Sunset Limited, are the only nondaily long-distance routes. The Palmetto is near the middle for ridership, but near the bottom for total annual passenger-miles due to its relatively short route length compared to some other Amtrak long-distance routes. While the Auto Train is in the lower half for ridership, it is nearer the top in passenger-miles because passengers travel the full length of the route since there are no intermediate stations.

Figure 3-2. Annual Ridership (Thousands) by Amtrak Long-Distance Route (2019)



Source: Amtrak, FY 2019. Data on boardings and average trip distance by route, station, and service class.
 Note: Cardinal and Sunset Limited both operate three times per week; all others are daily.

Figure 3-3. Passenger-Miles (Millions) by Amtrak Long-Distance Route (2019)



Source: Amtrak, FY 2019. Data on boardings and average trip distance by route, station, and service class.
 Note: For both Lake Shore Limited and Empire Builder, total route miles includes both branches. Total route length (miles) in Italics.

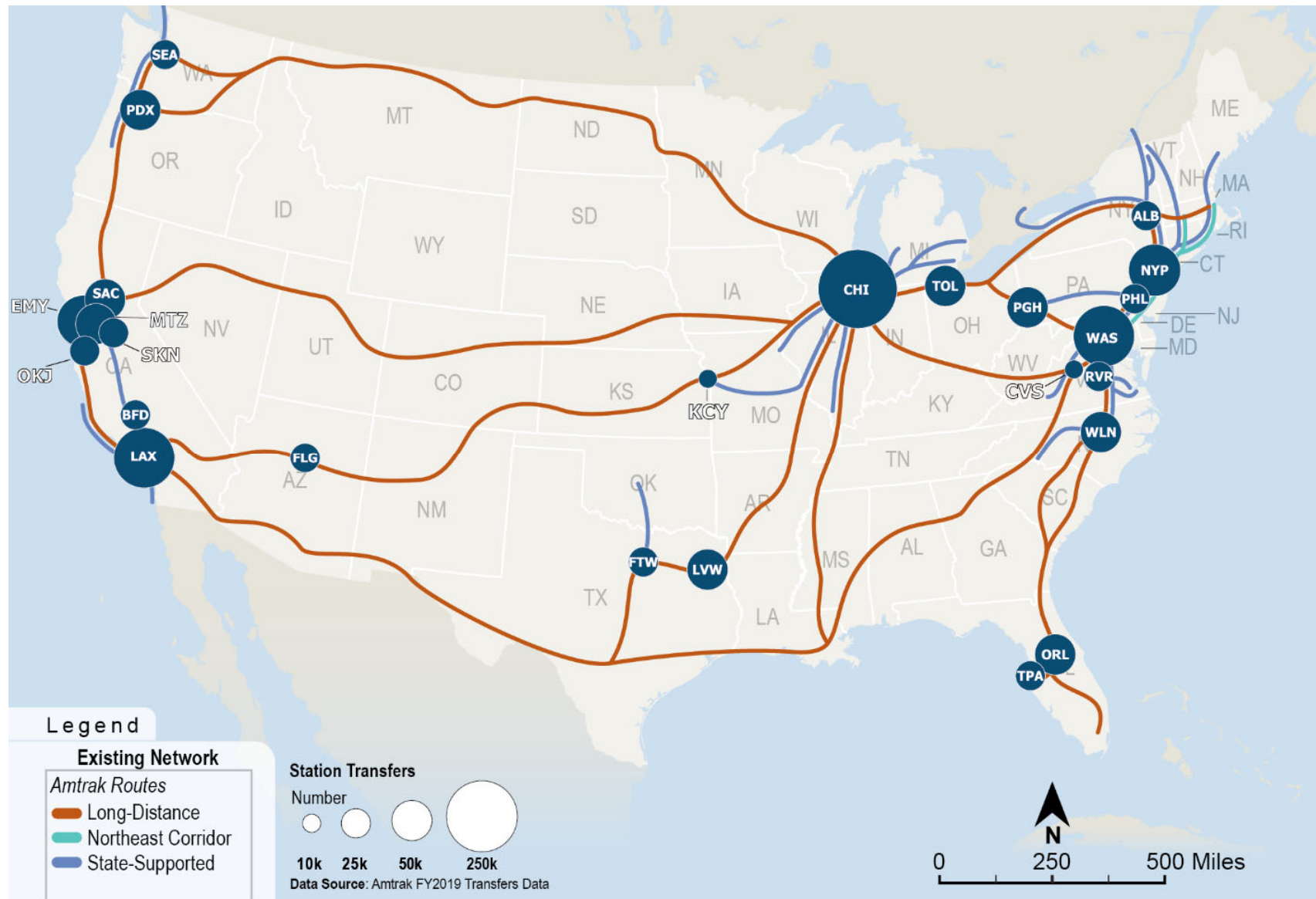
3.1.3.2 Passenger Transfers

About 20 percent of Amtrak long-distance passengers transferred to another Amtrak service in 2019 (Amtrak 2022b). Figure 3-4 shows the top 25 passenger rail stations where long-distance passengers made transfers in 2019 and the volume of passengers transferring between other Amtrak services (other long-distance routes, NEC services, state-supported services, and Amtrak Thruway bus services). Eight Amtrak long-distance routes and many Amtrak state-supported routes terminate in Chicago, Illinois (a key east-west transfer point for long-distance markets), accounting for 27 percent of Amtrak long-distance passenger transfers. Non-terminal stations (stations not found at the ends of long-distance routes) with high volumes of transfers in 2019 (including Amtrak Thruway bus service transfers) include the following (Amtrak 2022b):

- Sacramento, California (approximately 20,000 annual transfers).
- Pittsburgh, Pennsylvania (approximately 19,000 annual transfers).
- Longview, Texas (approximately 18,000 annual transfers).
- Toledo, Ohio (approximately 16,000 annual transfers).

Amtrak Thruway bus service accounted for 5 percent of Amtrak long-distance transfers in 2019, providing service to communities otherwise unserved by the passenger rail network (Amtrak 2022b).

Figure 3-4. Amtrak Long-Distance Passenger Transfers: Top 25 Stations (2019)



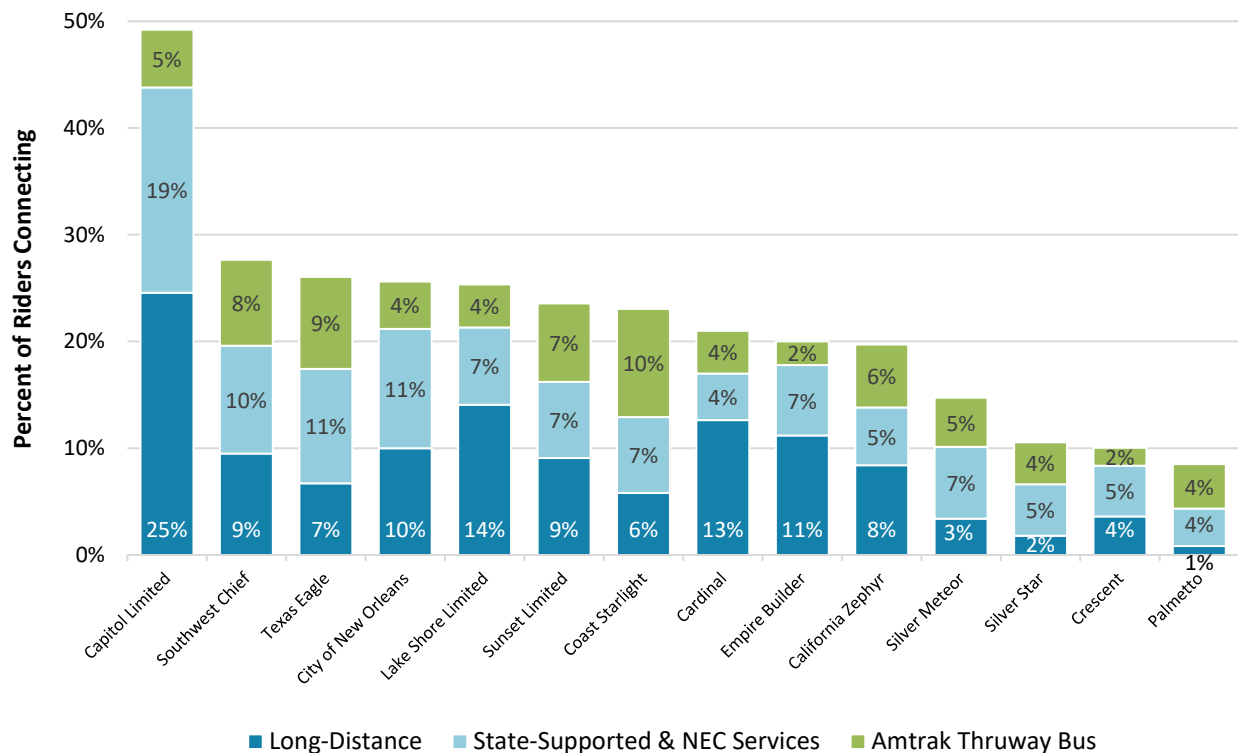
Source: Amtrak FY 2019 Transfers Data (Amtrak 2022c).

Figure 3-5 shows the share of passengers transferring to another Amtrak service by Amtrak long-distance route and the type of service to which they transfer. On the Capitol Limited, nearly 50 percent of passengers transfer to another Amtrak service (Amtrak 2022b). The top three Amtrak routes to which Capitol Limited passengers transfer are the following:

- Pennsylvanian in Pittsburgh, Pennsylvania (14 percent of Capitol Limited passengers transferring).
- Southwest Chief in Chicago, Illinois (11 percent of passengers transferring).
- Empire Builder in Chicago, Illinois (11 percent of passengers transferring).

Long-distance routes with the fewest transferring passengers are routes that operate partly on the NEC. These routes are the Palmetto, Crescent, Silver Star, Silver Meteor, and Cardinal. The Palmetto, which operates between New York, New York, and Savannah, Georgia, is the only daytime-only long-distance route and offers intra-NEC sales in both directions, with service scheduled in coordination with other daytime trains on the NEC between New York City, New York, and Washington, DC. Other Amtrak long-distance routes that operate on the NEC have limited intra-NEC ticket sales.

Figure 3-5. Percentage of Amtrak Long-Distance Passengers Transferring to Other Amtrak Services by Long-Distance Route and Transfer Type (2019)



Source: Amtrak, FY 2019. Data on Amtrak long-distance passenger rail connections by route.
 Note: Does not include Auto Train.

The Coast Starlight has the highest share of its passengers transferring to Amtrak Thruway services, likely due to robust Amtrak Thruway bus service available in California. Table 3-5 provides a list of the top Amtrak passenger rail routes to which Amtrak long-distance passengers transfer, sorted from highest to lowest by the number of transferring passengers in 2019.

Table 3-5. Top Amtrak Routes for Passengers Transferring from Long-Distance Routes (2019)

Rank	Amtrak Route	Passengers Transferring from Amtrak Long-Distance Routes
1	Capitol Limited	69,899
2	Northeast Regional	53,473
3	Empire Builder	53,055
4	Lake Shore Limited	52,333
5	Southwest Chief	42,624
6	California Zephyr	41,806
7	Pacific Surfliner	39,845
8	San Joaquins	36,762
9	Hiawatha	31,929
10	Coast Starlight	30,293
11	Pennsylvanian	29,567
12	Wolverine	23,073
13	Texas Eagle	21,642

Source: Amtrak FY 2019 data on Amtrak long-distance passenger rail transfers by route (Amtrak 2022b).

3.1.3.3 Passenger Loads and Load Factors

The passenger load factor is a ratio of the number of passengers to seats on a train. Average passenger load factors along each Amtrak long-distance route were calculated by dividing the annual passenger load between two stations by the annual capacity for each train between those two stations. Figure 3-6 shows the passenger load factor on Amtrak long-distance routes for combined Coach and Business Class trips. Business Class comprises about 3 percent of Amtrak long-distance trips, while Coach Class comprises 82 percent of Amtrak long-distance trips (Amtrak 2022d). Passenger load factor was calculated using Amtrak FY 2019 data on each train’s consist (number and type of passenger cars) to determine train capacity and Amtrak 2019 data on passenger train boardings and departures at each station to determine each train’s passenger load between stations along the route. To improve the visual comparison of the passenger load factor in Figure 3-6, segments of routes with similar passenger load factors were grouped for a segment average passenger load factor.

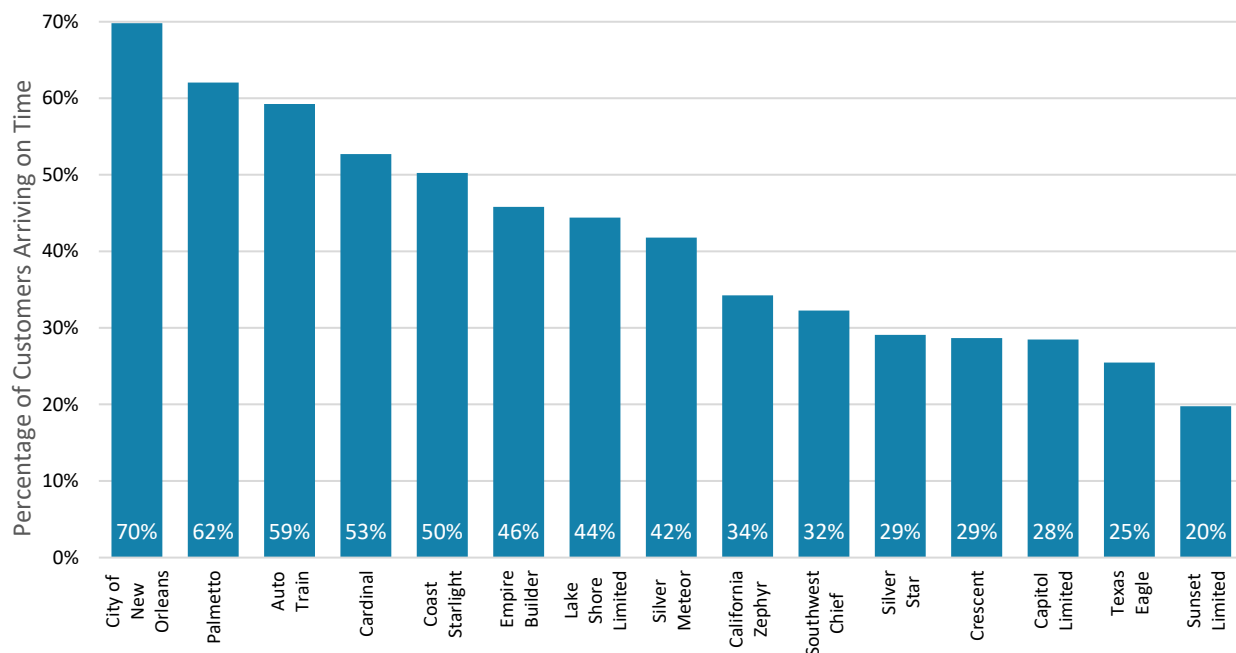
Generally, passenger load factors are highest near Chicago, Illinois, on the Southwest Chief between Los Angeles, California, and Albuquerque, New Mexico, along much of the Capitol Limited route, and on parts of routes that follow the East and West Coasts. Lower passenger load factors are on the Crescent between New Orleans, Louisiana, and Atlanta, Georgia; on the California Zephyr between Reno, Nevada, and Denver, Colorado; and on the Sunset Limited east of Tucson, Arizona (which currently operates three round trips per week).

3.1.3.4 Customer On-Time Performance

Customer OTP is measured as the percentage of customers on a passenger train who arrive at their detraining point no later than 15 minutes after their published scheduled arrival time (49 CFR Part 273). Customer OTP is measured by both route and train. For example, City of New Orleans customer OTP is measured by route, but also by its northbound train (Train 58) and its southbound train (Train 59).

In FY 2019, 42 percent of Amtrak long-distance customers arrived at their destination on time. The best performing Amtrak long-distance route was the City of New Orleans with 70 percent of customers arriving on time. In the same period, 20 percent of Sunset Limited customers arrived on time, the worst performing Amtrak long-distance route (Amtrak 2022a). Customer OTP for all Amtrak long-distance routes in FY 2019 is shown on Figure 3-7.

Figure 3-7. Customer On-Time Performance by Amtrak Long-Distance Route (2019)



Source: Amtrak 2022a.

Note: Percentage of customers arriving at their destination no later than 15 minutes after the published scheduled arrival time, by route.

3.1.3.5 Financial Performance by Amtrak Long-Distance Route

Table 3-6 shows the financial performance of each long-distance route in FY 2019. The adjusted operating earnings are negative, calculated from the total revenues minus the total costs.

The Amtrak long-distance routes with the highest annual ridership are the Empire Builder, Coast Starlight, and California Zephyr. The Amtrak long-distance routes with the greatest adjusted operating earnings (revenue minus costs) are the Auto Train, Palmetto, Cardinal, City of New Orleans, and Capitol Limited. Amtrak long-distance routes with the greatest cost recovery ratio are the Auto Train, Palmetto, Silver Meteor, and Silver Star.

Table 3-6. Annual Financial Performance by Amtrak Long-Distance Route (2019)

Route	Annual Riders (thousands)	Adjusted Operating Earnings [a] (millions)	Cost Recovery Ratio [b]	Cost per Seat Mile	Revenue per Seat Mile	Cost per Passenger-Mile	Revenue per Passenger-Mile
Auto Train	236	-\$7	92%	\$0.24	\$0.22	\$0.44	\$0.40
California Zephyr	410	-\$57	50%	\$0.22	\$0.11	\$0.40	\$0.20
Capitol Limited	210	-\$24	46%	\$0.31	\$0.14	\$0.48	\$0.22
Cardinal	110	-\$16	34%	\$0.32	\$0.11	\$0.65	\$0.22
City of New Orleans	240	-\$23	44%	\$0.24	\$0.11	\$0.47	\$0.21
Coast Starlight	430	-\$43	52%	\$0.26	\$0.13	\$0.45	\$0.23
Crescent	300	-\$36	48%	\$0.26	\$0.13	\$0.54	\$0.26
Empire Builder	430	-\$51	53%	\$0.19	\$0.10	\$0.36	\$0.19
Lake Shore Limited	360	-\$32	49%	\$0.20	\$0.10	\$0.40	\$0.20
Palmetto	350	-\$7	79%	\$0.20	\$0.16	\$0.42	\$0.33
Silver Meteor	350	-\$35	55%	\$0.23	\$0.13	\$0.39	\$0.21
Silver Star	390	-\$30	54%	\$0.21	\$0.11	\$0.38	\$0.20
Southwest Chief	340	-\$56	46%	\$0.24	\$0.11	\$0.38	\$0.17
Sunset Limited	90	-\$32	28%	\$0.28	\$0.08	\$0.63	\$0.17
Texas Eagle	320	-\$29	46%	\$0.23	\$0.11	\$0.37	\$0.17

Source: Amtrak Route Performance Report: Year-To-Date September FY 2019 (Amtrak 2020).

[a] Adjusted operating earnings are total revenues minus total costs.

[b] Cost recovery ratio is total revenue divided by total costs.

Total costs allocated to a route are primarily driven by the following operating statistics:

- **Ridership:** The number of passengers.
- **Total Train Miles:** The cumulative number of miles traveled by each train.
- **Frequency:** The number of train trips providing service over a period of time.
- **Labor Hours:** The number of labor hours for station staff, on-board services staff, train conductors, and train engineers.

3.2 Travel Markets

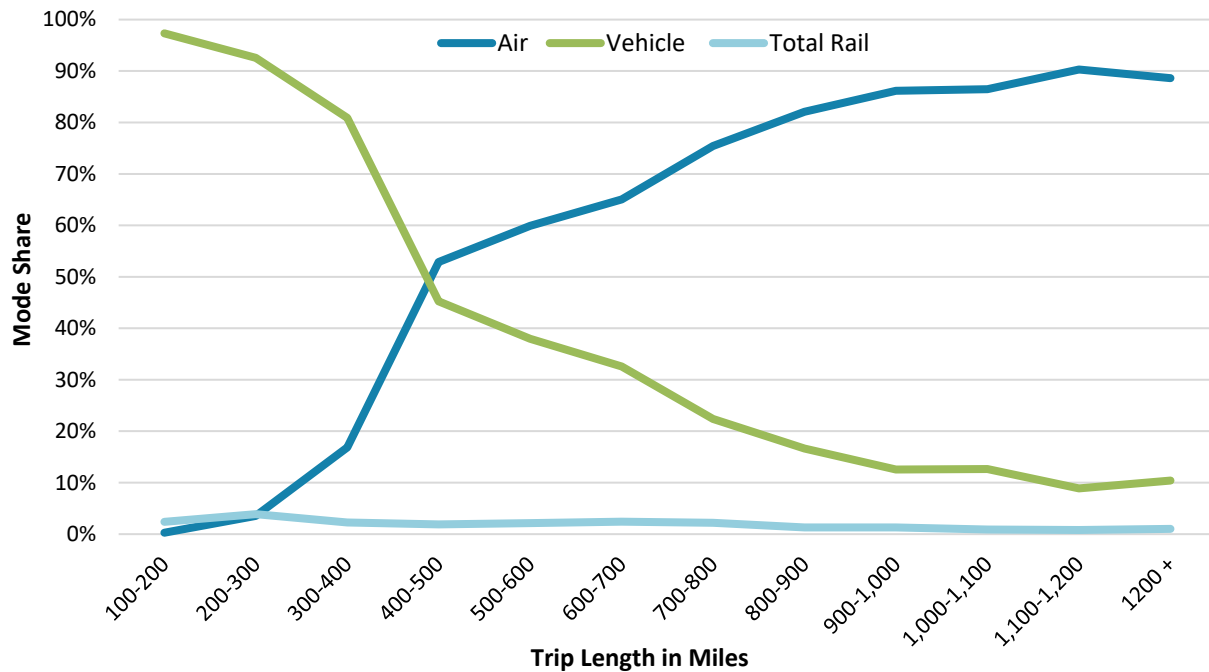
3.2.1 Trends in Markets for Competitive Modes

Several factors play into trip mode choice, including income, trip length, travel party size, and trip cost. Competitive transportation modes for long-distance trip-making include automobile, air, intercity bus, and passenger rail. Understanding long-distance modes other than passenger rail helps to better establish the base condition of total trip-making, of which long-distance passenger rail is a part. An expanded national passenger rail network could give Americans greater mobility and more options to complete millions of long-distance trips

currently made on other modes and may induce travel by Americans who otherwise would not make a given trip for various reasons, including Americans who cannot or will not drive or fly.

Trip length is a key determinant of mode choice and of the dominant competitor to long-distance passenger rail service. Figure 3-8 shows travel mode choice in 2019 in areas served by the current Amtrak long-distance routes. Vehicle travel (including automobiles and intercity buses) dominates long-distance travel for trip lengths of up to 500 miles, after which air travel dominates. Automobile mode share falls to about 10 percent of trips that are over 1,000 miles in length.

Figure 3-8. Travel Modes Competing With Long-Distance Passenger Rail, Mode Share by Trip Length (2019)

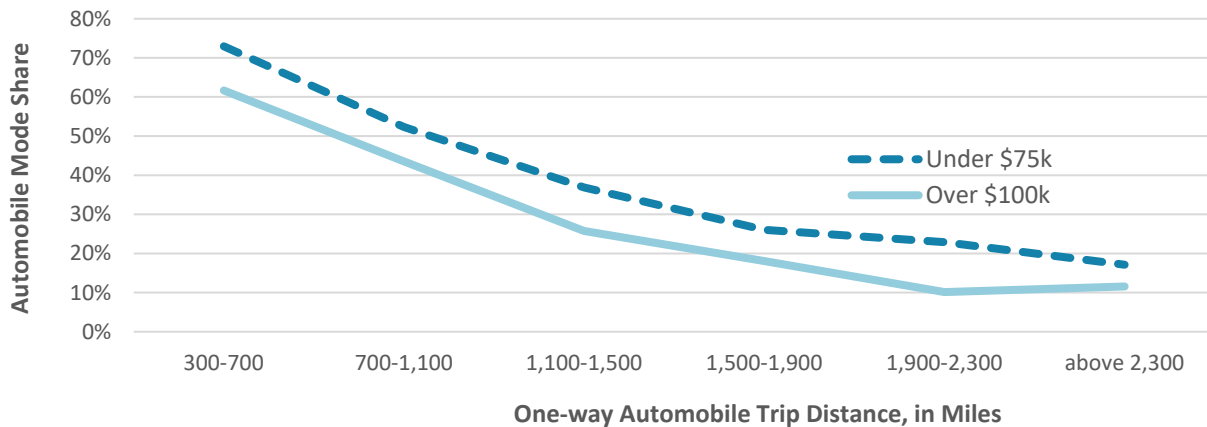


Source: Long-Distance Service Study Current Route Systemwide Trip Table (Amtrak 2023d, BTS 2023, FHWA 2022a).

Figure 3-9 and Figure 3-10 show automobile mode share by trip length for different income groups and travel party sizes, respectively. Figure 3-11 shows passenger roundtrip costs based on trip length, travel party size, and mode.

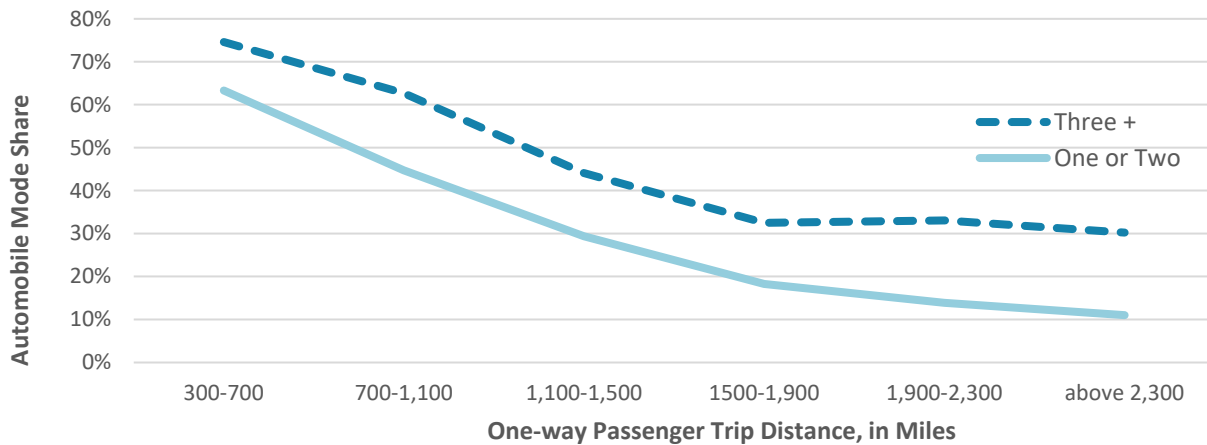
Income level can affect a traveler’s mode choice. Figure 3-9 shows that as distance increases, the high-income group (household income over \$100,000) decrease automobile use sharply, as they gravitate towards air travel. With increasing distance, the low-income group (household income under \$75,000) shows a higher dependence on the automobile compared to the high-income group. This pattern of selection of the private automobile over passenger rail could be a major consideration in the propensity of the low-income group to purchase tickets for long-distance passenger rail. Transportation Research Board (TRB) Special Report 320 showed that, when the lowest income group (household income under \$25,000) was examined, the choice of the automobile for long trips was even more pronounced, with higher overall differences compared with the high-income group (TRB 2016). Income may combine with travel party size to influence the low-income groups in the choice of automobile over passenger rail.

Figure 3-9. Effect of Income on Automobile Share by Trip Length Based on 2017 Survey Data



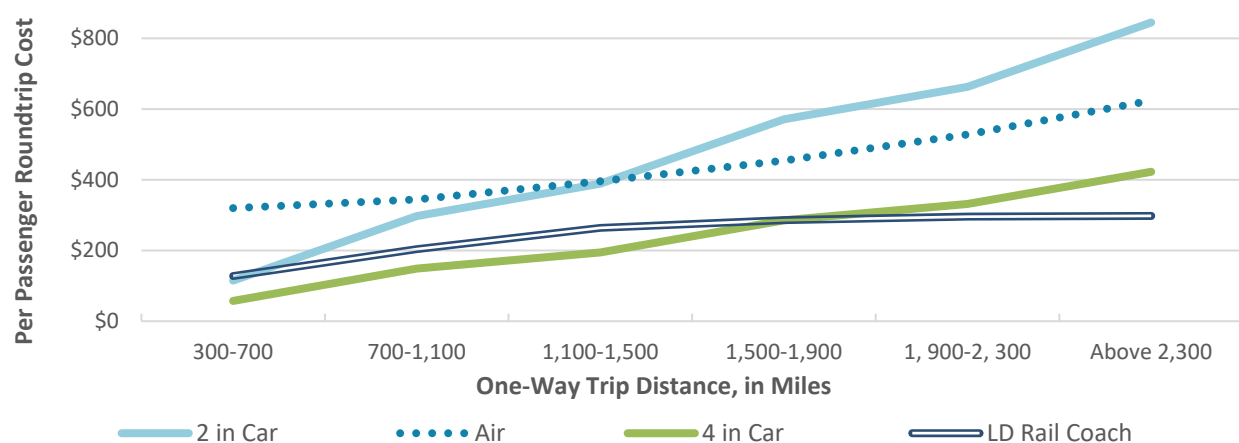
Source: Airport Cooperative Research Program (ACRP) Report 204 (TRB 2019).

Figure 3-10. Effect of Travel Party Size on Automobile Mode Share by Trip Length



Source: ACRP Report 204 (TRB 2019).

Figure 3-11. Effect of Party Size on Per-Passenger Costs (2017 Auto & 2019 Air/Rail) by Trip Length



Source: Updated from ACRP Research Report 204 (TRB 2019).

Note: Auto costs are based on 2017 survey data (TRB 2019). Passenger rail costs are based on a Coach Class ticket in 2023 for Amtrak long-distance passenger rail (Amtrak 2023g). Air costs are based on 2019 BTS DB1B Market data (BTS 2023).

3.2.2 Market Opportunities for Long-Distance Services

Amtrak’s passenger rail network connects communities of varying sizes throughout the contiguous United States. In many of these communities, Amtrak long-distance passenger rail is the only passenger rail service available. Overall, 18 of the top 50 metropolitan statistical areas (MSAs) are served only by Amtrak long-distance passenger rail, and 4 of the top 50 MSAs are not served by any Amtrak passenger rail service. MSAs are core based statistical areas associated with at least one urban area that has a population of at least 50,000 (U.S. Census Bureau 2022). Table 3-7 summarizes Amtrak service levels for the top 50 MSAs.

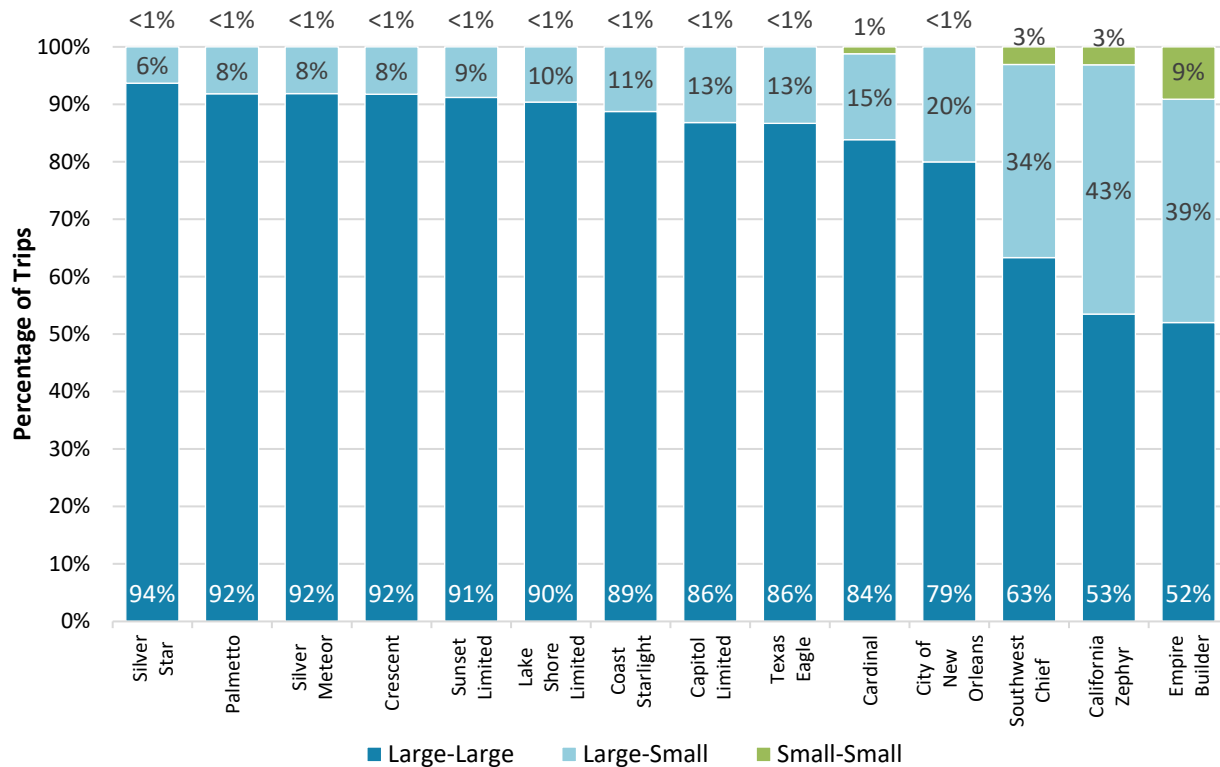
Table 3-7. Characteristics of the Top 50 MSAs Based on Amtrak Service Levels

	Not Served by Amtrak Rail	Served only by Long-Distance (3x per week)	Served only by Long-Distance (Daily)	Served by Other Amtrak Rail Including Long-Distance
Number of MSAs	4	4	14	28
Population	7.7 million	16.3 million	38.2 million	120.6 million
Top 4 Largest MSAs	Las Vegas, Nevada Columbus, Ohio Nashville, Tennessee Louisville, Kentucky	Houston, Texas Phoenix, Arizona Cincinnati, Ohio Indianapolis, Indiana	Miami, Florida Atlanta, Georgia Minneapolis, Minnesota Tampa, Florida	New York City, New York Los Angeles, California Chicago, Illinois Dallas, Texas

Source: 2020 Decennial Census (U.S. Census Bureau 2020) and Amtrak service availability in the top 50 MSAs (Amtrak 2023f). Note: Phoenix, Arizona, while often considered as not being served by Amtrak, has service within its MSA at Maricopa, Arizona.

Amtrak long-distance routes serve small communities (defined here as a community served by an Amtrak station located outside an MSA) and connect these communities to large metropolitan areas (a community served by an Amtrak station located within an MSA). Figure 3-12 shows how Amtrak long-distance routes serve large metropolitan areas and small communities. For example, nearly 10 percent of trips on the Empire Builder are made between small communities. On each of the three longest routes (the Empire Builder, California Zephyr, and Southwest Chief), more than one-third of trips are to or from a small community.

Figure 3-12. Percentage of Trips by Station Location Type (2019)



Source: Amtrak FY 2019 ridership data (Amtrak 2022e).

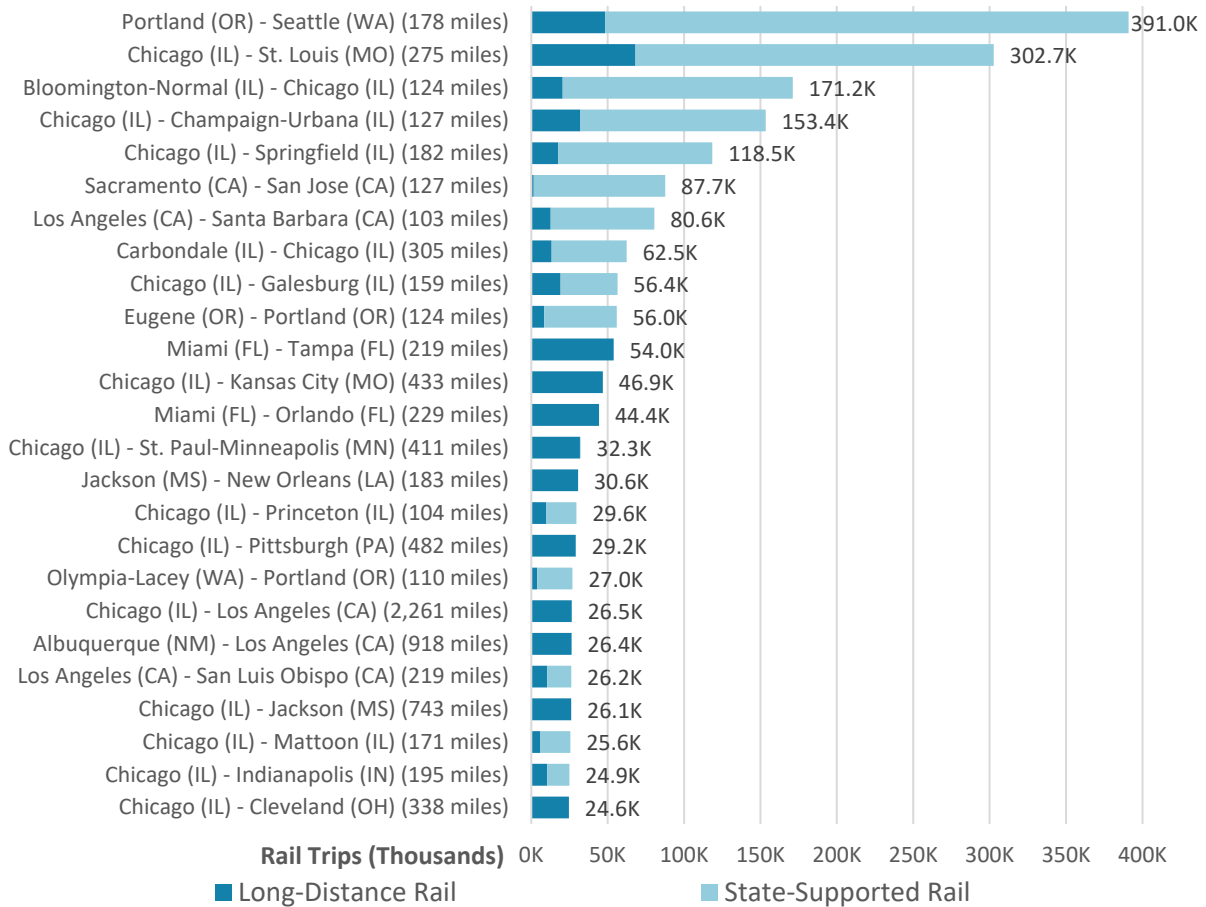
Note: Does not include Auto Train. For the station location type, "Large" refers to a community served by a station in an MSA, and "Small" refers to a community served by a station outside an MSA.

3.2.2.1 Top City Pairs by Total Annual Passenger Rail Trips

Figure 3-13 presents the top 25 city pairs along current Amtrak long-distance routes by total annual passenger rail trips (excluding trips on the NEC but including state-supported route trips for city pairs also served by state-supported routes). Many of the top city pairs by total rail trips include significant ridership from Amtrak's state-supported routes. The top city pairs served exclusively by long-distance rail are the following:

- Miami, Florida and Tampa, Florida (Silver Star).
- Chicago, Illinois and Kansas City, Missouri (Southwest Chief).
- Miami, Florida and Orlando, Florida (Silver Meteor and Silver Star).
- Chicago, Illinois and Minneapolis, Minnesota (Empire Builder).
- Jackson, Mississippi and New Orleans, Louisiana (City of New Orleans).
- Chicago, Illinois and Pittsburgh, Pennsylvania (Capitol Limited).
- Chicago, Illinois and Cleveland, Ohio (Capitol Limited and Lake Shore Limited).

Figure 3-13. Top 25 City Pairs by Total Annual Passenger Rail Trips (2019) (Trips Over 100 Miles)

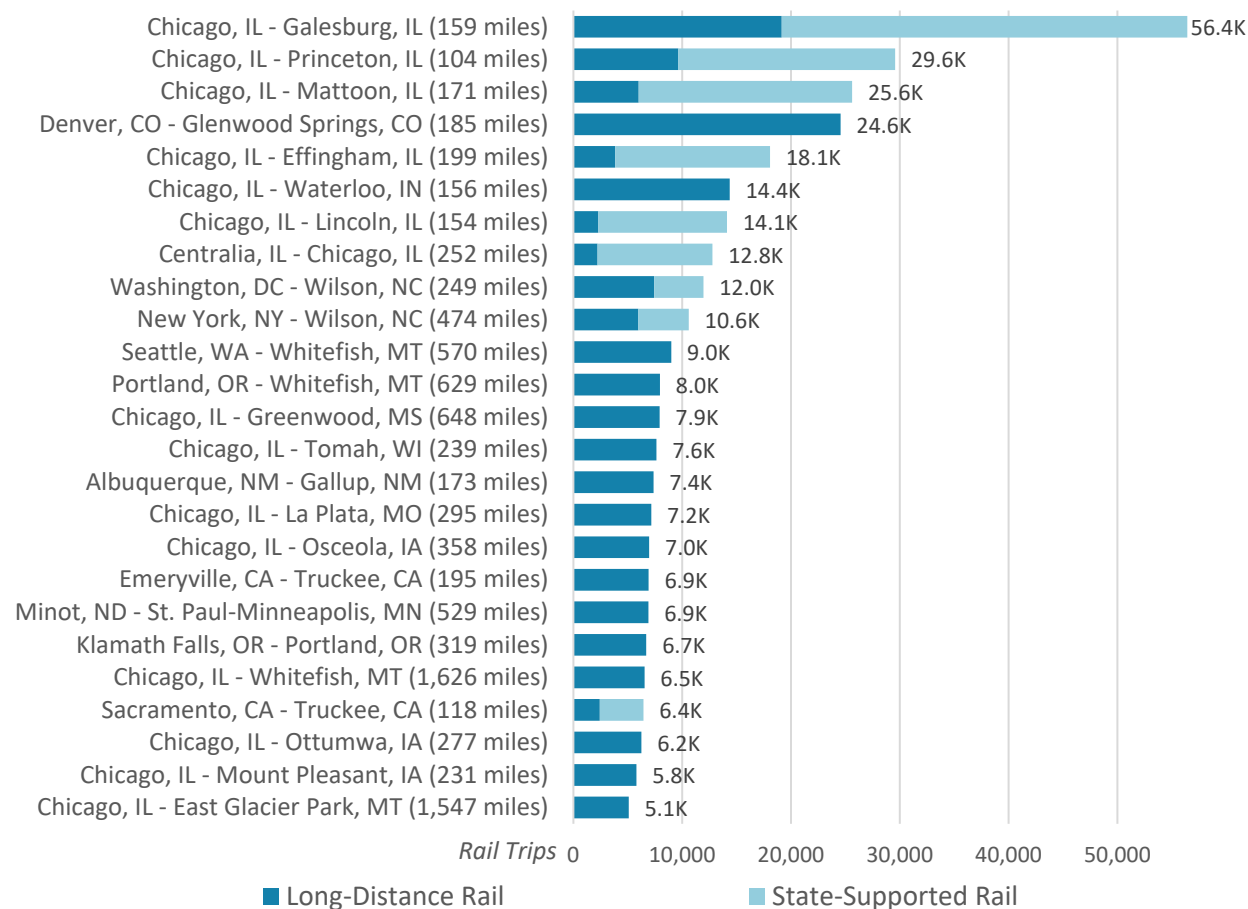


Source: Long-Distance Service Study Current Route Systemwide Trip Table, which uses Amtrak FY 2019 passenger rail ridership data (Amtrak 2023d, BTS 2023, FHWA 2022a); Amtrak schedule skeletons provided mileage between stations (Amtrak 2022g).

Note: Does not include Auto Train (Lorton, Virginia – Sanford, Florida). Does not include city pairs where both cities are on the NEC. City pairs in this chart are served by Amtrak long-distance passenger rail. State-supported passenger rail between Chicago, Illinois, and Indianapolis, Indiana (i.e., the Hoosier State service) was suspended in June 2019.

Figure 3-14 shows the top 25 city pairs along current Amtrak long-distance routes by total annual passenger rail trips where at least one of the cities in each pair is a small community. This includes state-supported route trips for city pairs also served by state-supported routes. Many of the top city pairs by total rail trips include significant ridership from Amtrak’s state-supported routes, especially those with an endpoint in Chicago, Illinois, where eight Amtrak long-distance routes and many state-supported routes terminate. Twenty-seven percent of Amtrak long-distance passenger rail transfers occur in Chicago, highlighting its importance in providing connectivity. The top city pairs served exclusively by long-distance passenger rail include Denver, Colorado to Glenwood Springs, Colorado (a resort town) (California Zephyr); Chicago, Illinois to Waterloo, Indiana (Capitol Limited and Lake Shore Limited); Seattle, Washington to Whitefish, Montana (gateway to Glacier National Park) (Empire Builder); Portland, Oregon, to Whitefish, Montana (Empire Builder); and Chicago, Illinois to Greenwood, Mississippi (City of New Orleans).

Figure 3-14. Annual Rail Trips for City Pairs Served by Current Amtrak Long-Distance Passenger Rail with One City in a Small Community (FY 2019)



Source: Long-Distance Service Study Current Route Systemwide Trip Table, which uses Amtrak FY 2019 passenger rail ridership data (Amtrak 2023d, BTS 2023, FHWA 2022a).

Note: Includes both Amtrak long-distance and Amtrak state-supported passenger rail trips.

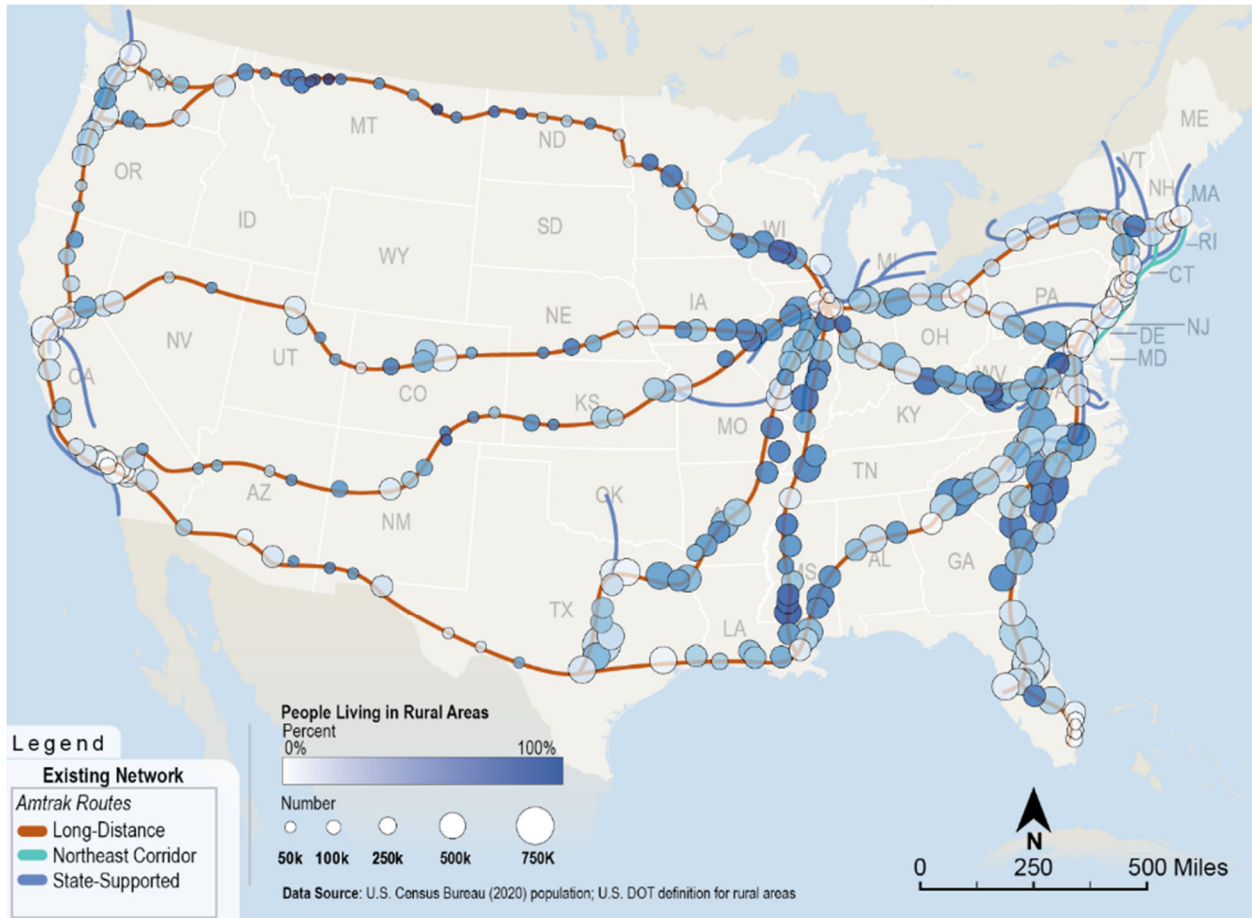
3.2.2.2 Demographics of Cities Served by Amtrak Long-Distance Passenger Rail

This section looks at the demographics and socioeconomic conditions of cities currently served by Amtrak long-distance passenger rail based on catchment areas around stations. In this analysis, station catchment areas have a 30-mile radius for stations inside MSAs and a 50-mile radius for stations outside of MSAs. While individuals may travel more than 50 miles to or from a station, the sizes of these catchment areas capture most Amtrak long-distance trips. For the maps in this section, circle size indicates the number of people that live within a station’s catchment area, and the color intensity indicates the percentage of people within a station catchment area for each analysis metric.

Figure 3-15 shows the number and percentage of people living in rural areas within station catchment areas currently served by Amtrak long-distance passenger rail. “Rural” is defined by the U.S. Census Bureau as “any population, housing, or territory not in an urban area”; an “urban area” is either an urbanized area with a

population of 50,000 or more or an “urban cluster” with a population of at least 2,500 and less than 50,000 (U.S. Census Bureau 2023).^{2,3}

Figure 3-15. Station Catchment Areas of Current Amtrak Long-Distance Routes by Share of Population in Rural Areas (2019)



Source: 2020 Decennial Census for population figures (U.S. Census Bureau 2020). The U.S. Census Bureau defines “rural” as population not in an “urban area” (U.S. Census Bureau 2023), and this definition was used to identify rural areas.

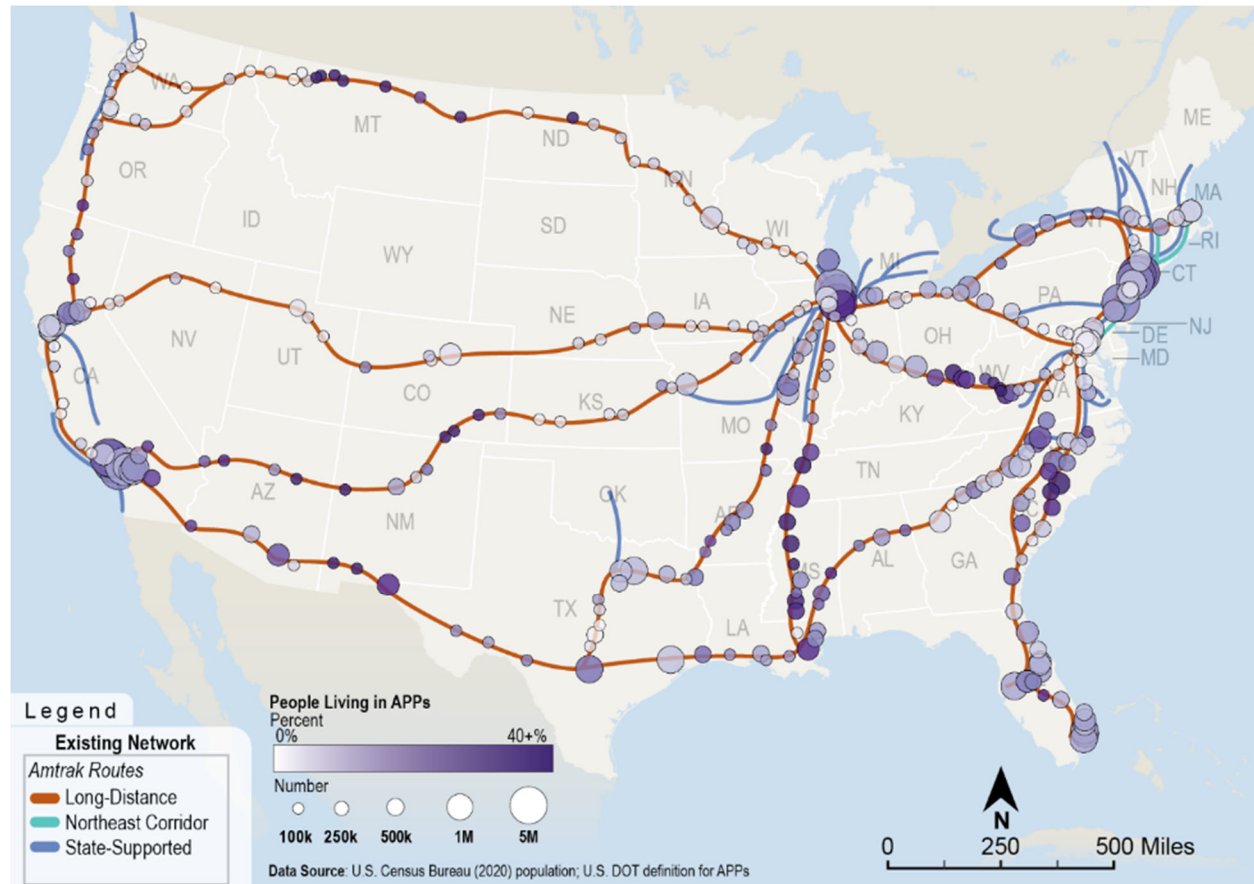
Figure 3-16 shows the number and percentage of people living in station catchment areas identified by DOT as “areas of persistent poverty” (APPs). A census tract is an APP if it has “a poverty rate of at least 20 percent as measured by the 2014–2018 5-year data series available from the American Community Survey of the Bureau of the Census” (DOT 2023).

² DOT’s Rural Opportunities to Use Transportation for Economic Success (ROUTES) initiative supports rural transportation policy and equitable access for rural and Tribal communities that face challenges related to transportation safety, mobility, and economic development. More information available at <https://www.transportation.gov/rural>

³ The Bureau of Transportation Statistics (BTS) defines “Reasonable Access to Intercity Transportation” as residents who live within 75 miles of a large airport or within 25 miles of a smaller airport, intercity bus stop, or intercity rail station with scheduled service. BTS has an interactive map application that displays the percent of rural population with reasonable access to intercity transportation service, available at <https://www.bts.gov/data-spotlight/85-rural-residents-have-reasonable-access-intercity-transportation-lack-reasonable>

A high percentage of people live in APPs in small communities in Montana served by the Empire Builder, in Mississippi served by the City of New Orleans, in West Virginia and Kentucky served by the Cardinal, and in New Mexico served by the Sunset Limited and Southwest Chief.

Figure 3-16. Station Catchment Areas of Current Long-Distance Routes by Number and Share of Population in Areas of Persistent Poverty



Source: 2020 Decennial Census (U.S. Census Bureau 2020) for population figures. DOT data (DOT 2023) was used to identify Census tracts designated as “areas of persistent poverty.”

3.2.3 City Pairs Served by Previously Discontinued Long-Distance Routes

Considering the previously discontinued long-distance routes (see Chapter 2), numerous cities and many Americans were left without a connection to the national passenger rail network. Analysis of the city pairs, measured by the city’s discontinued station catchment area, by volume of annual trips for all modes (including ground [vehicle] and air) that were previously served by discontinued long-distance routes shows large markets were left without a connection to the national passenger rail network. Total ground trips are from the FHWA 2020 NextGen National Passenger OD dataset (FHWA 2022). Total air trips are from BTS DB1B Market 2019 air trip data (BTS 2023). Las Vegas, Nevada – Los Angeles, California, is the top pair, and Las Vegas, Nevada - San Bernardino, California is the fifth highest pair. This highlights the lack of Amtrak passenger rail service in Las Vegas, Nevada, which is currently served by Amtrak Thruway bus.

Top city pairs by volume of annual trips that were previously served by discontinued long-distance routes and that no longer have direct Amtrak passenger rail service (i.e., a one-seat ride) between cities are:

- Las Vegas, Nevada – Los Angeles, California (315 miles).
- Phoenix, Arizona – Tucson, Arizona (119 miles).

- Dallas, Texas – Houston, Texas (264 miles).
- Phoenix, Arizona – Yuma, Arizona (184 miles).
- Las Vegas, Nevada – San Bernardino, California (267 miles).

Top city pairs by volume of annual trips that were previously served by discontinued long-distance routes where both cities no longer have passenger rail service include the following:

- Columbus, Ohio – Dennison, Ohio (102 miles).
- Bowling Green, Kentucky – Louisville, Kentucky (116 miles).
- Decatur, Alabama – Nashville, Tennessee (118 miles).
- Louisville, Kentucky – Nashville, Tennessee (184 miles).
- Mobile, Alabama – Montgomery, Alabama (176 miles).

4 Assessment of Daily Service for the Cardinal and Sunset Limited

Most of Amtrak's 15 long-distance routes are operated daily. Two Amtrak long-distance routes currently operate less than daily service (each runs three times per week): the Cardinal and the Sunset Limited. Amtrak submitted a CID program application to increase service on the Cardinal and Sunset Limited from three times per week to daily (Amtrak 2023a). For the Study, FRA reviewed these two routes for potential expansion of train frequency to daily service. The following sections describe the current three times per week services and the proposed expansion of services to daily. This Interim Report to Congress provides a high-level overview of current service on these routes and potential future equipment needs and operating expenses for daily service. Further details on expansion to daily service will be provided in the final Report to Congress.

4.1 Service History

Table 4-1 and Table 4-2 show a history of significant service changes for the Cardinal and the Sunset Limited, respectively.

The Cardinal began operations in 1971 as the renamed James Whitcomb Riley. During most of Amtrak's history, other trains provided additional service between Chicago, Illinois, and Indianapolis, Indiana, in addition to the Cardinal. During most of the period from 1980 until 2019, Amtrak operated a route between Chicago, Illinois, and Indianapolis, Indiana, called the Hoosier State to provide a minimum of daily service. The Hoosier State ceased operation in 2019 when state funding support was terminated (Railway Age 2019).

The Sunset Limited has had service three times per week since Amtrak's inception. During the 1998 to 2001 period, the Texas Eagle was extended one day per week from San Antonio, Texas, to Los Angeles, California, resulting in four times per week service over that portion of the Sunset Limited's route.

Table 4-1. Cardinal History of Service Changes

Year	Service Change
1977	James Whitcomb Riley renamed the Cardinal
1981	Eastern terminus extended from Washington, DC, to New York in April
1981	Discontinued due to Amtrak budget reduction in October
1982	Resumed operation but reduced from daily to three times per week operation
1986	Rerouted within Indiana, resulting in the discontinuation of Richmond, Muncie, Gary, Marion, Peru, and Hammond-Whiting stops, and the addition of Indianapolis, Crawfordsville, Lafayette, and Dyer stops
1995	Received Superliner equipment and eastern terminus was truncated to Washington, DC
2003	Consist reverted back to single-level equipment and eastern terminus extended to New York

Source: Amtrak. "Fifty Years of Amtrak Trains."

Table 4-2. Sunset Limited History of Service Changes

Year	Service Change
1971	Amtrak takes over operations, keeping it as a three times per week train
1993	Eastern terminus extended from New Orleans, Louisiana, to Miami, Florida
1996	Rerouted in Arizona, resulting in the discontinuance of Phoenix, Tempe, and Coolidge, Arizona, stops
1996	Eastern terminus truncated from Miami, Florida, to Sanford, Florida
1997	Eastern terminus extended from Sanford, Florida, to Orlando, Florida
2001	Maricopa, Arizona, stop added, and Texas Eagle extension discontinued, returning service to three times per week
2005	Following damage to the tracks from Hurricane Katrina, eastern terminus truncated first to San Antonio, Texas, then New Orleans, Louisiana, later in the year

Source: Amtrak. "Fifty Years of Amtrak Trains."

4.2 Description of Current Services

Table 4-3 summarizes the service characteristics of the two nondaily routes. Table 4-4 provides an overview of the populations and stations served. Figure 4-1 shows a map of the Cardinal route, and Table 4-5 lists the stations served by the Cardinal in 2022. Figure 4-2 shows a map of the Sunset Limited route, and Table 4-6 lists the stations served by the Sunset Limited in 2022.

Table 4-3. Characteristics of Non-daily Amtrak Long-Distance Routes

Route Name	West/ South Endpoint	East/ North Endpoint	Route Length	Frequency (Roundtrip)	Approximate Travel Time	Consists	On-Board Services Provided
Cardinal	Chicago, Illinois	New York, New York	1,147 miles	3/week	28 hours	2	Baggage, Coach, Dinette, Sleeper
Sunset Limited	Los Angeles, California	New Orleans, Louisiana	1,995 miles	3/week	47 hours	3	Baggage, Coach, Diner, Lounge, Sleeper

Source: Amtrak 2022f, Streamliner Schedules 2023b; American-Rails.

Table 4-4. Populations and Stations Served by the Cardinal and Sunset Limited (2022)

Route Name	Ridership (2019)	Population Served (based on 2020 data)	Number of Stations Served	States Served by Route	Number of Discontinued Stations from Service Changes
Cardinal	108,900	41.8 million	32	New York, New Jersey, Pennsylvania, Delaware, Maryland, Washington, DC, Virginia, West Virginia, Kentucky, Ohio, Indiana, Illinois	6 (all in Indiana in 1986)
Sunset Limited	92,800	27.2 million	22	California, Arizona, New Mexico, Texas, Louisiana	3 (all in Arizona in 1996)

Source: Amtrak Route Performance Reports (Amtrak 2020); U.S. Census Bureau Decennial Census (U.S. Census Bureau 2020a) for 2020 population.

Note: Population served is defined by the station catchment areas of all stations along a given route. Station catchment areas represent either 30-miles (for stations located inside MSAs) or 50-miles (for stations outside of MSAs), depending on station type.

Figure 4-1. Cardinal Route Overview



Source: Amtrak 2023g, TrainWeb 2023a.

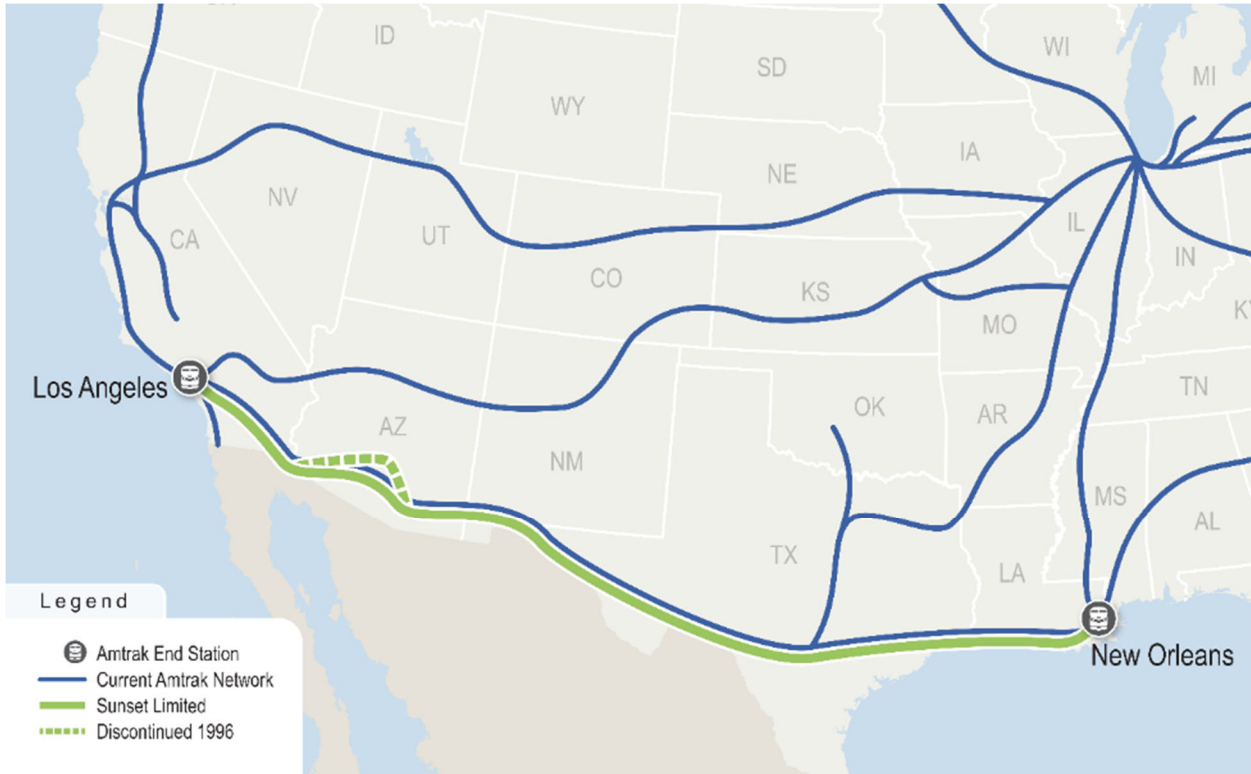
Table 4-5. Cardinal Stations Served (2022)

City	State
Chicago Union Station	Illinois
Dyer	Indiana
Rensselaer	Indiana
Lafayette	Indiana
Crawfordsville	Indiana
Indianapolis	Indiana
Connersville	Indiana
Cincinnati	Ohio
Maysville	Kentucky
South Shore	Kentucky
Ashland	Kentucky
Huntington	West Virginia
Charleston	West Virginia
Montgomery	West Virginia
Thurmond	West Virginia
Prince	West Virginia
Hinton	West Virginia
Alderson	West Virginia
White Sulphur Springs	West Virginia
Clifton Forge	Virginia
Staunton	Virginia
Charlottesville	Virginia
Culpeper	Virginia
Manassas	Virginia
Alexandria	Virginia

City	State
Washington Union Station	DC
Baltimore Penn Station	Maryland
Wilmington	Delaware
Philadelphia 30th Street Station	Pennsylvania
Trenton	New Jersey
Newark Penn Station	New Jersey
New York Penn Station	New York

Source: Amtrak 2022g

Figure 4-2. Sunset Limited Route Overview



Source: Amtrak 2023g, TrainWeb 2023b.

Table 4-6. Sunset Limited Stations Served (2022)

City	State
Los Angeles	California
Pomona	California
Ontario	California
Palm Springs	California
Yuma	Arizona
Maricopa	Arizona
Tucson	Arizona
Benson	Arizona
Lordsburg	New Mexico
Deming	New Mexico
El Paso	Texas
Alpine	Texas
Sanderson	Texas
Del Rio	Texas

City	State
San Antonio	Texas
Houston	Texas
Beaumont	Texas
Lake Charles	Louisiana
Lafayette	Louisiana
New Iberia	Louisiana
Schriever	Louisiana
New Orleans	Louisiana

Source: Amtrak 2022g

Financial performance metrics for the Cardinal and Sunset Limited over the past 4 years are presented in Table 4-7. Over the past 2 years financial performance has significantly improved for both routes as systemwide ridership recovered from the COVID-19 pandemic. However, the cost recovery ratio for both routes has been much lower than that of Amtrak’s long-distance passenger rail system overall, which was 53 percent in 2019, 44 percent in 2021, and 49 percent in 2022. The cost recovery ratios for the Cardinal and Amtrak’s long-distance passenger rail system are recovering, but not yet at 2019 levels (Amtrak 2023g).

Table 4-7. Performance Metrics (actual year of expenditure) for the Cardinal and Sunset Limited (FY 2019-2022)

Metric	2019	2020	2021	2022
Cardinal				
Ridership	108,900	63,200	69,100	80,300
Net Operating Costs	-\$15,960,000	-\$22,246,000	-\$18,232,000	-\$18,946,000
Loss per Passenger	-\$147	-\$352	-\$264	-\$236
Cost Recovery Ratio	34%	20%	26%	30%
Average Load Factor	49%	34%	41%	56%
Sunset Limited				
Ridership	92,800	55,100	57,600	73,900
Net Operating Costs	-\$31,502,000	-\$35,510,000	-\$39,849,000	-\$41,794,000
Loss per Passenger	-\$339	-\$644	-\$692	-\$566
Cost Recovery Ratio	28%	18%	17%	21%
Average Load Factor	45%	27%	28%	37%

Source: Amtrak Route Performance Reports for FY 2019, FY 2020, FY 2021, and FY 2022 (Amtrak 2023g).

4.3 Proposed Expansion of Train Frequency to Daily Service

4.3.1 Cardinal Service

The current three times per week Cardinal service means cities such as Cincinnati, Ohio, and Indianapolis, Indiana, only see three trains a week heading in either direction. Both Cincinnati, Ohio, and Indianapolis, Indiana, rank in the top 35 largest MSA populations and are among some of the largest communities without daily Amtrak service. The Cardinal serves residents living in western Virginia, southern West Virginia, and eastern Kentucky.

The routes serve communities in rural Appalachia, where public transportation options are limited. Additionally, the Cardinal is currently the only passenger rail service connecting cities like Indianapolis, Indiana, or Cincinnati, Ohio, to Chicago, Illinois. Amtrak noted in its PRIIA Section 210 FY10 Performance Improvement Plan (PIP) that for the Cardinal, “the biggest hinderance to increasing the Cardinal’s ridership is the lack of daily service” (Amtrak 2010d).

In FY 2019, the last full year of service pre-COVID, ridership on the Cardinal was 108,935 and in FY 2022, ridership was 80,300 (Amtrak 2022a). Amtrak noted in its PRIIA Section 210 FY10 PIP that increasing frequency of the Cardinal service from three times per week to daily could result in over 160,000 new Amtrak passengers on the route (Amtrak 2010a).

4.3.2 Sunset Limited Service

The current three times per week Sunset Limited service means major cities including Houston, Texas; El Paso, Texas; and Tucson, Arizona, only see three trains a week heading in either direction. Houston, Texas, is the fifth largest MSA, with a population of more than 7 million, making it the largest MSA in the United States without daily Amtrak service (U.S. Census Bureau 2020). The Sunset Limited also carries “through cars” that connect with the Texas Eagle in San Antonio, Texas, offering a one-seat-ride for travelers interchanging between these routes.

Daily service would enhance travel options along a route with limited public transportation alternatives. Similarly, the Sunset Limited is currently the only passenger rail service that connects cities like San Antonio, Texas, or New Orleans, Louisiana, to Houston, Texas. Amtrak noted in its PRIIA Section 210 FY10 PIP for the Sunset Limited that “the biggest hinderance to increasing the Sunset Limited’s ridership is the lack of daily service” (Amtrak 2010b).

In FY 2019, the last year of service pre-COVID, ridership on the Sunset Limited was 92,825 and in FY 2022 ridership was 74,000 (Amtrak 2020). Amtrak noted in its PRIIA Section 210 FY10 PIP that increasing frequency of the Sunset Limited service from three times per week to daily could result in over 100,000 new passengers (Amtrak 2010b).

4.3.3 Equipment Needs for Daily Operation

The Cardinal currently requires two train consists to operate. Increasing the frequency to daily service will require one additional train consist. The Sunset Limited currently requires three train consists to operate, plus “through cars” from the Texas Eagle, which sends one sleeping car and one coach car to Los Angeles on the Sunset Limited. Daily service will require two additional train consists and approximately four additional through cars. Major terminals also must maintain spare cars to account for maintenance and repairs of equipment. The fleet requires a spare ratio of approximately 20 percent.

Table 4-8 shows the equipment needs for a typical consist of three day per week service and daily service. The equipment needs are derived from Amtrak’s average train consist data for each route as of FY 2022, reflect bi-directional operations, and do not consider Amtrak’s ongoing long-distance fleet replacement efforts (Amtrak 2023b). Equipment acquisition costs associated with the estimates will be provided in the final Report to Congress, in addition to equipment costs associated with the entire recommended network.

The equipment requirements do not account for any spare equipment. While Amtrak currently operates two diesel locomotives for both the Cardinal and Sunset Limited, Amtrak could operate one diesel locomotive because of the capabilities of the new diesel equipment. On the Cardinal route, only one electric locomotive is required for current three day per week service and daily service, as it is only needed for the service between Washington, DC, and New York City, New York.

Table 4-8. Equipment Needs for Daily Service on the Cardinal and Sunset Limited

Equipment	Typical Consist	Three Day per Week Equipment Requirements	Daily Equipment Requirements
Cardinal			
Electric Locomotives (ACS 64)	1	1	1
Diesel Locomotives (ALC 42 or P42)	1	2	3
Amfleet II Coach	2	4	6
Amfleet II Lounge	1	2	3
Viewliner I Sleeper	1	2	3
Viewliner Combination Sleeper	1	2	3
Sunset Limited: (New Orleans – Los Angeles)			
P42 Locomotives	2	6	10
Baggage Car	1	3	5
Superliner Coach	1	3	5
Superliner Lounge	1	3	5
Superliner Dining Car	1	3	5
Superliner Sleeper	1	3	5
Sunset Limited: San Antonio – Los Angeles Through Cars for Texas Eagle			
Superliner Coach	1	3	5
Superliner Sleeper	1	3	5

Source: Amtrak FY 2022 average train consist data. Business confidential information provided by Amtrak (Amtrak 2023b).

4.3.4 Operating Expenses for Daily Operation

FRA modeled two operating cost scenarios, using route-level unit costs derived from Amtrak Performance Tracking system FY 2019 expenses and operating statistics, inflated to FY 2023 dollars. The two scenarios are:

- Route-specific calculation applying unit costs derived for the Cardinal and Sunset Limited routes.
- Route-type calculation applying average unit costs derived for similar long-distance routes: one-night routes for the Cardinal and two-night routes for the Sunset Limited.

These two scenarios form a preliminary low- and high-end range of incremental costs if these currently non-daily services were to operate daily. The route-specific scenario represents the high-end and is the more conservative estimate. Table 4-9 summarizes estimated daily operating costs for the current three day per week and for future daily services, based on FY 2022 average train consists. These operating costs are preliminary estimates and reflect bi-directional operations.

Table 4-9. Annual Operating Costs for the Cardinal and Sunset Limited (\$ Millions)

Route	3-Day per Week Service Cost (\$ millions)	Daily Service Cost (\$ millions) Range for Route-Type vs Route-Specific Unit Costs (Preliminary Range)
Cardinal	\$30	\$56 - \$61
Sunset Limited	\$55	\$101 - \$115

Source: Average train consist data (Amtrak 2023b) and Amtrak Performance Tracking system data (Amtrak 2023e).

The values shown in Table 4-9 reflect preliminary estimates for operating the proposed services, subject to further review with Amtrak. The cost estimates do not include potential capital costs that could be required for implementing daily service. Estimates for capital investments, as well as potential revenues, will be completed during later phases of the Study.

5 Stakeholder Engagement

5.1 Engagement Approach

In conducting the Study, FRA is required, through working groups or other forums, to consult with Amtrak, states along relevant routes, regional planning organizations, municipalities and communities along relevant routes, host railroads, organizations representing onboard Amtrak employees, nonprofit organizations representing Amtrak passengers, relevant regional passenger rail authorities, and federally recognized Indian tribes.

To date, FRA has facilitated 12 regional working group meetings, connected with more than 250 stakeholder organizations, and presented at 7 external events and conferences. More than 13,000 unique visitors have engaged with the material and information on the Study website. In addition, FRA has contacted 347 federally recognized Indian tribes.

5.2 Engagement Goals

Engagement and meaningful participation by national and regional stakeholders are paramount to the success of the Study. The stakeholders identified as part of this Study represent the geographic extent of the Study and markets served. This allows for greater input on the benefits and impacts of improved long-distance passenger rail service for their organizations and communities.

The goals of the stakeholder engagement activities are to:

- Execute an engagement process that supports the directive outlined in Section 22214 of the IIJA.
- Establish trust and accountability with agencies, stakeholders, and the public through transparent and frequent communication.
- Build and sustain support for the Study methodologies and recommendations that extend beyond the life of the Study, including potential future implementation of Study recommendations by sharing information that fosters support for advancing the Study.
- Increase public awareness by providing easily accessible information and ample opportunity for two-way communication.

5.3 Study Kick-off/Online Engagement

In October 2022, a website – fralongdistancerailstudy.org – was established and launched to share Study information and create a mechanism for interested parties to sign up for a mailing list. Also, in coordination with the launch of the website, social media posts were made on Facebook, Instagram, LinkedIn, and Twitter.

The website is updated periodically and following each regional working group meeting series. All meeting materials are posted on the website at the conclusion of each working group meeting series.

Since the launch of the website, more than 13,000 unique visitors have accessed the website to review Study information.

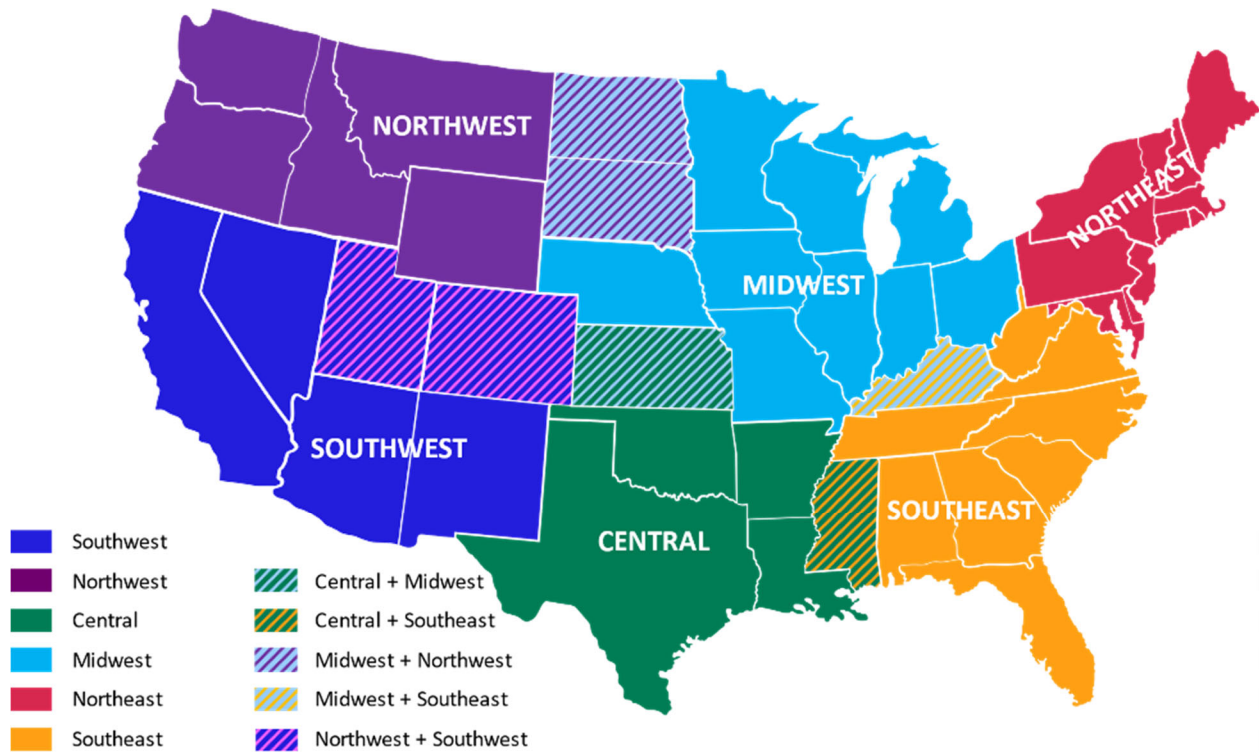
In June 2023, a Tribal Interest section of the website was added to further engage and communicate with the tribal interests associated with the Study.

5.4 Regional Working Group Meetings Approach

A key element of engagement for the Study was the formation and execution of regional working groups across the country. Regions for the working groups are based on the map shown on Figure 5-1. Stakeholders in Utah, Colorado, North Dakota, South Dakota, Kansas, Mississippi, Kentucky, and Washington, DC, are invited to

participate in more than one region and may participate in both or self-select the region they think is most applicable to them.

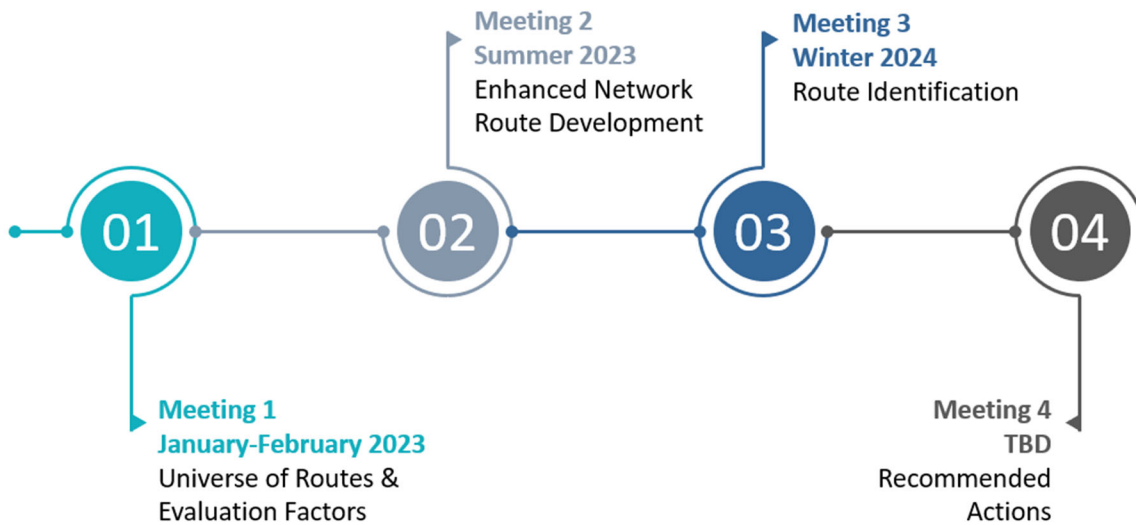
Figure 5-1. Study Regions



FRA sent letters in November 2022 to the executives of transportation departments at each of the lower 48 states and Washington, DC, asking for a representative for each of the working groups. Based on stakeholder feedback, FRA created a roster for each regional meeting and sent invitations to the stakeholders in December 2022. Regional working group meetings review technical elements of the Study and stakeholder feedback to help guide FRA as methodologies and alternatives are refined and further developed. A high-level meeting schedule is shown in Figure 5-2.

Each meeting is hosted both virtually and in-person with in-person attendance encouraged. Amtrak staff, host railroads, and federally recognized Indian tribes are offered briefings in advance of each working group series. FRA will host a total of 24 regional working group meetings across the country—four meetings in each of the six regions.

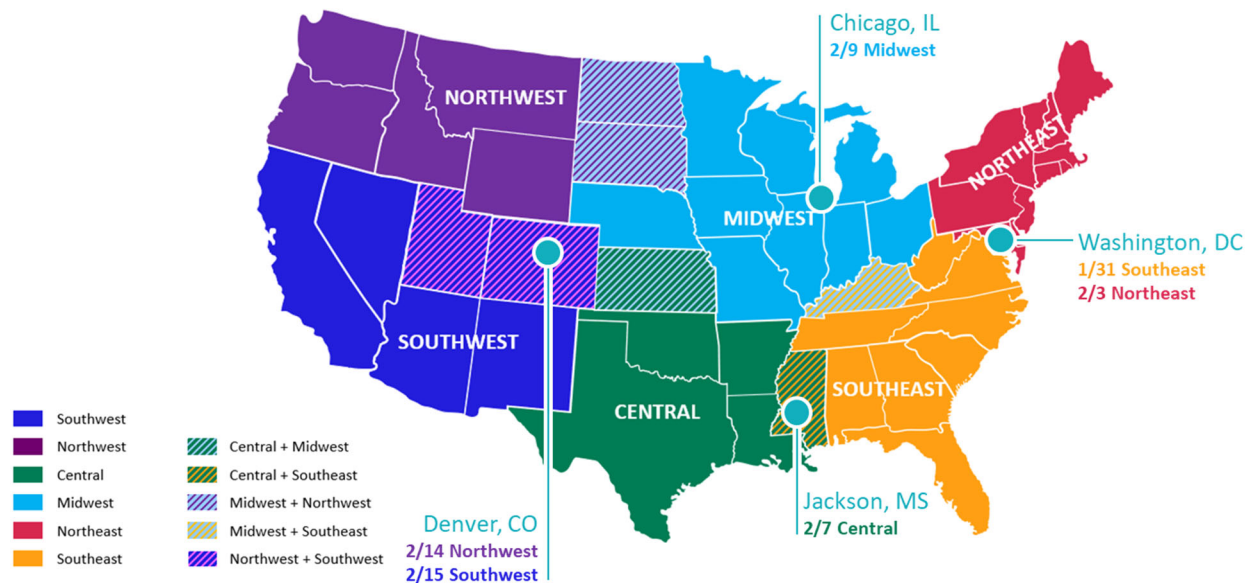
Figure 5-2. Long-Distance Service Study Engagement Schedule



5.4.1 Regional Working Group Meetings – January-February 2023

In January and February 2023, FRA hosted the first regional working group meetings across the United States to engage stakeholders. The regions, dates, and locations of the first round of meetings are shown on Figure 5-3. Region-specific workshop summaries are available on the Study website – fralongdistancerailstudy.org.

Figure 5-3. Dates and Locations of Round 1 Stakeholder Group Meetings



The agenda for the first series of meetings was to inform attendees about long-distance passenger rail service and the Study; provide a briefing on the progress of the Study’s analysis of current routes, discontinued routes, and travel market assessments; and receive input from attendees on key topics. Key topics included existing and planned rail infrastructure and services in the region; potential new routes, communities, frequencies, or service changes for the Study to consider; evaluation factors to help guide development of new and restored long-distance routes; and recommendations on how Amtrak and communities can collaborate to support long-distance passenger rail services.

To better understand priorities and projects in each region, each working group discussed the key topics pertaining to their region. Discussion themes from across the country included:

- Efforts to attract new rider populations/markets.
- Re-establishing discontinued routes with new alignments.
- Creating additional east/west routes.
- Improving north/south connectivity.
- Addressing delays on existing service.
- Connecting riders to major destinations.
- More frequency as opposed to new routes.
- Limited opportunity to expand stations.
- Track improvement to enable increased speeds for passenger rail.
- Increased frequencies and speeds.

Detailed meeting materials and input received from the regional working groups is available on the Study website – fralongdistancerailstudy.org/meeting-materials.

The discussion of evaluation factors to help guide development of new and restored long-distance routes included an interactive online exercise. Attendees could view potential evaluation factors suggested by previous working group meetings, as well as suggest new ones.

Feedback themes from across the country included interest in evaluating the number of connections a route would provide to enhance the national long-distance and regional passenger rail network, number of areas with higher-than-average disadvantaged populations, number of city pairs with highest ridership market potential, operational cost and revenues, schedule frequency and convenience, availability of local transit, connections to airports and multimodal opportunities, evaluating the number of large and small communities that a route would connect, the number of rural areas a route would serve, the number of communities that do not have passenger rail or other long-distance transportation, the number of activity centers served, economic benefits to communities along a route, and cost and schedule competitiveness with automobile and air travel.

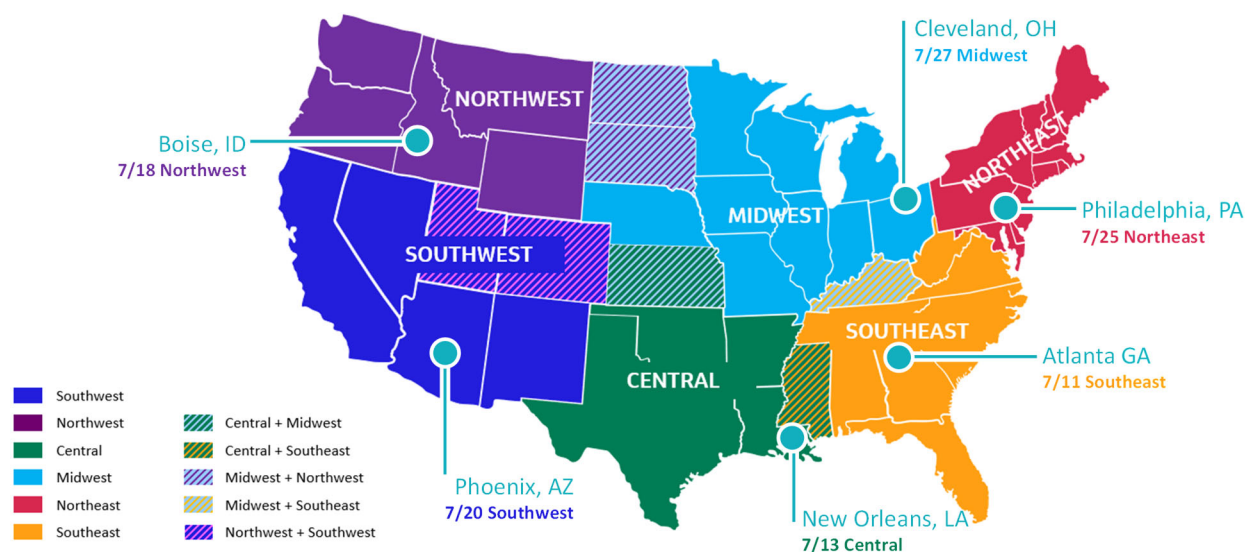
As part of the Study, FRA will recommend methods for Amtrak to work with local communities and organizations to find ways to continuously increase public use of passenger rail service along each route. In this portion of the meeting, participants discussed how Amtrak and communities could work together to accomplish this.

Feedback themes from stakeholders included leveraging regional tourism and event marketing, connectivity with carshare and multimodal first/last mile solutions, marketing and partnership opportunities with chambers of commerce and casinos, real-time signage, outreach to unsupported communities, connectivity to other services, improved signage, increased transparency into fares, last mile connections, streamlining technology, working with MPOs to leverage their local understanding and connect with state DOTs, establishing station hosts at stations in more rural areas without dedicated staff, promoting the climate benefits of travel by rail, and advertising Amtrak to major destinations and events.

5.4.2 Regional Working Group Meetings – Summer 2023

In July 2023, FRA hosted the second of four regional working group meetings. The regions, dates, and locations of the second round of meetings are shown on Figure 5-4. All regional working group meetings followed a similar agenda. Following the same format as the initial round of regional working group meetings, consistent materials were presented in each of the six regions. Detailed meeting materials and input received from the regional working groups is available on the Study website – fralongdistancerailstudy.org.

Figure 5-4. Dates and Locations of Round 2 Stakeholder Group Meetings



5.5 Host Railroad, Labor Union, and Tribal Engagement

5.5.1 Host Railroad Engagement

Host railroads are those private railroads whose tracks can be used for passenger service identified in the Study. These include Class I rail carriers (referred to hereinafter as “Class I railroads”), privately owned Short Line and Regional Railroads (Class II and Class III rail carriers), and other publicly owned railroads.

5.5.1.1 Initial Outreach

The majority of track miles to be assessed for the restoration or expansion of long-distance passenger rail service are anticipated to be on Class I railroad track; therefore, early outreach efforts were concentrated on engagement with the Class I railroads.

FRA contacted six of the seven Class I railroads, and FRA conducted individual introductory meetings with Class I railroads in October and December 2022. In the introductory Class I railroad meetings, FRA established a point of contact for each railroad, committed to keeping the railroad informed as the Study progressed, and invited the railroads to communicate directly with FRA. In the initial outreach, FRA did not engage with Kansas City Southern, both because there was a merger pending with Canadian Pacific Railway (which occurred on April 14, 2023 and resulted in the formation of Canadian Pacific Kansas City [CPKC 2023]), and because there are no Amtrak trains currently hosted on Kansas City Southern-owned tracks.

Class I railroads were invited to the regional working group meetings that pertained to their respective regions. Representatives from Norfolk Southern Corporation, Canadian Pacific, Canadian National Railway, CSX Transportation, and Union Pacific Railroad attended the first series of stakeholder meetings. After the regional working group meetings concluded, FRA conducted a separate briefing with BNSF.

FRA also held pre-briefings with Class I railroads in June and July 2023 – prior to the second series of regional working group meetings in July 2023.

5.5.1.2 Future Route-Specific Engagement

Once a list of preferred routes is identified through the stakeholder and Study process, the Class I railroads and/or privately owned railroad(s) whose tracks are part of a route will be contacted to ensure they are aware of the route identification in the Study.

All input from host railroads will be captured in the final Report to Congress.

5.5.2 Amtrak Labor Union Engagement

Amtrak's on-board employees (defined generally as train and engine crews and on-board service personnel) are represented by several labor organizations, such as the Brotherhood of Locomotive Engineers and Trainmen (BLET); the Transportation Communications Union; the Transportation Communications Union – American Railway and Airline Supervisors Association; the Transportation Division of the International Association of Sheet Metal, Air, Rail and Transportation Workers (SMART-TD); Amtrak Service Workers Council (ASWC) Transportation Workers; Transport Workers Union of America; and Unite-Here. Engagement with the leadership of these organizations began in early 2023 and will continue throughout the Study.

5.5.2.1 Initial Outreach

In coordination with Amtrak's Labor Relations group, FRA initiated outreach to the labor unions. Initial outreach consisted of an invitation to identify unions to attend an online briefing to provide an overview of the Study, answer any questions, and work with them to identify how to best communicate with them and share information in the future. The first briefing with labor union representation was held on April 18, 2023. Unions represented at the briefing included BLET, ASWC, and SMART-TD.

Information shared included:

- Description of the Study and its background and purpose.
- Schedule of upcoming regional workshops and contact information for attendance.
- Contact point for further information and briefings.

Representatives at the meeting indicated that their preferred method of communication and engagement was continued online briefings with labor leadership after the regional working group meetings.

5.5.2.2 Future Route-Specific Engagement

Once a list of preferred routes has been identified, labor union input will be solicited to gather insights regarding daily service, operations and costs, capital improvements, and other concerns related to new or enhanced long-distance service.

All input from labor organizations will be captured in the final Report to Congress.

5.5.3 Tribal Engagement

5.5.3.1 Initial Outreach

Tribes were identified using the Department of the Interior's Bureau of Indian Affairs' list of federally recognized tribes, published in the *Federal Register*. Currently, there are an estimated 347 federally recognized Indian tribes in the lower 48 states that may have an interest in the Study.

In January and February 2023, invitation letters were sent through postal mail and electronic mail to 347 federally recognized Indian tribes. The letters included:

- Description of the planning study and its background and purpose.
- Map showing Study regions.
- Summary of input requested and timelines.
- Tentative schedule of upcoming regional working group meetings and contact information for attendance, if desired.
- Invitation for a tribal briefing, if desired.
- Contact point for further consultation, if desired.

Initial communications yielded 20 federally recognized Indian tribes expressing interest in additional information or attending an upcoming regional working group meeting.

Additionally, prior to the second series of regional working group meetings, emails and letters were once again sent to all identified federally recognized Indian tribes to solicit their interest in briefings or attending a working

group meeting. From that effort, five more federally recognized Indian tribes identified that they were interested in further engagement.

5.5.3.2 Future Route-Specific Engagement

Once a list of preferred routes has been identified, another round of engagement will be initiated on route specific elements. This will be done through directed letters and emails to relevant federally recognized tribes.

5.6 Other Engagement Activities

In addition to the engagement activities described in sections 5.3 through 5.5, FRA has provided briefings to a variety of groups. These meetings were held at the request of the specific, nongovernmental stakeholder. They include:

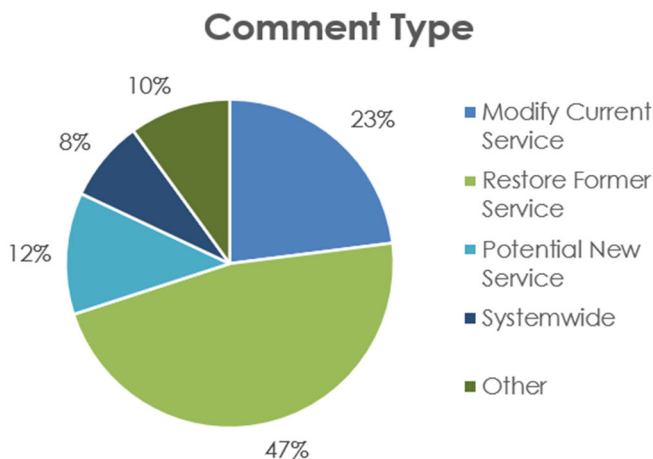
- American Association of State Highway and Transportation Officials Council on Rail Transportation – September 22, 2022.
- I-20 Corridor Passenger Rail Stakeholder Convening– November 3, 2022.
- Midwest Interstate Passenger Rail Committee – November 18, 2022.
- Big Sky Passenger Rail Authority – December 14, 2022.
- Transportation Research Board – January 3, 2023.
- Rail Passengers Association *RailNation* – March 10, 2023.
- Southeast Rail Forum – March 21, 2023.

FRA will continue to provide briefings to organizations that request them, as well as offer briefings at events or meetings where there are large numbers of stakeholders or interested parties.

5.7 Comments Received

Since initiation of the contactus@fralongdistancestudy.com email address and the comment form on the Study website, and in conjunction with the regional working group meetings, FRA has received more than 1,400 comments. FRA received approximately 1,000 comments as part of the first series of regional working group meetings and in the month following during an open call for comments. Themes from comments received are shown in Figure 5-5.

Figure 5-5. Summary of Feedback Received as of March 17, 2023



5.8 Future Study Engagement

FRA will continue to engage stakeholders, federally recognized Indian tribes, host railroads, Amtrak labor organizations, and others throughout the remainder of the Study. All feedback received in meetings, briefings, and through the Study website will be summarized in the final Report to Congress.

6 Implementation and Governance

The Study will develop recommendations for a common, long-term vision for governance of and institutional coordination for Amtrak’s long-distance passenger rail service, including current and potential future roles of Amtrak, FRA, and other key stakeholders. It will also recommend a high-level implementation framework to mobilize stakeholders and advance Study recommendations.

The following provides initial background information on long-distance service governance and funding and a preliminary approach to implementation planning.

6.1 Developing Institutional and Governance Recommendations for Long-Distance Service

FRA will conduct discussions with stakeholders to define the current governance structure of Amtrak’s long-distance services and to establish a baseline from which to develop recommendations. When completed, this baseline will depict the institutional framework and governance structures within which decisions are currently made on long-distance service routes, station stops, frequency, and other key items related to service delivery. These baseline assessments of existing stakeholder roles will be used later in the Study to determine gaps between baseline conditions and future, more effective institutional and governance systems and ways to move toward those recommended structures. This section of the interim report provides a brief background on current long-distance service funding and stakeholders.

6.1.1 Background: Long-Distance Funding Framework

6.1.1.1 Operating Costs Funding

Long-distance services are operated and maintained by Amtrak. Long-distance service operating costs are typically funded by (1) revenue generated from long-distance fares; and (2) FRA’s annual National Network Cooperative Agreement to the National Railroad Passenger Corporation (“Annual Grant”), with the grant process and reporting procedures directed by 49 U.S.C. Section 24319(c)(2)(A). FRA approves and administers Annual Grant funds, and other emergency relief funds as available, such as those granted to Amtrak’s National Network under the American Rescue Plan Act of 2021.

6.1.1.2 Capital Costs Funding

Amtrak Annual Grant

Amtrak’s Annual Grant funds a variety of capital expenses in the National Network, which includes both long-distance and state-supported routes, from state-of-good-repair projects to specific improvements or strategic initiative projects.

Competitive Grants

No specific capital grants are established for long-distance service, which primarily operates on tracks owned by host railroads. However, since 2014, DOT has awarded three Transportation Investment Generating Economic Recovery (TIGER) grants, two Consolidated Rail Infrastructure and Safety (CRISI) grants, and one Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grant for improvements to Amtrak’s long-distance Southwest Chief route in Kansas, Colorado, and New Mexico. These grants helped fund capital investments on trackage used by the Southwest Chief, owned by a host railroad, but not in use by that host railroad. Grant sponsors for these improvements include Amtrak; Garden City, Kansas; La Junta, Colorado; Colfax County, New Mexico; Trinidad, Colorado; and the Colorado DOT.

Recent changes to the Federal-State Partnership for Intercity Passenger Rail Competitive Grant Program under the IIJA establish that not less than 20 percent of FSP-National funds (for projects not located on the NEC) “shall be for projects that benefit (in whole or in part) a long-distance route” (IIJA Section 22307(d)(3)(A)).

However, this is a new requirement, and as of the development of this Interim Report, the grant awards have not yet been announced.

IIJA Amtrak Authorizations – National Network

IIJA provides additional funding to Amtrak’s National Network, for FY 2022 through FY 2026, for several items, including:

- “Acquiring new passenger rolling stock to replace obsolete passenger equipment used in Amtrak’s long-distance and state-supported services, and associated rehabilitation, upgrade, or expansion of facilities used to maintain and store such equipment.”
- “Bringing Amtrak-served stations to full compliance with the Americans with Disabilities Act” (Congress 2021).

6.1.2 Background: Long-Distance Stakeholders

All current long-distance services are operated and maintained by Amtrak. The long-distance network has remained relatively static over the last 20 years. Outside of the COVID-19 pandemic (which resulted in temporary service reduction and suspension across the Amtrak network), the most substantial recent change to a long-distance route was in 2005, when service on the Sunset Limited was suspended indefinitely between New Orleans, Louisiana, and Florida after Hurricane Katrina.

Amtrak’s long-distance routes primarily runs on tracks owned by host railroads. Amtrak enters maintenance and operation agreements with the host railroads, where the host railroad agrees to maintain certain performance on the railroad and to coordinate daily service with Amtrak’s long-distance services.

States currently have no formal systemic participation in long-distance governance or planning. In contrast, states influence state-supported route policies through the State-Amtrak Intercity Passenger Rail Committee (SAIPRC). For Northeast Corridor services, representatives from NEC member states participate in collaborative planning facilitated through the Northeast Corridor Commission.

6.2 Recommendations to Assist Study Implementation

Feedback received from Amtrak, the host railroads, and other stakeholders will be used to develop an implementation plan for Study recommendations, including preferred routes. The plan will reflect the current governance structure and, where possible, findings and recommendations from the institutional and governance analysis.

The implementation plan will propose a process for advancing infrastructure improvements and operating services and will consider near-term, mid-term, and long-term options, as well as level of complexity and project costs and benefits on impacted communities.

7 Issues for Congressional Awareness

This section summarizes FRA’s preliminary assessment of issues that may affect implementation of FRA’s recommendations in the final Report to Congress. The statutory issues identified in this section will not prevent FRA from completing the Study, but may prevent or limit implementation of Study recommendations, including the restoration of discontinued Amtrak long-distance routes or the development of new Amtrak long-distance routes. These issues will be further considered as FRA advances the Study.

7.1 Statutory Definition of Long-Distance Routes

Section 22214 of IIJA states that FRA shall conduct a study to evaluate the restoration of daily intercity rail passenger service along discontinued long-distance routes and Amtrak long-distance routes that occur on a non-daily basis. While Section 22214 of IIJA states that FRA may evaluate new or restored long-distance routes, the term “long-distance routes” is elsewhere defined in the statute to mean “routes of more than 750 miles between endpoints operated by Amtrak as of the date of enactment of the Passenger Rail Investment and Improvement Act of 2008” (49 U.S.C. Section 24102(5), (7)(C)). Amtrak currently operates 15 long-distance routes; these routes and their endpoints have not substantially changed since the enactment of PRIIA, and Amtrak has not added or removed any long-distance routes since. Applying the definition of “long-distance routes” appears to preclude the consideration of new routes beyond the routes operated in 2008.

In the final Report to Congress, FRA may identify new long-distance routes that will likely not fall within the existing statutory definition for long-distance routes. This statutory limitation will not prevent FRA from completing the Study, but it may affect the implementation of Study recommendations, including new Amtrak long-distance routes that were not in operation as of the date of enactment of the PRIIA, if FRA recommends new routes in the final Report to Congress. This limitation also extends to the restoration of discontinued Amtrak long-distance routes, as discontinued Amtrak long-distance routes identified by this Study were all discontinued before the enactment of PRIIA, and therefore do not appear to conform to the definition of long-distance routes in Section 24102(5). FRA will continue to evaluate its options on this issue.

7.2 Corridor Identification and Development Program – Long-Distance Corridor Eligibility

The Corridor Identification and Development (CID) program, established in Section 22308 of the IIJA, does not currently include new long-distance routes – those not previously operated by Amtrak – in its definition of “intercity passenger rail corridors.” The CID program is a comprehensive, intercity passenger rail planning and development program that will help guide sustained intercity passenger rail development throughout the country and create a pipeline of intercity passenger rail projects ready for implementation. FRA anticipates that the CID program will be the primary mechanism for developing off-NEC intercity passenger rail corridors and projects for subsequent implementation. Projects that are identified and fully developed through the CID program will benefit from a selection preference for future Federal-State Partnership-National funding opportunities.

Section 22308 of IIJA established that two types of long-distance service are eligible to participate in the CID program:

- A corridor that “restore[s]...service over all or portions of an intercity passenger rail route formerly operated by Amtrak.”
- A corridor with an “increase of service frequency of a long-distance intercity passenger rail route.”

Therefore, the CID program does not explicitly refer to new long-distance routes – those not previously operated by Amtrak – in its definition of intercity passenger rail corridors. FRA is evaluating whether this definition would preclude new long-distance routes from participating in the CID program. This issue will not prevent FRA from completing the Study, but it may limit the implementation of Study recommendations, including new Amtrak long-distance routes, as they will not have a clear path forward under the CID program.

7.3 Stakeholder Feedback

FRA has conducted robust stakeholder engagement for this Study, including working group meetings throughout the country. As part of this engagement, FRA has received feedback from stakeholders on several issues related to Amtrak long-distance service that may require further consideration. These issues will not prevent FRA from completing the Study; rather, FRA is presenting them for general awareness.

7.3.1 International Long-Distance Service

Amtrak's existing long-distance routes operate entirely within the contiguous United States and receive federal funding for operating support. During stakeholder and public engagement, FRA received feedback requesting FRA to consider Amtrak long-distance service that extends across international borders, both to Canada and Mexico. FRA intends to focus the final Report to Congress on domestic routes, given uncertainties with the use of federal funds to support long-distance services taking place outside of the contiguous United States. Amtrak's long-distance services currently receive federal funds for operating support. However, FRA will continue to engage with stakeholders on this issue.

7.3.2 Extensions to Current Amtrak Long-Distance Routes

During stakeholder engagement, FRA received feedback requesting new extensions to current long-distance routes. Some stakeholders requested new extensions that traverse several states. Long-distance routes have a different funding structure than state-supported routes. Specifically, long-distance routes receive federal support for operating costs via FRA's annual National Network Cooperative Agreement to Amtrak – unlike state-supported routes, which are primarily funded through cost-sharing agreements with state partners. Under these cost-sharing agreements, the state partner pays Amtrak for certain operating costs not covered by ticket revenue. States do not directly pay for long-distance route operating expenses. FRA is evaluating whether extensions of long-distance routes are properly characterized as long-distance routes, or whether extensions of long-distance routes should be considered state-supported routes, given the different funding structure for each type of service. FRA will continue to engage with stakeholders on this issue.

8 Next Steps

This Interim Report to Congress presents an overview of progress and findings as of June 2023 for the Long-Distance Service Study. The information provided in this Interim Report will serve as a foundation upon which FRA will build the recommendations in its final Report to Congress.

The immediate next steps for the Study are:

- Continued engagement with stakeholders, including regional working groups, Amtrak, states, regional transportation planning organizations, MPOs, municipalities, host railroads, Amtrak labor organizations, passenger organizations, and relevant regional passenger rail authorities and federally recognized Indian tribes.
- Incorporate feedback from July 2023 stakeholder engagement meetings (summarized on the Study website – [fralongdistancerailstudy.org](https://www.fralongdistancerailstudy.org)).
- Develop preferred options for restoring or enhancing long-distance service.
- Identify federal and non-federal funding sources to restore or enhance long-distance services.
- Develop prioritized inventory of capital improvements and other actions required to restore or enhance long-distance services, including cost estimates for those projects and actions.
- Develop estimated costs and public benefits of restoring or enhancing passenger rail transportation in the region impacted for each relevant route, as well as federal and non-federal funding sources to restore or enhance service.
- Develop recommendations for methods by which Amtrak could work with local communities and organizations to develop activities and programs to continuously improve public use of passenger rail service along each route.

The results of these steps will be presented in the final Report to Congress. The final report will also incorporate work that has been presented in this document.

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