



Regional Working Group Meeting 4

WELCOME & SAFETY BRIEFING

INTRODUCTIONS

FRA OPENING REMARKS

AMTRAK OPENING REMARKS

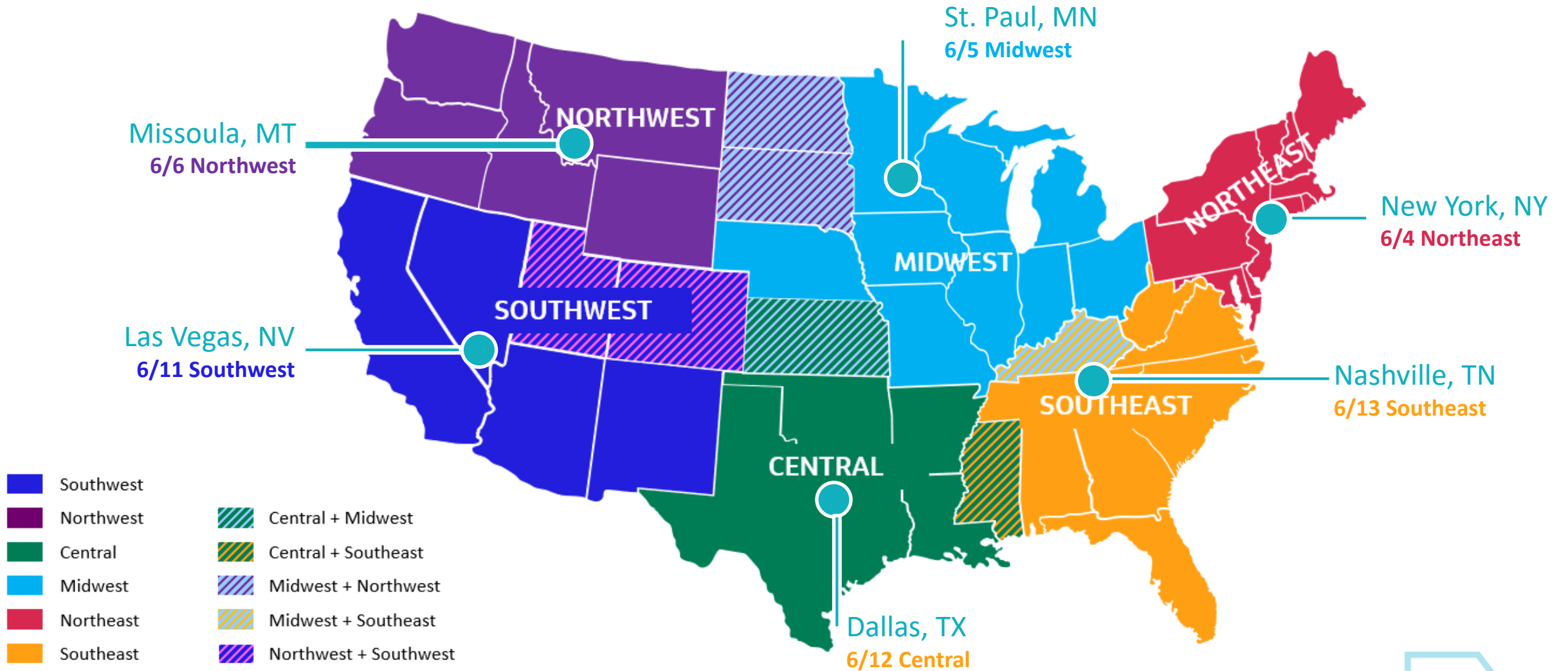
Agenda

- Welcome and Introductions
- Study Overview and What We've Heard
- Network Development
- Methods and Tools for Network Assessment
- Preferred Route Analysis
- Prioritization
- On-going Long-Distance Collaboration and Planning
- Closing and Next Steps

Meeting Objectives

- Review and discuss the analyses associated with each of the preferred routes:
 - Conceptual service schedules
 - High-level capital and operating and maintenance cost estimate ranges for certain types of projects
 - Public benefits analysis
- Create a shared understanding of next steps for the project

Long-Distance Service Study Regions: Stakeholder Group Meetings



Long-Distance Service Study Engagement Schedule



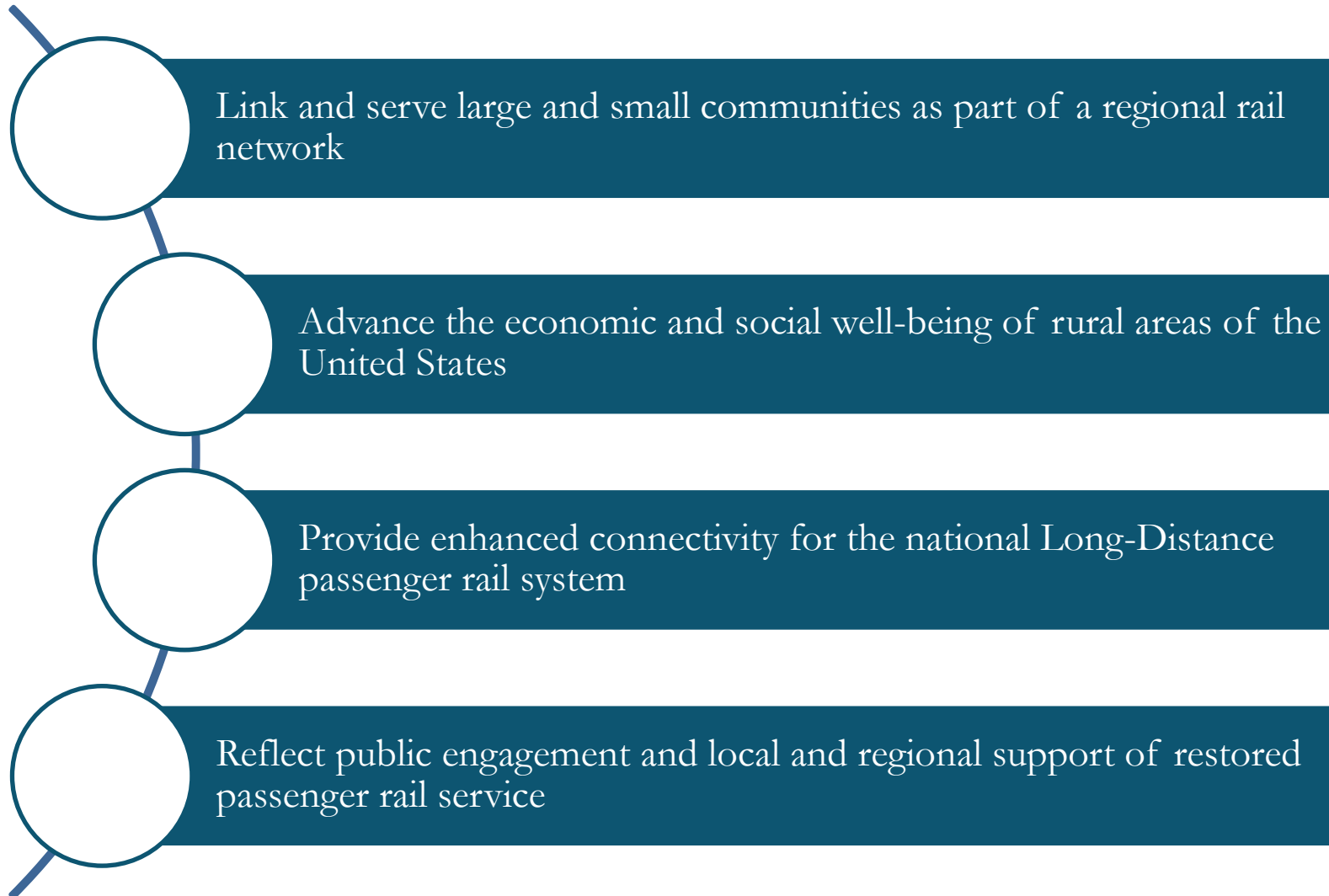
STUDY OVERVIEW

About the FRA Long-Distance Service Study

The Infrastructure Investment and Jobs Act (IIJA) of 2021 requires the FRA to conduct a study to evaluate the restoration of daily intercity rail passenger service along —

- any Amtrak Long-Distance routes that were discontinued; and
- any Amtrak Long-Distance routes that occur on a nondaily basis.
- FRA may also evaluate potential new Amtrak Long-Distance routes, including with specific attention provided to routes in service as of April 1971 but not continued by Amtrak.

Legislative Considerations for Long-Distance Service Expansion



FRA Long-Distance Service Study – Report to Congress

Preferred options for restoring or enhancing Long-Distance service

Prioritized inventory of capital projects to restore or enhance service

Federal and non-Federal funding sources

Estimated costs and public benefits of restoring or enhancing intercity rail passenger transportation in the region impacted for each relevant Amtrak route

Recommendations for methods by which Amtrak could work with local communities and organizations to develop activities and programs to continuously improve public use of intercity passenger rail service along each route.

Amtrak Passenger Rail Service

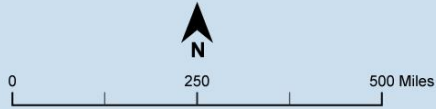
- Amtrak provides passenger rail service across the nation, serving more than 500 destinations in 46 states.
- The current Amtrak network provides passenger rail service across three service lines:
 - **Northeast Corridor (NEC)** provides service between Boston, Massachusetts, and Washington, DC on the Northeast Regional and Acela routes; Amtrak owns most of the NEC main line, and provides high-speed service on Acela.
 - **State-Supported** provides service on 30 routes of not more than 750 miles through cost-sharing agreements with state partners.
 - **Long-Distance** provides service on 15 Amtrak routes over 750 miles. The federal government provides significant financial support to Amtrak for these routes.
- Both state-supported and long-distance routes primarily operate on host railroad tracks, which are not owned by Amtrak.

Existing Network



Legend

- Existing Network**
- Amtrak Routes
 - Long-Distance
 - Northeast Corridor
 - State-Supported



What are Amtrak Long-Distance (LD) Routes?

Frequency and Service

Amtrak operates 15 LD routes. By statute, LD routes are over 750 miles; they typically operate once per day in each direction (except Cardinal and Sunset Limited), with end-to-end travel times of 12+ hours, and have coach and sleeper accommodations.

Rural Connections

Less than 10 percent of LD riders travel end-to-end; many different origin-destination pairs in each route,* connecting urban and rural markets. Approximately 20 percent of LD riders connect to another Amtrak service.

Geography

LD routes are the only passenger rail service in 22 of the 46 states in the passenger rail network; on average, an LD route serves 29 stations and 8 states.* LD routes help form a “backbone” of the national passenger rail network.

Funding

Congress, through an annual grant to Amtrak, provides funds to offset the adjusted operating loss for LD routes – projected to be approximately \$495M in FY25.** Amtrak is prohibited from discontinuing LD routes in any year it receives adequate federal funding.

Passengers

LD routes carried over 4 million passengers in 2023, who traveled 2 billion passenger miles – more than a third of total passenger miles traveled in the Amtrak system.

*Station data excludes the Auto Train; state data includes Washington, DC

**Amtrak General and Legislative Annual Report & Fiscal Year 2025 Grant Request



Federal Funding Program Overview: Amtrak Annual Grant

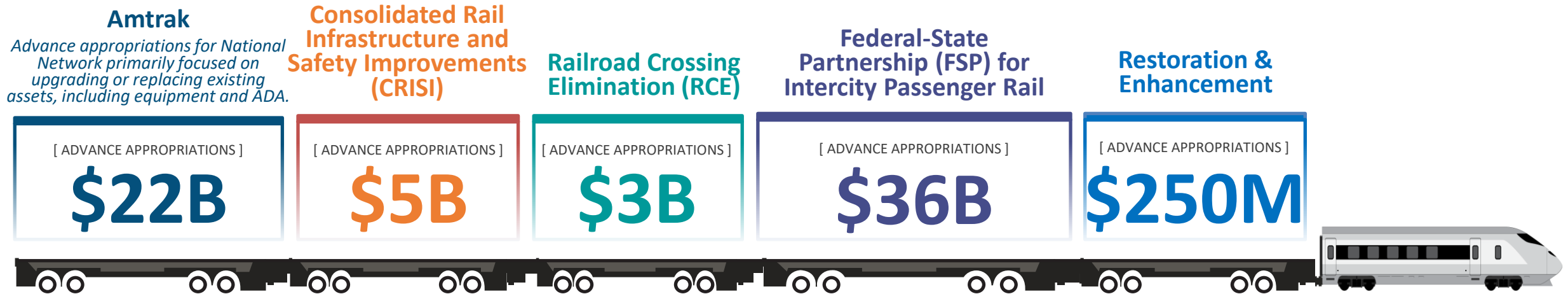
- The Amtrak Annual Grant is a directed grant program that is unique in scope and purpose—Amtrak is the only eligible recipient, and funds are broadly eligible for use to support Amtrak’s activities. FRA administers the grant, and **available funding changes year-to-year based on Congressional appropriations.**
- Amtrak’s funds are administered via two grants: one for Amtrak’s Northeast Corridor Account and one for Amtrak’s **National Network** Account.
- Annual Grant funds are often used for:
 - Capital improvement projects and annual maintenance activities
 - Debt service payments
 - Operating expenses on the National Network
 - ✓ **Long-Distance Routes:** Funds are typically used to offset operating losses on existing routes
 - ✓ **State-Supported Routes:** Amtrak has cost-sharing agreements with state partners, but federal funds are used for certain expenses on these routes

Federal Funding Program Overview: BIL Advance Appropriations

[ADVANCE APPROPRIATIONS]

From FY22-FY26

\$66B in total funding



FRA Discretionary Grant Programs: BIL Advance Appropriations

Programs	Purpose	Advanced Appropriations
Consolidated Rail Infrastructure and Safety Improvements (CRISI)	To fund projects that improve the safety, efficiency, or reliability of intercity passenger and freight rail.	\$5 billion (\$1 billion annually)
Railroad Crossing Elimination (New)	To promote highway-rail or pathway-rail grade crossing improvement projects that focus on improving the safety and mobility of people and goods.	\$3 billion (\$600 million annually)
Federal-State Partnership for Intercity Passenger Rail (Significantly Changed)	To fund capital projects that reduce the state of good repair backlog, improve performance, or expand or establish new intercity passenger rail service, including privately operated intercity passenger rail service if an eligible applicant is involved.	\$36 billion (\$7.2 billion annually)
Restoration & Enhancement	To provide operating assistance to initiate, restore, or enhance intercity passenger rail service.	\$250 million (\$50 million annually from Amtrak National Network fund)
Interstate Rail Compacts (New)	This program will provide funding for interstate rail compacts' administrative costs and railroad systems planning, promotion of intercity passenger rail operations, and the preparation of grant applications.	\$15 million (\$3 million annually from Amtrak National Network fund)

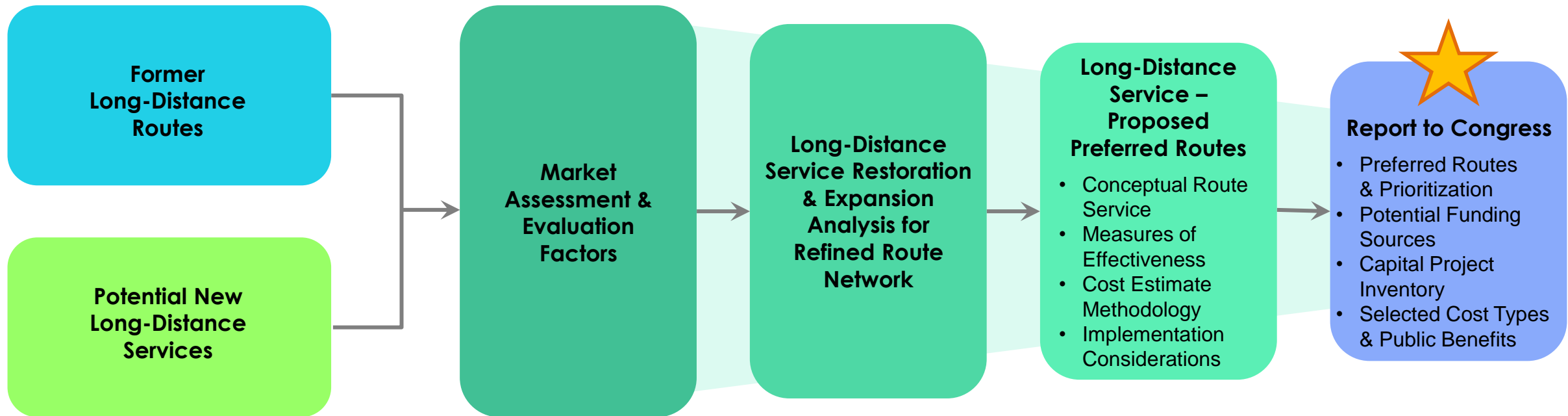
Overview of Long-Distance Service Study Scope

- Plan and execute agency, stakeholder and public engagement
- Review previous Long-Distance services
- Assess current Long-Distance services and travel market
- Develop study methods and tools
- Develop restoration and expansion concepts
- Identify preferred options and prioritization
- Develop costs, benefits, and financing information
- Identify final recommendations and implementation strategies
- Issue final report

Long-Distance Service Study Approach

Amtrak Non-Daily
(Cardinal & Sunset
Limited) Routes

- Evaluate existing conditions & requirements to restore to daily service
- Consider & recommend daily service restoration plan



Long-Distance Service Study Expectations

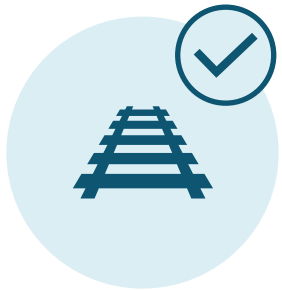
<u>What this Study IS</u>	<u>What this Study IS NOT</u>
Focused on Long-Distance Network	A “National Rail Plan”
Assessment of routes over 750 miles	Assessment of State-Supported routes
Focused on Amtrak as service provider	Identifying other service providers
Service frequencies to meet Long-Distance markets	High frequency service
Utilization of existing rail corridors	Identifying new “greenfield” alignments
Conventional rail/technology	High-speed or other emerging technologies

Long-Distance Service Study Technical Outputs

- **Develop market demand and operations and maintenance (O&M) costs that emphasize the benefits and costs of both the existing and an expanded long-distance network**
 - Includes developing demand, revenue, and O&M cost estimates for specific routes under consideration
- **Identify certain types of passenger service-required projects**
 - Passenger service-required projects identified for this study include track upgrades to track class 4 and supporting signalization and PTC, passenger stations, maintenance facilities, and rolling stock
 - Projects will be included as part of “prioritized inventory” required by the legislation
 - Decision to focus on identifying these types of projects was based on feedback from host railroads during initial outreach
 - Estimated cost ranges of passenger service-required projects will be identified
 - Total capital costs for preferred routes will **not** be identified

Capital Cost Estimating for Selected Passenger Service-Required Projects

Costs Estimated for Selected Passenger Service-Required Projects



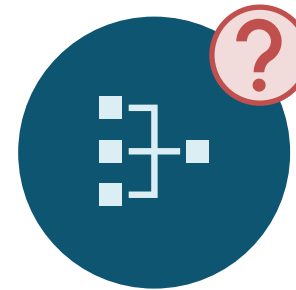
Track Class 4,
including
Signalization
and PTC



Stations and
Maintenance
Facilities



Vehicles
(Rolling Stock)



Other Capital Projects
Including Track Capacity
and Operational
Improvement Projects



Total Estimated
Capital Costs

Unknown Costs
To be determined based on
future studies and analysis

Opportunities and Challenges

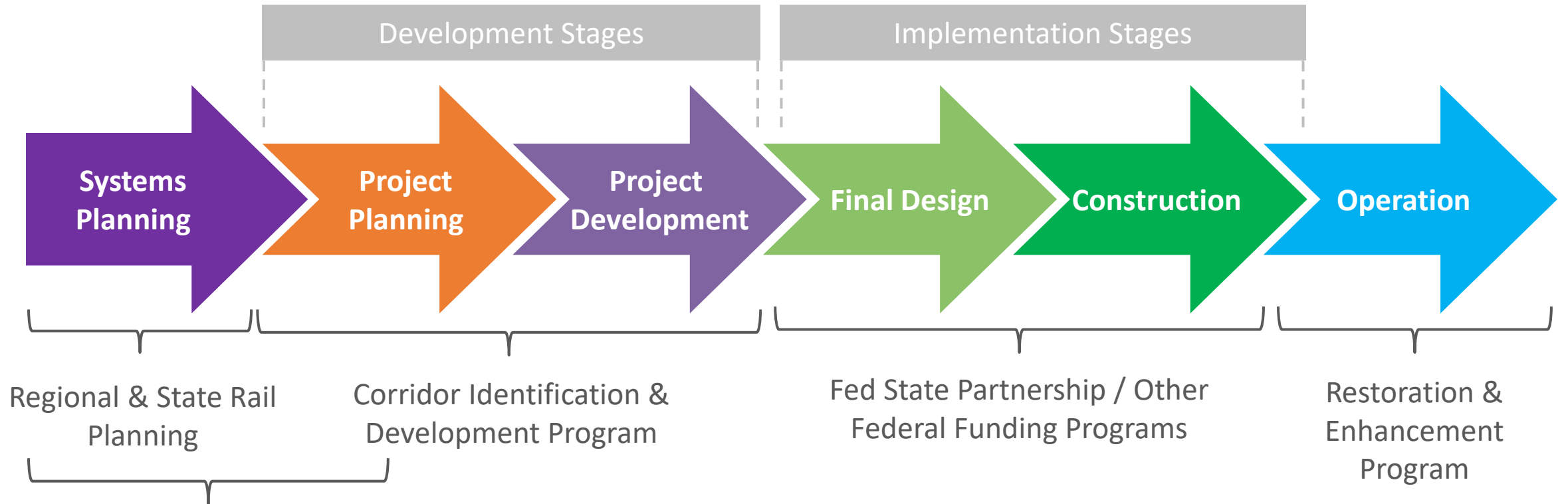
Opportunities

- Establishes options for potential future long-distance service, in response to legislative requirements, examining broad needs, challenges, and opportunities.
- Identifies regions where potential new service could provide economic and social benefits.
- Demonstrates support for restoring long-distance intercity passenger rail services and exploring the creation of new long-distance routes.
- Satisfies an early step in the FRA project lifecycle to identify actions needed to enhance long-distance service.

- Documents high-level analysis. Substantial additional analysis and resources are required prior to implementation.
- Identifies only certain passenger service-required capital projects. Future identification and analysis of additional capital projects, including those related to capacity, requires additional time and resources, including coordination with host railroads and other stakeholders.
- Requires significant unidentified funding for planning, infrastructure improvements, fleet needs, and ongoing operating support.

Challenges

Long-Distance Service Study in the FRA Project Lifecycle Stages



FRA Long-Distance Service Study

Long-Distance Service Study in the FRA Project Lifecycle Stages

Key Systems and Project Planning Tasks Undertaken by the Study

- ✓ Create a foundation for further planning of potential future long-distance services
- ✓ Examine broad needs, challenges, and opportunities
- ✓ Consider links with other transportation modes
- ✓ Identify selected passenger service required projects, including their respective costs and benefits

Key Project Planning Tasks Subject to Additional Analysis AFTER the Study

- ❑ Route, service, and passenger service-required project recommendations are subject to further development and refinement under subsequent detailed project planning and project development efforts
- ❑ Identify potential capacity related improvements and operational issues associated with the proposed routes
- ❑ Develop conceptual engineering concepts

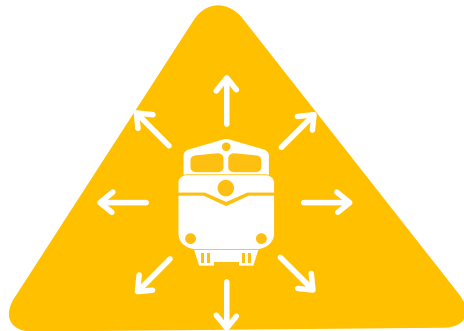
Corridor Identification and Development Program Overview

Build the foundation for a long-term rail program



Corridor ID creates a foundational framework for identifying and developing new or improved intercity passenger rail (IPR) services. Under the program, FRA will:

Bring world-class passenger rail service to regions across the country



Solicit proposals for implementing new or improving existing IPR services

Select corridors for development

Partner with corridor sponsor to prepare (or update) a Service Development Plan (SDP)

Grow a safer, cleaner, more equitable rail system



SDP includes a “corridor project inventory”

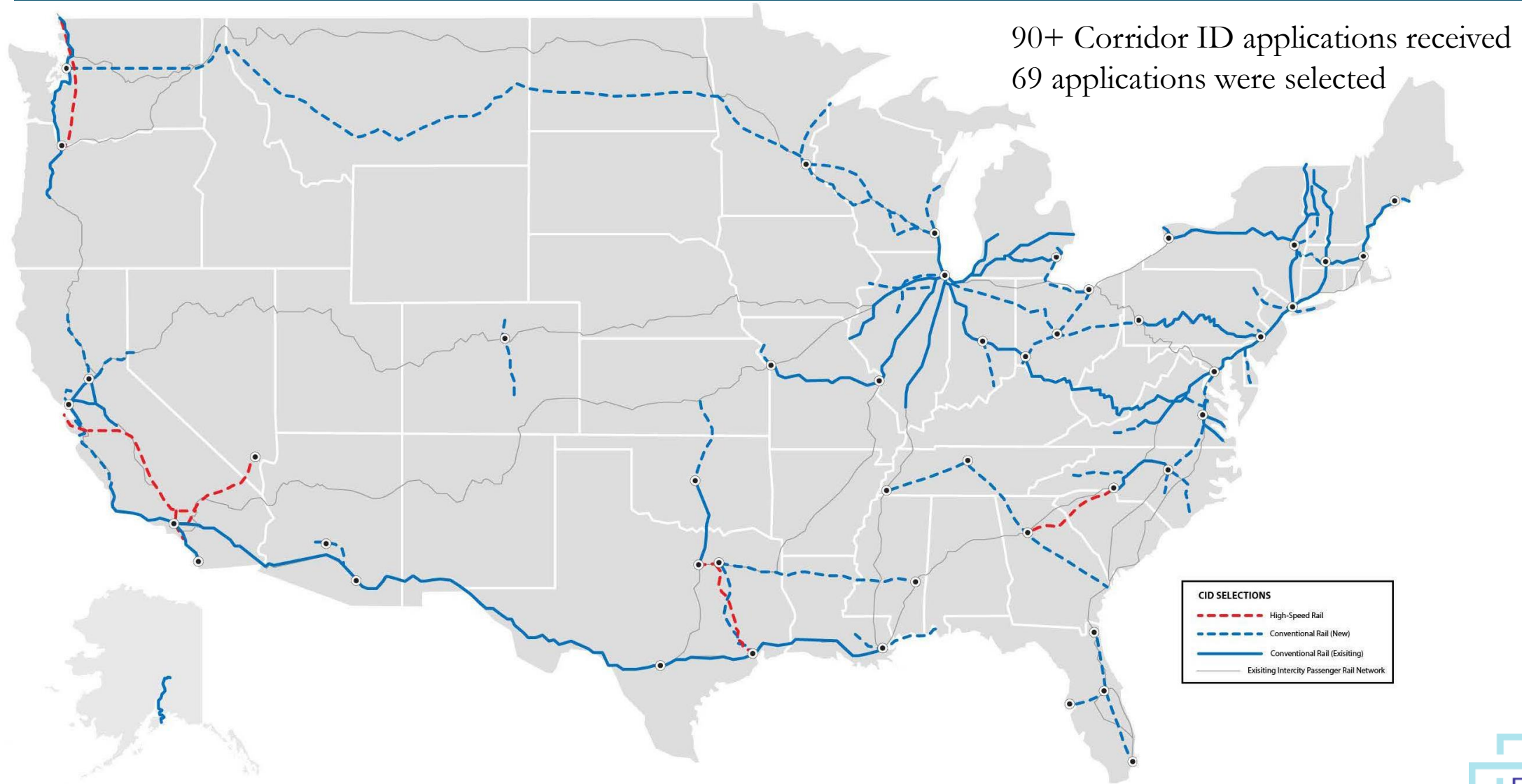
Corridor project inventories populate a prioritized “pipeline” of projects

Projects in the Corridor ID Pipeline are eligible for funding under FRA’s financial assistance programs

Nexus between the Long-Distance Service Study and Corridor ID Program

- Corridor ID eligibility includes both short-distance (less than 750 miles) services, along with increasing the frequency of long-distance service, and restoring service over any route formerly operated by Amtrak.
- Long-distance service corridors selected into Corridor ID include:
 - Daily Cardinal Service (Amtrak) – Increase service frequency of a long-distance route
 - Daily Sunset Limited Service (Amtrak) – Increase service frequency of a long-distance route
 - North Coast Hiawatha (Big Sky Passenger Rail Authority) - Restoration of service over all or portions of an intercity passenger rail route formerly operated by Amtrak

FY 22 Corridor ID Selections



WHAT WE HEARD

Ideas for Ongoing Long-Distance Planning & Collaboration

■ Ongoing Long-Distance Planning

- FRA is considering ideas for a recurring, high-level long-distance planning process, potentially updated approximately every five years.
- This process, led by FRA, could be similar to State Rail Plans or other comparable transportation investment plans, focusing on the status and needs of current Amtrak long-distance service, as well as needs for potential future service.

■ Ongoing Long-Distance Collaboration

- FRA is considering ideas for a new Long-Distance Public Committee, which may need to be established by Congress.
 - This committee could focus on **ongoing feedback for current Amtrak long-distance service**, including engagement / marketing, customer service, and other policy discussions.
- FRA heard significant support for these ideas during regional working group meetings earlier this year and will continue to consider these ideas.

Over 47,000 Comments Received - AI Methodology

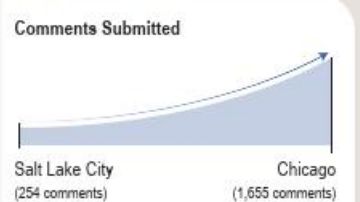
- Public and stakeholder comments were collected from February 6 – March 11
 - Submitted via emails, letters, and a webform
 - Over 47,000 comments received
- Artificial Intelligence (AI) was used to analyze the comments received and identify preferred routes and geographies (cities, states) mentioned
- Steps in the AI analysis process included:
 - Validating Data: a random sample of comments was reviewed to confirm the AI analysis matched the human analysis
 - Tuning Responses: AI prompts were tested until performance was acceptable
 - Reviewing: AI processed all comments and summarized results

Over 47,000 Comments Received

Project Website, Email, and Letters – February 6 through March 11

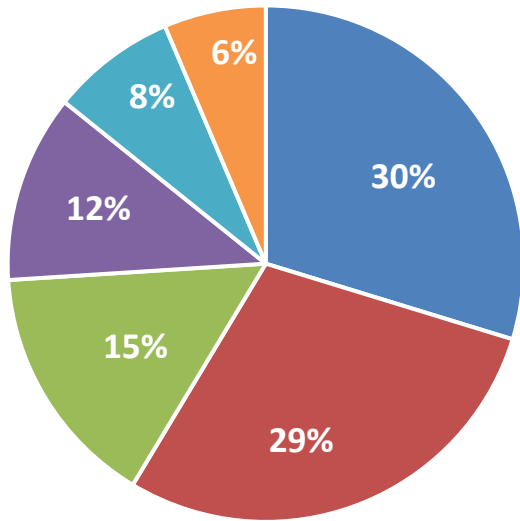
Further analysis after completion of this study would be necessary to advance the preferred routes through project planning and project development activities prior to implementation.

- Legend**
- Baseline Network**
 - Long-Distance, Northeast Corridor, State-Supported, Baseline Projects
 - Preferred Routes**
 - Chicago – Miami
 - Dallas/Fort Worth – Miami
 - Denver – Houston
 - Los Angeles – Denver
 - Phoenix – Minneapolis/St. Paul
 - Dallas/Fort Worth – New York
 - Houston – New York
 - Seattle – Denver
 - San Antonio – Minneapolis/St. Paul
 - San Francisco – Dallas/Fort Worth
 - Detroit – New Orleans
 - Denver – Minneapolis/St. Paul
 - Seattle – Chicago
 - Dallas/Fort Worth – Atlanta
 - El Paso – Billings



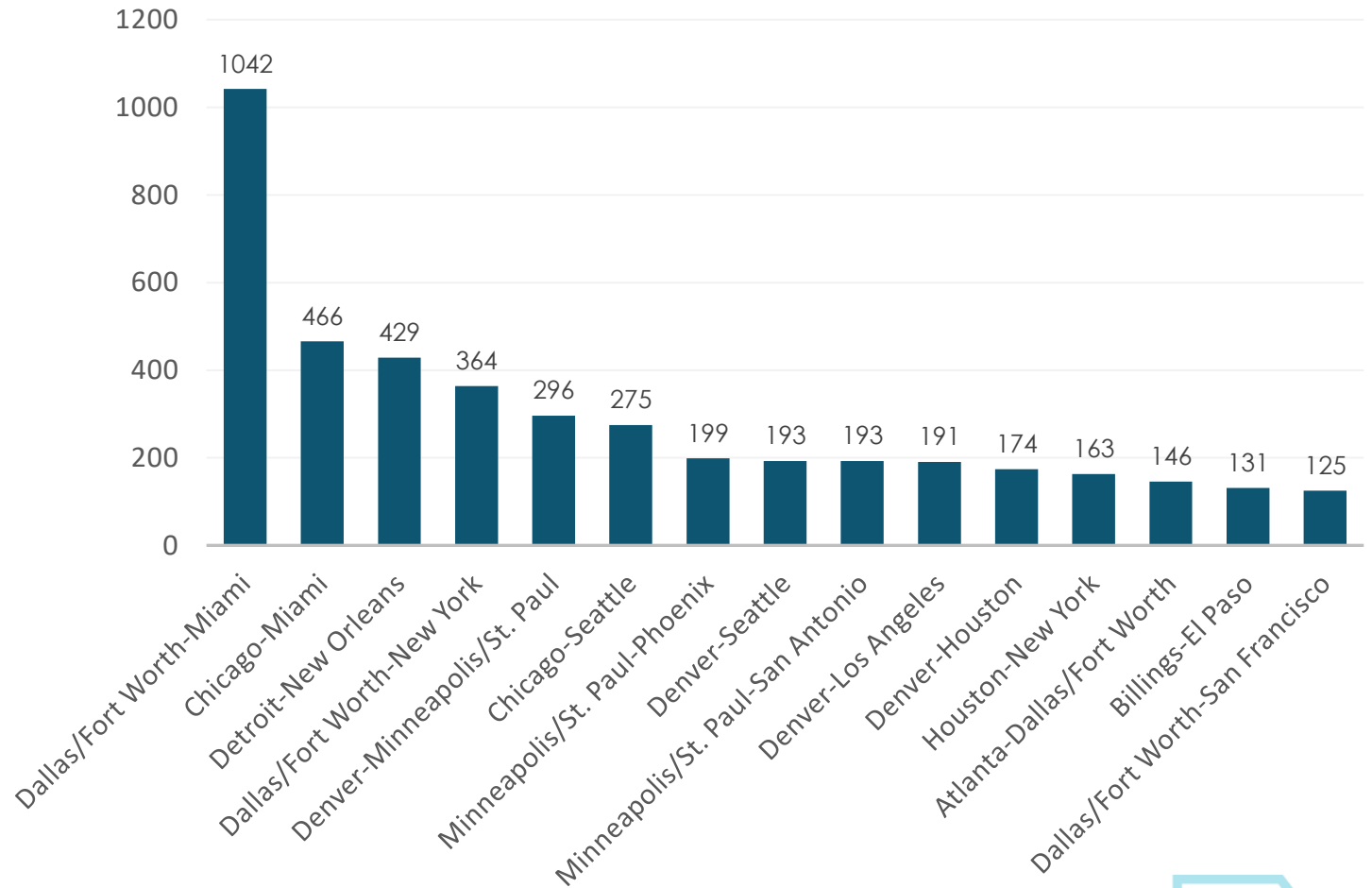
Over 47,000 Comments Received

Comments by Topic



- Restoration of Discontinued Long-Distance Routes
- Potential New Long-Distance Service
- Current Long-Distance Service
- Prioritization and Implementation
- Costs and Funding
- Public and Stakeholder Involvement

Comments Referencing a Preferred Route



Stakeholder and Public Comment Takeaways

- 99% of comments were supportive of long-distance passenger rail in the United States.
- 23% of the comments simply offered support for passenger rail.
- Some cities that are not included on a preferred route generated many comments and support for consideration. These cities will be discussed later in the presentation.

NETWORK DEVELOPMENT

Existing Network



Legend

- Existing Network**
- Amtrak Routes
 - Long-Distance (Orange line)
 - Northeast Corridor (Green line)
 - State-Supported (Blue line)

Baseline Network



Legend

Baseline Network

Amtrak Routes

- Long-Distance
- Northeast Corridor
- State-Supported

Baseline Projects

- Brightline
- Gulf Coast Passenger Rail
- CAHSR MOS

Existing Route and Station Data provided by Amtrak 2024; Baseline Projects Data provided by FRA 2024

Conceptual Enhanced Network

Conceptual segments for future route development consideration
 Not an FRA proposal for service



Presented at Regional Working Group Meetings July 2023

Segments are conceptual building blocks for consideration in developing potential new long-distance routes

Legend

Baseline Network

- Amtrak Routes
- Long-Distance
- Northeast Corridor
- State-Supported

Baseline Projects

- Brightline
- Gulf Coast Passenger Rail
- CAHSR MOS

Enhanced Network

- Segments
- Segment Options

Existing Route and Station Data provided by Amtrak 2024; Baseline Projects Data provided by FRA 2024

Proposed Network of Preferred Routes

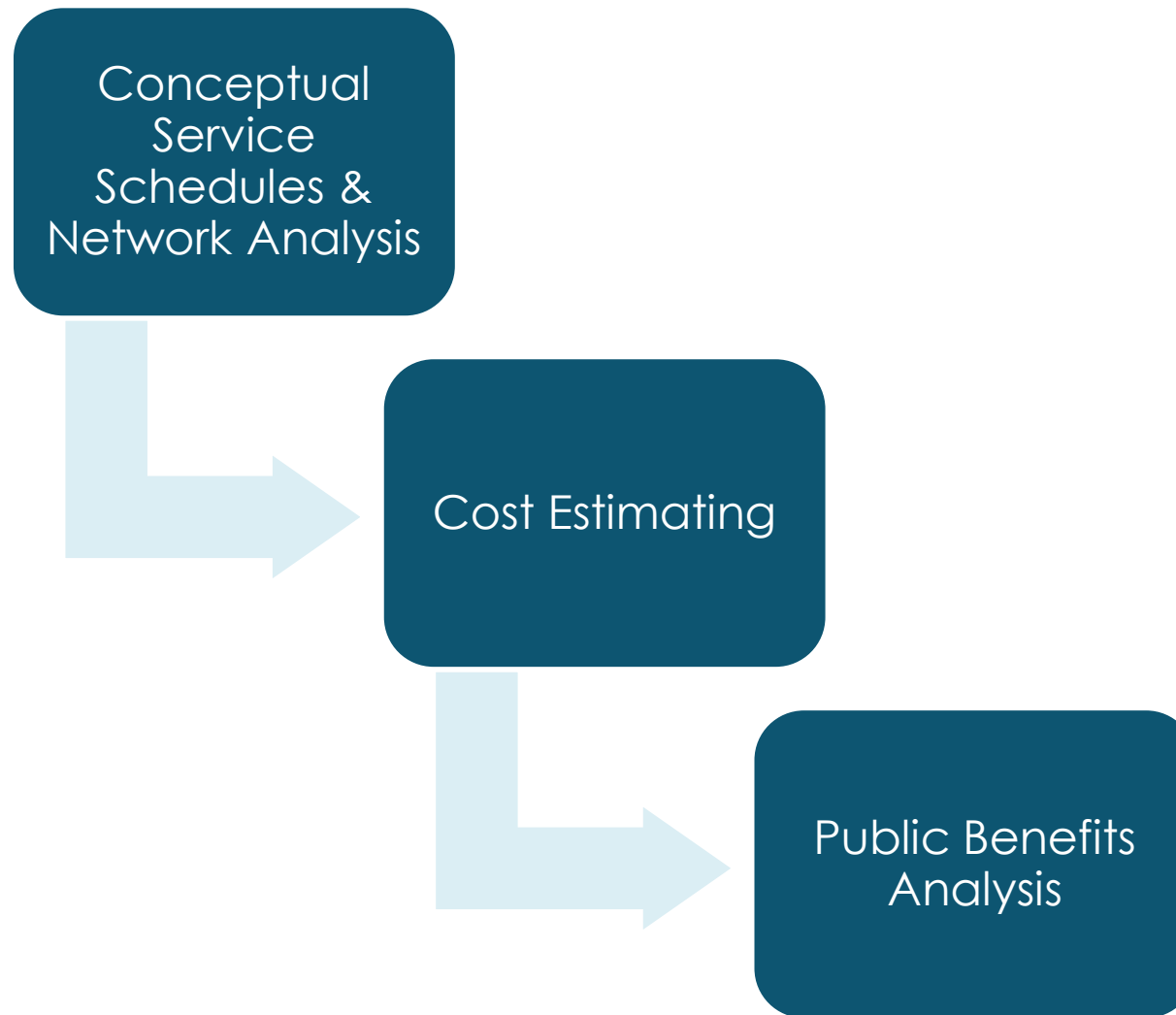


Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities prior to implementation.

Presented at Regional Working Group Meetings February 2024

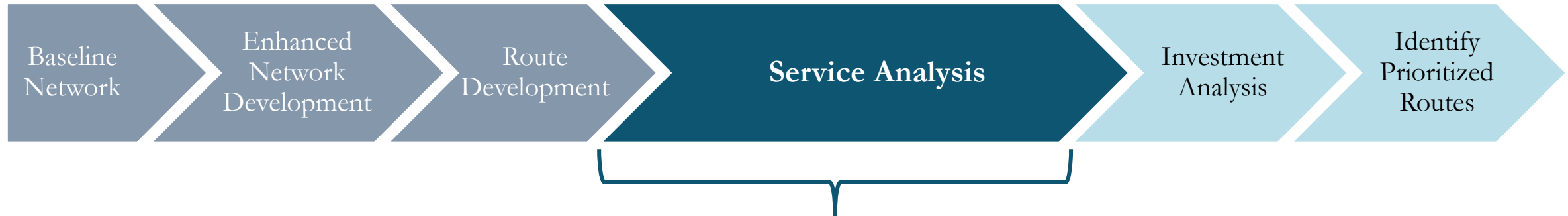
METHODS AND TOOLS FOR NETWORK ASSESSMENT

Methods and Tools for Network Assessment



CONCEPTUAL SERVICE SCHEDULES & NETWORK ANALYSIS METHODOLOGY

Methods and Tools



Conceptual Service Schedules & Network Analysis

- Purpose: Analyze and develop conceptual service schedules with approximate departure and arrival times for each preferred route to support investment analysis.
 - ✓ Develop conceptual service schedules
 - ✓ Analyze the network connections and travel time savings
- **Conceptual service schedules are not proposals for service, and do not consider existing or future traffic conditions along the routes, or site-specific conditions such as steep grades.**

Substantial additional planning after completion of this study would be needed to determine actual service plans.

Methodology for Developing Conceptual Service Schedules

- Identified potential station locations for each preferred route

Used **existing long-distance station** locations

Quantify the number of **new stations** where preferred routes expand the long-distance network

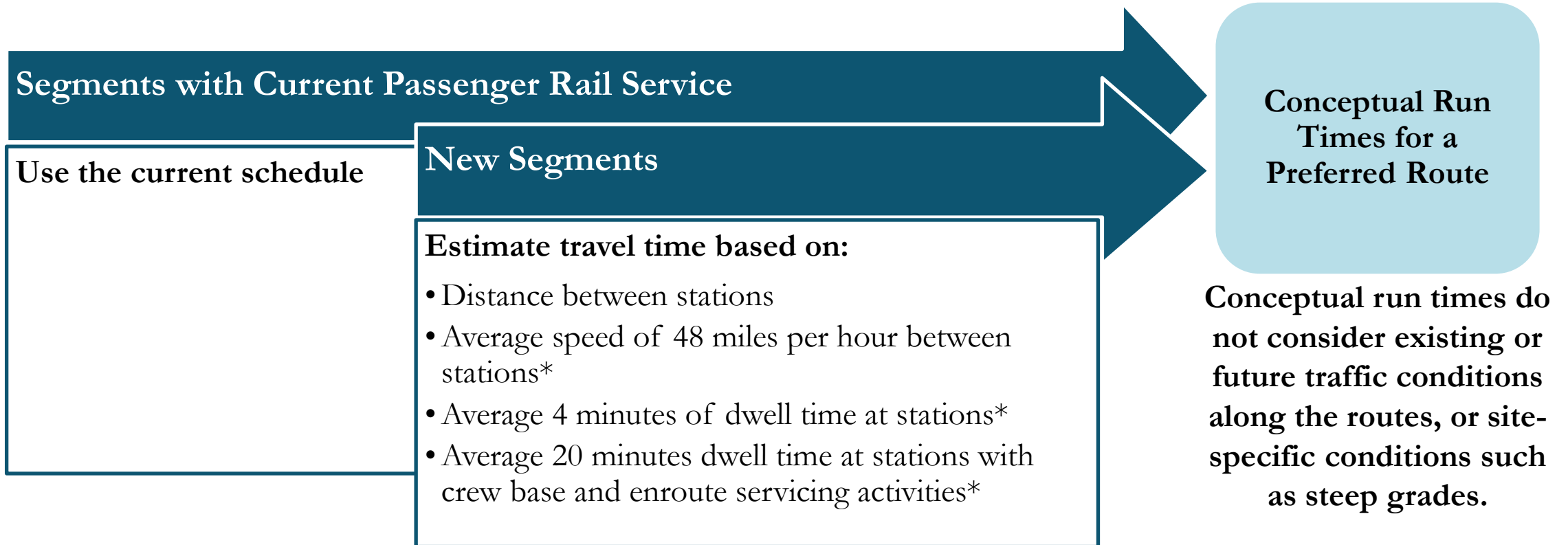
- Station spacing of approximately every 50 miles*
- City population greater than 5,000 people
- Used station locations of state-supported routes and discontinued long-distance routes and that met this criteria

Added **new stations** where a preferred route intersected an existing long-distance route where there wasn't an existing station

*Based on the average station spacing of Amtrak long-distance service for fiscal year 2022: average of 42 miles east of the Mississippi River, average of 70 miles west of the Mississippi River.

Methodology for Developing Conceptual Service Schedules

- Estimated conceptual run times for each preferred route



*Based on the average for fiscal year 2022 Amtrak long-distance service schedules.

Methodology for Developing Conceptual Service Schedules

- Developed conceptual service schedules for each preferred route

Analyzed all departure times in a 24-hour period

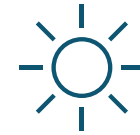


Selected departure times from the terminals:

Provided daytime departures from terminal stations

Selected conceptual departure times to maximize daytime service for the highest population market pairs on the preferred route*

Minimized nighttime service for existing long-distance stations with only nighttime service that are served by a preferred route



Daytime

5:00 a.m. – 10:59 p.m.

- 5:00 a.m. - 7:59 a.m. early morning
- 8:00 a.m. - 10:59 a.m. late morning
- 11:00 a.m. - 12:59 p.m. midday
- 1:00 p.m. - 3:59 p.m. early afternoon
- 4:00 p.m. - 5:59 p.m. late afternoon
- 6:00 p.m. - 8:59 p.m. early evening
- 9:00 p.m. - 10:59 p.m. late evening



Nighttime

11:00 p.m. – 4:59 a.m.

One train a day in each direction

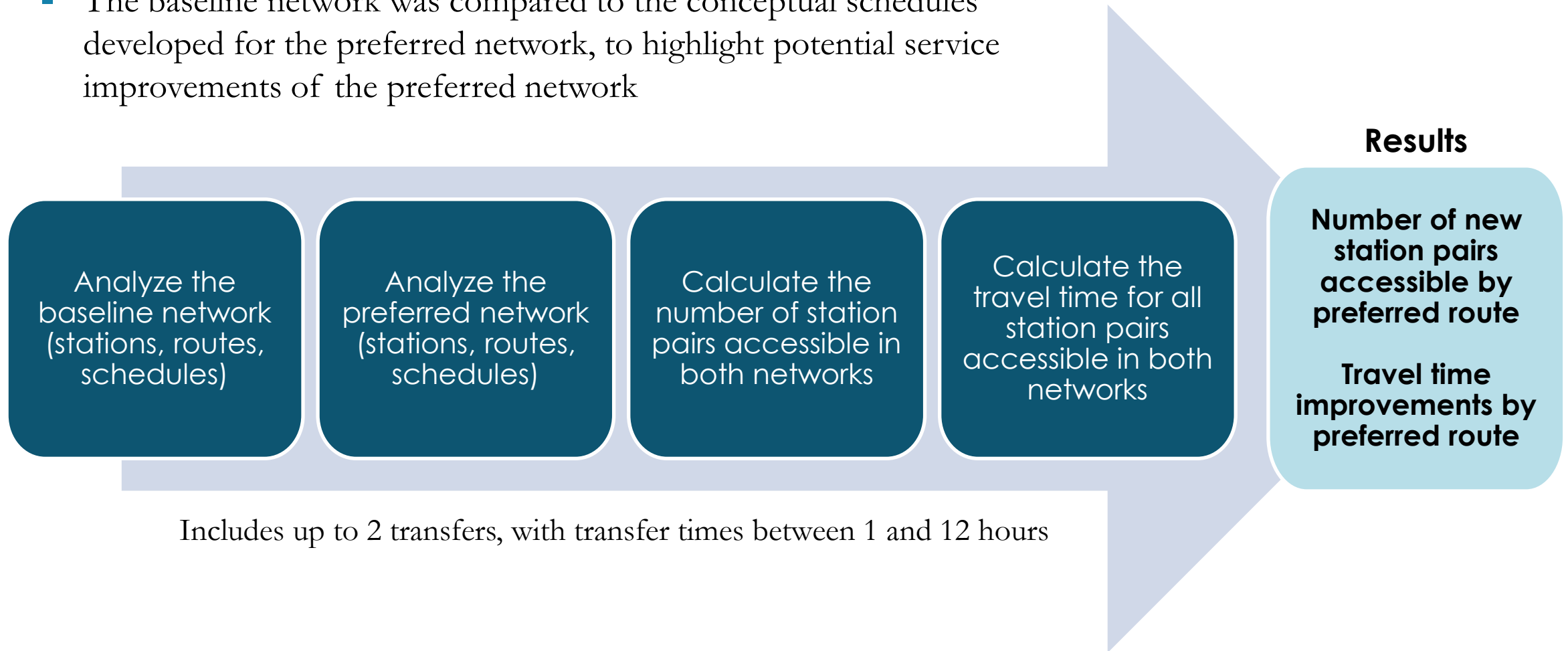
*Based on an analysis of the metropolitan statistical area or micropolitan statistical area census population and the travel time between each origin-destination station pair on the preferred route.

Methodology for Developing Conceptual Service Schedules

- Conceptual service schedules for preferred routes are:
 - **Conceptual and for analysis purposes only. They are not an FRA proposal for service.**
 - Consistent with the schedules of the existing long-distance routes
 - Consistent with existing long-distance route frequencies: one train a day in each direction
 - Based on schedules for existing long-distance routes and do not consider existing or future traffic conditions or site-specific conditions such as steep grades along the preferred routes
- Conceptual service schedules support analysis of the people and places served by the preferred routes:
 - Catchment area around stations identified for the preferred route
 - ✓ 30-mile radius where the station is in a Metropolitan Statistical Area (MSA)
 - ✓ 50-mile radius where the station is in a non-MSA area

Methodology for Network Analysis

- The baseline network was compared to the conceptual schedules developed for the preferred network, to highlight potential service improvements of the preferred network



Includes up to 2 transfers, with transfer times between 1 and 12 hours

Methodology for Network Analysis

- Potential average travel time improvements for existing station pairs when using the preferred network compared to the baseline network, based on conceptual service schedules



COST ESTIMATING METHODOLOGY

Methods and Tools



Selected Passenger Service-Required Projects:

- Passenger Rail Route Infrastructure
- Stations and Maintenance Facilities
- Vehicles (Rolling Stock)

Cost Estimating

- Purpose: Estimate selected passenger service-required capital project costs and operating and maintenance (O&M) costs of each preferred route as an input for public benefits analysis.

Public Benefits Analysis

- Purpose: Estimate the public benefits of constructing selected passenger service-required capital projects and operating the preferred routes.
 - ✓ Safety
 - ✓ Rail accessibility
 - ✓ Equity
 - ✓ Jobs and earnings

Selected Passenger Service-Required Capital Projects

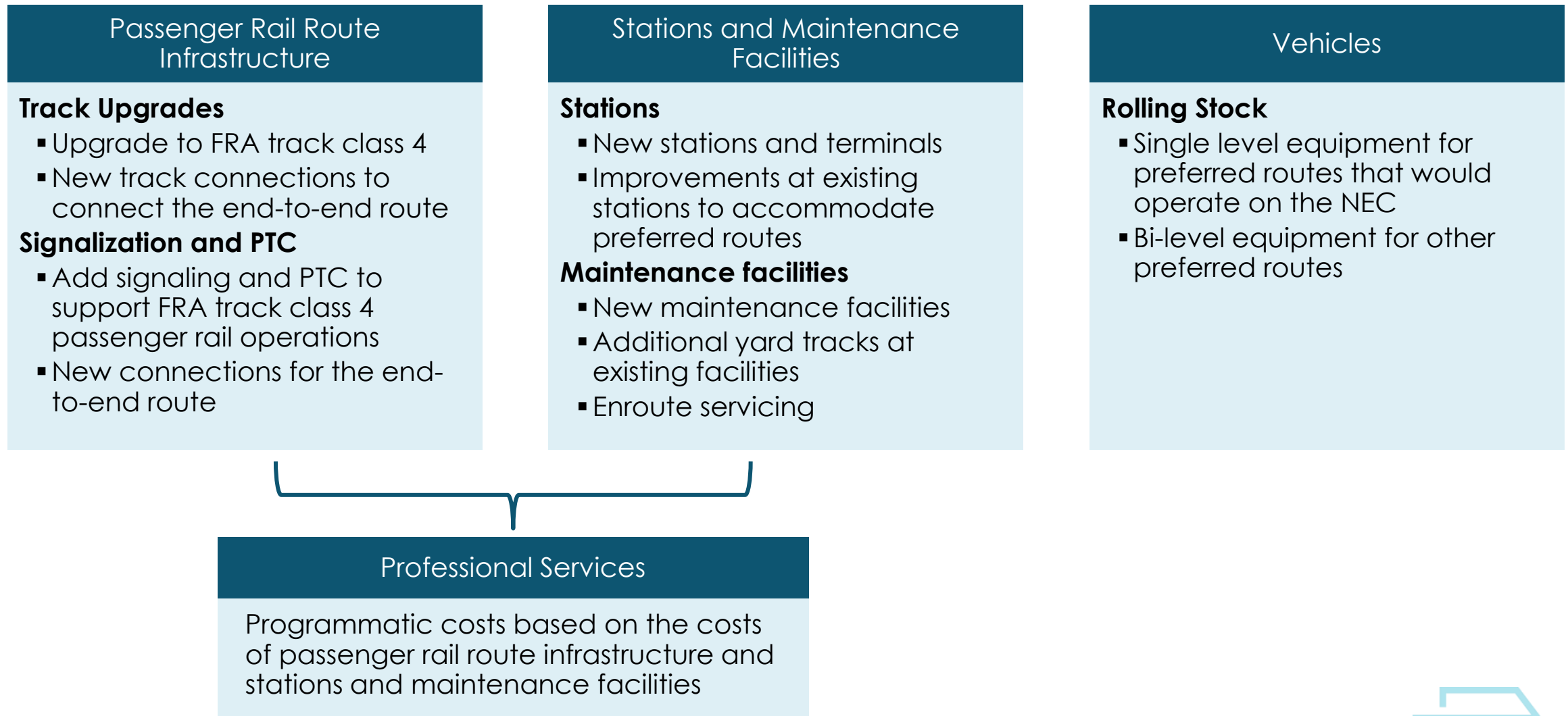
**Provides high-level
cost estimating to
support early planning
activities**

**Includes 35%
allocated
contingency to
address project risks**

**Estimates selected
passenger-service
required project costs**

- Track upgrades
- Signalization and Positive Train Control (PTC)
- Stations
- Maintenance facilities
- Vehicles

Capital Cost Estimating for Selected Passenger Service-Required Projects



Consist Estimates Used

One Night Route	Two Night Route
2 locomotives	2 locomotives
1 baggage	1 baggage
3 sleepers	3 sleepers
1 diner	1 diner
1 lounge (café/sightseer)	1 lounge (café/sightseer)
3 coaches	4 coaches
	1 transition/sleeper

Source: Amtrak FY2019 consist data

- Consists for the preferred routes based on conceptual service schedules
- Represent the maximum typical length for vehicle acquisition costs
- Number of trainsets for each preferred route calculated from:
 - Runtime + layover time divided by headway of 24 hours
 - Layover time is assumed to be 8 hours
 - Includes spare vehicles (25%)

Consist Estimates Used

Preferred Route	Number of Nights	Number of Trainsets
Chicago - Miami	2-night	5
Dallas/Fort Worth - Miami	1-night	5
Denver - Houston	1-night	4
Los Angeles - Denver	1-night	5
Phoenix - Minneapolis/St. Paul	2-night	7
Dallas/Fort Worth - New York	2-night	7 (single-level equipment)
Houston - New York	2-night	7 (single-level equipment)
Seattle - Denver	2-night	5
San Antonio - Minneapolis/St. Paul	1-night	5
San Francisco - Dallas/Fort Worth	2-night	7
Denver - Minneapolis/St. Paul	1-night	4
Seattle - Chicago	2-night	7
Detroit - New Orleans	1-night	4
Dallas/Fort Worth - Atlanta	1-night	4
El Paso - Billings	1-night	5
Daily Cardinal	1-night	4 (2 additional trainsets)
Daily Sunset Limited	2-night	7 (4 additional trainsets)

- Bi-level equipment consistent with existing long-distance routes
- Preferred routes on the Northeast Corridor would use compatible single-level equipment
- Cardinal and Sunset Limited require additional trainsets for daily operations

Capital Cost Estimating for Selected Passenger Service-Required Projects

- Does not include capacity improvements to accommodate existing or future traffic, structural improvements, grade crossing improvements, and freight railroad onboard PTC improvements
- Cost estimates reported in 2025-year dollars
- The high-cost estimate includes an additional 30% unallocated contingency over and above the low-cost estimate to account for unforeseen circumstances that impact project delivery
- The values will represent high-level cost estimates to support early planning
- Substantial additional planning and analysis would be required for further refinement and accuracy

Capital Cost Estimating for Selected Passenger Service-Required Projects

Costs Estimated for Selected Passenger Service-Required Projects



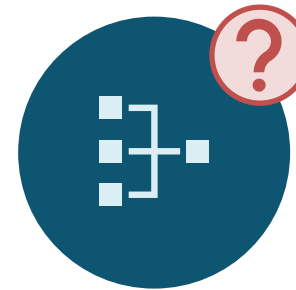
Track Class 4,
including
Signalization
and PTC



Stations and
Maintenance
Facilities



Vehicles
(Rolling Stock)



Other Capital Projects
Including Track Capacity
and Operational
Improvement Projects



Total Estimated
Capital Costs

Unknown Costs
To be determined based on
future studies and analysis

Operating & Maintenance Cost Methodology

- Based on Amtrak Performance Tracking statistics for fiscal year 2019
- Estimate O&M costs for marginal costs of the preferred routes based on conceptual service schedules:
 - Run times
 - Frequency
 - Number of vehicles
- Fixed costs would remain unchanged

MARGINAL COSTS

Costs vary by the level of service provided

- Boardings
- Locomotive Miles
- Locomotive Trips
- Coach, Food Service, Sleeper Car Hours
- Passenger Car Trips
- Non-Shared Staffed Stations
- Train Hours
- Train Miles
- Locomotive Days
- Passenger Car Days

Operating & Maintenance Cost Methodology

- Cost estimates reported in 2025-year dollars
- The low- and high-range of cost estimates reflect the variation in marginal unit costs by operating statistic of existing long-distance routes
- The values will represent high-level cost estimates to support early planning
- Substantial additional planning and analysis would be required for further refinement and accuracy

PUBLIC BENEFITS ANALYSIS METHODOLOGY

Public Benefits Analysis

- The Report to Congress must include the estimated public benefits of restoring or enhancing intercity passenger rail transportation in the region impacted along relevant routes

- **What is a public benefits analysis?**

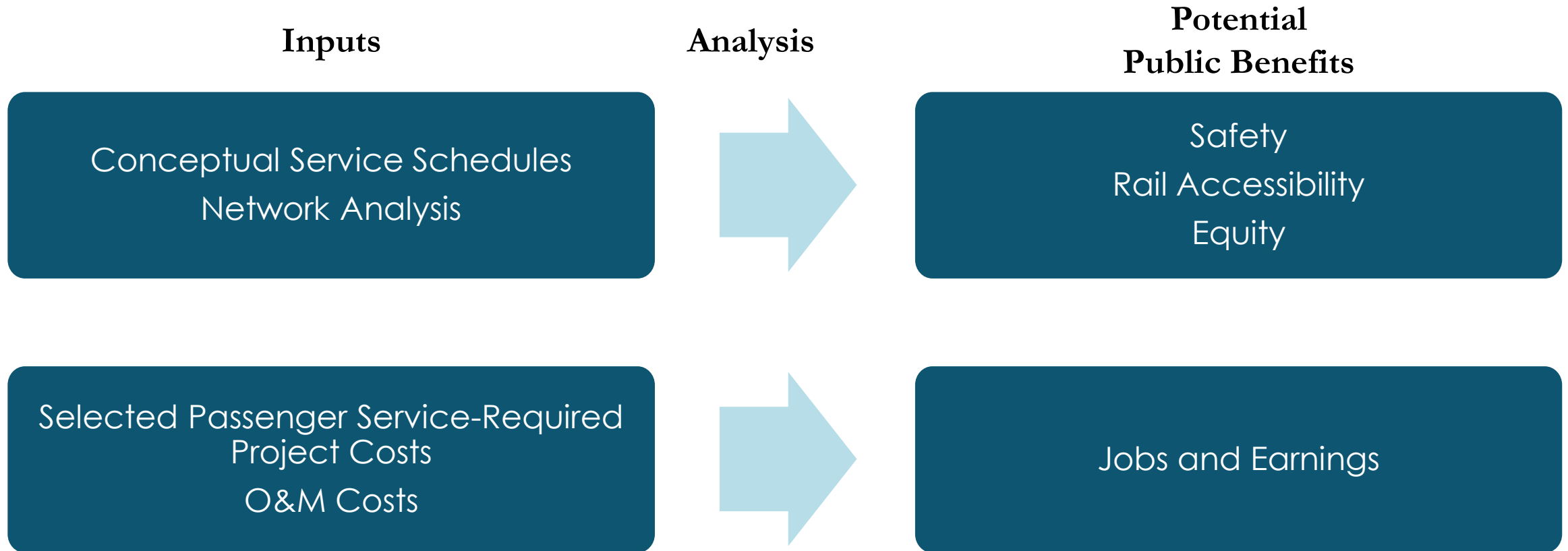
Not formally defined by U.S. Department of Transportation (DOT)
Public benefits analysis is described in FRA guidance for State Rail Plans
Not a benefit-cost analysis

Identify the beneficial outcomes from the construction, operation, availability, and use of the preferred routes in an expanded preferred network in terms of:

- Safety benefits
- Rail accessibility
- Equity
- Jobs and earnings

Estimate the potential benefits of constructing selected passenger service-required projects and operating the preferred routes

Public Benefits Analysis Methodology



Jobs and earnings from the construction of preferred routes does not include other potential capital projects not identified by this study, including track capacity and operational improvement projects.

Equity

- Identify the potential change in access to long-distance passenger rail service

Analyze the additional population within the catchment areas of a preferred route

30-mile radius where the station is in a Metropolitan Statistical Area (MSA), 50-mile radius where the station is in a non-MSA area.



Results: Additional people that could have access by preferred route

- Population served
- Rural population
- Rural population in areas of persistent poverty
- Rural population in transportation disadvantaged communities
- Rural population in health disadvantaged communities
- Population on tribal lands

Transportation Disadvantaged: U.S. DOT Justice40 Initiative: ACS Data (2015-2019 5-year estimates, 2010 Census Tract Shapefiles). Health Disadvantaged: U.S. DOT Justice40 Initiative: ACS Data (2015-2019 5-year estimates, 2010 Census Tract Shapefiles). Areas of Persistent Poverty: Census tracts with 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. Tribal Lands: American Indian and Alaska Native Land, American Indian Tribal Subdivisions, Bureau of Indian Affairs Regional Boundaries, Oklahoma Tribal Statistical Areas.

Rail Accessibility

- Identify the potential change in access to institutions from the long-distance passenger rail service

Analyze the additional institutions or services within the catchment areas of a preferred route

30-mile radius where the station is in a Metropolitan Statistical Area (MSA), 50-mile radius where the station is in a non-MSA area.



Results: Potential number of additional institutions accessible by preferred route

- Medical centers
- Higher education institutions
- Historically black colleges and universities
- Military installations
- National Park Service (NPS) lands

Medical centers include Level I/Level II Trauma, Cancer centers, Veteran centers. Higher education institutions public and private not-for-profit higher education institutions. Military installations include all Department of Defense sites, including installations, ranges, training areas, bases, forts, camps, armories. NPS lands include national parks, recreation areas, and preserves.

Jobs and Earnings

- Identify the potential number of jobs and amount of earnings from constructing and operating each preferred route.

Analyze the selected passenger service-required capital project costs and O&M costs of each preferred route



Results: Potential number of additional jobs and earnings by preferred route

- Potential jobs supported by long-distance passenger rail construction
- Potential earnings supported by long-distance passenger rail construction
- Potential annual jobs supported by operations
- Potential annual earnings supported by operations

RIMS II multipliers from the U.S. Bureau of Economic Analysis to estimate jobs and earnings (2023)
Includes direct, indirect, and induced impacts.

Safety

- Identify the potential number of crashes avoided by shifting passengers from auto and bus to rail.

Analyze the NextGen travel demand data for each preferred route



Results: Potential change in Vehicle Miles Traveled (VMT) and crashes avoided

- Potential change in auto and bus travel to rail (annual VMT)
- Potential change in the number of fatal, non-fatal, and property damage crashes avoided annually

2022 Next-Generation (NextGen) National Household Travel Survey (NHTS) National Passenger Origin-Destination Data.

Bureau of Transportation Statistics data on the crash rate per 100,000,000 miles for highway and the crash rate for passenger rail (2023)

PREFERRED ROUTE ANALYSIS

Inclusion of Cardinal and Sunset Limited

- This study is required to evaluate the restoration of daily passenger rail service along any long-distance routes that occur on a nondaily basis.
- The restoration of daily Cardinal and Sunset Limited passenger rail service is assumed when identifying the proposed network of preferred routes.
- Daily Cardinal and Daily Sunset Limited passenger rail service were selected into the Corridor ID Program in 2023 for advancing project planning activities, not implementation.



Cardinal: Chicago-
New York



Sunset Limited: Los
Angeles-New Orleans

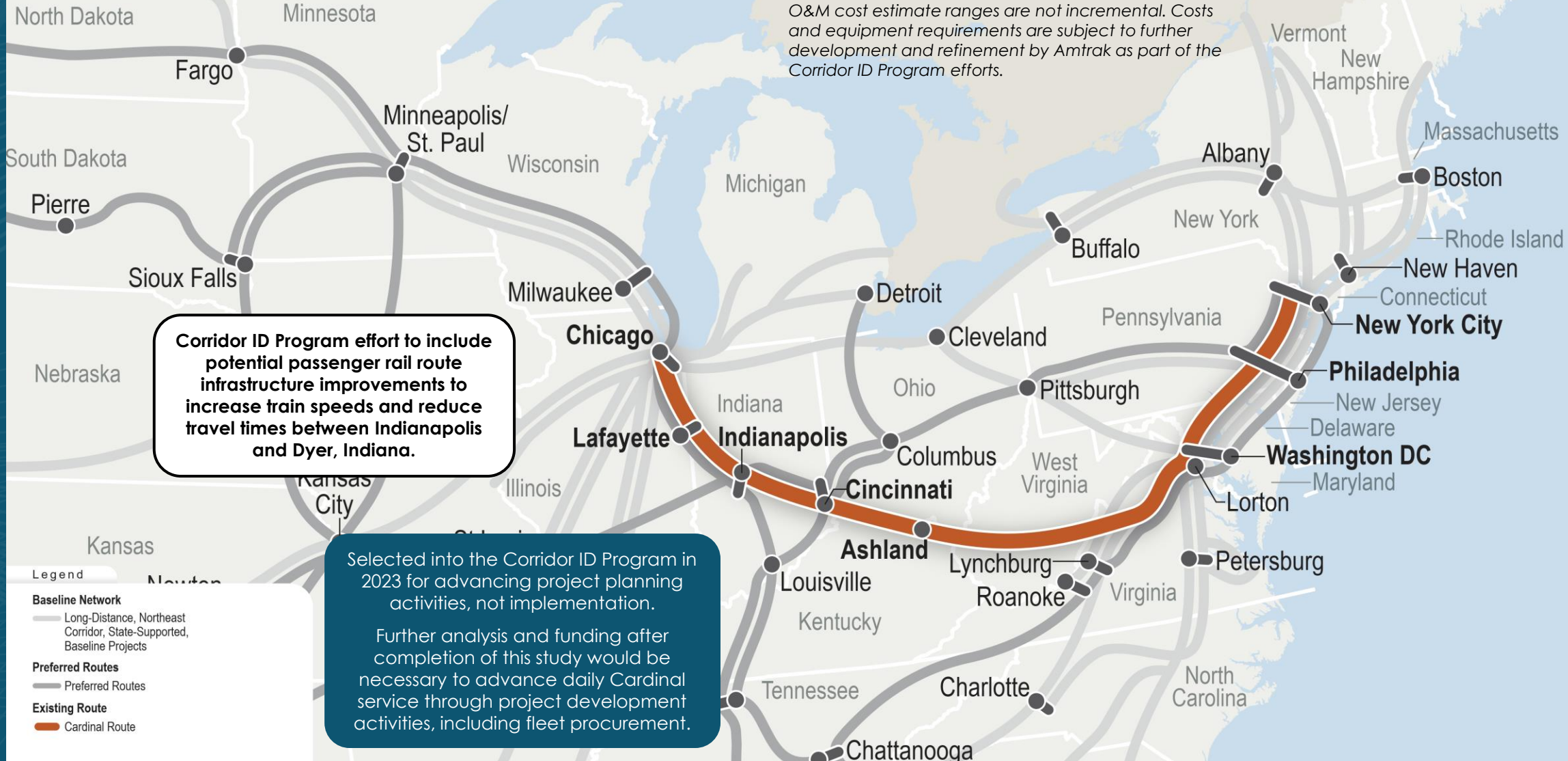
Daily Cardinal

Increasing Frequency to Daily Service

O&M Cost Estimates and Equipment Requirements

O&M costs (annual)	2025 dollars, in millions	\$78-110
Equipment Requirements	Potential number of additional trainsets	2

O&M cost estimate ranges are not incremental. Costs and equipment requirements are subject to further development and refinement by Amtrak as part of the Corridor ID Program efforts.



Corridor ID Program effort to include potential passenger rail route infrastructure improvements to increase train speeds and reduce travel times between Indianapolis and Dyer, Indiana.

Selected into the Corridor ID Program in 2023 for advancing project planning activities, not implementation.

Further analysis and funding after completion of this study would be necessary to advance daily Cardinal service through project development activities, including fleet procurement.

Legend

- Baseline Network**
 - Long-Distance, Northeast Corridor, State-Supported, Baseline Projects
- Preferred Routes**
 - Preferred Routes
- Existing Route**
 - Cardinal Route

Daily Sunset Limited

Increasing Frequency to Daily Service

O&M Cost Estimates and Equipment Requirements		
O&M costs (annual)	2025 dollars, in millions	\$107-122
Equipment Requirements	Potential number of additional trainsets	4

O&M cost estimate ranges are not incremental. Costs and equipment requirements are subject to further development and refinement by Amtrak as part of the Corridor ID Program efforts.

Corridor ID Program effort to include potential restoration of passenger rail service to Phoenix, Arizona.

Selected into the Corridor ID Program in 2023 for advancing project planning activities, not implementation.

Further analysis and funding after completion of this study would be necessary to advance daily Sunset Limited service through project development activities, including fleet procurement.

- Legend
- Baseline Network**
 - Long-Distance, Northeast Corridor, State-Supported, Baseline Projects
 - Preferred Routes**
 - Preferred Routes
 - Existing Route**
 - Sunset Limited

Proposed Network of Preferred Routes



Legend

Baseline Network

— Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

- Chicago – Miami
- Dallas/Fort Worth – Miami
- Denver – Houston
- Los Angeles – Denver
- Phoenix – Minneapolis/St. Paul
- Dallas/Fort Worth – New York
- Houston – New York
- Seattle – Denver
- San Antonio – Minneapolis/St. Paul
- San Francisco – Dallas/Fort Worth
- Detroit – New Orleans
- Denver – Minneapolis/St. Paul
- Seattle – Chicago
- Dallas/Fort Worth – Atlanta
- El Paso – Billings

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities prior to implementation.

Presented at Regional Working Group Meetings February 2024

Proposed Network of Preferred Routes

- Chicago - Miami
- Dallas/Fort Worth - Miami
- Denver - Houston
- Los Angeles - Denver
- Phoenix - Minneapolis/St. Paul
- Dallas/Fort Worth - New York
- Houston - New York
- Seattle - Denver
- San Antonio - Minneapolis/St. Paul
- San Francisco - Dallas/Fort Worth
- Detroit - New Orleans
- Denver - Minneapolis/St. Paul
- Seattle - Chicago
- Dallas/Fort Worth - Atlanta
- El Paso - Billings

Northeast Region

• Dallas/Fort Worth - New York

- Oklahoma City
- St. Louis
- Columbus
- Pittsburgh
- Harrisburg
- Lancaster

• Houston - New York

- New Orleans
- Montgomery
- Atlanta
- Chattanooga
- Roanoke
- Washington DC

Proposed Network of Preferred Routes

- Chicago - Miami
- Dallas/Fort Worth - Miami
- Denver - Houston
- Los Angeles - Denver
- Phoenix - Minneapolis/St. Paul
- Dallas/Fort Worth - New York
- Houston - New York
- Seattle - Denver
- San Antonio - Minneapolis/St. Paul
- San Francisco - Dallas/Fort Worth
- Detroit - New Orleans
- Denver - Minneapolis/St. Paul
- Seattle - Chicago
- Dallas/Fort Worth - Atlanta
- El Paso - Billings

Midwest Region

- Chicago - Miami
- Phoenix - Minneapolis/St. Paul
- Dallas/Fort Worth - New York
- San Antonio - Minneapolis/St. Paul
- Detroit - New Orleans
- Denver - Minneapolis/St. Paul
- Seattle - Chicago

Proposed Network of Preferred Routes

- Chicago - Miami
- Dallas/Fort Worth - Miami
- Denver - Houston
- Los Angeles - Denver
- Phoenix - Minneapolis/St. Paul
- Dallas/Fort Worth - New York
- Houston - New York
- Seattle - Denver
- San Antonio - Minneapolis/St. Paul
- San Francisco - Dallas/Fort Worth
- Detroit - New Orleans
- Denver - Minneapolis/St. Paul
- Seattle - Chicago
- Dallas/Fort Worth - Atlanta
- El Paso - Billings

Northwest Region

- Denver - Houston
- Los Angeles - Denver
- Seattle - Denver
- Denver - Minneapolis/St. Paul
- Seattle - Chicago
- El Paso - Billings

Proposed Network of Preferred Routes

- Chicago - Miami
- Dallas/Fort Worth - Miami
- Denver - Houston
- Los Angeles - Denver
- Phoenix - Minneapolis/St. Paul
- Dallas/Fort Worth - New York
- Houston - New York
- Seattle - Denver
- San Antonio - Minneapolis/St. Paul
- San Francisco - Dallas/Fort Worth
- Detroit - New Orleans
- Denver - Minneapolis/St. Paul
- Seattle - Chicago
- Dallas/Fort Worth - Atlanta
- El Paso - Billings

Southwest Region

- Denver - Houston
- Los Angeles - Denver
- Phoenix - Minneapolis/St. Paul
- Seattle - Denver
- San Francisco - Dallas/Fort Worth
- Denver - Minneapolis/St. Paul
- El Paso - Billings

Proposed Network of Preferred Routes

- Chicago - Miami
- Dallas/Fort Worth - Miami
- Denver - Houston
- Los Angeles - Denver
- Phoenix - Minneapolis/St. Paul
- Dallas/Fort Worth - New York
- Houston - New York
- Seattle - Denver
- San Antonio - Minneapolis/St. Paul
- San Francisco - Dallas/Fort Worth
- Detroit - New Orleans
- Denver - Minneapolis/St. Paul
- Seattle - Chicago
- Dallas/Fort Worth - Atlanta
- El Paso - Billings

Central Region

- Dallas/Fort Worth - Miami
- Denver - Houston
- Phoenix - Minneapolis/St. Paul
- Dallas/Fort Worth - New York
- Houston - New York
- San Antonio - Minneapolis/St. Paul
- San Francisco - Dallas/Fort Worth
- Detroit - New Orleans
- Dallas/Fort Worth - Atlanta
- El Paso - Billings

Proposed Network of Preferred Routes

- Chicago - Miami
- Dallas/Fort Worth - Miami
- Denver - Houston
- Los Angeles - Denver
- Phoenix - Minneapolis/St. Paul
- Dallas/Fort Worth - New York
- Houston - New York
- Seattle - Denver
- San Antonio - Minneapolis/St. Paul
- San Francisco - Dallas/Fort Worth
- Detroit - New Orleans
- Denver - Minneapolis/St. Paul
- Seattle - Chicago
- Dallas/Fort Worth - Atlanta
- El Paso - Billings

Southeast Region

- Chicago - Miami
- Dallas/Fort Worth - Miami
- Houston - New York
- Detroit - New Orleans
- Dallas/Fort Worth - Atlanta

CHICAGO - MIAMI

Chicago - Miami

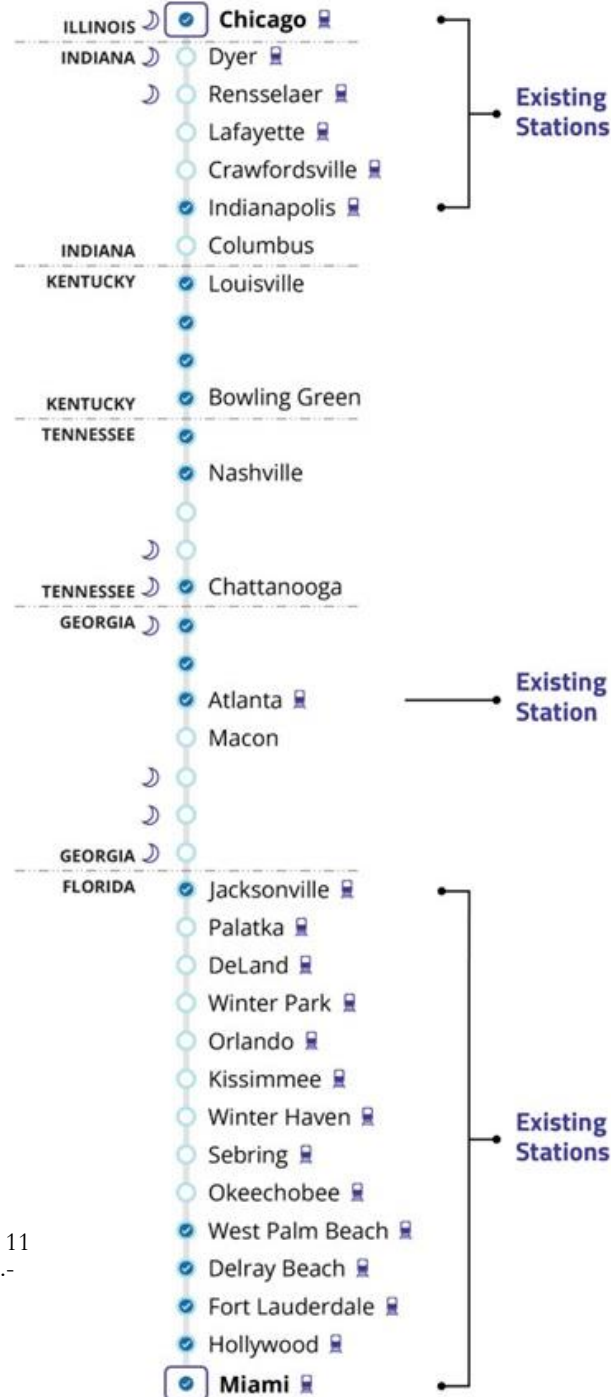
Conceptual Service Overview

Not an FRA proposal for service

Route Service Metrics		
Scheduled run time	avg. of both directions	approx. 36 hours
Route length	avg. of both directions	1,531 miles
Chicago, IL departure time	local time	late morning
Miami, FL arrival time	local time	late evening ⁺¹
Miami, FL departure time	local time	early afternoon
Chicago, IL arrival time	local time	nighttime ⁺²
Average travel time improvements	hours	11
Route Stations		
Total number of stations	count of stations	37
Stations in small communities	count of stations	5
Existing stations adding new service	count of stations	21

Average travel time improvements are for existing OD pairs when using a new route compared to an existing route

Daytime = 5:00 a.m.-10:59 p.m. (5 a.m.-7:59 a.m. early morning; 8 a.m.-10:59 a.m. late morning; 11 a.m.-12:59 p.m. midday; 1 p.m.-3:59 p.m. early afternoon; 4 p.m.-5:59 p.m. late afternoon; 6 p.m.-8:59 p.m. early evening; 9 p.m.-10:59 p.m. late evening). Nighttime = 11 p.m.-4:59 a.m.



Legend

- Some Arrivals at Night
- All Arrivals at Night
- Station
- Terminal
- Connecting Existing Amtrak Rail Service
- Connecting Preferred Route

Some arrivals at night depends on direction. All existing stations and new stations in cities with over 50K people are labeled.

These conceptual schedules are not FRA proposals for service. This study selected conceptual departure times to maximize daytime service for highest population market pairs on a preferred route.

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Chicago - Miami

Equity and Accessibility

Additional Populations Served		
Population served	in thousands of people	6,640
Rural population	in thousands of people	1,240
Rural population in areas of persistent poverty	in thousands of people	860
Rural population that is transportation disadvantaged	in thousands of people	1,028
Rural population that is health disadvantaged	in thousands of people	715
Population on tribal lands	in thousands of people	27
Additional Institutions Served		
Medical centers	count of centers	9
Higher education institutions	count of institutions	72
Historically black colleges and universities	count of institutions	10
Military installations	count of installations	11
NPS Lands	count of NPS units measured	1

Legend

Baseline Network

— Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

— Preferred Routes

— Preferred Route: Chicago - Miami

○ Stations in Cities with Populations over 50K: Chicago - Miami

Not an FRA proposal for service

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

223 miles of discontinued long-distance routes restored

Chicago - Miami

Selected Passenger Service-Required Cost Estimate Ranges

Selected Passenger Service-Required Cost Ranges		
Vehicle costs	2025 dollars, in millions	\$650-840
Station and maintenance facility costs	2025 dollars, in millions	\$1,140-1,490
Track class and PTC upgrade costs	2025 dollars, in millions	\$950-1,240
O&M costs (annual)	2025 dollars, in millions	\$78-110

Cost estimate ranges include Professional Services. Cost estimate ranges do not include other capital projects including track capacity and operational improvement projects.

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Not an FRA proposal for service

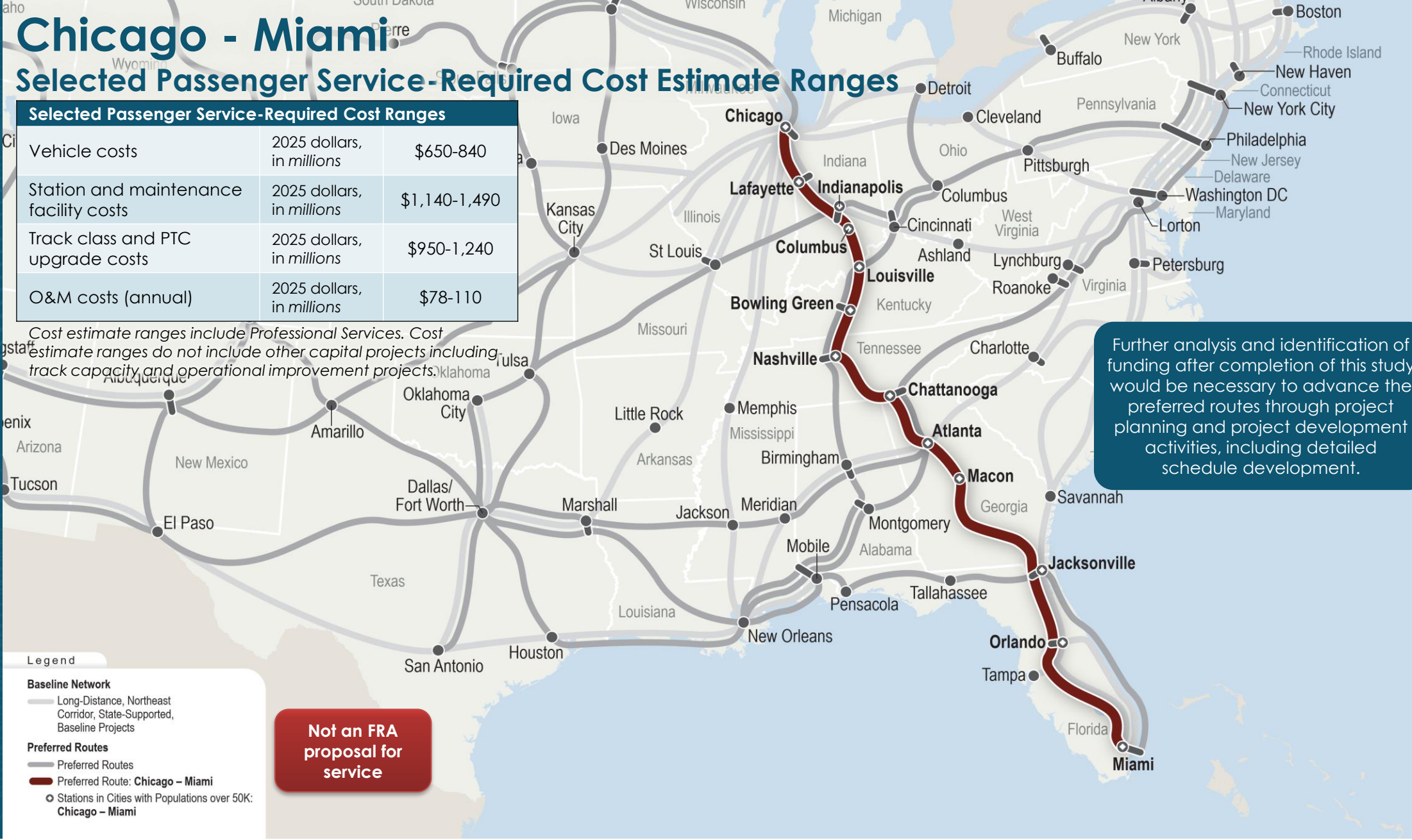
Legend

Baseline Network

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

- Preferred Routes
- Preferred Route: Chicago - Miami
- Stations in Cities with Populations over 50K: Chicago - Miami



Chicago - Miami

Safety, Jobs, and Earnings

Estimated Jobs and Earnings

Jobs supported by construction	count of jobs, in thousands	22.1 - 28.7
Earnings supported by construction	2025 dollars, in millions	\$1,513-1,967
Jobs supported by operations (annual)	count of jobs, in thousands	1.4 - 2.0
Earning supported by operations (annual)	2025 dollars, in millions	\$72-102

Route Travel Changes and Impacts

Travel shifted from vehicle to rail (annual)	vehicles miles traveled, in millions	44
Total crashes avoided (annual)	number of crashes (decrease)	93

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Not an FRA proposal for service

Legend

Baseline Network

— Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

— Preferred Routes

— Preferred Route: Chicago - Miami

○ Stations in Cities with Populations over 50K: Chicago - Miami

DALLAS/FORT WORTH - MIAMI

Dallas/Fort Worth - Miami

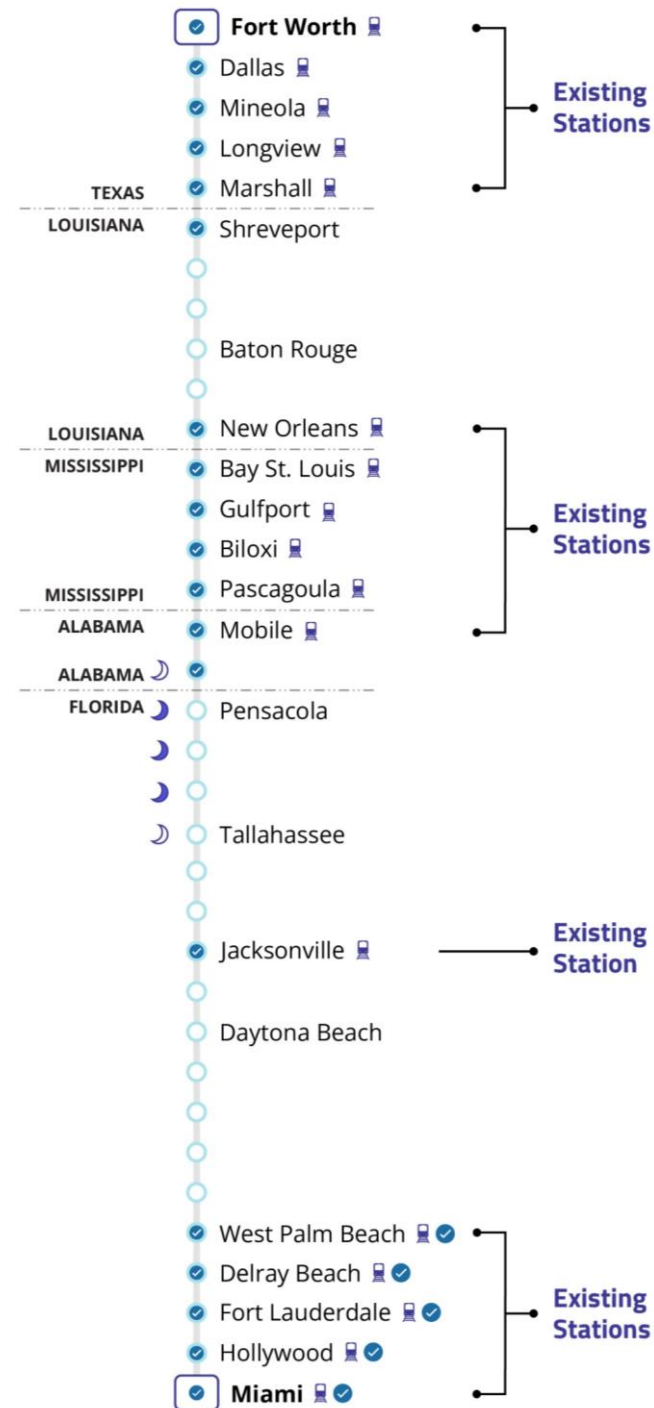
Conceptual Service Overview

Not an FRA proposal for service

Route Service Metrics		
Scheduled run time	avg. of both directions	approx. 36 hours
Route length	avg. of both directions	1,507 miles
Fort Worth, TX departure time	local time	early morning
Miami, FL arrival time	local time	late afternoon ⁺¹
Miami, FL departure time	local time	midday
Fort Worth, TX arrival time	local time	late evening ⁺¹
Average travel time improvements	hours	13
Route Stations		
Total number of stations	count of stations	35
Stations in small communities	count of stations	5
Existing stations adding new service	count of stations	17

Average travel time improvements are for existing OD pairs when using a new route compared to an existing route

Daytime = 5:00 a.m.-10:59 p.m. (5 a.m.-7:59 a.m. early morning; 8 a.m.-10:59 a.m. late morning; 11 a.m.-12:59 p.m. midday; 1 p.m.-3:59 p.m. early afternoon; 4 p.m.-5:59 p.m. late afternoon; 6 p.m.-8:59 p.m. early evening; 9 p.m.-10:59 p.m. late evening). Nighttime = 11 p.m.-4:59 a.m.



Legend

- Some Arrivals at Night
- All Arrivals at Night
- Station
- Terminal
- Connecting Existing Amtrak Rail Service
- Connecting Preferred Route

Some arrivals at night depends on direction. All existing stations and new stations in cities with over 50K people are labeled.

These conceptual schedules are not FRA proposals for service. This study selected conceptual departure times to maximize daytime service for highest population market pairs on a preferred route.

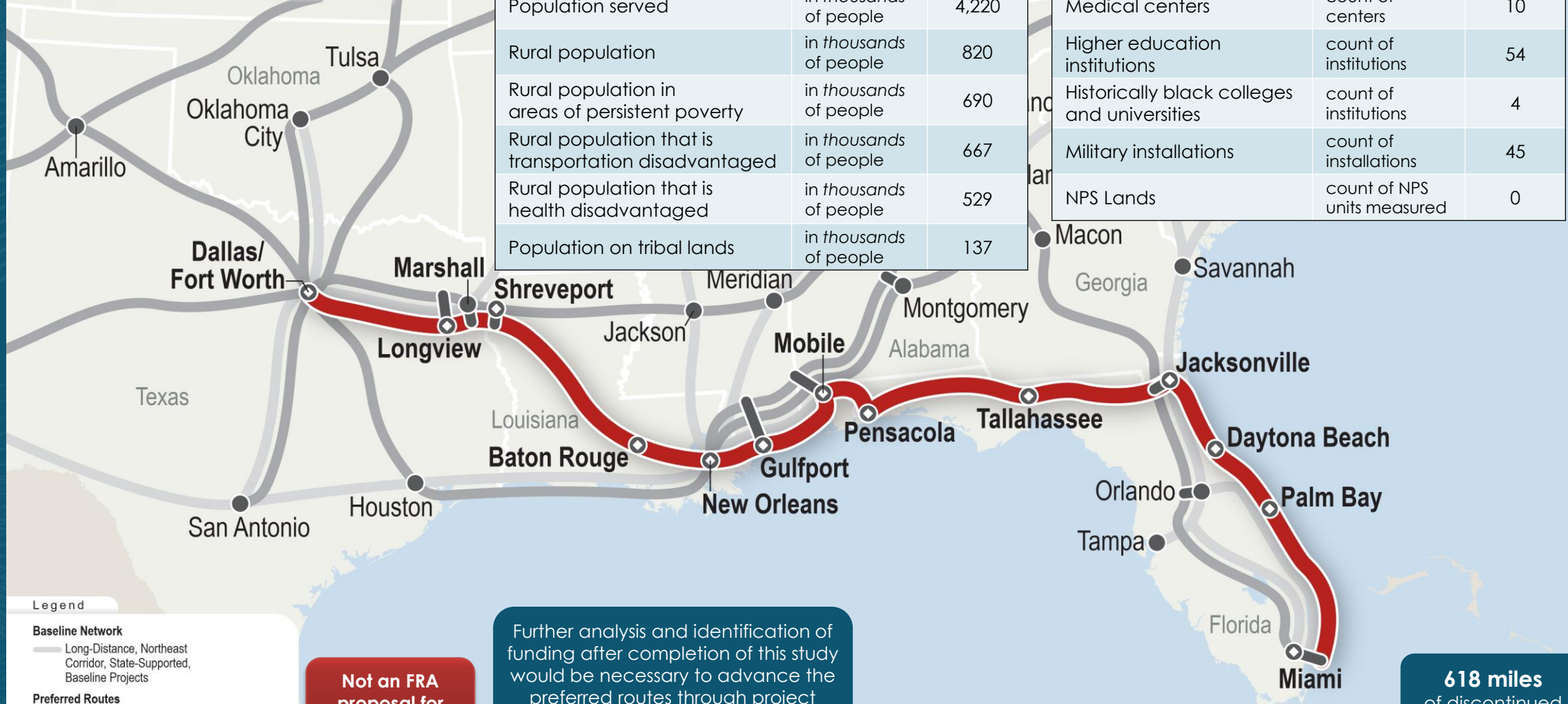
Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Dallas/Fort Worth - Miami

Equity and Accessibility

Additional Populations Served		
Population served	in thousands of people	4,220
Rural population	in thousands of people	820
Rural population in areas of persistent poverty	in thousands of people	690
Rural population that is transportation disadvantaged	in thousands of people	667
Rural population that is health disadvantaged	in thousands of people	529
Population on tribal lands	in thousands of people	137

Additional Institutions Served		
Medical centers	count of centers	10
Higher education institutions	count of institutions	54
Historically black colleges and universities	count of institutions	4
Military installations	count of installations	45
NPS Lands	count of NPS units measured	0



Legend

Baseline Network

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

- Preferred Routes
- Preferred Route: Dallas/Fort Worth - Miami
- Stations in Cities with Populations over 50K: Dallas/Fort Worth - Miami

Not an FRA proposal for service

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

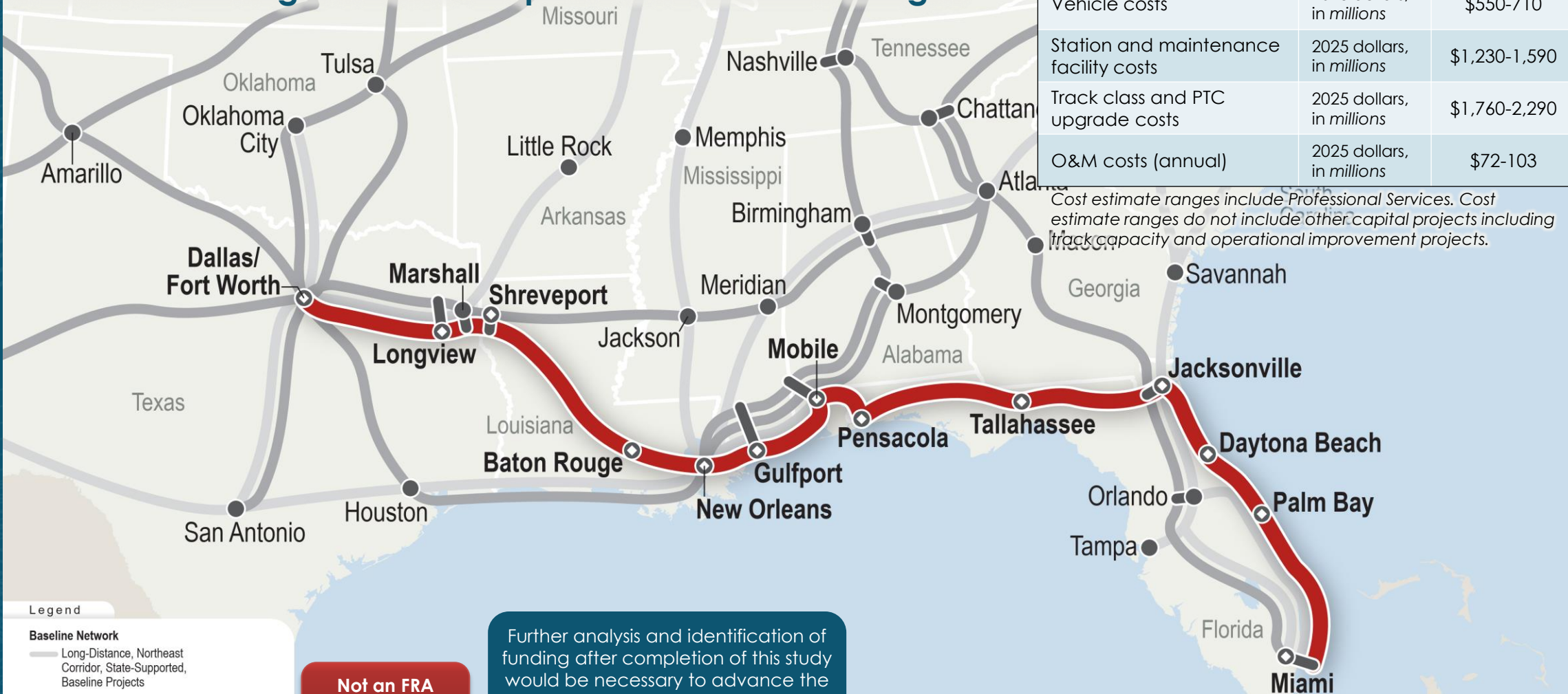
618 miles of discontinued long-distance routes restored

Dallas/Fort Worth - Miami

Selected Passenger Service-Required Cost Estimate Ranges

Selected Passenger Service-Required Cost Ranges		
Vehicle costs	2025 dollars, in millions	\$550-710
Station and maintenance facility costs	2025 dollars, in millions	\$1,230-1,590
Track class and PTC upgrade costs	2025 dollars, in millions	\$1,760-2,290
O&M costs (annual)	2025 dollars, in millions	\$72-103

Cost estimate ranges include Professional Services. Cost estimate ranges do not include other capital projects including track capacity and operational improvement projects.



Legend

Baseline Network
 - Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes
 - Preferred Routes
 - Preferred Route: Dallas/Fort Worth - Miami

○ Stations in Cities with Populations over 50K: Dallas/Fort Worth - Miami

Not an FRA proposal for service

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Dallas/Fort Worth - Miami

Safety, Jobs, and Earnings



Estimated Jobs and Earnings		
Jobs supported by construction	count of jobs, in thousands	46.7 - 60.7
Earnings supported by construction	2025 dollars, in millions	\$3,113-4,047
Jobs supported by operations (annual)	count of jobs, in thousands	1.3 - 1.8
Earning supported by operations (annual)	2025 dollars, in millions	\$67-94
Route Travel Changes and Impacts		
Travel shifted from vehicle to rail (annual)	vehicles miles traveled, in millions	20
Total crashes avoided (annual)	number of crashes (decrease)	42

Legend

Baseline Network

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

- Preferred Routes
- Preferred Route: Dallas/Fort Worth - Miami**
- Stations in Cities with Populations over 50K: Dallas/Fort Worth - Miami

Not an FRA proposal for service

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

DENVER - HOUSTON

Denver - Houston

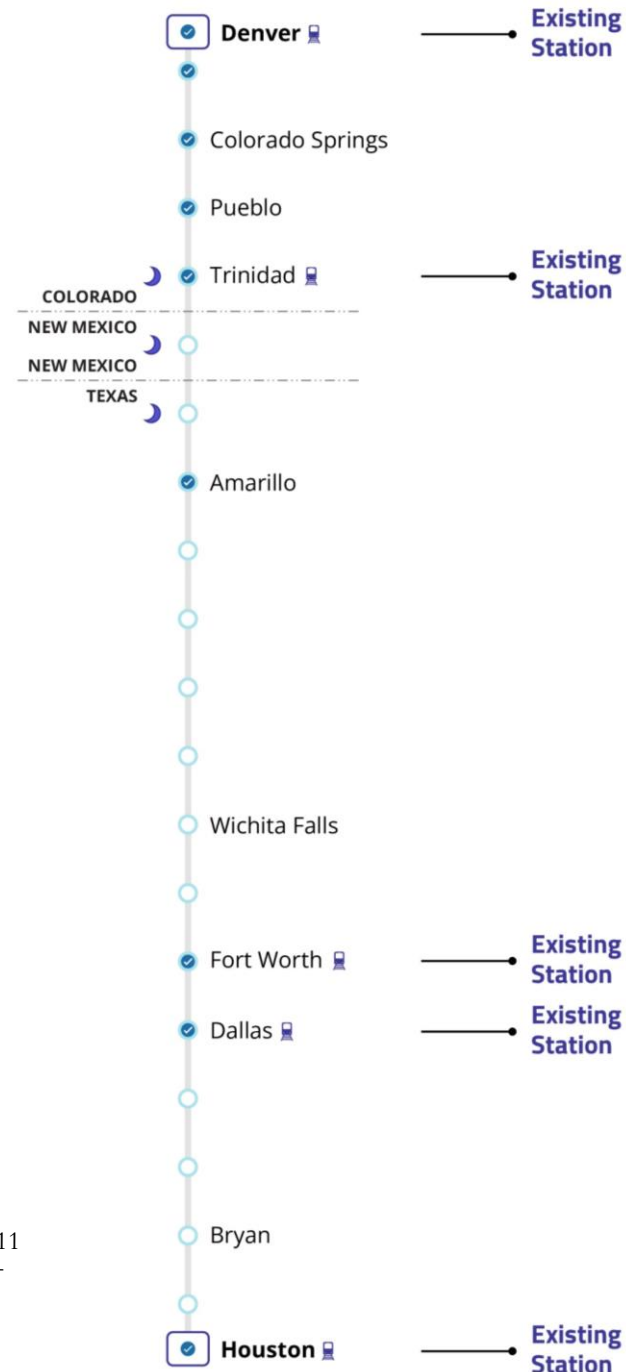
Conceptual Service Overview

Not an FRA proposal for service

Route Service Metrics		
Scheduled run time	avg. of both directions	approx. 25 hours
Route length	avg. of both directions	1,088 miles
Denver, CO departure time	local time	early evening
Houston, TX arrival time	local time	early evening ⁺¹
Houston, TX departure time	local time	early morning
Denver, CO arrival time	local time	early morning ⁺¹
Average travel time improvements	hours	15
Route Stations		
Total number of stations	count of stations	21
Stations in small communities	count of stations	9
Existing stations adding new service	count of stations	5

Average travel time improvements are for existing OD pairs when using a new route compared to an existing route

Daytime = 5:00 a.m.-10:59 p.m. (5 a.m.-7:59 a.m. early morning; 8 a.m.-10:59 a.m. late morning; 11 a.m.-12:59 p.m. midday; 1 p.m.-3:59 p.m. early afternoon; 4 p.m.-5:59 p.m. late afternoon; 6 p.m.-8:59 p.m. early evening; 9 p.m.-10:59 p.m. late evening). Nighttime = 11 p.m.-4:59 a.m.



Legend

- Some Arrivals at Night
- All Arrivals at Night
- Station
- Terminal
- Connecting Existing Amtrak Rail Service
- Connecting Preferred Route

Some arrivals at night depends on direction. All existing stations and new stations in cities with over 50K people are labeled.

These conceptual schedules are not FRA proposals for service. This study selected conceptual departure times to maximize daytime service for highest population market pairs on a preferred route.

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Denver - Houston

Equity and Accessibility

Additional Populations Served		
Population served	in thousands of people	2,520
Rural population	in thousands of people	430
Rural population in areas of persistent poverty	in thousands of people	150
Rural population that is transportation disadvantaged	in thousands of people	249
Rural population that is health disadvantaged	in thousands of people	108
Population on tribal lands	in thousands of people	54
Additional Institutions Served		
Medical centers	count of centers	7
Higher education institutions	count of institutions	22
Historically black colleges and universities	count of institutions	1
Military installations	count of installations	11
NPS Lands	count of NPS units measured	1

Legend

Baseline Network

— Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

— Preferred Routes

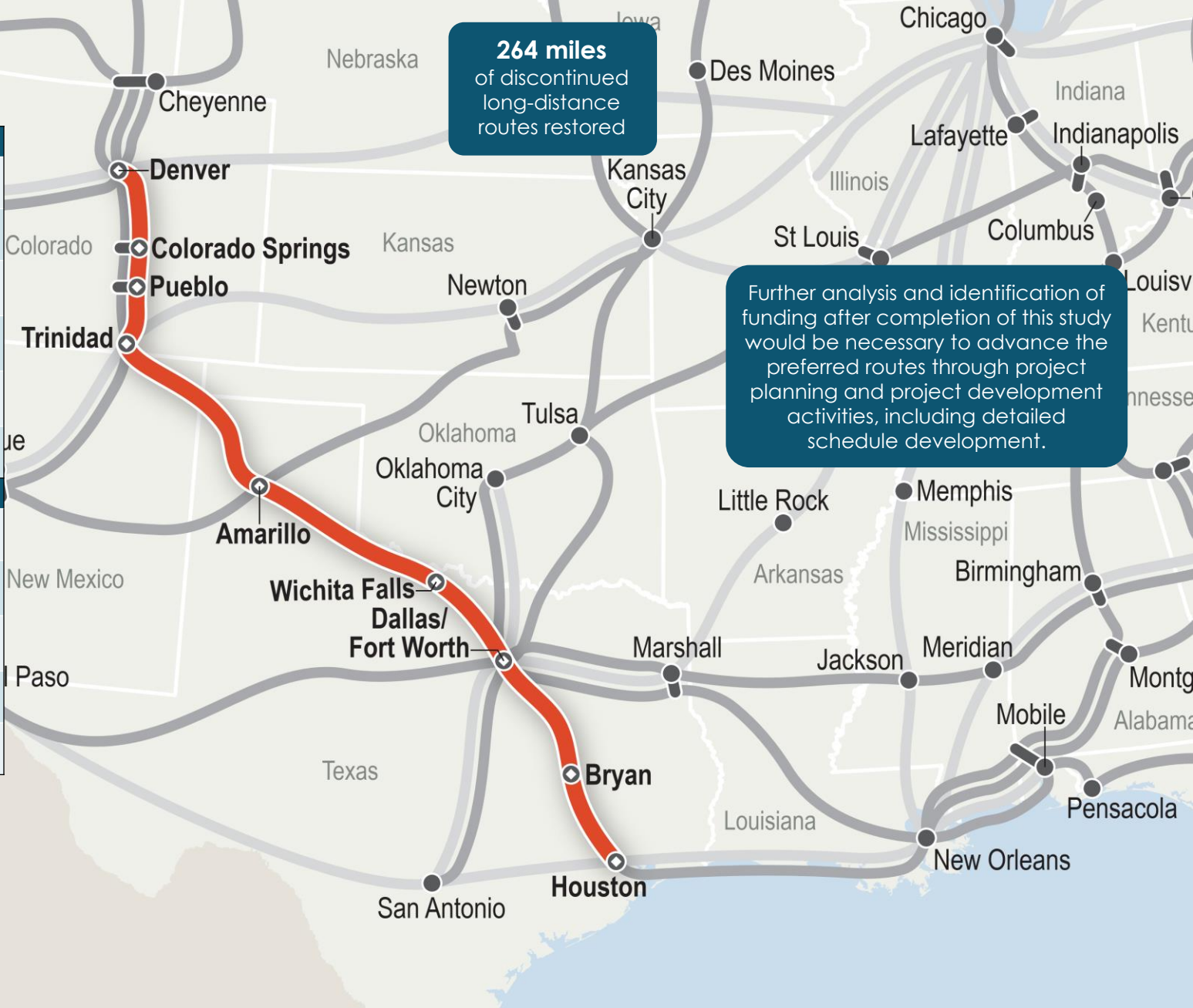
— Preferred Route: Denver – Houston

○ Stations in Cities with Populations over 50K: Denver – Houston

Not an FRA proposal for service

264 miles of discontinued long-distance routes restored

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.



Denver - Houston

Selected Passenger Service-Required Cost Estimate Ranges

Selected Passenger Service-Required Cost Ranges		
Vehicle costs	2025 dollars, in millions	\$440-570
Station and maintenance facility costs	2025 dollars, in millions	\$1,210-1,570
Track class and PTC upgrade costs	2025 dollars, in millions	\$350-450
O&M costs (annual)	2025 dollars, in millions	\$59-83

Cost estimate ranges include Professional Services. Cost estimate ranges do not include other capital projects including track capacity and operational improvement projects.

Legend

Baseline Network

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

- Preferred Routes
- Preferred Route: Denver - Houston
- Stations in Cities with Populations over 50K: Denver - Houston

Not an FRA proposal for service

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Denver - Houston

Safety, Jobs, and Earnings

Estimated Jobs and Earnings		
Jobs supported by construction	count of jobs, in thousands	15.2 - 19.8
Earnings supported by construction	2025 dollars, in millions	\$1,047-1,362
Jobs supported by operations (annual)	count of jobs, in thousands	1.1 - 1.5
Earning supported by operations (annual)	2025 dollars, in millions	\$54-77
Route Travel Changes and Impacts		
Travel shifted from vehicle to rail (annual)	vehicles miles traveled, in millions	25
Total crashes avoided (annual)	number of crashes (decrease)	53

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Not an FRA proposal for service

- Legend**
- Baseline Network**
 - Long-Distance, Northeast Corridor, State-Supported, Baseline Projects
 - Preferred Routes**
 - Preferred Routes
 - Preferred Route: Denver - Houston
 - Stations in Cities with Populations over 50K: Denver - Houston

LOS ANGELES - DENVER

Los Angeles - Denver

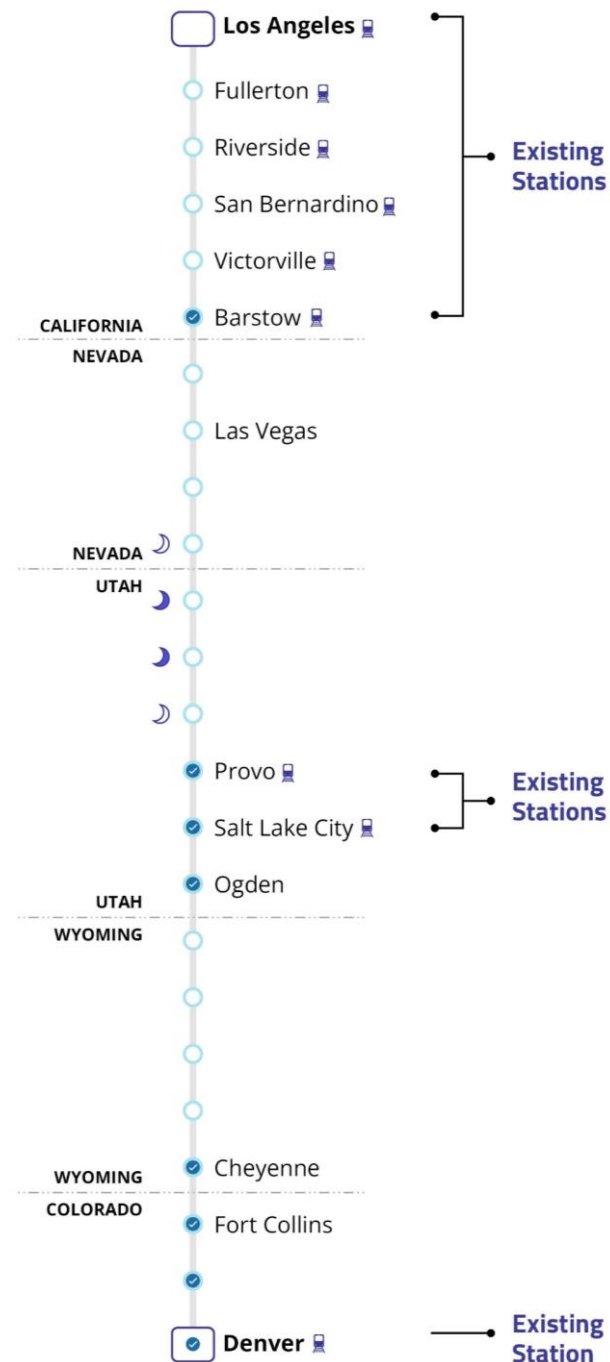
Conceptual Service Overview

Not an FRA proposal for service

Route Service Metrics		
Scheduled run time	avg. of both directions	approx. 33 hours
Route length	avg. of both directions	1,423 miles
Los Angeles, CA departure time	local time	midday
Denver, CO arrival time	local time	late evening ⁺¹
Denver, CO departure time	local time	early morning
Los Angeles, CA arrival time	local time	early afternoon ⁺¹
Average travel time improvements	hours	24.5
Route Stations		
Total number of stations	count of stations	24
Stations in small communities	count of stations	7
Existing stations adding new service	count of stations	9

Average travel time improvements are for existing OD pairs when using a new route compared to an existing route

Daytime = 5:00 a.m.-10:59 p.m. (5 a.m.-7:59 a.m. early morning; 8 a.m.-10:59 a.m. late morning; 11 a.m.-12:59 p.m. midday; 1 p.m.-3:59 p.m. early afternoon; 4 p.m.-5:59 p.m. late afternoon; 6 p.m.-8:59 p.m. early evening; 9 p.m.-10:59 p.m. late evening). Nighttime = 11 p.m.-4:59 a.m.



Legend

- Some Arrivals at Night
- All Arrivals at Night
- Station
- Terminal
- Connecting Existing Amtrak Rail Service
- Connecting Preferred Route

Some arrivals at night depends on direction. All existing stations and new stations in cities with over 50K people are labeled.

These conceptual schedules are not FRA proposals for service. This study selected conceptual departure times to maximize daytime service for highest population market pairs on a preferred route.

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Los Angeles - Denver

Equity and Accessibility

Additional Populations Served		
Population served	in thousands of people	3,230
Rural population	in thousands of people	120
Rural population in areas of persistent poverty	in thousands of people	50
Rural population that is transportation disadvantaged	in thousands of people	8
Rural population that is health disadvantaged	in thousands of people	13
Population on tribal lands	in thousands of people	0

1,217 miles of discontinued long-distance routes restored

Not an FRA proposal for service

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Additional Institutions Served		
Medical centers	count of centers	3
Higher education institutions	count of institutions	16
Historically black colleges and universities	count of institutions	0
Military installations	count of installations	8
NPS Lands	count of NPS units measured	3

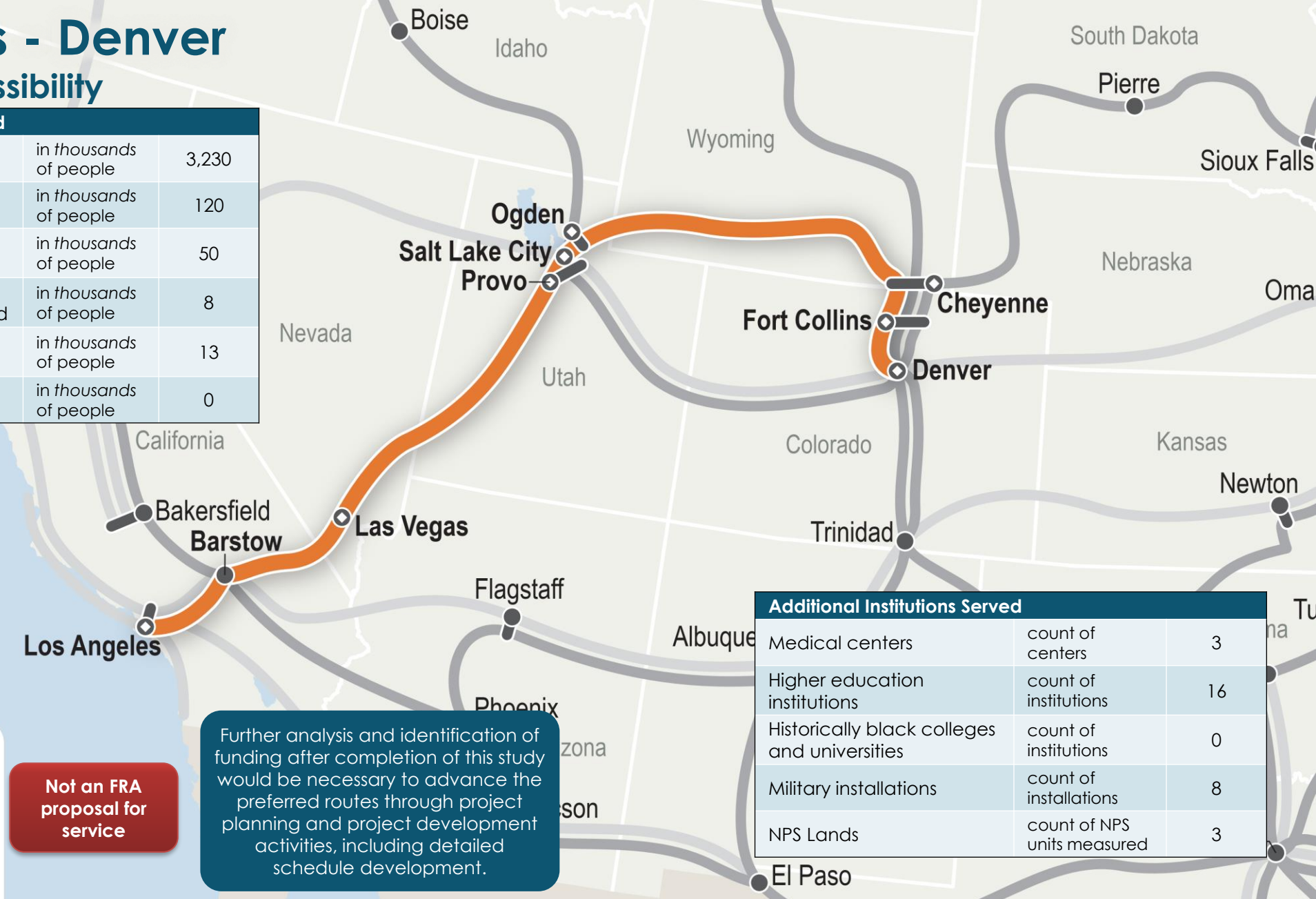
Legend

Baseline Network

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

- Preferred Routes
- Preferred Route: Los Angeles - Denver
- Stations in Cities with Populations over 50K: Los Angeles - Denver



Los Angeles - Denver

Selected Passenger Service-Required Cost Estimate Ranges

Selected Passenger Service-Required Cost Ranges		
Vehicle costs	2025 dollars, in millions	\$550-710
Station and maintenance facility costs	2025 dollars, in millions	\$1,140-1,480
Track class and PTC upgrade costs	2025 dollars, in millions	\$550-720
O&M costs (annual)	2025 dollars, in millions	\$68-97

Cost estimate ranges include Professional Services. Cost estimate ranges do not include other capital projects including track capacity and operational improvement projects.



Legend

Baseline Network

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

- Preferred Routes
- Preferred Route: Los Angeles – Denver
- Stations in Cities with Populations over 50K: Los Angeles – Denver

Not an FRA proposal for service

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Los Angeles - Denver

Safety, Jobs, and Earnings

Estimated Jobs and Earnings		
Jobs supported by construction	count of jobs, in thousands	23.9 - 31.1
Earnings supported by construction	2025 dollars, in millions	\$1,616-2,101
Jobs supported by operations (annual)	count of jobs, in thousands	1.2 - 1.7
Earning supported by operations (annual)	2025 dollars, in millions	\$63-89
Route Travel Changes and Impacts		
Travel shifted from vehicle to rail (annual)	vehicles miles traveled, in millions	35
Total crashes avoided (annual)	number of crashes (decrease)	74

Not an FRA proposal for service

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

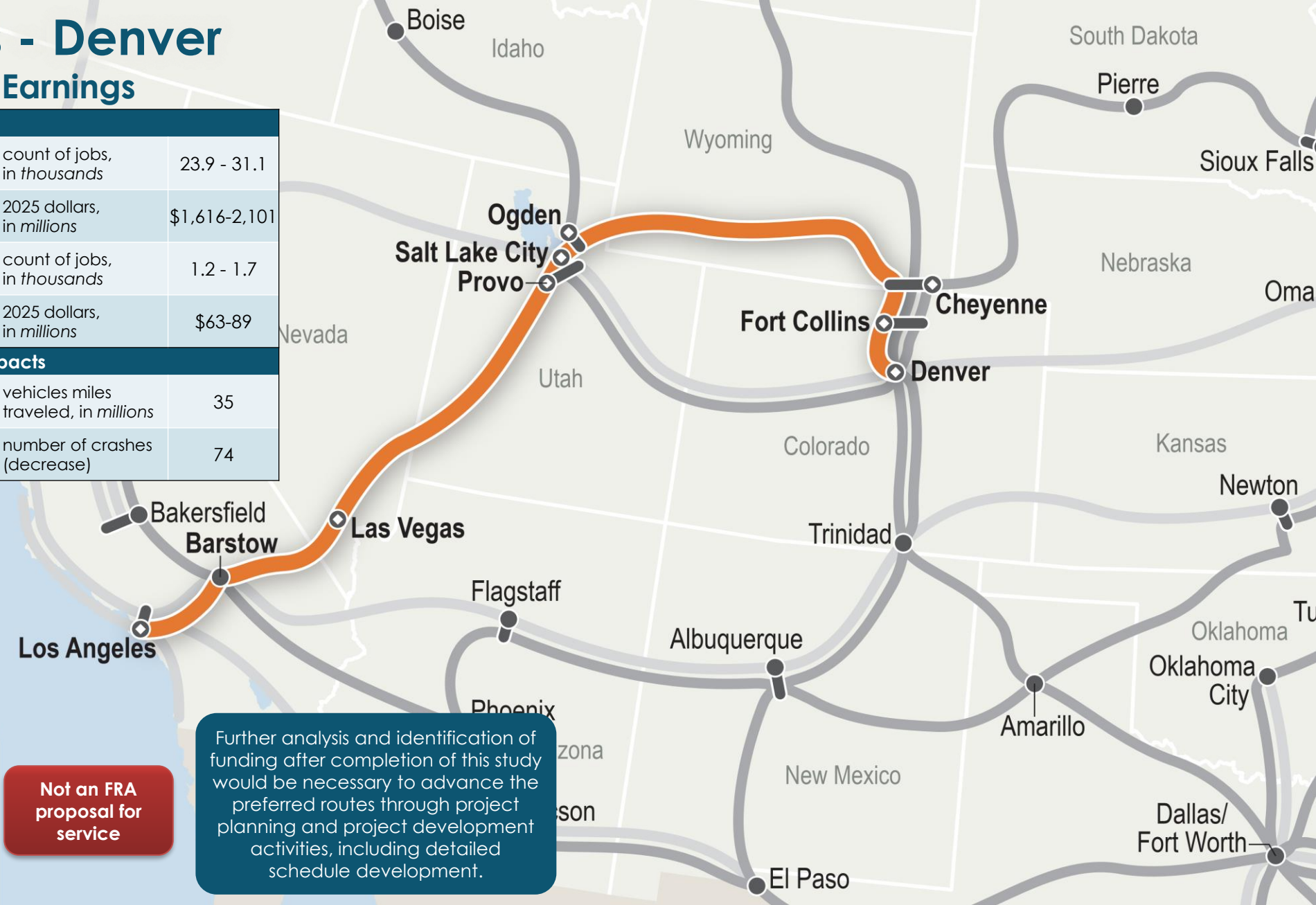
Legend

Baseline Network

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

- Preferred Routes
- Preferred Route: Los Angeles - Denver
- Stations in Cities with Populations over 50K: Los Angeles - Denver



PHOENIX - MINNEAPOLIS/ ST. PAUL

Phoenix - Minneapolis/St. Paul

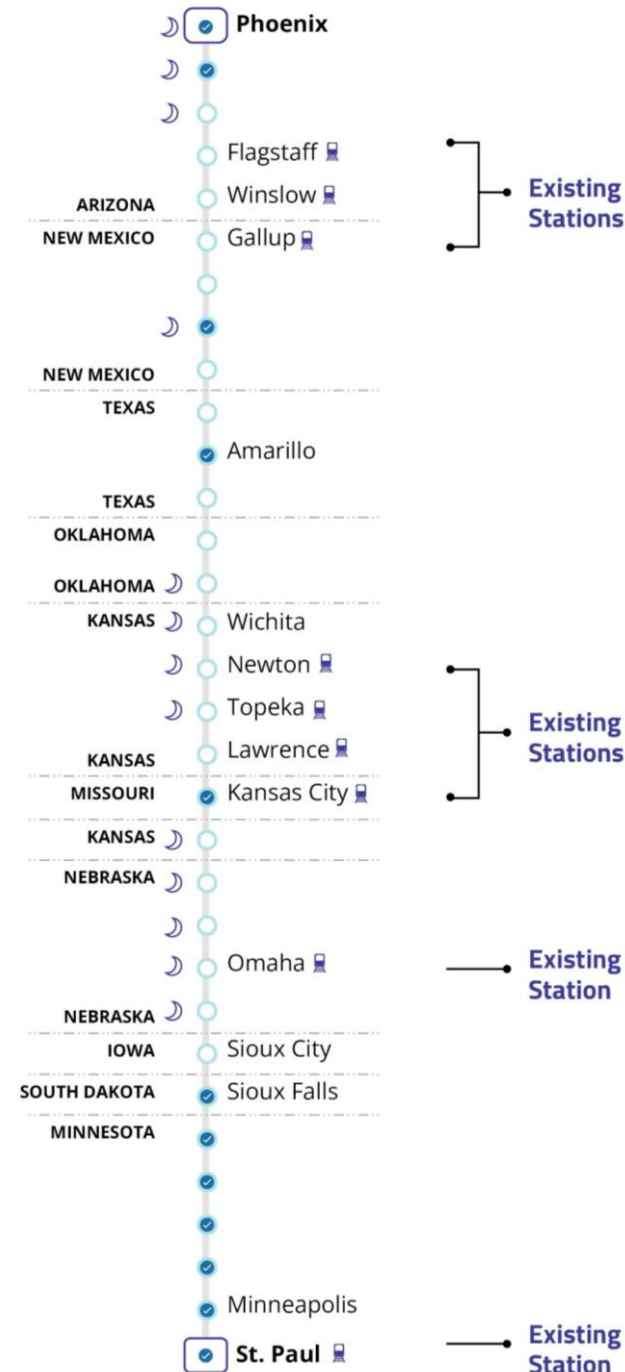
Conceptual Service Overview

Not an FRA proposal for service

Route Service Metrics		
Scheduled run time	avg. of both directions	approx. 47 hours
Route length	avg. of both directions	2,135 miles
Phoenix, AZ departure time	local time	early afternoon
St. Paul, MN arrival time	local time	early afternoon ⁺²
St. Paul, MN departure time	local time	early morning
Phoenix, AZ arrival time	local time	nighttime ⁺²
Average travel time improvements	hours	19.5
Route Stations		
Total number of stations	count of stations	32
Stations in small communities	count of stations	14
Existing stations adding new service	count of stations	9

Average travel time improvements are for existing OD pairs when using a new route compared to an existing route

Daytime = 5:00 a.m.-10:59 p.m. (5 a.m.-7:59 a.m. early morning; 8 a.m.-10:59 a.m. late morning; 11 a.m.-12:59 p.m. midday; 1 p.m.-3:59 p.m. early afternoon; 4 p.m.-5:59 p.m. late afternoon; 6 p.m.-8:59 p.m. early evening; 9 p.m.-10:59 p.m. late evening). Nighttime = 11 p.m.-4:59 a.m.



Legend

- Some Arrivals at Night
- All Arrivals at Night
- Station
- Terminal
- Connecting Existing Amtrak Rail Service
- Connecting Preferred Route

Some arrivals at night depends on direction. All existing stations and new stations in cities with over 50K people are labeled.

These conceptual schedules are not FRA proposals for service. This study selected conceptual departure times to maximize daytime service for highest population market pairs on a preferred route.

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Phoenix - Minneapolis/ St. Paul

Equity and Accessibility

Additional Populations Served		
Population served	in thousands of people	4,930
Rural population	in thousands of people	650
Rural population in areas of persistent poverty	in thousands of people	130
Rural population that is transportation disadvantaged	in thousands of people	120
Rural population that is health disadvantaged	in thousands of people	114
Population on tribal lands	in thousands of people	29

726 miles of discontinued long-distance routes restored

Not an FRA proposal for service

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Additional Institutions Served		
Medical centers	count of centers	14
Higher education institutions	count of institutions	55
Historically black colleges and universities	count of institutions	0
Military installations	count of installations	12
NPS Lands	count of NPS units measured	1

Legend

Baseline Network
 - Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes
 - Preferred Routes
 - Preferred Route: Phoenix - Minneapolis/St. Paul

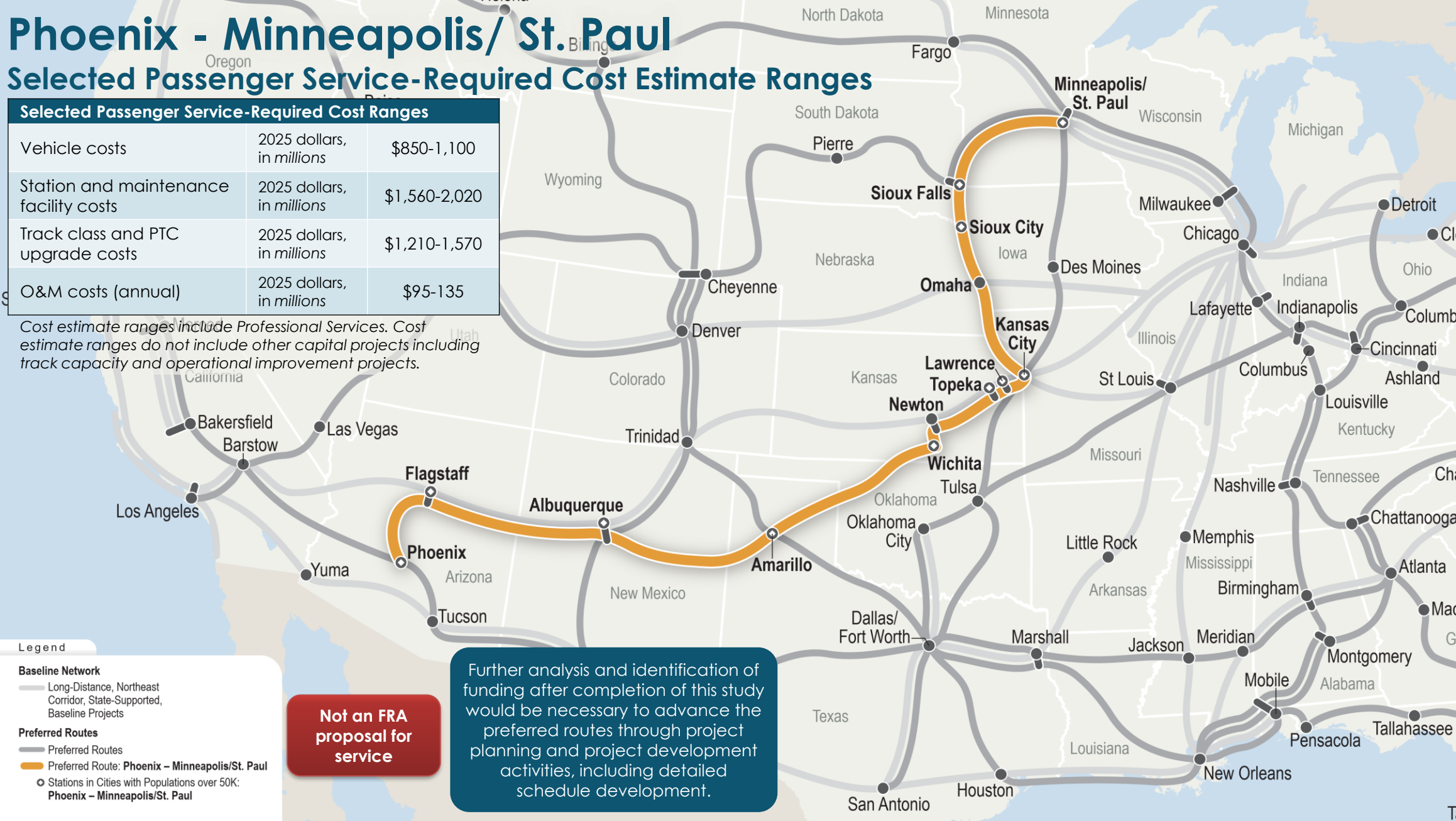
○ Stations in Cities with Populations over 50K: Phoenix - Minneapolis/St. Paul

Phoenix - Minneapolis/ St. Paul

Selected Passenger Service-Required Cost Estimate Ranges

Selected Passenger Service-Required Cost Ranges		
Vehicle costs	2025 dollars, in millions	\$850-1,100
Station and maintenance facility costs	2025 dollars, in millions	\$1,560-2,020
Track class and PTC upgrade costs	2025 dollars, in millions	\$1,210-1,570
O&M costs (annual)	2025 dollars, in millions	\$95-135

Cost estimate ranges include Professional Services. Cost estimate ranges do not include other capital projects including track capacity and operational improvement projects.



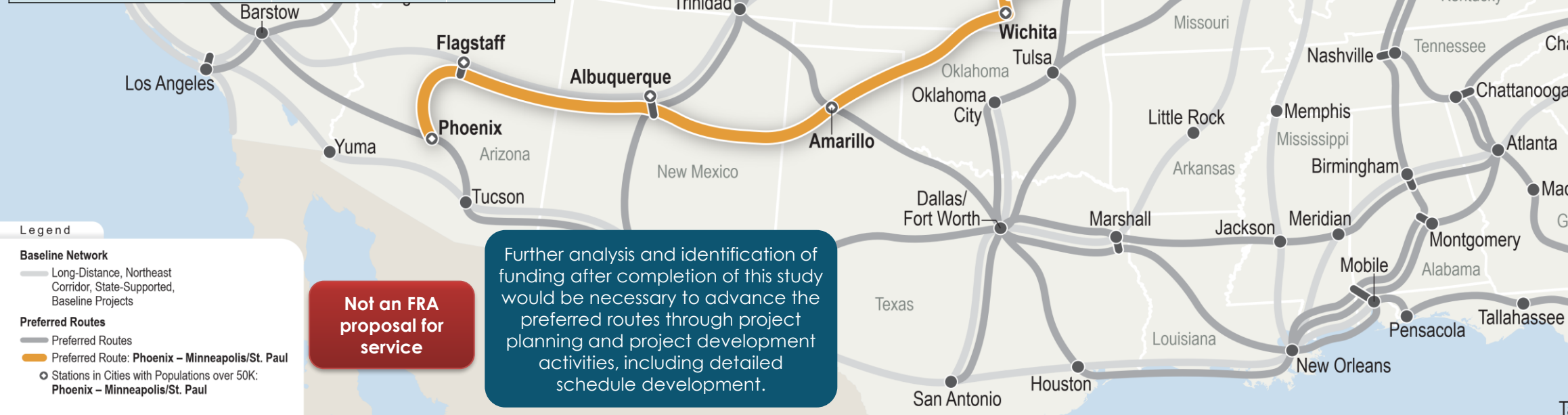
Not an FRA proposal for service

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Phoenix - Minneapolis/ St. Paul

Safety, Jobs, and Earnings

Estimated Jobs and Earnings		
Jobs supported by construction	count of jobs, in thousands	38.5 - 50.1
Earnings supported by construction	2025 dollars, in millions	\$2,600-3,380
Jobs supported by operations (annual)	count of jobs, in thousands	1.7 - 2.4
Earning supported by operations (annual)	2025 dollars, in millions	\$87-123
Route Travel Changes and Impacts		
Travel shifted from vehicle to rail (annual)	vehicles miles traveled, in millions	31
Total crashes avoided (annual)	number of crashes (decrease)	67



DALLAS/FORT WORTH - NEW YORK

Dallas/Fort Worth - New York

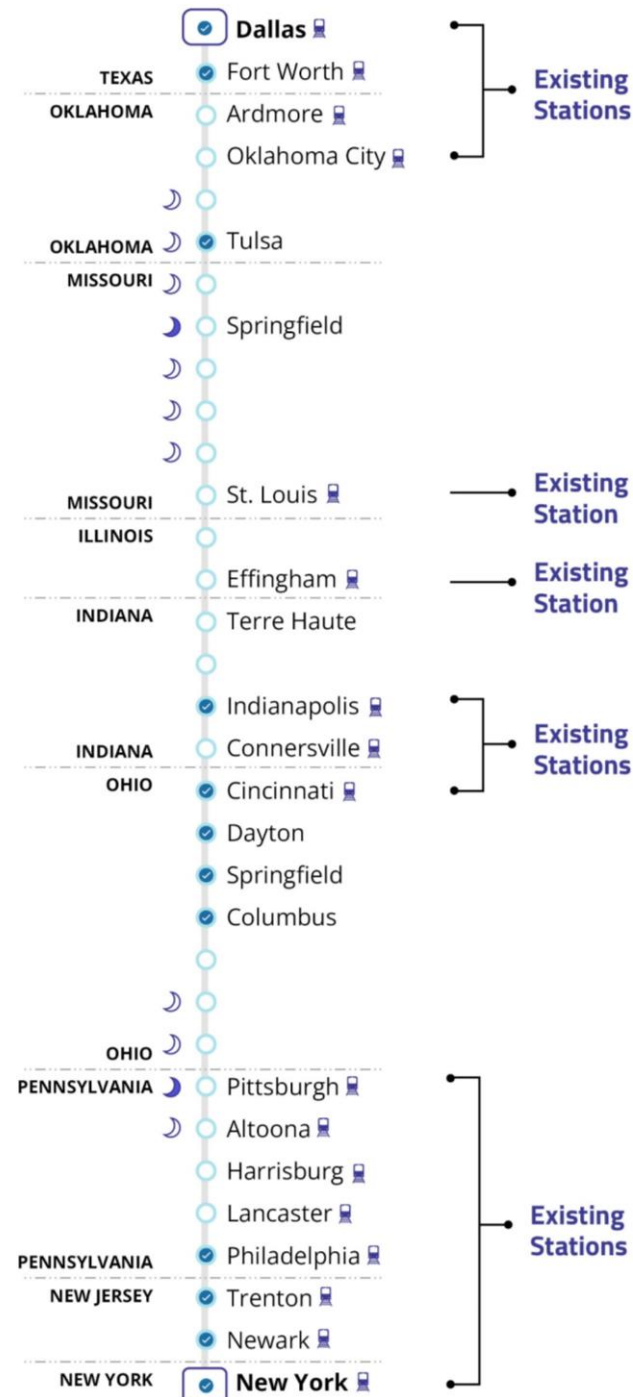
Conceptual Service Overview

Not an FRA proposal for service

Route Service Metrics		
Scheduled run time	avg. of both directions	approx. 44 hours
Route length	avg. of both directions	1,907 miles
Dallas, TX departure time	local time	midday
New York, NY arrival time	local time	late morning ⁺²
New York, NY departure time	local time	late afternoon
Dallas, TX arrival time	local time	midday ⁺²
Average travel time improvements	hours	7
Route Stations		
Total number of stations	count of stations	33
Stations in small communities	count of stations	3
Existing stations adding new service	count of stations	17

Average travel time improvements are for existing OD pairs when using a new route compared to an existing route

Daytime = 5:00 a.m.-10:59 p.m. (5 a.m.-7:59 a.m. early morning; 8 a.m.-10:59 a.m. late morning; 11 a.m.-12:59 p.m. midday; 1 p.m.-3:59 p.m. early afternoon; 4 p.m.-5:59 p.m. late afternoon; 6 p.m.-8:59 p.m. early evening; 9 p.m.-10:59 p.m. late evening). Nighttime = 11 p.m.-4:59 a.m.



Legend

- ☾ Some Arrivals at Night
- 🌙 All Arrivals at Night
- Station
- Terminal
- 🚂 Connecting Existing Amtrak Rail Service
- ✓ Connecting Preferred Route

Some arrivals at night depends on direction. All existing stations and new stations in cities with over 50K people are labeled.

These conceptual schedules are not FRA proposals for service. This study selected conceptual departure times to maximize daytime service for highest population market pairs on a preferred route.

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Dallas/Fort Worth - New York

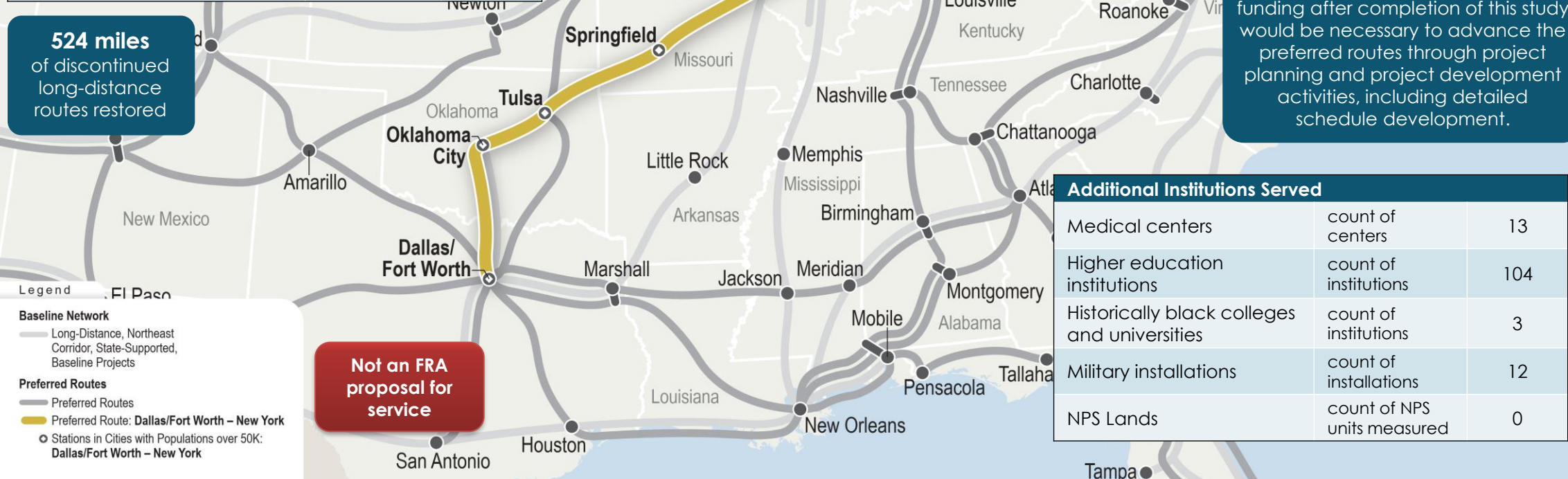
Equity and Accessibility

Additional Populations Served		
Population served	in thousands of people	5,820
Rural population	in thousands of people	990
Rural population in areas of persistent poverty	in thousands of people	280
Rural population that is transportation disadvantaged	in thousands of people	630
Rural population that is health disadvantaged	in thousands of people	378
Population on tribal lands	in thousands of people	1,025

524 miles of discontinued long-distance routes restored

Not an FRA proposal for service

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.



Additional Institutions Served		
Medical centers	count of centers	13
Higher education institutions	count of institutions	104
Historically black colleges and universities	count of institutions	3
Military installations	count of installations	12
NPS Lands	count of NPS units measured	0

Legend

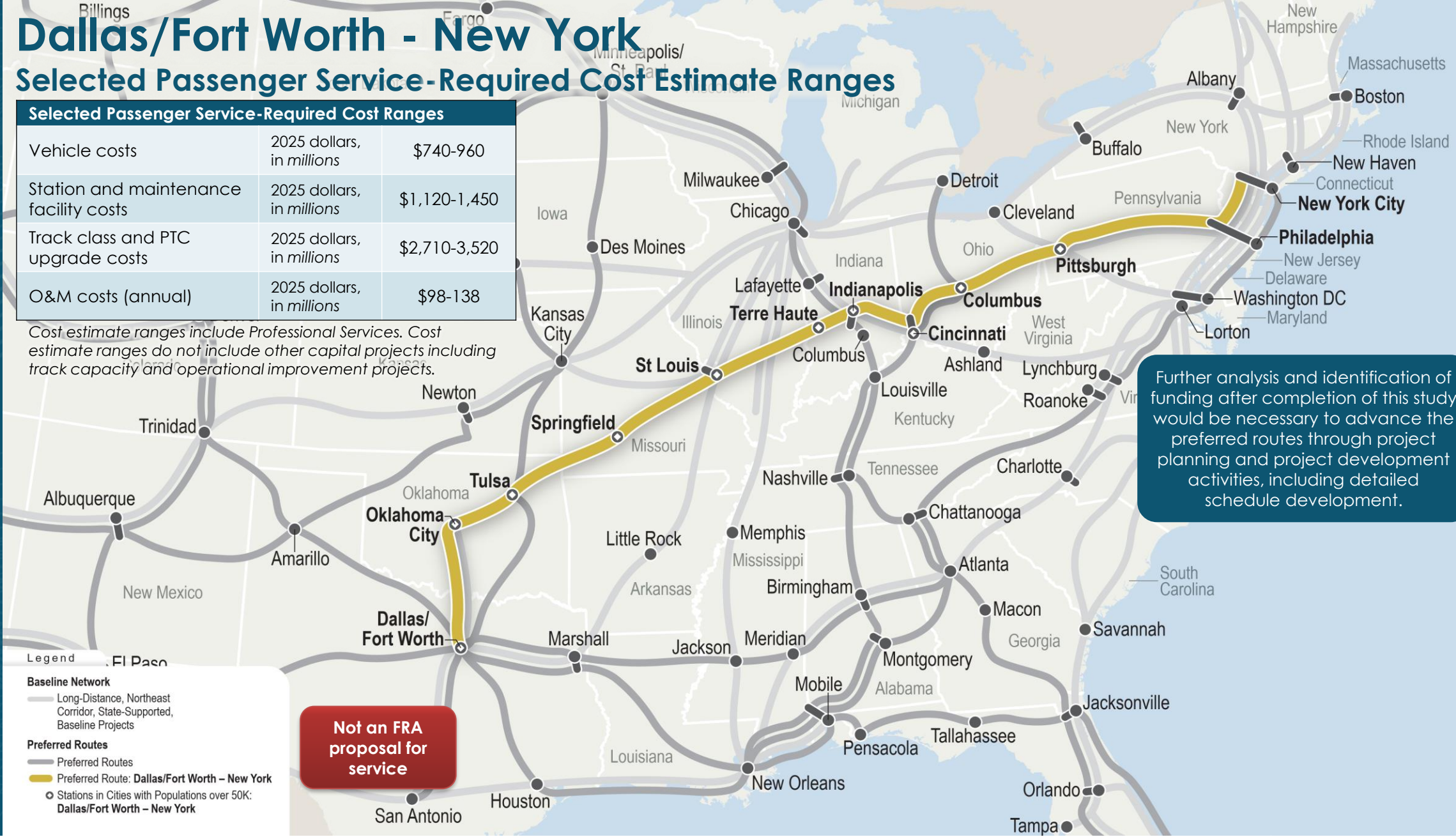
- Baseline Network
 - Long-Distance, Northeast Corridor, State-Supported, Baseline Projects
- Preferred Routes
 - Preferred Routes
 - Preferred Route: Dallas/Fort Worth – New York
- Stations in Cities with Populations over 50K: Dallas/Fort Worth – New York

Dallas/Fort Worth - New York

Selected Passenger Service-Required Cost Estimate Ranges

Selected Passenger Service-Required Cost Ranges		
Vehicle costs	2025 dollars, in millions	\$740-960
Station and maintenance facility costs	2025 dollars, in millions	\$1,120-1,450
Track class and PTC upgrade costs	2025 dollars, in millions	\$2,710-3,520
O&M costs (annual)	2025 dollars, in millions	\$98-138

Cost estimate ranges include Professional Services. Cost estimate ranges do not include other capital projects including track capacity and operational improvement projects.



Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Not an FRA proposal for service

- Legend**
- Baseline Network**
 - Long-Distance, Northeast Corridor, State-Supported, Baseline Projects
 - Preferred Routes**
 - Preferred Routes
 - Preferred Route: Dallas/Fort Worth - New York
 - Stations in Cities with Populations over 50K: Dallas/Fort Worth - New York

Dallas/Fort Worth - New York

Safety, Jobs, and Earnings

Estimated Jobs and Earnings

Jobs supported by construction	count of jobs, in thousands	56.3 - 73.1
Earnings supported by construction	2025 dollars, in millions	\$3,769-4,900
Jobs supported by operations (annual)	count of jobs, in thousands	1.7 - 2.5
Earning supported by operations (annual)	2025 dollars, in millions	\$90-127



Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Legend

Baseline Network

— Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

— Preferred Routes

— Preferred Route: Dallas/Fort Worth - New York
 ○ Stations in Cities with Populations over 50K: Dallas/Fort Worth - New York

Not an FRA proposal for service

Route Travel Changes and Impacts

Travel shifted from vehicle to rail (annual)	vehicles miles traveled, in millions	70
Total crashes avoided (annual)	number of crashes (decrease)	149

HOUSTON - NEW YORK

Houston - New York

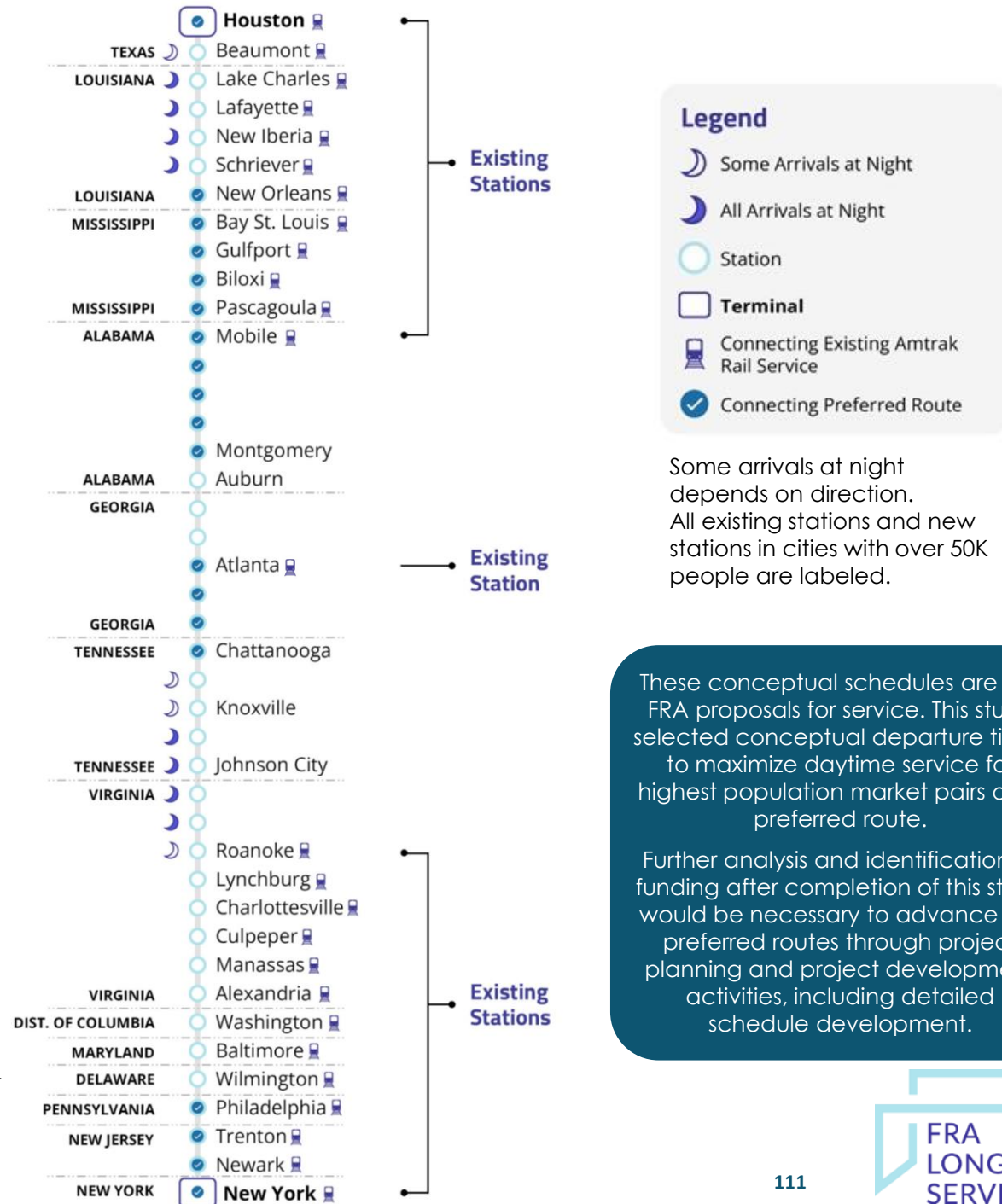
Conceptual Service Overview

Not an FRA proposal for service

Route Service Metrics		
Scheduled run time	avg. of both directions	approx. 43 hours
Route length	avg. of both directions	1,841 miles
Houston, TX departure time	local time	early evening
New York, NY arrival time	local time	late afternoon ⁺²
New York, NY departure time	local time	early afternoon
Houston, TX arrival time	local time	early morning ⁺²
Average travel time improvements	hours	13
Route Stations		
Total number of stations	count of stations	42
Stations in small communities	count of stations	5
Existing stations adding new service	count of stations	26

Average travel time improvements are for existing OD pairs when using a new route compared to an existing route

Daytime = 5:00 a.m.-10:59 p.m. (5 a.m.-7:59 a.m. early morning; 8 a.m.-10:59 a.m. late morning; 11 a.m.-12:59 p.m. midday; 1 p.m.-3:59 p.m. early afternoon; 4 p.m.-5:59 p.m. late afternoon; 6 p.m.-8:59 p.m. early evening; 9 p.m.-10:59 p.m. late evening). Nighttime = 11 p.m.-4:59 a.m.



These conceptual schedules are not FRA proposals for service. This study selected conceptual departure times to maximize daytime service for highest population market pairs on a preferred route.

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Houston - New York

Equity and Accessibility

Additional Populations Served

Population served	in thousands of people	5,490
Rural population	in thousands of people	1,230
Rural population in areas of persistent poverty	in thousands of people	840
Rural population that is transportation disadvantaged	in thousands of people	1,074
Rural population that is health disadvantaged	in thousands of people	899
Population on tribal lands	in thousands of people	14

Additional Institutions Served

Medical centers	count of centers	9
Higher education institutions	count of institutions	65
Historically black colleges and universities	count of institutions	3
Military installations	count of installations	27
NPS Lands	count of NPS units measured	0

Legend

Baseline Network

— Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

— Preferred Routes

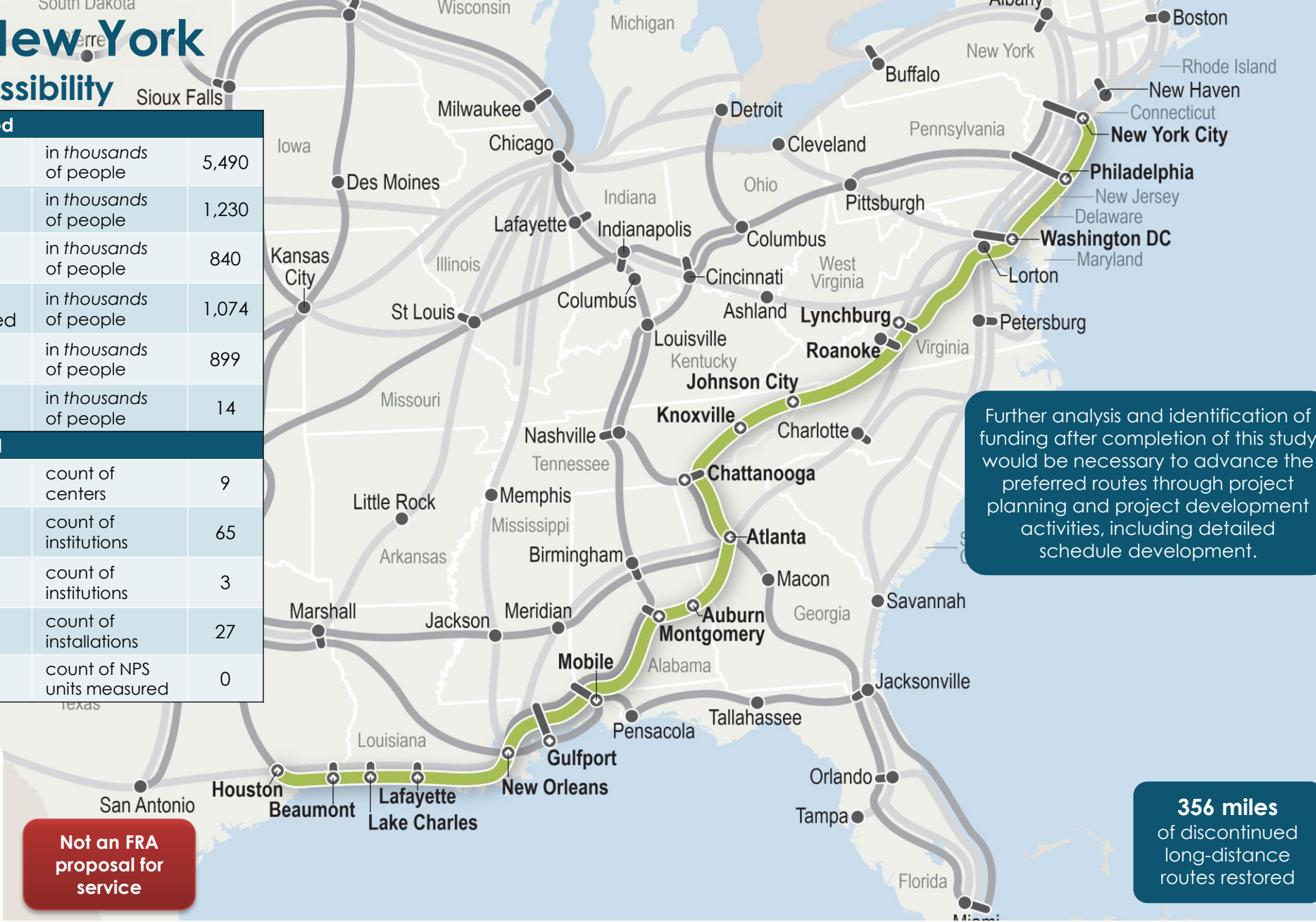
— Preferred Route: Houston – New York

○ Stations in Cities with Populations over 50K: Houston – New York

Not an FRA proposal for service

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

356 miles of discontinued long-distance routes restored



Houston - New York

Selected Passenger Service-Required Cost Estimate Ranges

Selected Passenger Service-Required Cost Ranges		
Vehicle costs	2025 dollars, in millions	\$740-960
Station and maintenance facility costs	2025 dollars, in millions	\$1,520-1,980
Track class and PTC upgrade costs	2025 dollars, in millions	\$1,580-2,050
O&M costs (annual)	2025 dollars, in millions	\$100-141

Cost estimate ranges include Professional Services. Cost estimate ranges do not include other capital projects including track capacity and operational improvement projects.



Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Not an FRA proposal for service

Legend

Baseline Network
 - Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes
 - Preferred Routes
 - Preferred Route: Houston - New York

○ Stations in Cities with Populations over 50K: Houston - New York

Houston - New York

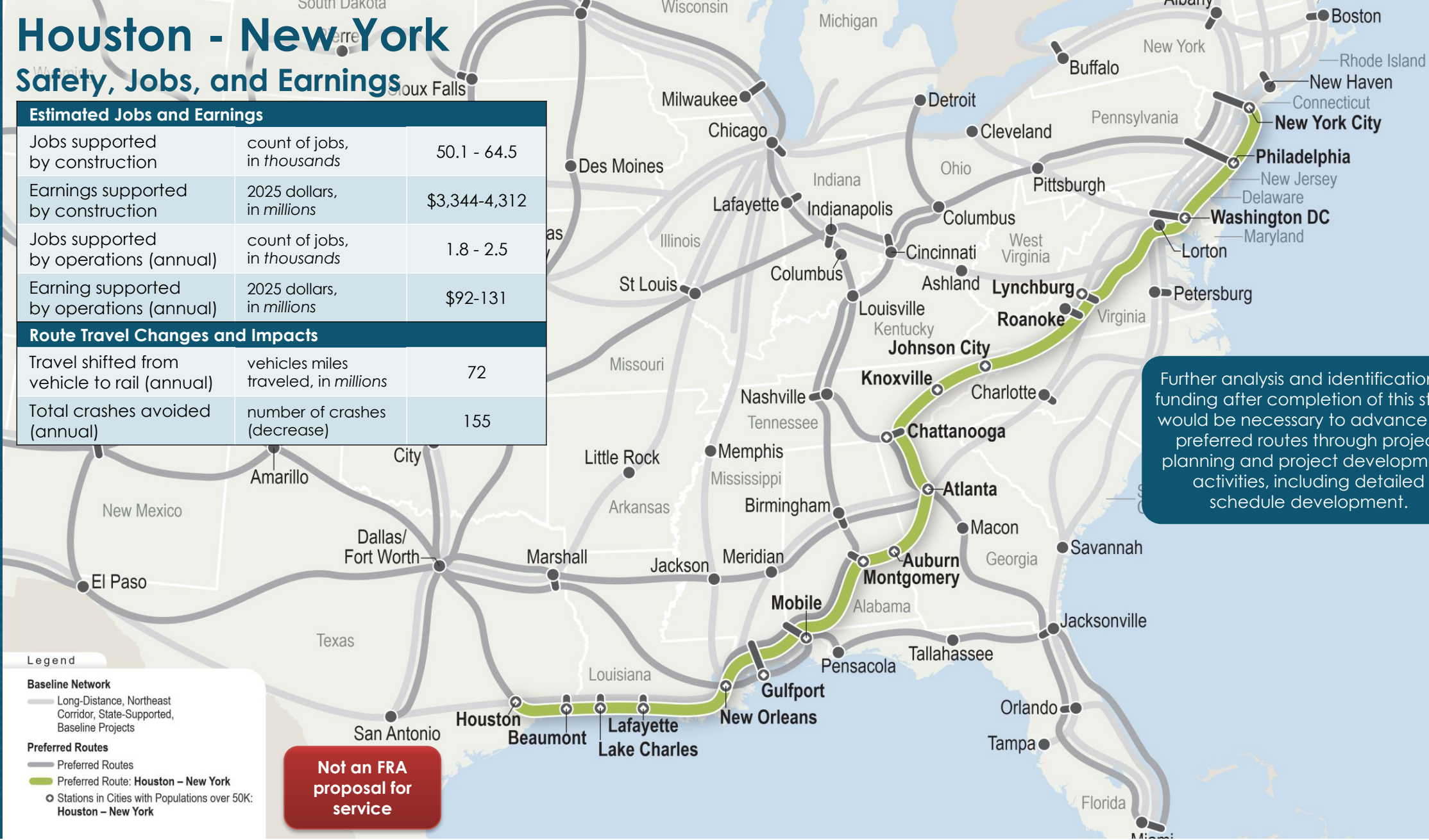
Safety, Jobs, and Earnings

Estimated Jobs and Earnings

Jobs supported by construction	count of jobs, in thousands	50.1 - 64.5
Earnings supported by construction	2025 dollars, in millions	\$3,344-4,312
Jobs supported by operations (annual)	count of jobs, in thousands	1.8 - 2.5
Earning supported by operations (annual)	2025 dollars, in millions	\$92-131

Route Travel Changes and Impacts

Travel shifted from vehicle to rail (annual)	vehicles miles traveled, in millions	72
Total crashes avoided (annual)	number of crashes (decrease)	155



Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Legend

Baseline Network

— Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

— Preferred Routes

— Preferred Route: Houston – New York

○ Stations in Cities with Populations over 50K: Houston – New York

SEATTLE - DENVER

Seattle - Denver

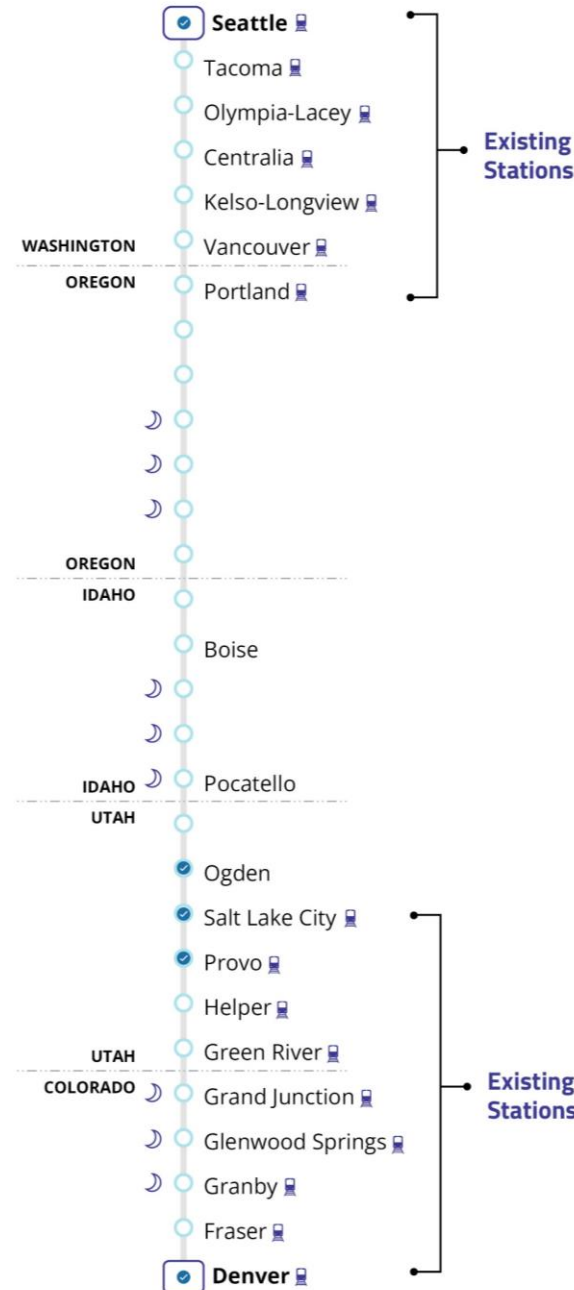
Conceptual Service Overview

Not an FRA proposal for service

Route Service Metrics		
Scheduled run time	avg. of both directions	approx. 40 hours
Route length	avg. of both directions	1,647 miles
Seattle, WA departure time	local time	early morning
Denver, CO arrival time	local time	late evening ⁺¹
Denver, CO departure time	local time	late evening
Seattle, WA arrival time	local time	midday ⁺²
Average travel time improvements	hours	18
Route Stations		
Total number of stations	count of stations	29
Stations in small communities	count of stations	8
Existing stations adding new service	count of stations	16

Average travel time improvements are for existing OD pairs when using a new route compared to an existing route

Daytime = 5:00 a.m.-10:59 p.m. (5 a.m.-7:59 a.m. early morning; 8 a.m.-10:59 a.m. late morning; 11 a.m.-12:59 p.m. midday; 1 p.m.-3:59 p.m. early afternoon; 4 p.m.-5:59 p.m. late afternoon; 6 p.m.-8:59 p.m. early evening; 9 p.m.-10:59 p.m. late evening). Nighttime = 11 p.m.-4:59 a.m.



Legend

- Some Arrivals at Night
- All Arrivals at Night
- Station
- Terminal
- Connecting Existing Amtrak Rail Service
- Connecting Preferred Route

Some arrivals at night depends on direction. All existing stations and new stations in cities with over 50K people are labeled.

These conceptual schedules are not FRA proposals for service. This study selected conceptual departure times to maximize daytime service for highest population market pairs on a preferred route.

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Seattle - Denver Equity and Accessibility

773 miles
of discontinued
long-distance
routes restored

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Additional Populations Served		
Population served	in thousands of people	1,660
Rural population	in thousands of people	190
Rural population in areas of persistent poverty	in thousands of people	80
Rural population that is transportation disadvantaged	in thousands of people	57
Rural population that is health disadvantaged	in thousands of people	28
Population on tribal lands	in thousands of people	10

Additional Institutions Served		
Medical centers	count of centers	3
Higher education institutions	count of institutions	19
Historically black colleges and universities	count of institutions	0
Military installations	count of installations	7
NPS Lands	count of NPS units measured	2

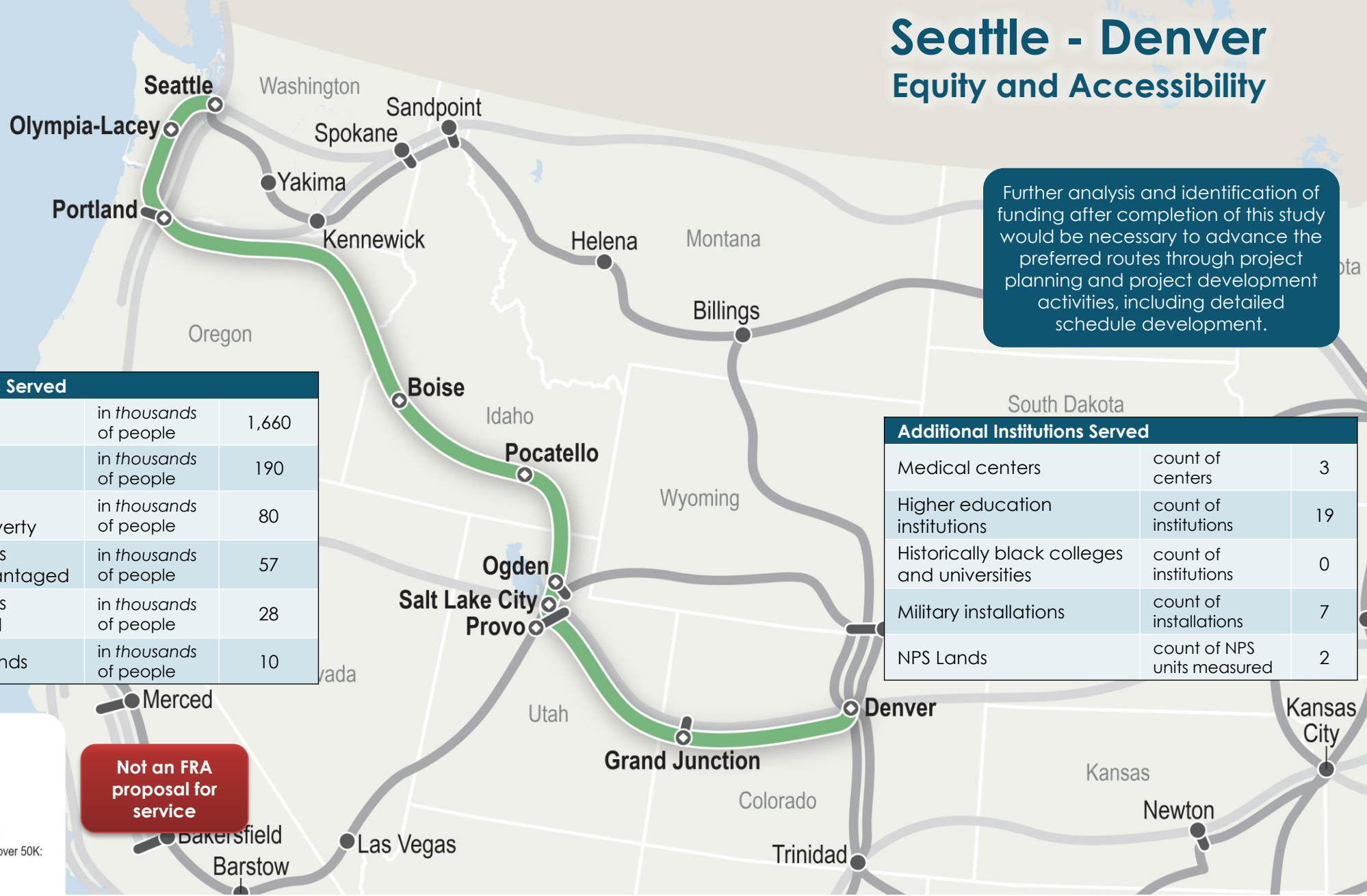
Not an FRA proposal for service

Legend

Baseline Network
 - Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

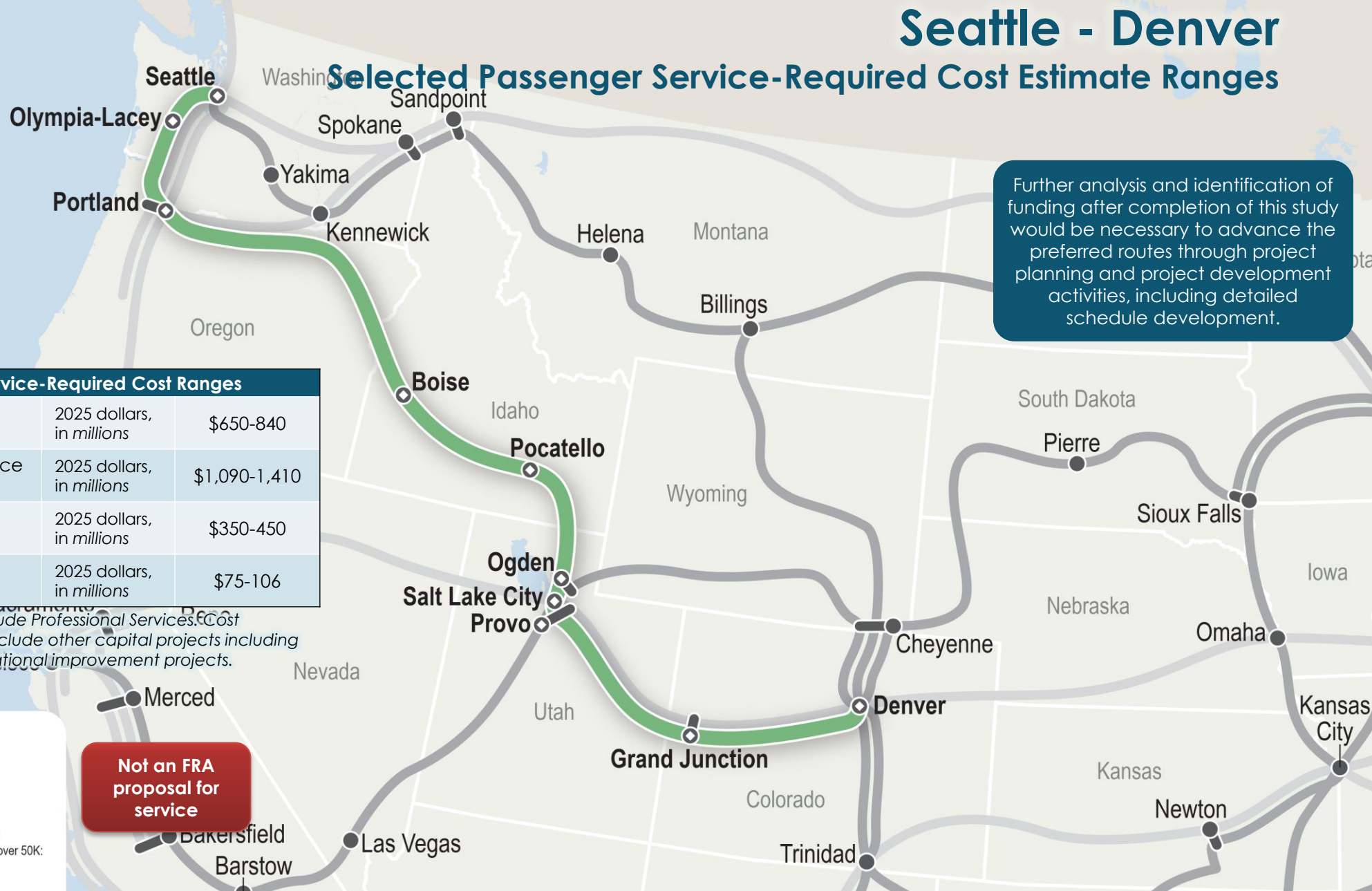
Preferred Routes
 - Preferred Routes
 - Preferred Route: **Seattle - Denver**

○ Stations in Cities with Populations over 50K: **Seattle - Denver**



Seattle - Denver

Selected Passenger Service-Required Cost Estimate Ranges



Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Selected Passenger Service-Required Cost Ranges

Vehicle costs	2025 dollars, in millions	\$650-840
Station and maintenance facility costs	2025 dollars, in millions	\$1,090-1,410
Track class and PTC upgrade costs	2025 dollars, in millions	\$350-450
O&M costs (annual)	2025 dollars, in millions	\$75-106

Cost estimate ranges include Professional Services. Cost estimate ranges do not include other capital projects including track capacity and operational improvement projects.

Legend

Baseline Network

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

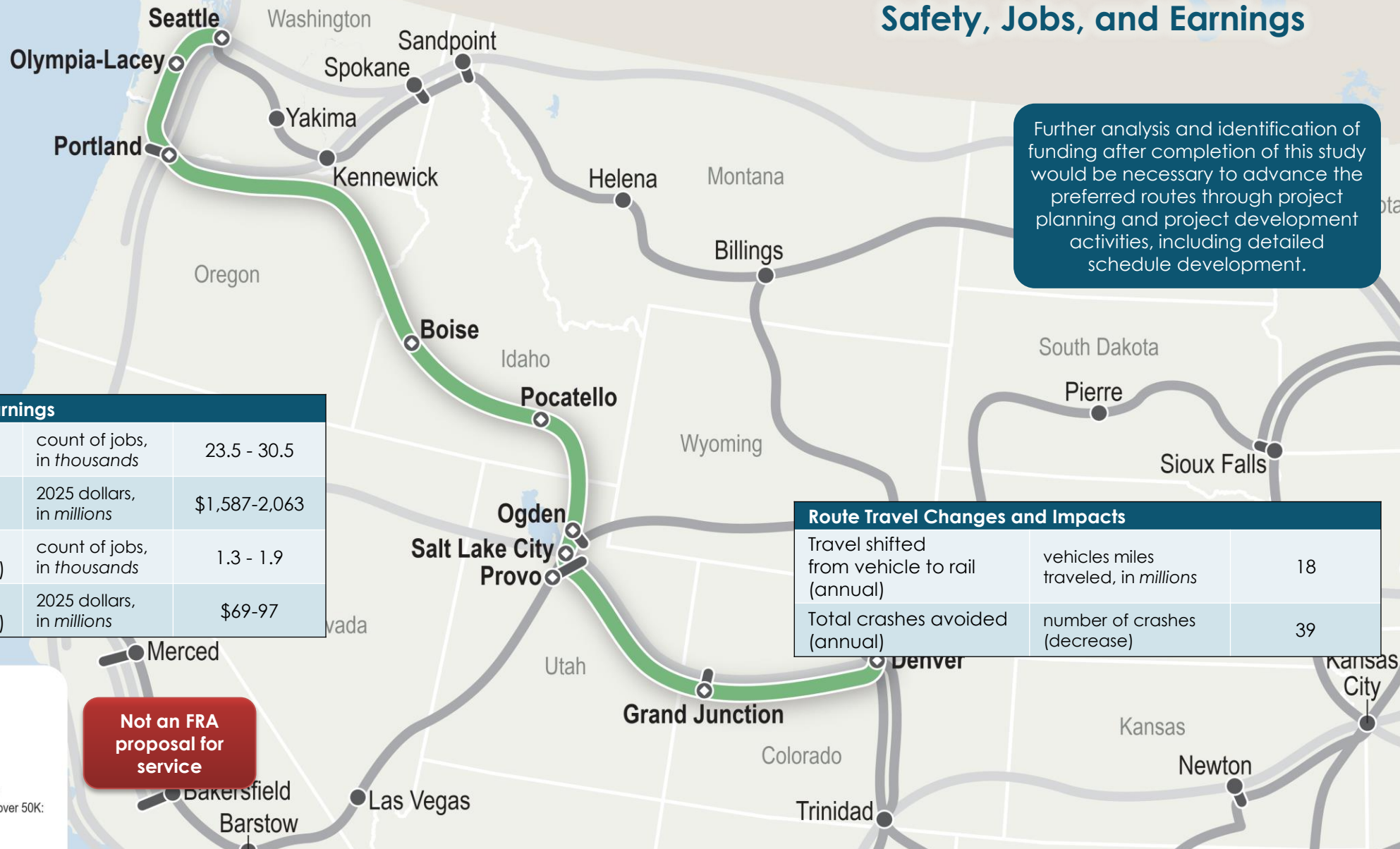
Preferred Routes

- Preferred Routes
- Preferred Route: **Seattle - Denver**
- Stations in Cities with Populations over 50K: **Seattle - Denver**

Not an FRA proposal for service

Seattle - Denver

Safety, Jobs, and Earnings



Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Estimated Jobs and Earnings		
Jobs supported by construction	count of jobs, in thousands	23.5 - 30.5
Earnings supported by construction	2025 dollars, in millions	\$1,587-2,063
Jobs supported by operations (annual)	count of jobs, in thousands	1.3 - 1.9
Earning supported by operations (annual)	2025 dollars, in millions	\$69-97

Route Travel Changes and Impacts		
Travel shifted from vehicle to rail (annual)	vehicles miles traveled, in millions	18
Total crashes avoided (annual)	number of crashes (decrease)	39

Not an FRA proposal for service

Legend

Baseline Network

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

- Preferred Routes
- Preferred Route: **Seattle - Denver**
- Stations in Cities with Populations over 50K: **Seattle - Denver**

SAN ANTONIO - MINNEAPOLIS/ST. PAUL

San Antonio - Minneapolis/St. Paul

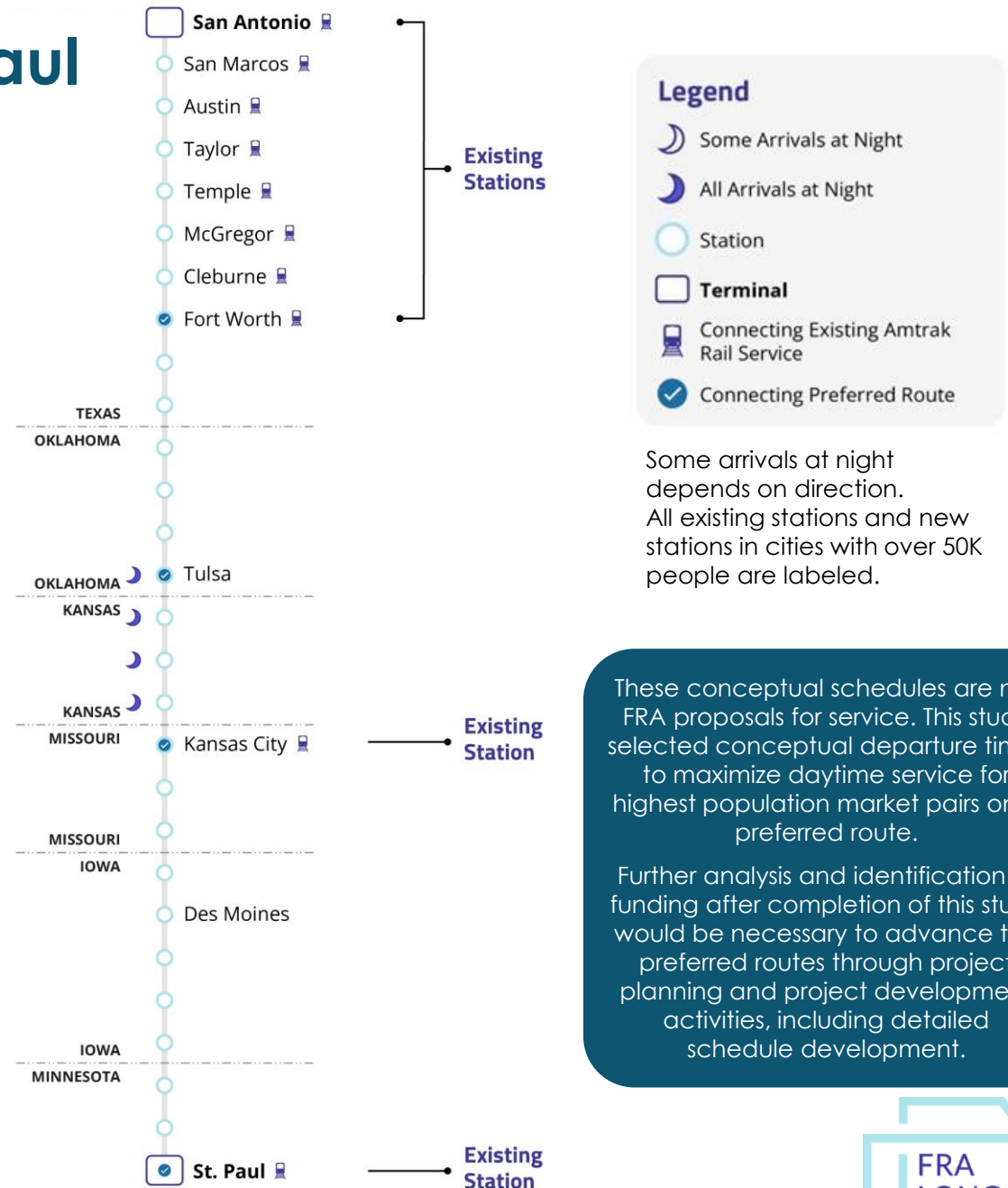
Conceptual Service Overview

Not an FRA proposal for service

Route Service Metrics		
Scheduled run time	avg. of both directions	approx. 32 hours
Route length	avg. of both directions	1,292 miles
San Antonio, TX departure time	local time	late morning
St. Paul, MN arrival time	local time	late afternoon ⁺¹
St. Paul, MN departure time	local time	midday
San Antonio, TX arrival time	local time	early evening ⁺¹
Average travel time improvements	hours	5
Route Stations		
Total number of stations	count of stations	28
Stations in small communities	count of stations	11
Existing stations adding new service	count of stations	10

Average travel time improvements are for existing OD pairs when using a new route compared to an existing route

Daytime = 5:00 a.m.-10:59 p.m. (5 a.m.-7:59 a.m. early morning; 8 a.m.-10:59 a.m. late morning; 11 a.m.-12:59 p.m. midday; 1 p.m.-3:59 p.m. early afternoon; 4 p.m.-5:59 p.m. late afternoon; 6 p.m.-8:59 p.m. early evening; 9 p.m.-10:59 p.m. late evening). Nighttime = 11 p.m.-4:59 a.m.



These conceptual schedules are not FRA proposals for service. This study selected conceptual departure times to maximize daytime service for highest population market pairs on a preferred route.

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

San Antonio - Minneapolis/St. Paul

Equity and Accessibility

Additional Populations Served

Population served	in thousands of people	2,660
Rural population	in thousands of people	810
Rural population in areas of persistent poverty	in thousands of people	290
Rural population that is transportation disadvantaged	in thousands of people	316
Rural population that is health disadvantaged	in thousands of people	365
Population on tribal lands	in thousands of people	1,444

Additional Institutions Served

Medical centers	count of centers	5
Higher education institutions	count of institutions	50
Historically black colleges and universities	count of institutions	0
Military installations	count of installations	6
NPS Lands	count of NPS units measured	0

Legend

Baseline Network

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

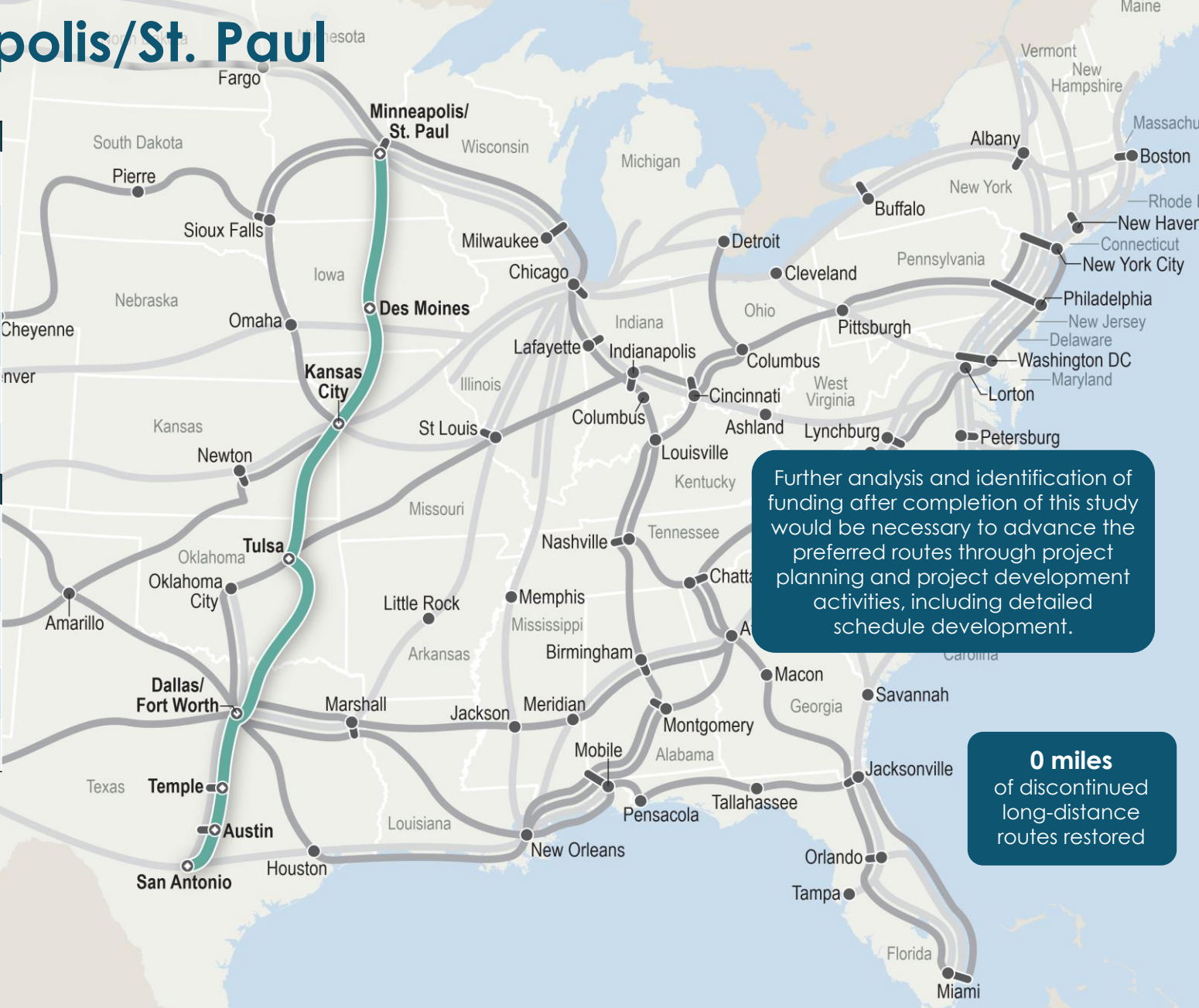
Preferred Routes

- Preferred Routes
- Preferred Route: San Antonio - Minneapolis/St. Paul
- Stations in Cities with Populations over 50K: San Antonio - Minneapolis/St. Paul

Not an FRA proposal for service

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

0 miles of discontinued long-distance routes restored

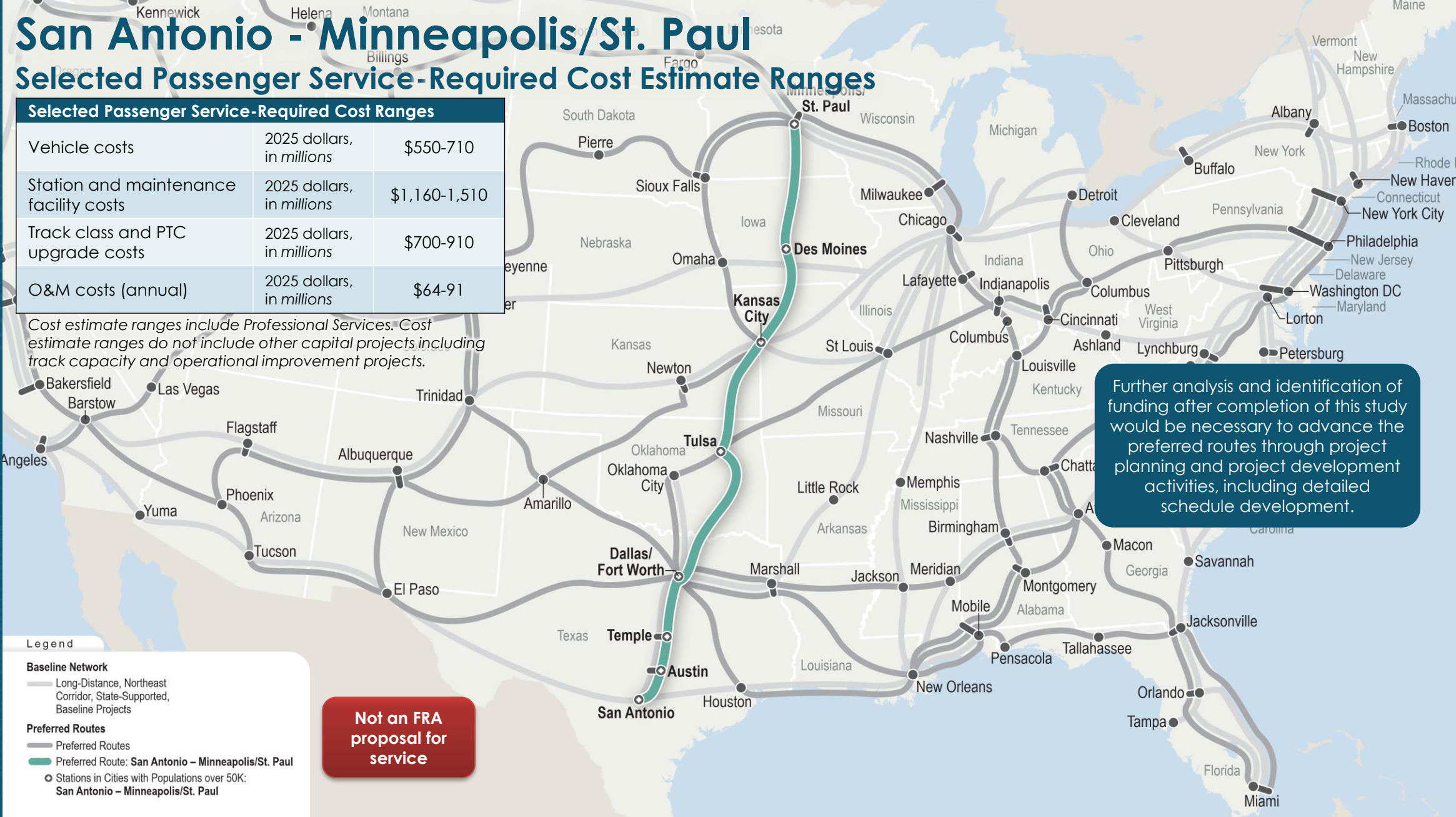


San Antonio - Minneapolis/St. Paul

Selected Passenger Service-Required Cost Estimate Ranges

Selected Passenger Service-Required Cost Ranges		
Vehicle costs	2025 dollars, in millions	\$550-710
Station and maintenance facility costs	2025 dollars, in millions	\$1,160-1,510
Track class and PTC upgrade costs	2025 dollars, in millions	\$700-910
O&M costs (annual)	2025 dollars, in millions	\$64-91

Cost estimate ranges include Professional Services. Cost estimate ranges do not include other capital projects including track capacity and operational improvement projects.



Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Not an FRA proposal for service

Legend

Baseline Network

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

- Preferred Routes
- Preferred Route: San Antonio - Minneapolis/St. Paul

○ Stations in Cities with Populations over 50K:
San Antonio - Minneapolis/St. Paul

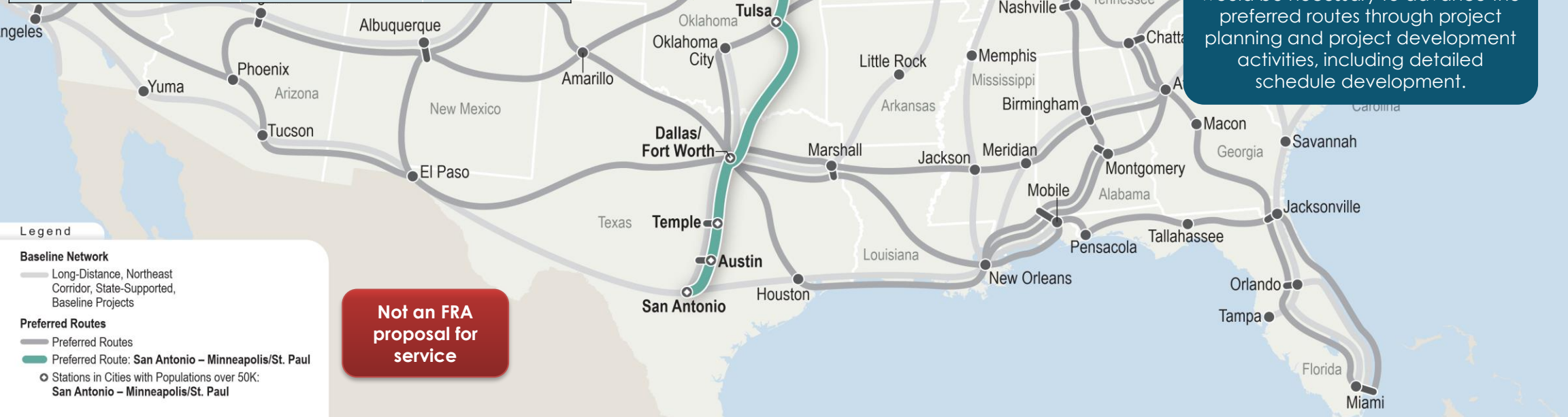
San Antonio - Minneapolis/St. Paul

Safety, Jobs, and Earnings

Estimated Jobs and Earnings		
Jobs supported by construction	count of jobs, in thousands	30.9 - 40.2
Earnings supported by construction	2025 dollars, in millions	\$2,069-2,689
Jobs supported by operations (annual)	count of jobs, in thousands	1.1 - 1.6
Earning supported by operations (annual)	2025 dollars, in millions	\$59-84
Route Travel Changes and Impacts		
Travel shifted from vehicle to rail (annual)	vehicles miles traveled, in millions	16
Total crashes avoided (annual)	number of crashes (decrease)	33

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Not an FRA proposal for service



SAN FRANCISCO - DALLAS/FORT WORTH

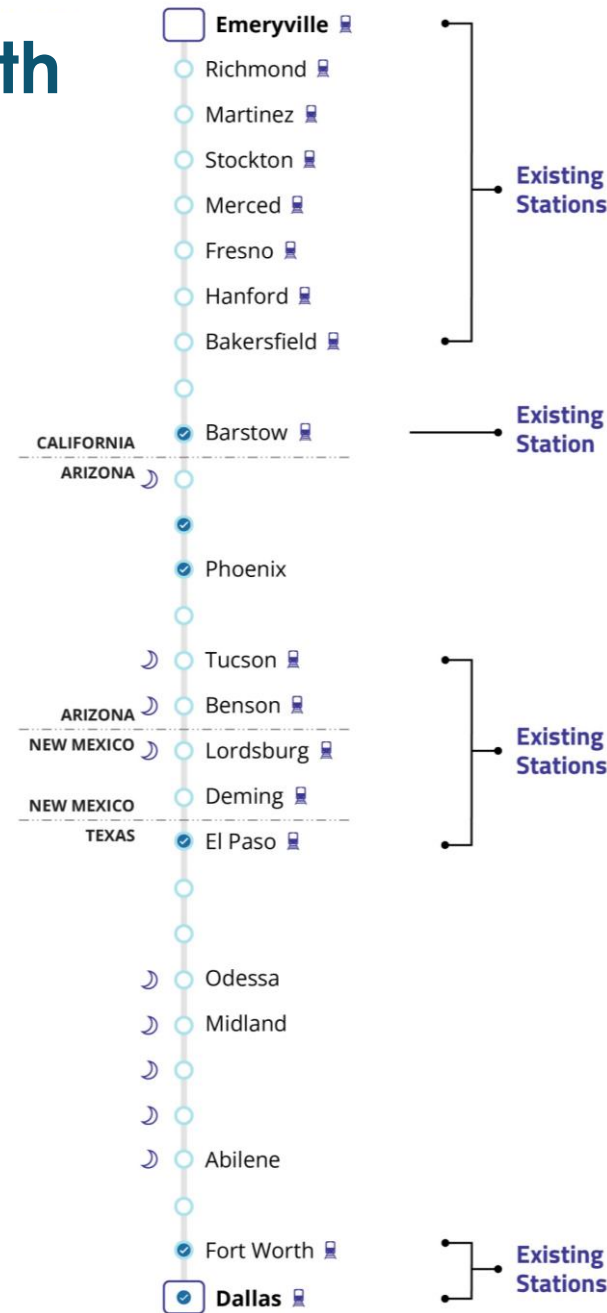
San Francisco - Dallas/Fort Worth

Conceptual Service Overview

Not an FRA proposal for service

Route Service Metrics		
Scheduled run time	avg. of both directions	approx. 42 hours
Route length	avg. of both directions	1,906 miles
Emeryville, CA departure time	local time	Midday
Dallas, TX arrival time	local time	early morning ⁺²
Dallas, TX departure time	local time	early morning
Emeryville, CA arrival time	local time	late evening ⁺¹
Average travel time improvements	hours	14
Route Stations		
Total number of stations	count of stations	29
Stations in small communities	count of stations	5
Existing stations adding new service	count of stations	16

Average travel time improvements are for existing OD pairs when using a new route compared to an existing route



Legend

- Some Arrivals at Night
- All Arrivals at Night
- Station
- Terminal
- Connecting Existing Amtrak Rail Service
- Connecting Preferred Route

Some arrivals at night depends on direction. All existing stations and new stations in cities with over 50K people are labeled.

These conceptual schedules are not FRA proposals for service. This study selected conceptual departure times to maximize daytime service for highest population market pairs on a preferred route.

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Daytime = 5:00 a.m.-10:59 p.m. (5 a.m.-7:59 a.m. early morning; 8 a.m.-10:59 a.m. late morning; 11 a.m.-12:59 p.m. midday; 1 p.m.-3:59 p.m. early afternoon; 4 p.m.-5:59 p.m. late afternoon; 6 p.m.-8:59 p.m. early evening; 9 p.m.-10:59 p.m. late evening). Nighttime = 11 p.m.-4:59 a.m.

San Francisco - Dallas/Fort Worth

Equity and Accessibility



Additional Populations Served		
Population served	in thousands of people	3,720
Rural population	in thousands of people	210
Rural population in areas of persistent poverty	in thousands of people	120
Rural population that is transportation disadvantaged	in thousands of people	138
Rural population that is health disadvantaged	in thousands of people	108
Population on tribal lands	in thousands of people	16

Additional Institutions Served		
Medical centers	count of centers	6
Higher education institutions	count of institutions	22
Historically black colleges and universities	count of institutions	0
Military installations	count of installations	6
NPS Lands	count of NPS units measured	1

207 miles of discontinued long-distance routes restored

Legend

Baseline Network

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

- Preferred Routes
- Preferred Route: San Antonio – Minneapolis/St. Paul

○ Stations in Cities with Populations over 50K: San Antonio – Minneapolis/St. Paul

Not an FRA proposal for service

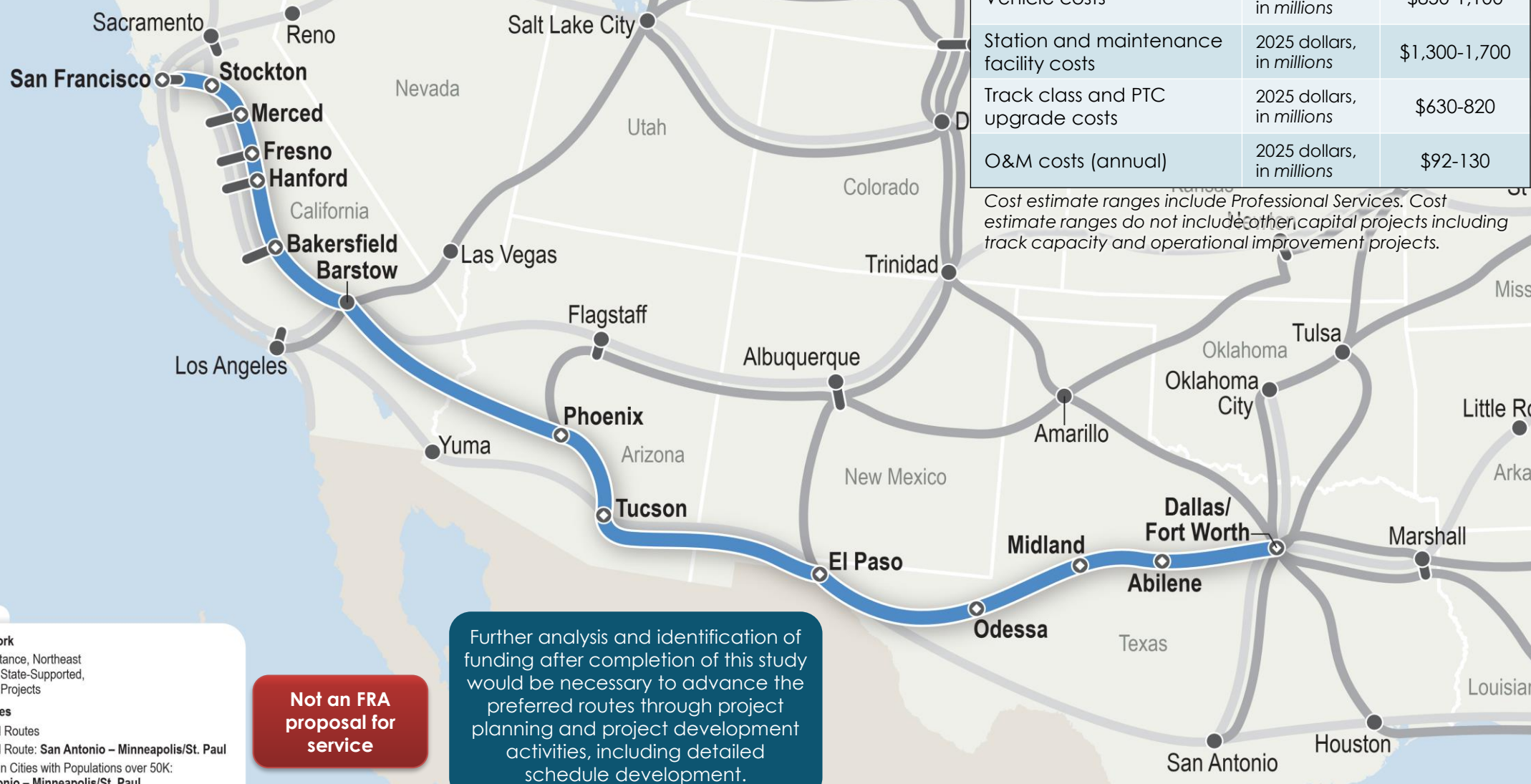
Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

San Francisco - Dallas/Fort Worth

Selected Passenger Service-Required Cost Estimate Ranges

Selected Passenger Service-Required Cost Ranges		
Vehicle costs	2025 dollars, in millions	\$850-1,100
Station and maintenance facility costs	2025 dollars, in millions	\$1,300-1,700
Track class and PTC upgrade costs	2025 dollars, in millions	\$630-820
O&M costs (annual)	2025 dollars, in millions	\$92-130

Cost estimate ranges include Professional Services. Cost estimate ranges do not include other capital projects including track capacity and operational improvement projects.



Legend

Baseline Network

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

- Preferred Routes
- Preferred Route: San Antonio – Minneapolis/St. Paul

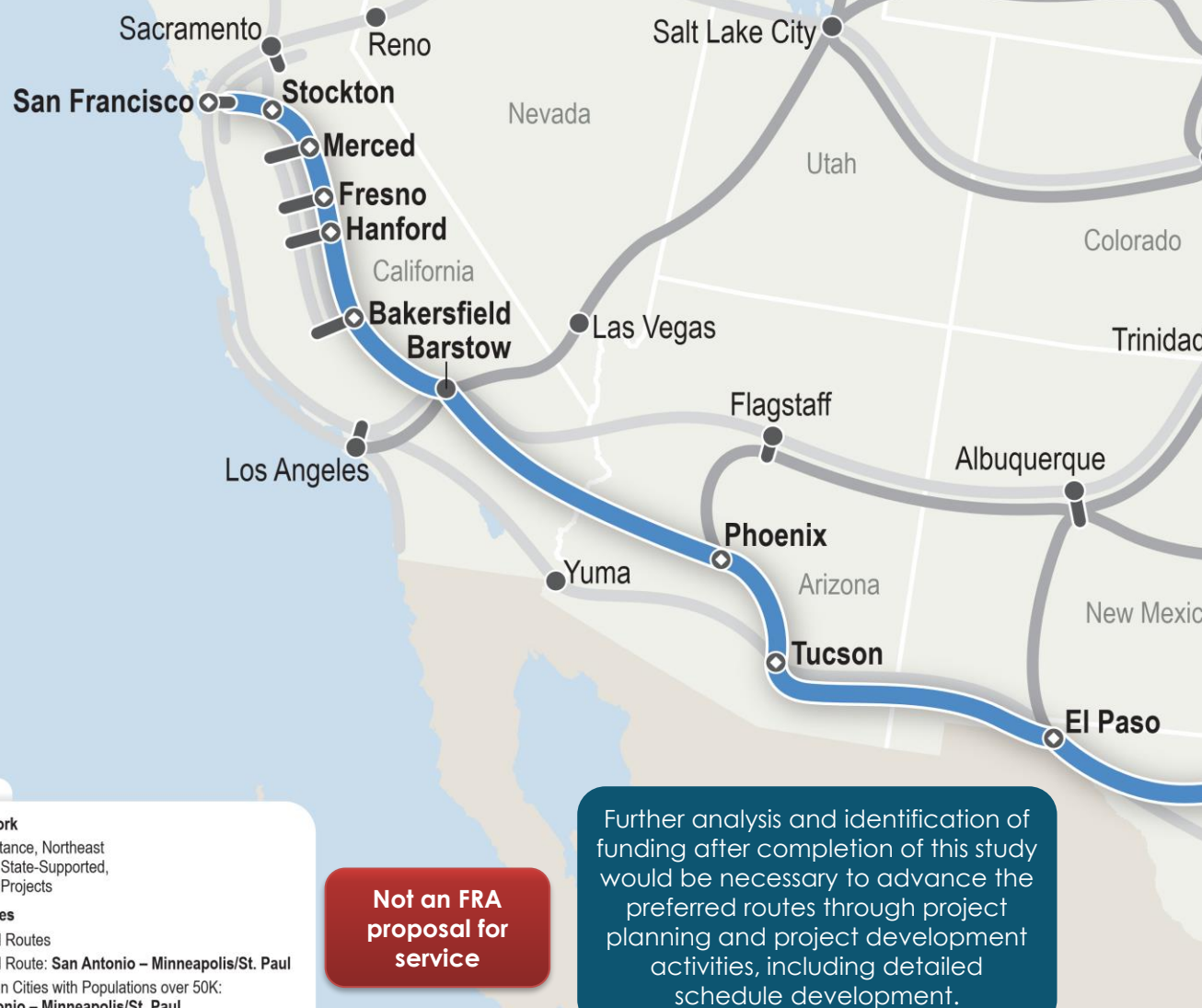
○ Stations in Cities with Populations over 50K: San Antonio – Minneapolis/St. Paul

Not an FRA proposal for service

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

San Francisco - Dallas/Fort Worth

Safety, Jobs, and Earnings



Estimated Jobs and Earnings		
Jobs supported by construction	count of jobs, in thousands	28.4 - 36.9
Earnings supported by construction	2025 dollars, in millions	\$1,927-2,505
Jobs supported by operations (annual)	count of jobs, in thousands	1.6 - 2.3
Earning supported by operations (annual)	2025 dollars, in millions	\$85-120
Route Travel Changes and Impacts		
Travel shifted from vehicle to rail (annual)	vehicles miles traveled, in millions	39
Total crashes avoided (annual)	number of crashes (decrease)	83

Legend

Baseline Network

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

- Preferred Routes
- Preferred Route: San Antonio – Minneapolis/St. Paul
- Stations in Cities with Populations over 50K: San Antonio – Minneapolis/St. Paul

Not an FRA proposal for service

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

DETROIT - NEW ORLEANS

Detroit - New Orleans

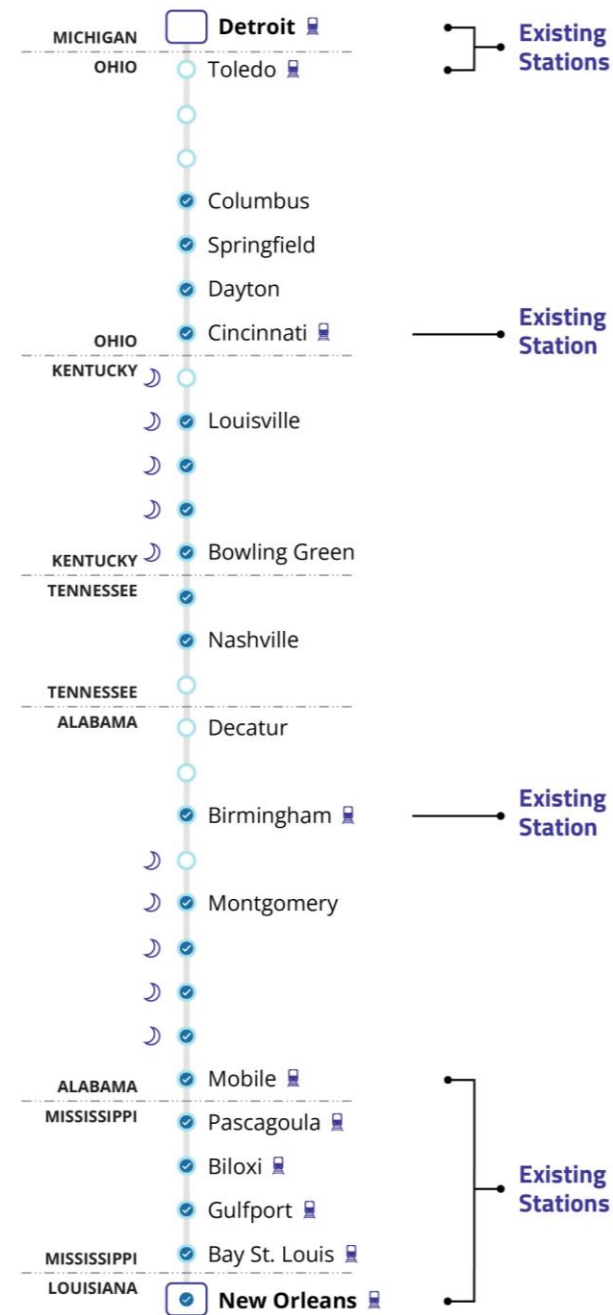
Conceptual Service Overview

Not an FRA proposal for service

Route Service Metrics		
Scheduled run time	avg. of both directions	approx. 29 hours
Route length	avg. of both directions	1,244 miles
Detroit, MI departure time	local time	early morning
New Orleans, LA arrival time	local time	late morning ⁺¹
New Orleans, LA departure time	local time	early morning
Detroit, MI arrival time	local time	midday ⁺¹
Average travel time improvements	hours	15.5
Route Stations		
Total number of stations	count of stations	30
Stations in small communities	count of stations	7
Existing stations adding new service	count of stations	10

Average travel time improvements are for existing OD pairs when using a new route compared to an existing route

Daytime = 5:00 a.m.-10:59 p.m. (5 a.m.-7:59 a.m. early morning; 8 a.m.-10:59 a.m. late morning; 11 a.m.-12:59 p.m. midday; 1 p.m.-3:59 p.m. early afternoon; 4 p.m.-5:59 p.m. late afternoon; 6 p.m.-8:59 p.m. early evening; 9 p.m.-10:59 p.m. late evening). Nighttime = 11 p.m.-4:59 a.m.



Legend

- Some Arrivals at Night
- All Arrivals at Night
- Station
- Terminal
- Connecting Existing Amtrak Rail Service
- Connecting Preferred Route

Some arrivals at night depends on direction. All existing stations and new stations in cities with over 50K people are labeled.

These conceptual schedules are not FRA proposals for service. This study selected conceptual departure times to maximize daytime service for highest population market pairs on a preferred route.

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Detroit - New Orleans

Equity and Accessibility

Additional Populations Served

Population served	in thousands of people	9,560
Rural population	in thousands of people	1,550
Rural population in areas of persistent poverty	in thousands of people	780
Rural population that is transportation disadvantaged	in thousands of people	1,252
Rural population that is health disadvantaged	in thousands of people	812
Population on tribal lands	in thousands of people	72
Medical centers	count of centers	17
Higher education institutions	count of institutions	122
Historically black colleges and universities	count of institutions	12
Military installations	count of installations	37
NPS Lands	count of NPS units measured	1

Legend

Baseline Network

— Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

— Preferred Routes

— Preferred Route: Detroit - New Orleans

○ Stations in Cities with Populations over 50K: Detroit - New Orleans

Not an FRA proposal for service

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

985 miles of discontinued long-distance routes restored

Detroit - New Orleans

Selected Passenger Service-Required Cost Estimate Ranges

Selected Passenger Service-Required Cost Ranges		
Vehicle costs	2025 dollars, in millions	\$440-570
Station and maintenance facility costs	2025 dollars, in millions	\$1,290-1,680
Track class and PTC upgrade costs	2025 dollars, in millions	\$1,450-1,890
O&M costs (annual)	2025 dollars, in millions	\$62-88

Cost estimate ranges include Professional Services. Cost estimate ranges do not include other capital projects including track capacity and operational improvement projects.



Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Not an FRA proposal for service

Detroit - New Orleans

Safety, Jobs, and Earnings

Estimated Jobs and Earnings

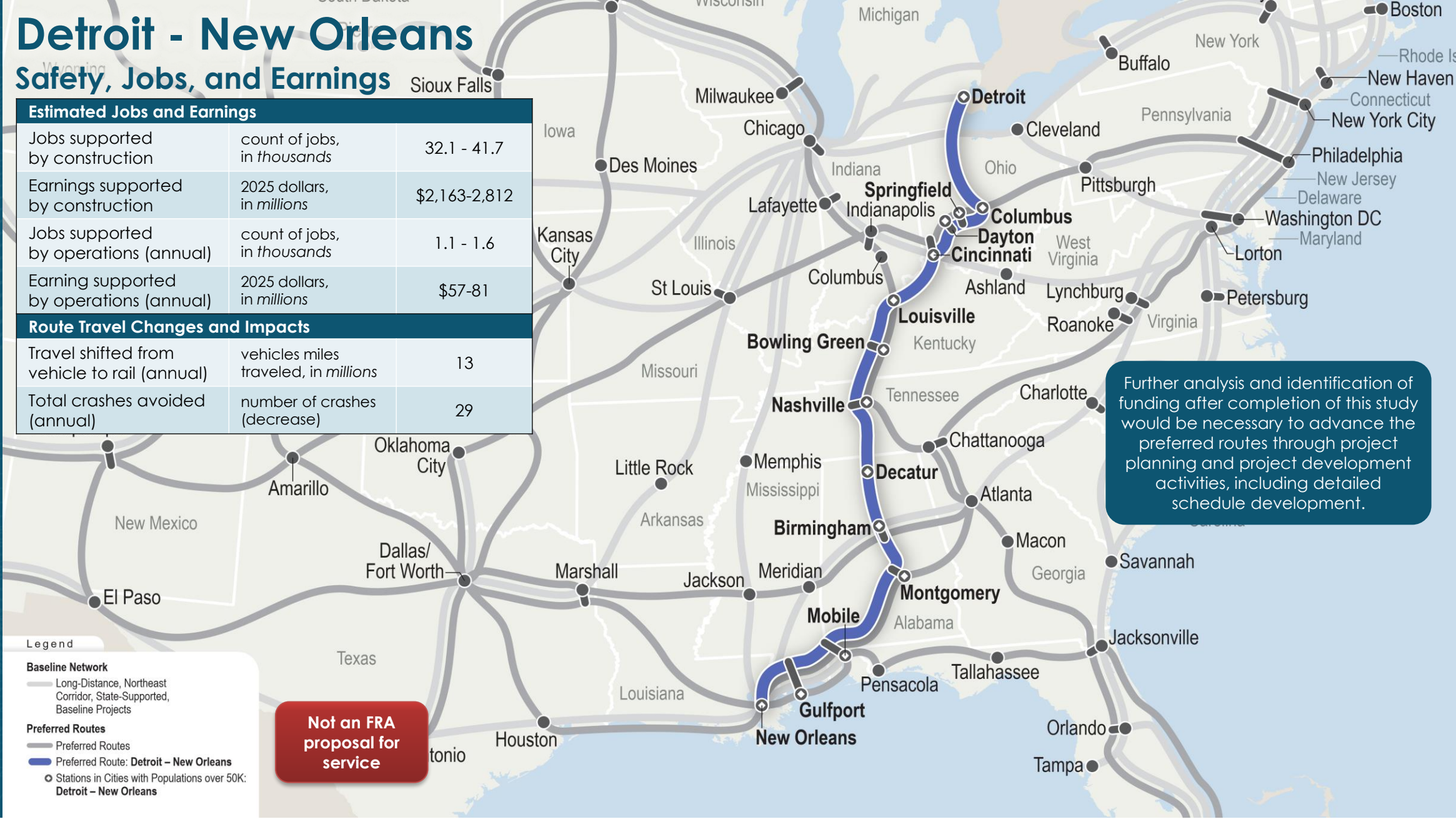
Jobs supported by construction	count of jobs, in thousands	32.1 - 41.7
Earnings supported by construction	2025 dollars, in millions	\$2,163-2,812
Jobs supported by operations (annual)	count of jobs, in thousands	1.1 - 1.6
Earning supported by operations (annual)	2025 dollars, in millions	\$57-81

Route Travel Changes and Impacts

Travel shifted from vehicle to rail (annual)	vehicles miles traveled, in millions	13
Total crashes avoided (annual)	number of crashes (decrease)	29

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Not an FRA proposal for service



DENVER - MINNEAPOLIS/ST. PAUL

Denver - Minneapolis/St. Paul

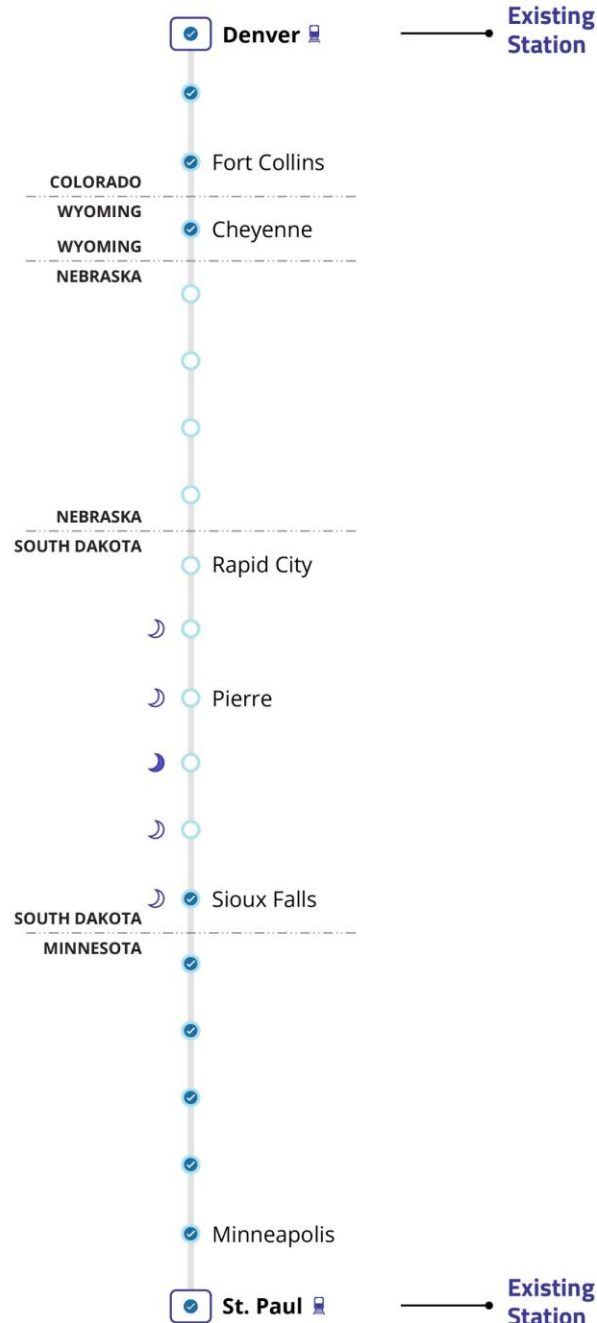
Conceptual Service Overview

Not an FRA proposal for service

Route Service Metrics		
Scheduled run time	avg. of both directions	approx. 26 hours
Route length	avg. of both directions	1,143 miles
Denver, CO departure time	local time	midday
St. Paul, MN arrival time	local time	early afternoon ⁺¹
St. Paul, MN departure time	local time	early evening
Denver, CO arrival time	local time	early evening ⁺¹
Average travel time improvements	hours	4.5
Route Stations		
Total number of stations	count of stations	20
Stations in small communities	count of stations	11
Existing stations adding new service	count of stations	2

Average travel time improvements are for existing OD pairs when using a new route compared to an existing route

Daytime = 5:00 a.m.-10:59 p.m. (5 a.m.-7:59 a.m. early morning; 8 a.m.-10:59 a.m. late morning; 11 a.m.-12:59 p.m. midday; 1 p.m.-3:59 p.m. early afternoon; 4 p.m.-5:59 p.m. late afternoon; 6 p.m.-8:59 p.m. early evening; 9 p.m.-10:59 p.m. late evening). Nighttime = 11 p.m.-4:59 a.m.



Legend

- Some Arrivals at Night
- All Arrivals at Night
- Station
- Terminal
- Connecting Existing Amtrak Rail Service
- Connecting Preferred Route

Some arrivals at night depends on direction. All existing stations and new stations in cities with over 50K people are labeled.

These conceptual schedules are not FRA proposals for service. This study selected conceptual departure times to maximize daytime service for highest population market pairs on a preferred route.

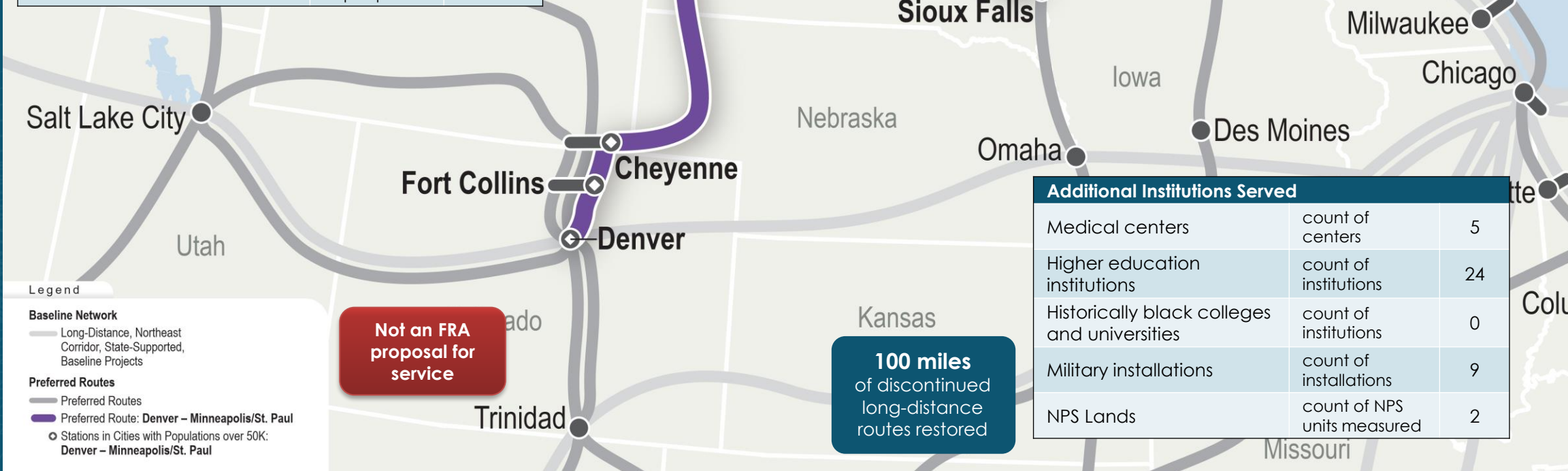
Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Denver - Minneapolis/St. Paul

Equity and Accessibility

Additional Populations Served		
Population served	in thousands of people	1,740
Rural population	in thousands of people	410
Rural population in areas of persistent poverty	in thousands of people	40
Rural population that is transportation disadvantaged	in thousands of people	27
Rural population that is health disadvantaged	in thousands of people	32
Population on tribal lands	in thousands of people	10

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.



Additional Institutions Served		
Medical centers	count of centers	5
Higher education institutions	count of institutions	24
Historically black colleges and universities	count of institutions	0
Military installations	count of installations	9
NPS Lands	count of NPS units measured	2

Not an FRA proposal for service

100 miles of discontinued long-distance routes restored

Legend

Baseline Network
 - Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes
 - Preferred Routes
 - Preferred Route: Denver - Minneapolis/St. Paul

○ Stations in Cities with Populations over 50K: Denver - Minneapolis/St. Paul

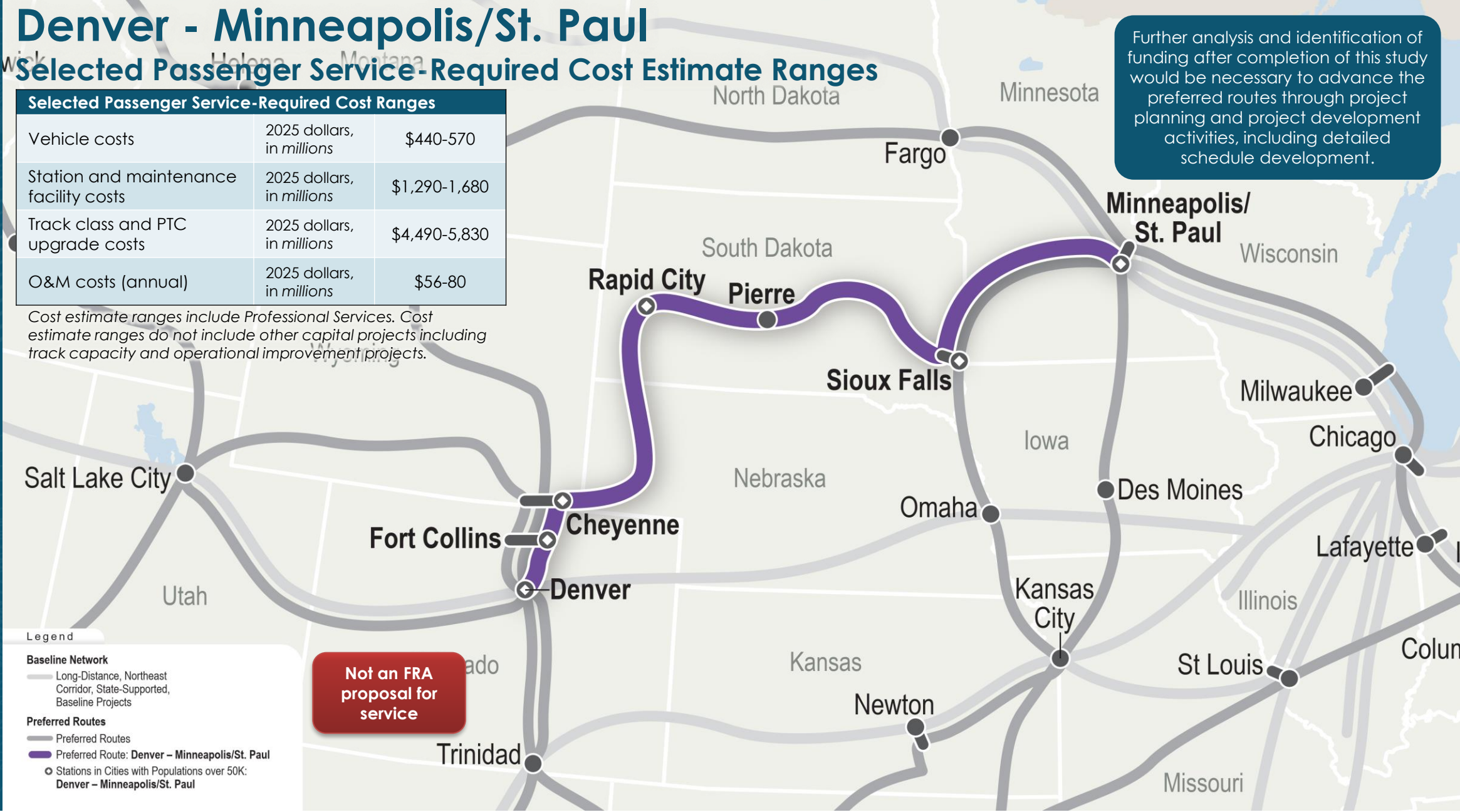
Denver - Minneapolis/St. Paul

Selected Passenger Service-Required Cost Estimate Ranges

Selected Passenger Service-Required Cost Ranges		
Vehicle costs	2025 dollars, in millions	\$440-570
Station and maintenance facility costs	2025 dollars, in millions	\$1,290-1,680
Track class and PTC upgrade costs	2025 dollars, in millions	\$4,490-5,830
O&M costs (annual)	2025 dollars, in millions	\$56-80

Cost estimate ranges include Professional Services. Cost estimate ranges do not include other capital projects including track capacity and operational improvement projects.

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.



Legend

Baseline Network

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

- Preferred Routes
- Preferred Route: Denver – Minneapolis/St. Paul
- Stations in Cities with Populations over 50K: Denver – Minneapolis/St. Paul

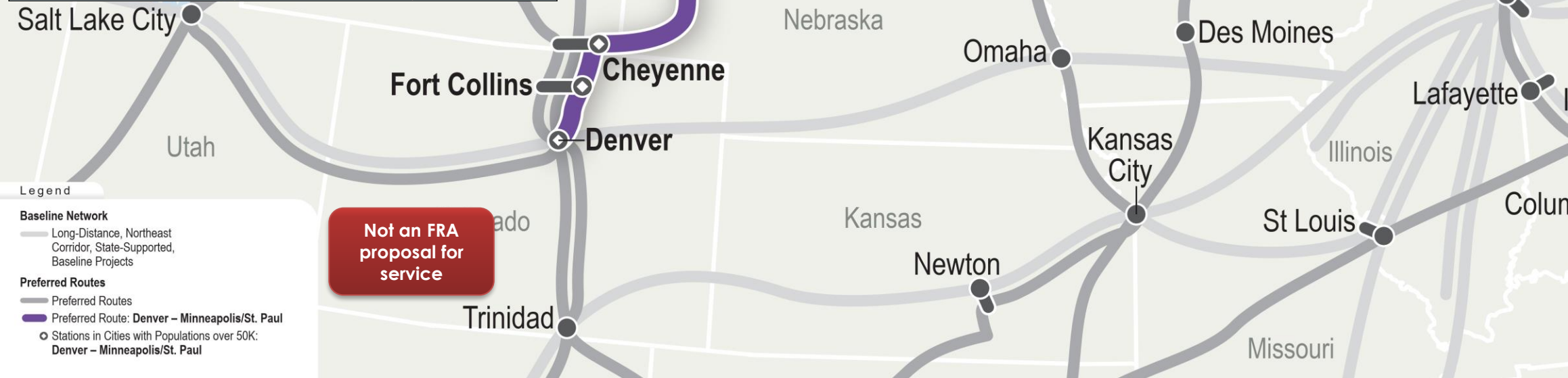
Not an FRA proposal for service

Denver - Minneapolis/St. Paul

Safety, Jobs, and Earnings

Estimated Jobs and Earnings		
Jobs supported by construction	count of jobs, in thousands	91.1 - 118.4
Earnings supported by construction	2025 dollars, in millions	\$6,047-7,861
Jobs supported by operations (annual)	count of jobs, in thousands	1.0 - 1.4
Earning supported by operations (annual)	2025 dollars, in millions	\$52-74
Route Travel Changes and Impacts		
Travel shifted from vehicle to rail (annual)	vehicles miles traveled, in millions	11
Total crashes avoided (annual)	number of crashes (decrease)	24

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.



Not an FRA proposal for service

SEATTLE - CHICAGO

Seattle - Chicago

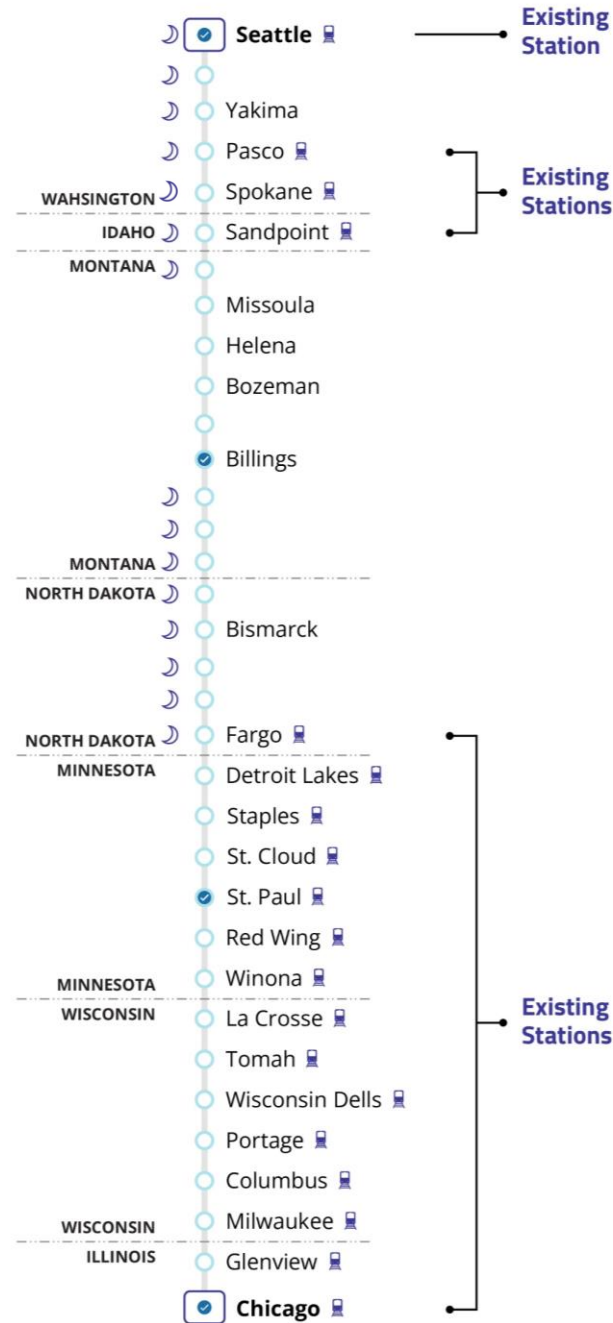
Conceptual Service Overview

Not an FRA proposal for service

Route Service Metrics		
Scheduled run time	avg. of both directions	approx. 50 hours
Route length	avg. of both directions	2,314 miles
Seattle, WA departure time	local time	early afternoon
Chicago, IL arrival time	local time	late afternoon ⁺²
Chicago, IL departure time	local time	early morning
Seattle, WA arrival time	local time	nighttime ⁺²
Average travel time improvements	hours	11
Route Stations		
Total number of stations	count of stations	34
Stations in small communities	count of stations	11
Existing stations adding new service	count of stations	19

Average travel time improvements are for existing OD pairs when using a new route compared to an existing route

Daytime = 5:00 a.m.-10:59 p.m. (5 a.m.-7:59 a.m. early morning; 8 a.m.-10:59 a.m. late morning; 11 a.m.-12:59 p.m. midday; 1 p.m.-3:59 p.m. early afternoon; 4 p.m.-5:59 p.m. late afternoon; 6 p.m.-8:59 p.m. early evening; 9 p.m.-10:59 p.m. late evening). Nighttime = 11 p.m.-4:59 a.m.



Legend

- ☾ Some Arrivals at Night
- 🌙 All Arrivals at Night
- Station
- ▭ Terminal
- 🚂 Connecting Existing Amtrak Rail Service
- ✓ Connecting Preferred Route

Some arrivals at night depends on direction. All existing stations and new stations in cities with over 50K people are labeled.

These conceptual schedules are not FRA proposals for service. This study selected conceptual departure times to maximize daytime service for highest population market pairs on a preferred route.

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Seattle - Chicago

Equity and Accessibility

1,285 miles
of discontinued
long-distance
routes restored

Additional Populations Served		
Population served	in thousands of people	1,090
Rural population	in thousands of people	210
Rural population in areas of persistent poverty	in thousands of people	40
Rural population that is transportation disadvantaged	in thousands of people	38
Rural population that is health disadvantaged	in thousands of people	49
Population on tribal lands	in thousands of people	42

Additional Institutions Served		
Medical centers	count of centers	2
Higher education institutions	count of institutions	24
Historically black colleges and universities	count of institutions	0
Military installations	count of installations	4
NPS Lands	count of NPS units measured	2

Not an FRA proposal for service

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Legend

Baseline Network

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

- Preferred Routes
- Preferred Route: **Seattle - Chicago**
- Stations in Cities with Populations over 50K: **Seattle - Chicago**

Seattle - Chicago

Selected Passenger Service-Required Cost Estimate Ranges

Selected Passenger Service-Required Cost Ranges		
Vehicle costs	2025 dollars, in millions	\$850-1,100
Station and maintenance facility costs	2025 dollars, in millions	\$1,340-1,740
Track class and PTC upgrade costs	2025 dollars, in millions	\$720-930
O&M costs (annual)	2025 dollars, in millions	\$96-136

Cost estimate ranges include Professional Services. Cost estimate ranges do not include other capital projects including track capacity and operational improvement projects.

Legend

Baseline Network

— Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

— Preferred Routes

— Preferred Route: Seattle - Chicago

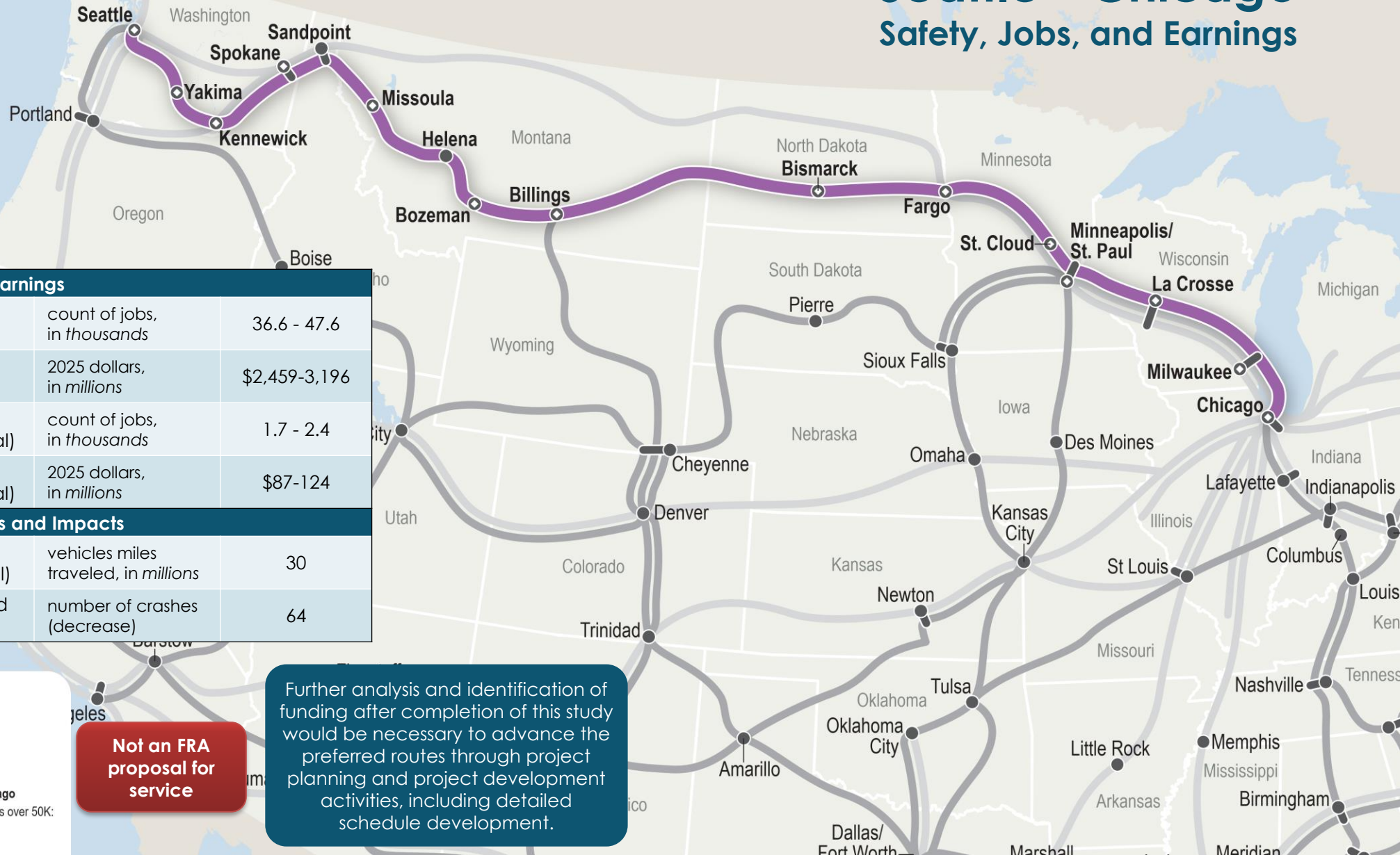
○ Stations in Cities with Populations over 50K: Seattle - Chicago

Not an FRA proposal for service

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Seattle - Chicago

Safety, Jobs, and Earnings



Estimated Jobs and Earnings		
Jobs supported by construction	count of jobs, in <i>thousands</i>	36.6 - 47.6
Earnings supported by construction	2025 dollars, in <i>millions</i>	\$2,459-3,196
Jobs supported by operations (annual)	count of jobs, in <i>thousands</i>	1.7 - 2.4
Earning supported by operations (annual)	2025 dollars, in <i>millions</i>	\$87-124
Route Travel Changes and Impacts		
Travel shifted from vehicle to rail (annual)	vehicles miles traveled, in <i>millions</i>	30
Total crashes avoided (annual)	number of crashes (decrease)	64

- Legend**
- Baseline Network**
 - Long-Distance, Northeast Corridor, State-Supported, Baseline Projects
 - Preferred Routes**
 - Preferred Routes
 - Preferred Route: **Seattle - Chicago**
 - Stations in Cities with Populations over 50K: **Seattle - Chicago**

Not an FRA proposal for service

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

DALLAS/FORT WORTH - ATLANTA

Dallas/Fort Worth - Atlanta

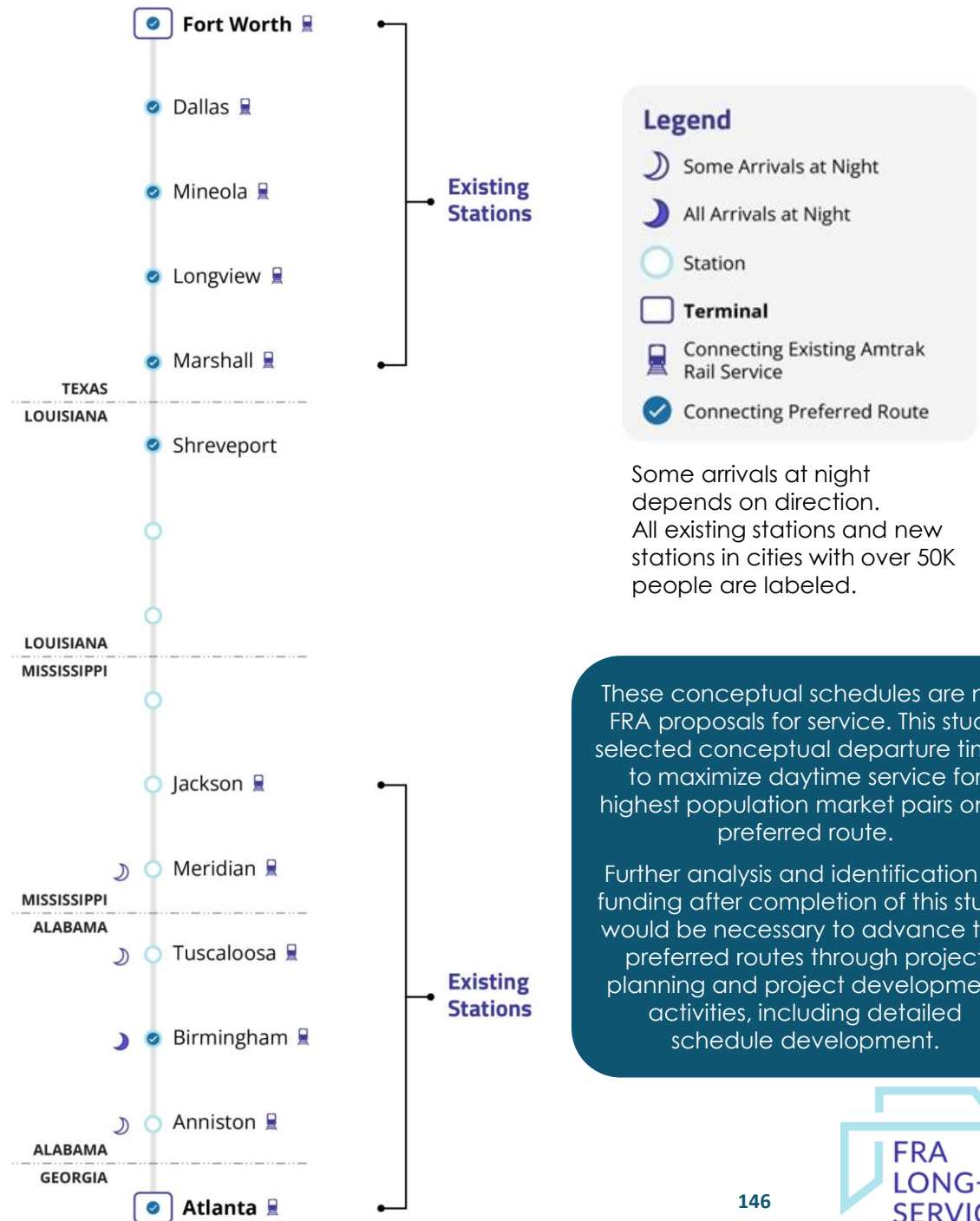
Conceptual Service Overview

Not an FRA proposal for service

Route Service Metrics		
Scheduled run time	avg. of both directions	approx. 22 hours
Route length	avg. of both directions	855 miles
Fort Worth, TX departure time	local time	early morning
Atlanta, GA arrival time	local time	early morning ⁺¹
Atlanta, GA departure time	local time	early evening
Fort Worth, TX arrival time	local time	early afternoon ⁺¹
Average travel time improvements	hours	18
Route Stations		
Total number of stations	count of stations	15
Stations in small communities	count of stations	2
Existing stations adding new service	count of stations	11

Average travel time improvements are for existing OD pairs when using a new route compared to an existing route

Daytime = 5:00 a.m.-10:59 p.m. (5 a.m.-7:59 a.m. early morning; 8 a.m.-10:59 a.m. late morning; 11 a.m.-12:59 p.m. midday; 1 p.m.-3:59 p.m. early afternoon; 4 p.m.-5:59 p.m. late afternoon; 6 p.m.-8:59 p.m. early evening; 9 p.m.-10:59 p.m. late evening). Nighttime = 11 p.m.-4:59 a.m.



Some arrivals at night depends on direction. All existing stations and new stations in cities with over 50K people are labeled.

These conceptual schedules are not FRA proposals for service. This study selected conceptual departure times to maximize daytime service for highest population market pairs on a preferred route.

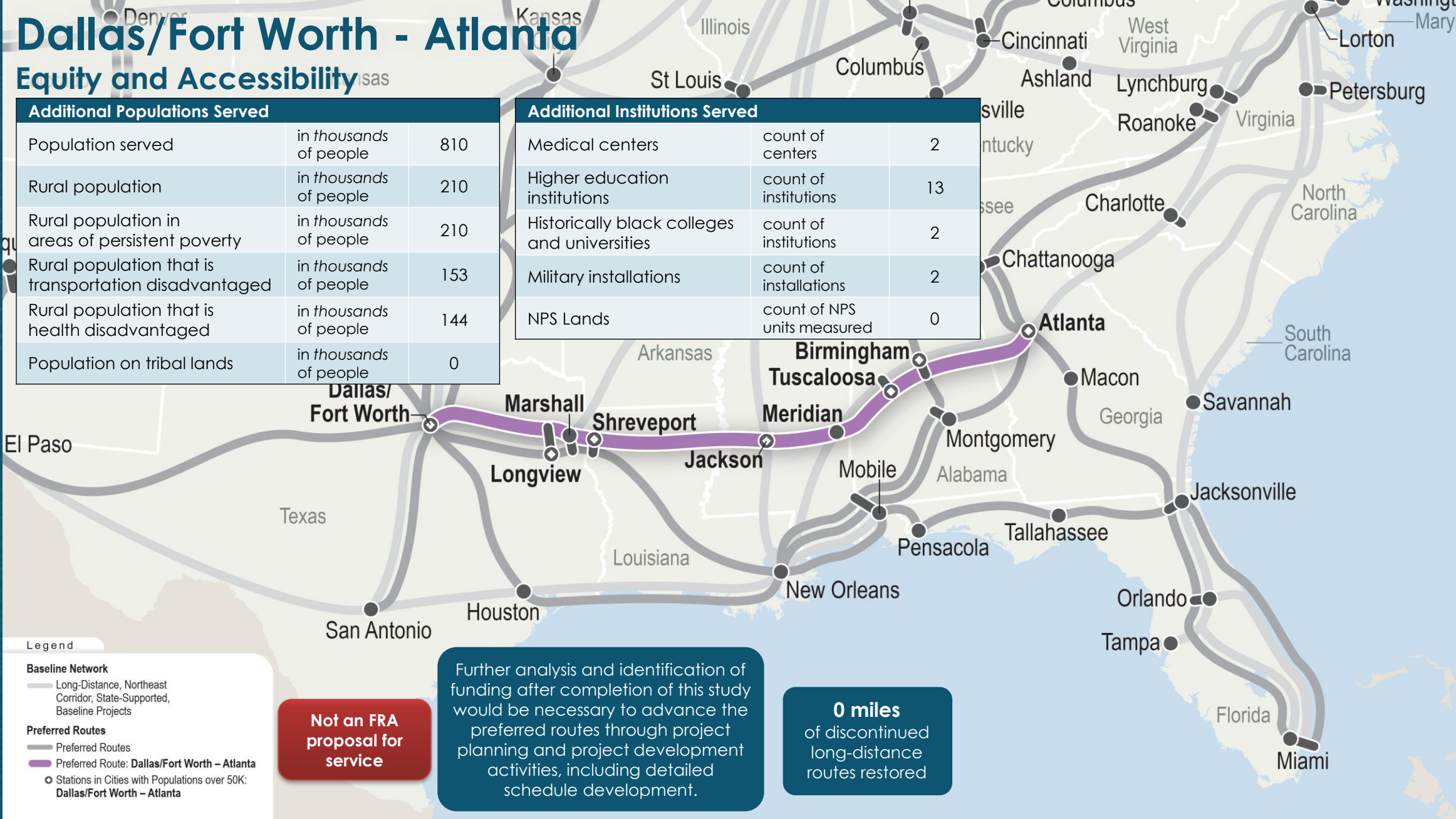
Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Dallas/Fort Worth - Atlanta

Equity and Accessibility

Additional Populations Served		
Population served	in thousands of people	810
Rural population	in thousands of people	210
Rural population in areas of persistent poverty	in thousands of people	210
Rural population that is transportation disadvantaged	in thousands of people	153
Rural population that is health disadvantaged	in thousands of people	144
Population on tribal lands	in thousands of people	0

Additional Institutions Served		
Medical centers	count of centers	2
Higher education institutions	count of institutions	13
Historically black colleges and universities	count of institutions	2
Military installations	count of installations	2
NPS Lands	count of NPS units measured	0



Legend

Baseline Network

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

- Preferred Routes
- Preferred Route: Dallas/Fort Worth - Atlanta
- Stations in Cities with Populations over 50K: Dallas/Fort Worth - Atlanta

Not an FRA proposal for service

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

0 miles of discontinued long-distance routes restored

Dallas/Fort Worth - Atlanta

Selected Passenger Service-Required Cost Estimate Ranges

Selected Passenger Service-Required Cost Ranges		
Vehicle costs	2025 dollars, in millions	\$440-570
Station and maintenance facility costs	2025 dollars, in millions	\$940-1,220
Track class and PTC upgrade costs	2025 dollars, in millions	\$100-130
O&M costs (annual)	2025 dollars, in millions	\$55-78

Cost estimate ranges include Professional Services. Cost estimate ranges do not include other capital projects including track capacity and operational improvement projects.



Legend

Baseline Network

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

- Preferred Routes
- Preferred Route: Dallas/Fort Worth – Atlanta
- Stations in Cities with Populations over 50K: Dallas/Fort Worth – Atlanta

Not an FRA proposal for service

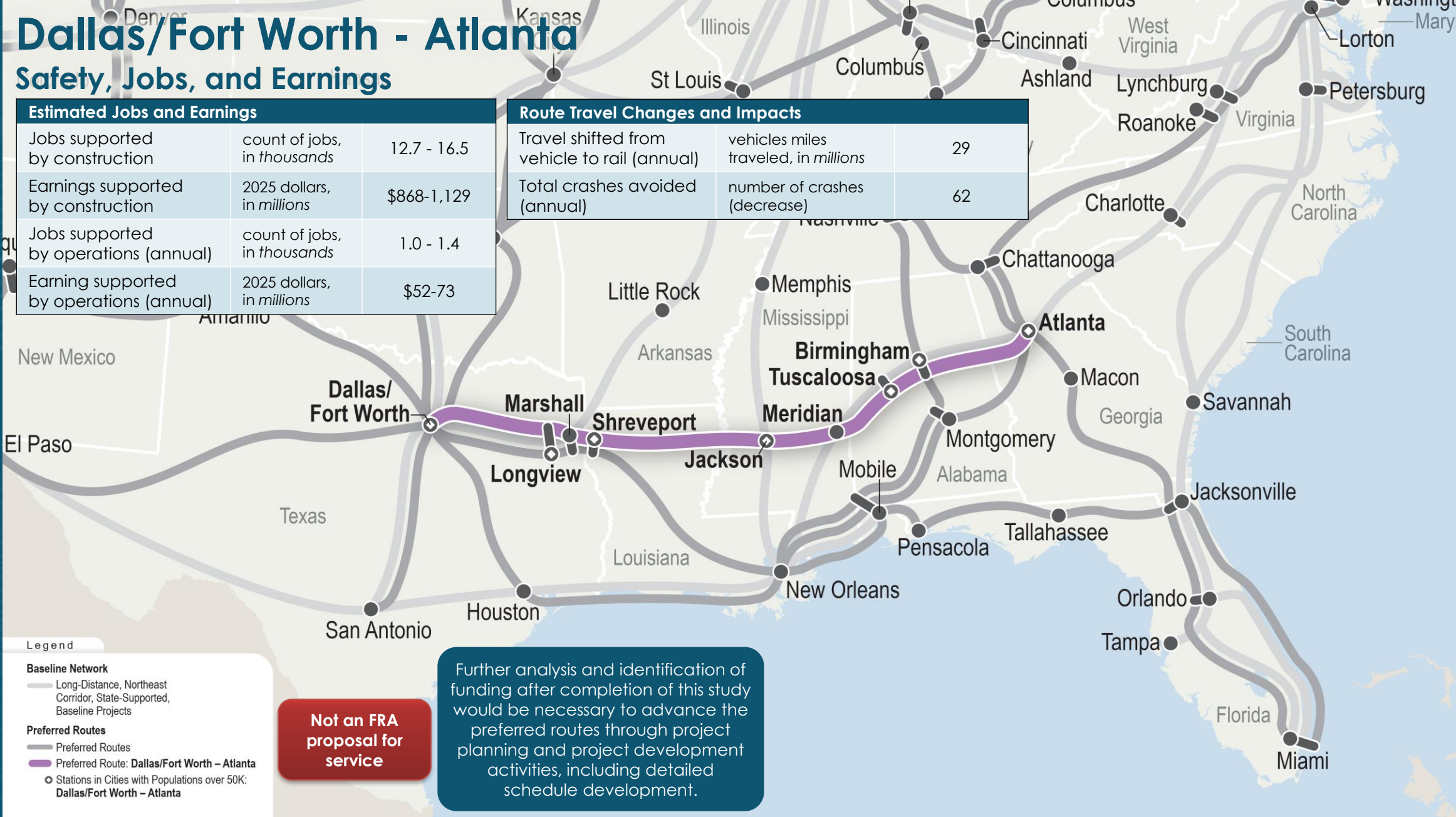
Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Dallas/Fort Worth - Atlanta

Safety, Jobs, and Earnings

Estimated Jobs and Earnings		
Jobs supported by construction	count of jobs, in thousands	12.7 - 16.5
Earnings supported by construction	2025 dollars, in millions	\$868-1,129
Jobs supported by operations (annual)	count of jobs, in thousands	1.0 - 1.4
Earning supported by operations (annual)	2025 dollars, in millions	\$52-73

Route Travel Changes and Impacts		
Travel shifted from vehicle to rail (annual)	vehicles miles traveled, in millions	29
Total crashes avoided (annual)	number of crashes (decrease)	62



Not an FRA proposal for service

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

EL PASO - BILLINGS

El Paso - Billings

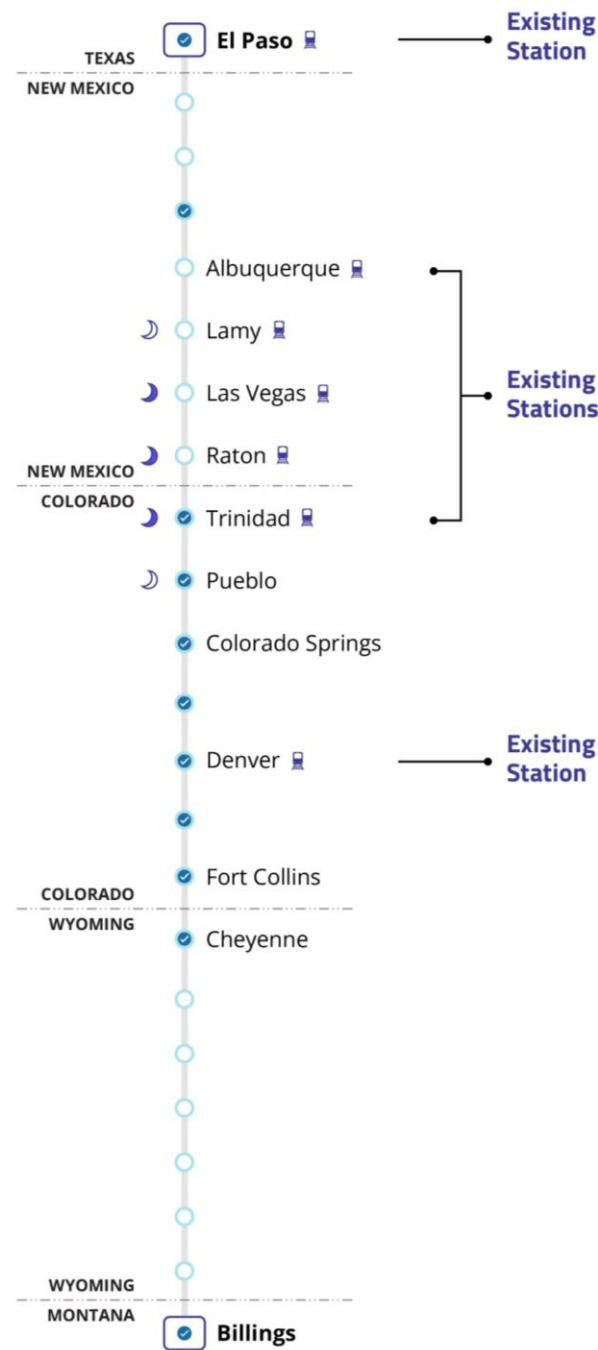
Conceptual Service Overview

Not an FRA proposal for service

Route Service Metrics		
Scheduled run time	avg. of both directions	approx. 31 hours
Route length	avg. of both directions	1,390 miles
El Paso, TX departure time	local time	late afternoon
Billings, MT arrival time	local time	late evening ⁺¹
Billings, MT departure time	local time	early morning
El Paso, TX arrival time	local time	midday ⁺¹
Average travel time improvements	hours	23.5
Route Stations		
Total number of stations	count of stations	23
Stations in small communities	count of stations	6
Existing stations adding new service	count of stations	7

Average travel time improvements are for existing OD pairs when using a new route compared to an existing route

Daytime = 5:00 a.m.-10:59 p.m. (5 a.m.-7:59 a.m. early morning; 8 a.m.-10:59 a.m. late morning; 11 a.m.-12:59 p.m. midday; 1 p.m.-3:59 p.m. early afternoon; 4 p.m.-5:59 p.m. late afternoon; 6 p.m.-8:59 p.m. early evening; 9 p.m.-10:59 p.m. late evening). Nighttime = 11 p.m.-4:59 a.m.



Legend

- Some Arrivals at Night
- All Arrivals at Night
- Station
- Terminal
- Connecting Existing Amtrak Rail Service
- Connecting Preferred Route

Some arrivals at night depends on direction. All existing stations and new stations in cities with over 50K people are labeled.

These conceptual schedules are not FRA proposals for service. This study selected conceptual departure times to maximize daytime service for highest population market pairs on a preferred route.

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

El Paso - Billings

Equity and Accessibility

Additional Populations Served

Population served	in thousands of people	2,030
Rural population	in thousands of people	150
Rural population in areas of persistent poverty	in thousands of people	60
Rural population that is transportation disadvantaged	in thousands of people	33
Rural population that is health disadvantaged	in thousands of people	13
Population on tribal lands	in thousands of people	29

Additional Institutions Served

Medical centers	count of centers	4
Higher education institutions	count of institutions	22
Historically black colleges and universities	count of institutions	0
Military installations	count of installations	11
NPS Lands	count of NPS units measured	2

Legend

Baseline Network

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

- Preferred Routes
- Preferred Route: El Paso - Billings
- Stations in Cities with Populations over 50K: El Paso - Billings

Not an FRA proposal for service

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

24 miles of discontinued long-distance routes restored

El Paso - Billings

Selected Passenger Service-Required Cost Estimate Ranges

Selected Passenger Service-Required Cost Ranges

Vehicle costs	2025 dollars, in millions	\$550-710
Station and maintenance facility costs	2025 dollars, in millions	\$1,110-1,440
Track class and PTC upgrade costs	2025 dollars, in millions	\$400-520
O&M costs (annual)	2025 dollars, in millions	\$63-89

Cost estimate ranges include Professional Services. Cost estimate ranges do not include other capital projects including track capacity and operational improvement projects.

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Not an FRA proposal for service

Legend

Baseline Network

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

- Preferred Routes
- Preferred Route: El Paso - Billings
- Stations in Cities with Populations over 50K: El Paso - Billings

El Paso - Billings

Safety, Jobs, and Earnings

Estimated Jobs and Earnings

Jobs supported by construction	count of jobs, in thousands	23.4 - 30.5
Earnings supported by construction	2025 dollars, in millions	\$1,580-2,054
Jobs supported by operations (annual)	count of jobs, in thousands	1.1 - 1.6
Earning supported by operations (annual)	2025 dollars, in millions	\$58-82

Route Travel Changes and Impacts

Travel shifted from vehicle to rail (annual)	vehicles miles traveled, in millions	7
Total crashes avoided (annual)	number of crashes (decrease)	14

Further analysis and identification of funding after completion of this study would be necessary to advance the preferred routes through project planning and project development activities, including detailed schedule development.

Not an FRA proposal for service

Legend

Baseline Network

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

- Preferred Routes
- Preferred Route: El Paso - Billings
- Stations in Cities with Populations over 50K: El Paso - Billings

NEW AND EXISTING HUBS

New and Existing Hubs

- The preferred network could improve the connectivity and geographic coverage of existing markets and could create new passenger rail hubs.
- **Existing Hubs**
 - Existing stations that provide over 100 unique direct connections
- **New Hubs**
 - Existing stations that are served by at most one daily long-distance route
 - Would be served by at least three additional preferred routes
 - Provide over 100 unique direct connections
- **Direct Connections:**
 - One-seat ride
 - No transfers required to connect the station pairs
- **Indirect Connections**
 - Two- or three-seat ride, connecting to another Amtrak passenger rail service
 - Transfer times between 1 and 12 hours
 - Supports an analysis of both connections between long-distance and state-supported service

Conceptual service schedules for the preferred routes do not consider existing or future traffic conditions or site-specific conditions such as steep grades.

Preferred Network Improvements at Existing Hubs

Existing Hubs With Potential Enhanced Connectivity and Service

Large markets where the connectivity and service would be further enhanced with the addition of the preferred routes.

Increase in Direct Connections:

- Los Angeles: +14%
- Chicago: +19%
- New York: +22%

Los Angeles

Los Angeles	Routes Served	Connections	
		Direct	Indirect
Existing	5*	126	381
+ Preferred	+ 1	+ 18	+ 181
= Total	= 6	= 144	= 562

*Includes the Texas Eagle, which operates with the Sunset Limited between San Antonio and Los Angeles

Legend

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects
- Preferred Routes

Chicago	Routes Served	Connections	
		Direct	Indirect
Existing	16	241	261
+ Preferred	+ 2	+ 46	+ 156
= Total	= 18	= 287	= 417

New York	Routes Served	Connections	
		Direct	Indirect
Existing	21	192	328
+ Preferred	+ 2	+ 43	+ 140
= Total	= 23	= 235	= 468



Existing route and station data provided by Amtrak 2024; Baseline Projects Data provided by FRA 2024. Assessment of existing routes served is based on existing long-distance, state-supported, and NEC services. Assessment of preferred routes includes existing long-distance, state-supported, NEC services, and preferred routes identified in this study.

Preferred Network Development of New Hubs

Potential New Hubs in the Proposed Network of Preferred Routes

The preferred routes expand the passenger rail network and would create new passenger rail hubs.

Increase in Direct Connections:

- Denver: +145%
- Dallas: +257%
- St. Paul: +189%
- Atlanta: +222%



Legend

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects
- Preferred Routes



Existing route and station data provided by Amtrak 2024; Baseline Projects Data provided by FRA 2024. Assessment of existing routes served is based on existing long-distance, state-supported, and NEC services. Assessment of preferred routes includes existing long-distance, state-supported, NEC services, and preferred routes identified in this study.

Preferred Network Improvements

Other Markets with Potential Enhanced Connectivity and Service

Seattle	Routes Served	Connections	
		Direct	Indirect
Existing	3	78	370
+ Preferred	+ 2	+ 37	+ 156
= Total	= 5	= 115	= 526

Several other markets in the existing long-distance network would be enhanced with the addition of the preferred routes.

Increase in Direct Connections:

- Seattle: +47%
- New Orleans: +93%
- Miami: +124%

Los Angeles

Legend

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects
- Preferred Routes

New Orleans	Routes Served	Connections	
		Direct	Indirect
Existing	3	74	397
+ Preferred	+ 3	+ 69	+ 147
= Total	= 6	= 143	= 544

Miami	Routes Served	Connections	
		Direct	Indirect
Existing	2	42	383
+ Preferred	+ 2	+ 52	+ 163
= Total	= 4	= 94	= 546



WHAT WE HEARD – ADDING MARKETS TO THE PREFERRED ROUTES

Opportunities and Challenges Adding Markets to the Preferred Routes

- Some cities or markets that are not included on a preferred route generated many comments and support for consideration.
- Top markets by volume of comments received in each region reviewed and described here.



Northeast Region

Opportunities & Challenges Adding Markets to Preferred Routes

Boston, MA

Stakeholder and Public Comments	<ul style="list-style-type: none"> Additional service connecting Chicago, New York, and Maine
Conditions	<ul style="list-style-type: none"> Served by Lake Shore Limited, state-supported routes, and the NEC Direct connections to preferred routes in Chicago, Toledo, New York
Future Opportunities	<ul style="list-style-type: none"> Evaluate extending preferred routes through New York Evaluate revising Dallas/Fort Worth - New York or Detroit - New Orleans to connect Columbus, Cleveland, and Buffalo, Albany, Boston
Challenges	<ul style="list-style-type: none"> Extending preferred route through New York adds approx. 4.5 hours travel time, and O&M costs Trade-offs changing Columbus-Toledo-Detroit, or Columbus-Pittsburgh-New York Primarily adds frequency to markets already served by frequent passenger rail

Legend

Baseline Network

— Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

— Dallas/Fort Worth - New York
— Houston - New York

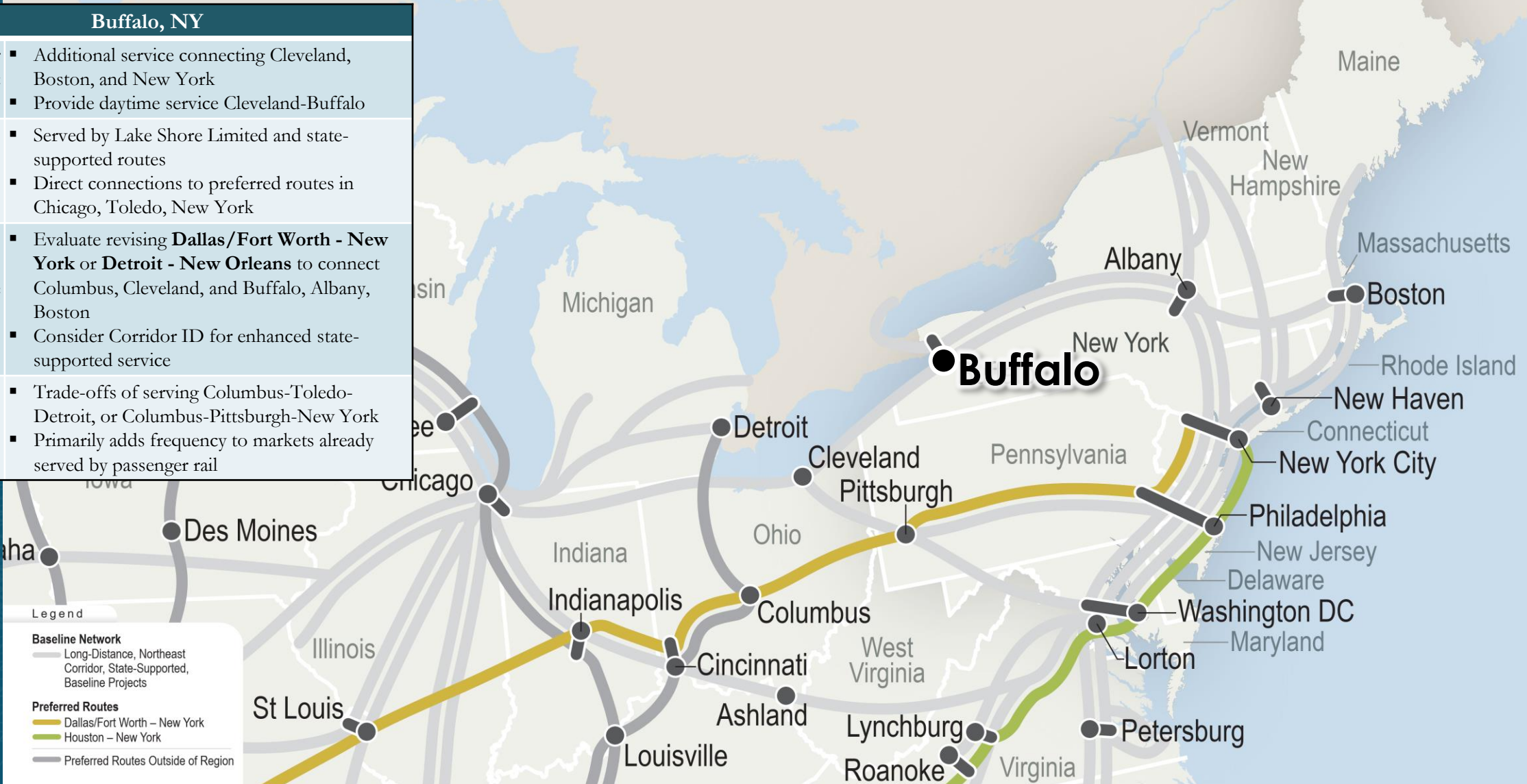
— Preferred Routes Outside of Region



Northeast Region

Opportunities & Challenges Adding Markets to Preferred Routes

Buffalo, NY	
Stakeholder and Public Comments	<ul style="list-style-type: none"> Additional service connecting Cleveland, Boston, and New York Provide daytime service Cleveland-Buffalo
Conditions	<ul style="list-style-type: none"> Served by Lake Shore Limited and state-supported routes Direct connections to preferred routes in Chicago, Toledo, New York
Future Opportunities	<ul style="list-style-type: none"> Evaluate revising Dallas/Fort Worth - New York or Detroit - New Orleans to connect Columbus, Cleveland, and Buffalo, Albany, Boston Consider Corridor ID for enhanced state-supported service
Challenges	<ul style="list-style-type: none"> Trade-offs of serving Columbus-Toledo-Detroit, or Columbus-Pittsburgh-New York Primarily adds frequency to markets already served by passenger rail



Midwest Region

Opportunities & Challenges Adding Markets to Preferred Routes

Cleveland, OH	
Stakeholder and Public Comments	<ul style="list-style-type: none"> Additional service connecting Chicago Provide daytime service Connect with Detroit and Columbus Include in Detroit - New Orleans
Conditions	<ul style="list-style-type: none"> Served by Lake Shore Limited and Capitol Limited long-distance routes Direct connections to preferred routes in Chicago, Toledo, Pittsburgh
Future Opportunities	<ul style="list-style-type: none"> Evaluate revising Dallas/Fort Worth - New York or Detroit - New Orleans to connect Columbus and Cleveland Re-evaluate a route option connecting Columbus-Cleveland-Pittsburgh for Dallas/Fort Worth - New York Consider Corridor ID for state-supported service
Challenges	<ul style="list-style-type: none"> Trade-offs of serving Columbus-Toledo-Detroit, or Columbus-Pittsburgh-New York Columbus-Cleveland-Pittsburgh adds approx. 250 miles, 5 hours of travel time, and O&M costs



Legend

Baseline Network

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

- Chicago - Miami
- Phoenix - Minneapolis/St. Paul
- Dallas/Fort Worth - New York
- San Antonio - Minneapolis/St. Paul
- Detroit - New Orleans
- Denver - Minneapolis/St. Paul
- Seattle - Chicago

Preferred Routes Outside of Region

Midwest Region

Opportunities & Challenges Adding Markets to Preferred Routes

Fort Wayne, IN

Stakeholder and Public Comments	<ul style="list-style-type: none"> Provide passenger rail access Connect in Chicago, Indianapolis, Columbus
Conditions	<ul style="list-style-type: none"> No Amtrak service
Future Opportunities	<ul style="list-style-type: none"> Advance project planning activities as per Corridor ID Program Consider Amtrak Thruway Bus
Challenges	<ul style="list-style-type: none"> Circuitous to include Fort Wayne in the preferred routes



Northwest Region

Opportunities & Challenges Adding Markets to Preferred Routes

Butte, MT	
Stakeholder and Public Comments	<ul style="list-style-type: none"> Restore long-distance service to Butte Include in Seattle - Chicago Include in a new route connecting Helena and Pocatello
Conditions	<ul style="list-style-type: none"> No Amtrak service
Future Opportunities	<ul style="list-style-type: none"> Re-evaluate a route option restoring service to Butte for Seattle - Chicago. Advance project planning activities as per Corridor ID Program Consider Amtrak Thruway Bus
Challenges	<ul style="list-style-type: none"> Track condition through Butte and associated construction costs Trade-offs of serving Helena and/or Butte

Legend

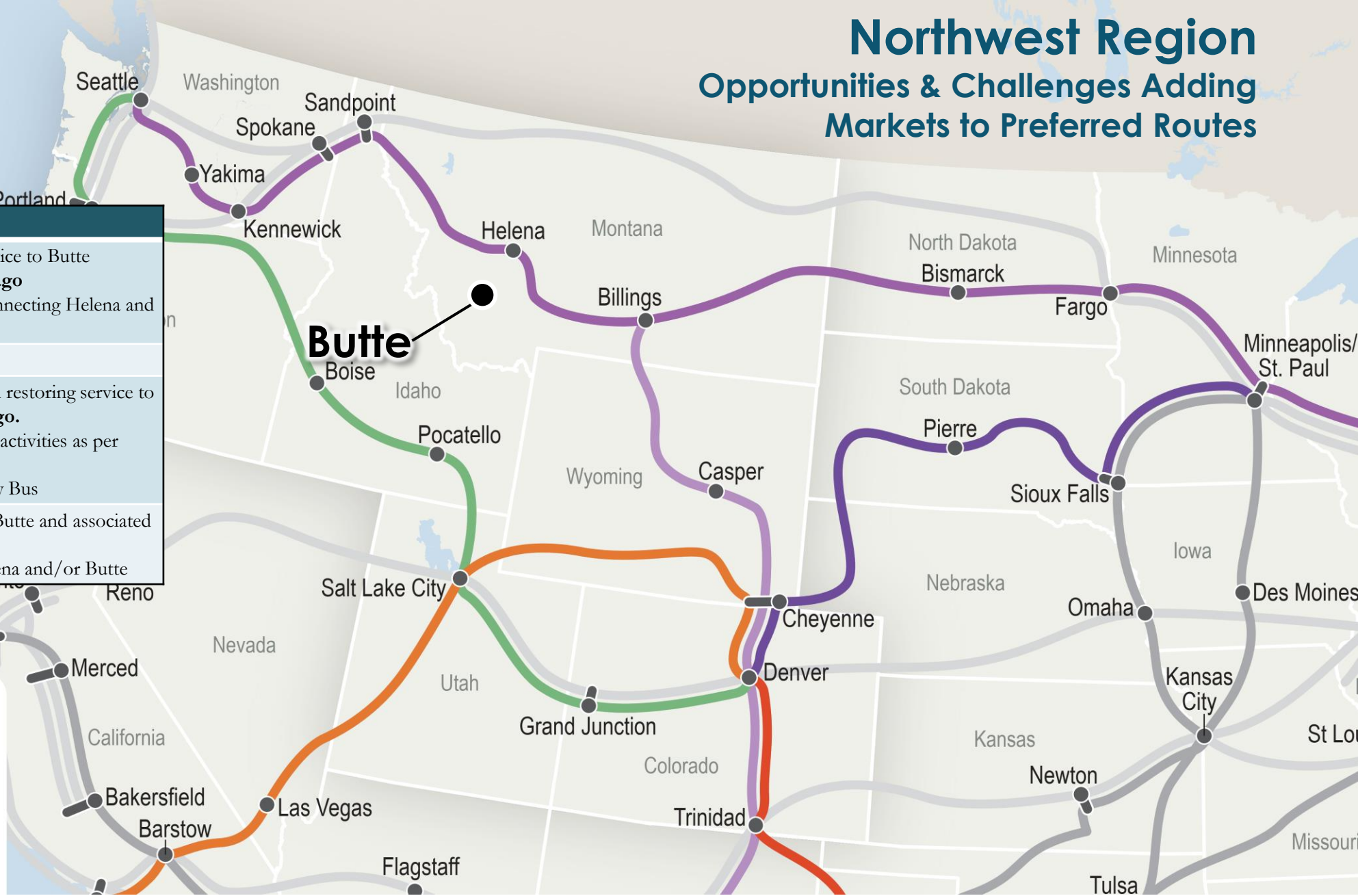
Baseline Network

- Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

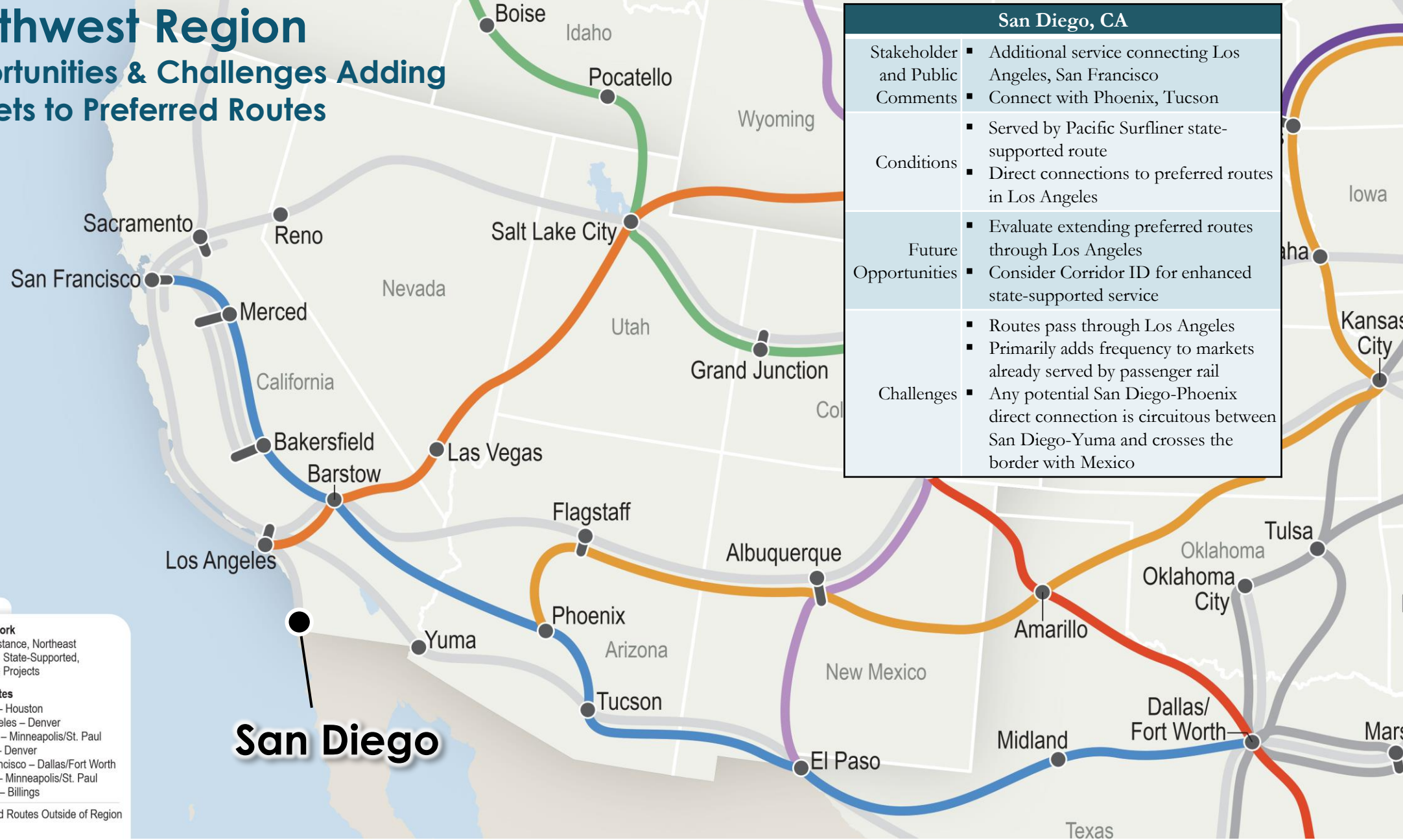
- Denver - Houston
- Los Angeles - Denver
- Seattle - Denver
- Denver - Minneapolis/St. Paul
- Seattle - Chicago
- El Paso - Billings

Preferred Routes Outside of Region



Southwest Region

Opportunities & Challenges Adding Markets to Preferred Routes



San Diego, CA	
Stakeholder and Public Comments	<ul style="list-style-type: none"> Additional service connecting Los Angeles, San Francisco Connect with Phoenix, Tucson
Conditions	<ul style="list-style-type: none"> Served by Pacific Surfliner state-supported route Direct connections to preferred routes in Los Angeles
Future Opportunities	<ul style="list-style-type: none"> Evaluate extending preferred routes through Los Angeles Consider Corridor ID for enhanced state-supported service
Challenges	<ul style="list-style-type: none"> Routes pass through Los Angeles Primarily adds frequency to markets already served by passenger rail Any potential San Diego-Phoenix direct connection is circuitous between San Diego-Yuma and crosses the border with Mexico

Legend

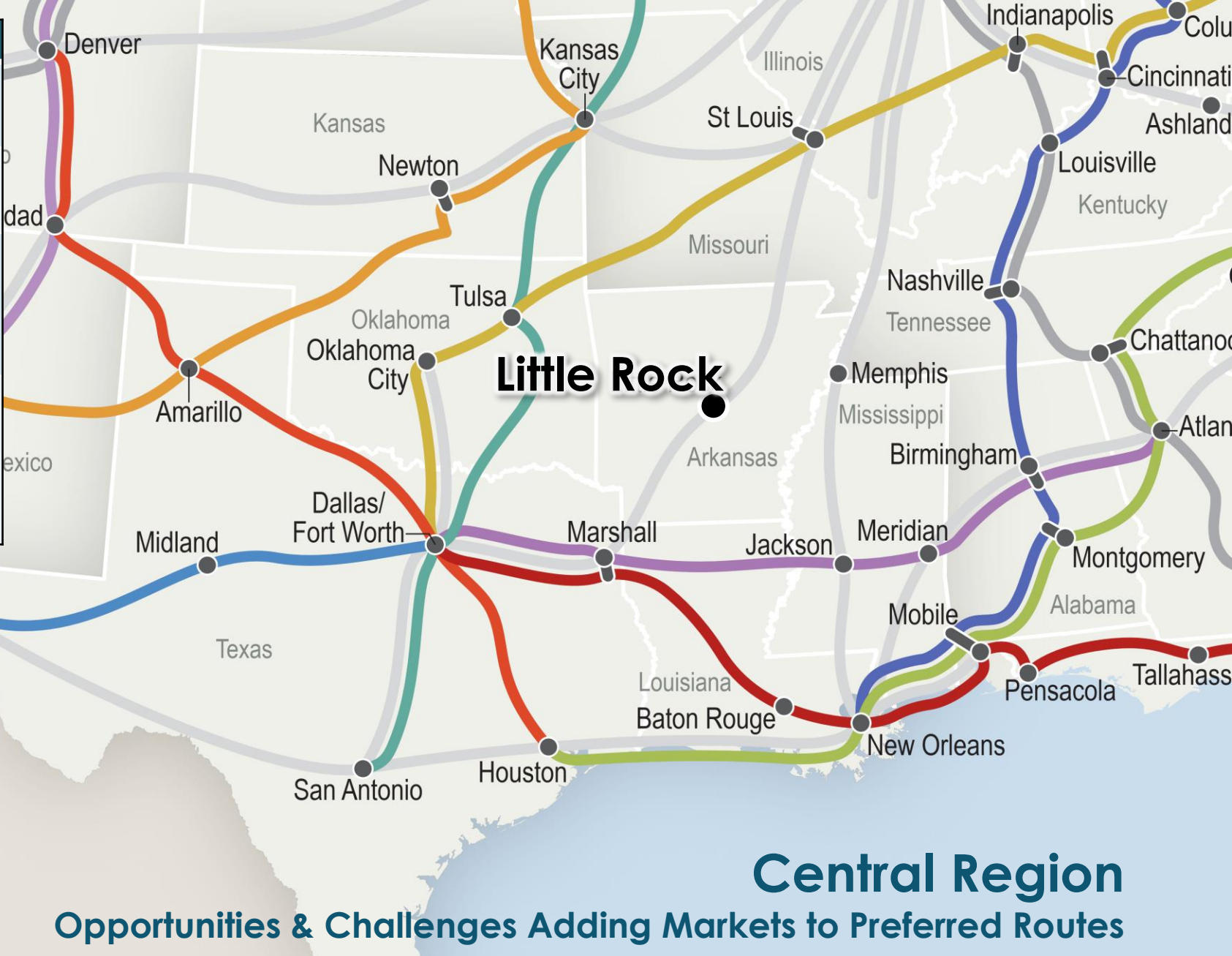
Baseline Network

— Long-Distance, Northeast Corridor, State-Supported, Baseline Projects

Preferred Routes

- Denver – Houston
 - Los Angeles – Denver
 - Phoenix – Minneapolis/St. Paul
 - Seattle – Denver
 - San Francisco – Dallas/Fort Worth
 - Denver – Minneapolis/St. Paul
 - El Paso – Billings
- Preferred Routes Outside of Region

Little Rock, AR	
Stakeholder and Public Comments	<ul style="list-style-type: none"> Connect with Memphis and Nashville Additional service connecting with Dallas/Fort Worth
Conditions	<ul style="list-style-type: none"> Served by Texas Eagle long-distance route Direct connections to preferred routes in Marshall, Dallas/Fort Worth, San Antonio, St. Louis
Future Opportunities	<ul style="list-style-type: none"> Evaluate a new route connecting Dallas/Fort Worth, Little Rock, Memphis Evaluate revising Dallas/Fort Worth - New York to connect Little Rock, Memphis, Nashville Consider Corridor ID Program
Challenges	<ul style="list-style-type: none"> Extending Dallas/Fort Worth-Little Rock-Memphis-Nashville beyond Nashville primarily adds frequency to markets already served by passenger rail or included in other preferred routes Trade offs of serving Oklahoma City-Indianapolis with Dallas/Fort Worth - New York



Central Region

Opportunities & Challenges Adding Markets to Preferred Routes

Southeast Region

Opportunities & Challenges Adding Markets to Preferred Routes

Tampa, FL

Stakeholder and Public Comments	<ul style="list-style-type: none"> Additional service Include in Chicago - Miami
Conditions	<ul style="list-style-type: none"> Served by the Silver Star long-distance route Direct connections to preferred routes between Jacksonville and Miami
Future Opportunities	<ul style="list-style-type: none"> Evaluate revising Chicago - Miami to include Tampa Planned expansion of Brightline service to Tampa provide intra-Florida trips
Challenges	<ul style="list-style-type: none"> Circuitous to include Tampa in Chicago - Miami Adds approx. 1.5 hours travel time and associated costs Adds frequency to market already served by long-distance passenger rail (focus is on expanding connections)



Southeast Region

Opportunities & Challenges Adding Markets to Preferred Routes

Memphis, TN

Stakeholder and Public Comments	<ul style="list-style-type: none"> Connect with Little Rock and Nashville
Conditions	<ul style="list-style-type: none"> Served by the City of New Orleans long-distance route Direct connections to preferred routes in Chicago, Jackson, New Orleans
Future Opportunities	<ul style="list-style-type: none"> Evaluate a new long-distance route connecting Dallas/Fort Worth, Little Rock, Memphis, Nashville Evaluate revising Dallas/Fort Worth - New York or Detroit - New Orleans to connect Memphis Consider Corridor ID for connecting Little Rock-Memphis-Nashville
Challenges	<ul style="list-style-type: none"> A long-distance route connecting Little Rock-Memphis-Nashville primarily adds frequency to markets already served by passenger rail or included in other preferred routes Trade offs of serving Nashville-Birmingham or Oklahoma City-St. Louis



Southeast Region

Opportunities & Challenges Adding Markets to Preferred Routes

Charlotte, NC	
Stakeholder and Public Comments	<ul style="list-style-type: none"> Additional service along the Crescent long-distance route Connect with Nashville and Memphis
Conditions	<ul style="list-style-type: none"> Served by the Crescent long-distance route, and state-supported routes Direct connections to preferred routes in Atlanta, Lynchburg
Future Opportunities	<ul style="list-style-type: none"> Evaluate revising Houston - New York to connect Charlotte Consider Corridor ID for enhanced state-supported service
Challenges	<ul style="list-style-type: none"> Primarily adds frequency to markets already served by the Crescent long-distance route Trade offs of serving Chattanooga-Roanoke Circuitous connections west from Charlotte toward Nashville



PRIORITIZATION

Prioritization Methodology – Evaluation Categories

Category

Metrics

LEVEL OF COMPLEXITY

- Number of Host Railroads and Users
- Passenger Rail Readiness

LEVEL OF BENEFITS

- Improved Long-Distance Access
- Improved Access to Communities
- Implementability Benefit
- Network Effect
- Connectivity

LEVEL OF COST

- Operating and Maintenance Costs

Weighting of the categories based on stakeholder input

Prioritization Methodology

Category

Metrics

LEVEL OF COMPLEXITY

- **Number of Host Railroads and Users**
 - Evaluate the complexity of working with multiple railroads
 - Identify the number of host railroads and passenger rail service operators within the preferred route
- **Passenger Rail Readiness**
 - Evaluate the improvements required to enable any passenger rail operations
 - Identify the percent of route miles requiring upgrades to track class 4, including signalization, communications, and PTC

Prioritization Methodology

Category

LEVEL OF BENEFITS

Metrics

Evaluate the potential beneficial outcomes from the construction, operation, availability, and use of the preferred routes

- **Improved Long-Distance Access:** Number of stations with new access to long-distance passenger rail service
- **Improved Access to Communities:**
 - ✓ Additional people on tribal lands or in rural areas
 - ✓ Additional services accessible
- **Implementability Benefit:** Selected passenger service-required cost savings from shared improvements
- **Network Effect:** Number of shared stations and segments
- **Connectivity:** Estimated demand for intra-route trips

Prioritization Methodology

Category

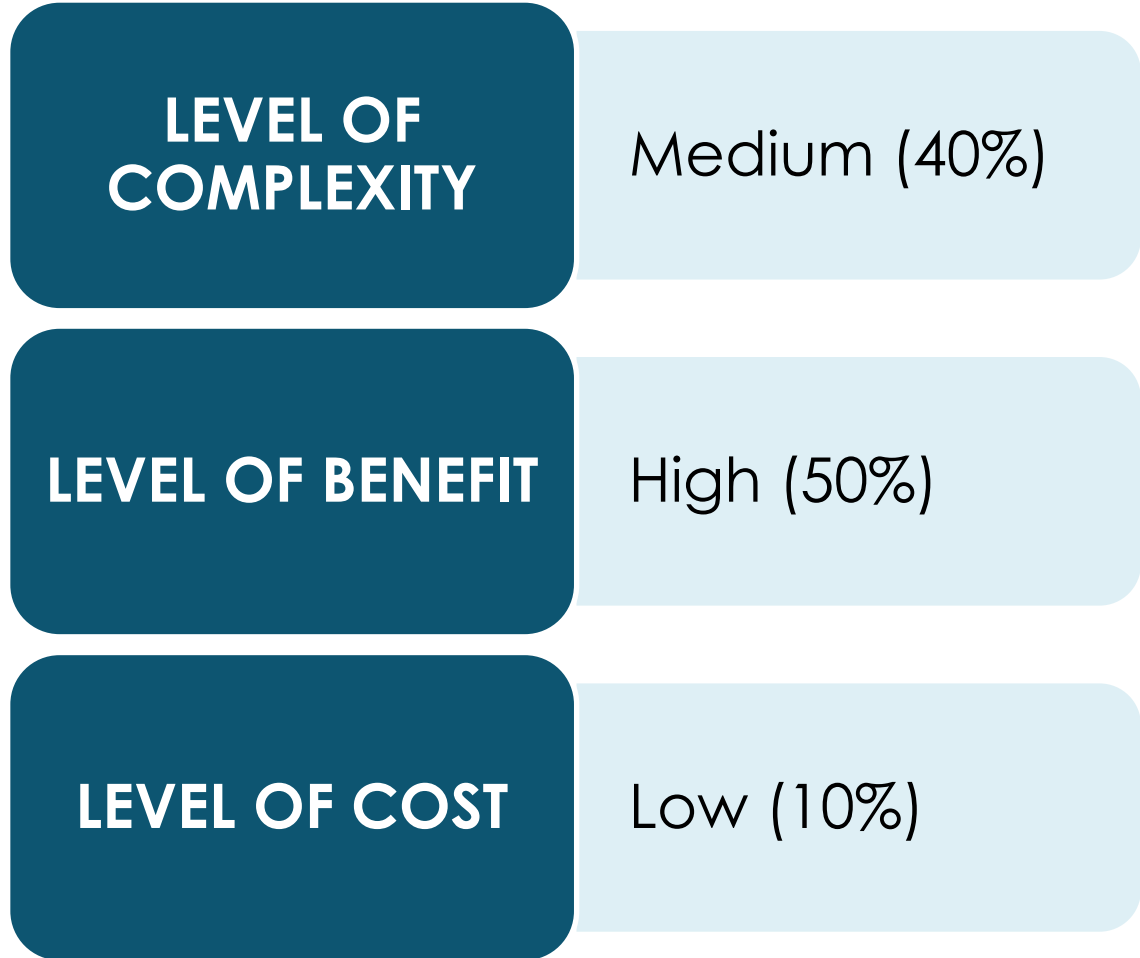
LEVEL OF COST

Metrics

- **Operating and Maintenance Costs**

- Evaluate the operating and maintenance costs by preferred route
- Identify the annual operating and maintenance costs per route mile

Approach to Rating



Rated the Metrics 1-5 (Worst to Best)



- Level of Complexity: most to least complex
- Level of Benefits: least to most benefits
- Level of Costs: most to least costs
- Combined the metrics to form a composite score for each category
- Weighting categories based on stakeholder input

Initial Rating by Preferred Route

Preferred Route	Rating (Weighted)
Houston - New York	14
Chicago - Miami	11
Dallas/Fort Worth - New York	11
Denver - Houston	9
Los Angeles - Denver	9
Phoenix - Minneapolis/St. Paul	9
San Francisco - Dallas/Fort Worth	9
Detroit - New Orleans	9
Dallas/Fort Worth - Atlanta	9
San Antonio - Minneapolis/St. Paul	8
Denver - Minneapolis/St. Paul	8
Dallas/Fort Worth - Miami	7
Seattle - Denver	7
El Paso - Billings	5
Seattle - Chicago (North Coast Hiawatha)*	not applicable
Daily Cardinal*	not applicable
Daily Sunset Limited*	not applicable

*Included in the Corridor ID Program

- Assessment of the complexity, benefits, and cost metrics evaluated for this study
- Weighted results may provide guidance on future priorities regarding the next phase of project planning; these ratings do not reflect prioritization for implementation funding
- Weighted results provide for a rating between 3 and 15
- Rating informs the prioritization
 - 3 = lowest priority for implementation
 - 15 = highest priority for implementation
- Corridor ID Program provides funding for project development activities and next steps towards project implementation:
 - Seattle - Chicago (North Coast Hiawatha)
 - Daily Cardinal
 - Daily Sunset Limited

Ratings for the following preferred routes were revised after the June 2024 Regional Working Group Meetings based on a review of the level of complexity category: Denver - Houston changed from 10 to 9, San Antonio - Minneapolis/St. Paul changed from 9 to 8, El Paso - Billings changed from 6 to 5.

Inclusion of Cardinal and Sunset Limited

- Selected into the Corridor ID Program in 2023 for advancing project planning activities, not implementation
- Daily Cardinal
 - Evaluate passenger rail route infrastructure improvements to increase train speeds and reduce travel times between Indianapolis and Dyer, Indiana
 - Improve service in Indiana, Ohio, West Virginia
 - Better connectivity to the passenger rail network in Chicago and along the Northeast Corridor
- Daily Sunset Limited
 - Evaluate restoring passenger rail service to Phoenix, Arizona
 - Improve service Arizona, New Mexico, Texas, Louisiana
 - Better connectivity to the passenger rail network in Los Angeles, San Antonio, New Orleans



Cardinal: Chicago-
New York



Sunset Limited: Los
Angeles-New Orleans

Preferred Routes

Corridor ID Program

Initial Program Selections to Support Project Development Activities

- Seattle - Chicago (North Coast Hiawatha)
- Daily Cardinal
- Daily Sunset Limited

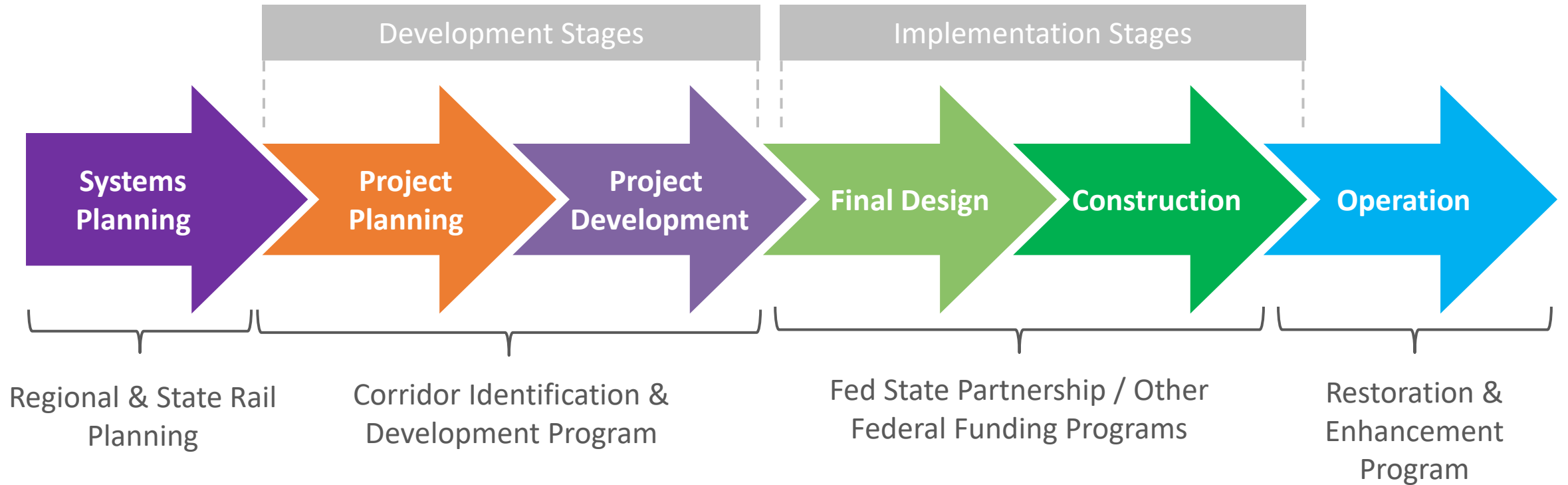
Additional Preferred Routes

Next steps: Initiate Project Planning

- Houston - New York
- Chicago - Miami
- Dallas/Fort Worth - New York
- Denver - Houston
- Los Angeles - Denver
- Phoenix - Minneapolis/St. Paul
- San Francisco - Dallas/Fort Worth
- Detroit - New Orleans
- Dallas/Fort Worth - Atlanta
- San Antonio - Minneapolis/St. Paul
- Denver - Minneapolis/St. Paul
- Dallas/Fort Worth - Miami
- Seattle - Denver
- El Paso - Billings

There is currently no sustained funding or program to advance the development of preferred routes identified by this study

FRA Project Lifecycle and Program Framework



Implementation Considerations

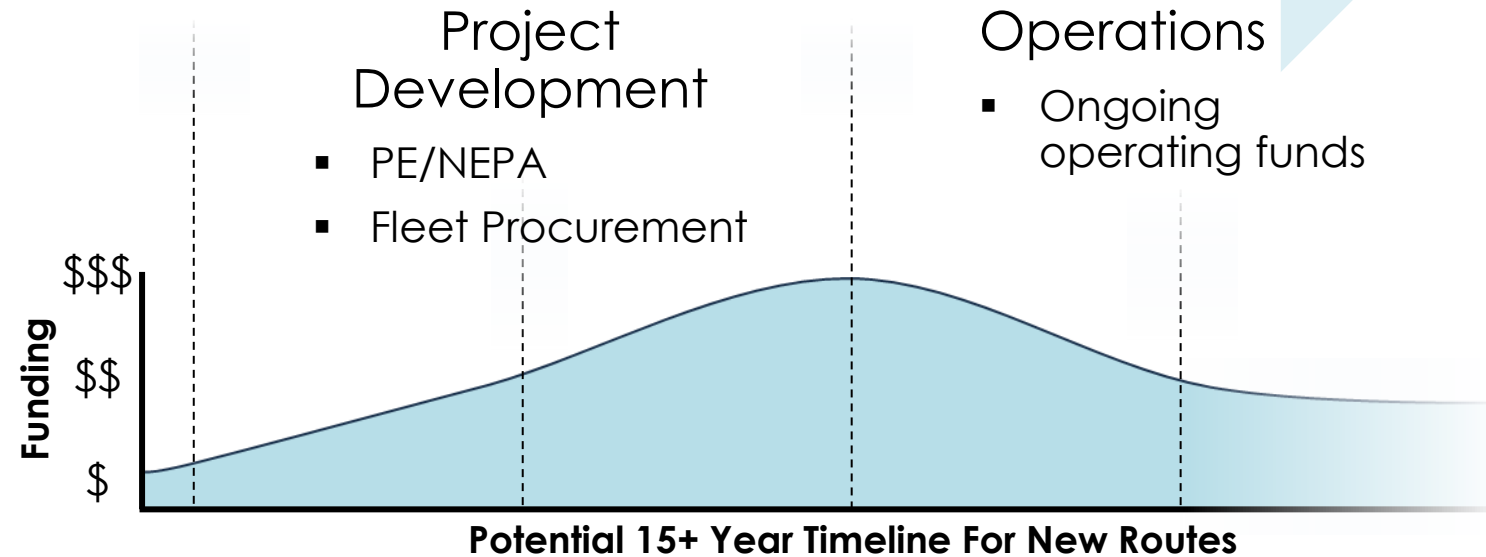
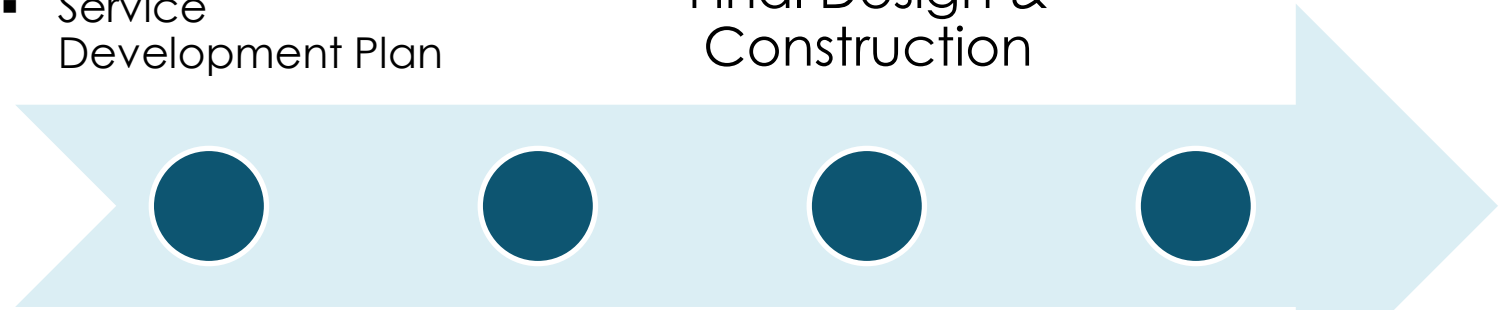
Key Considerations For Implementation

- Funding and preparation of a service development plan
- Industry capacity to plan and implement a new long-distance route
- Coordinating and agreement with the host railroads and passenger rail service operators
- Funding and acquisition of fleet
- Funding for construction
- Sustained funding for operations

Project Planning

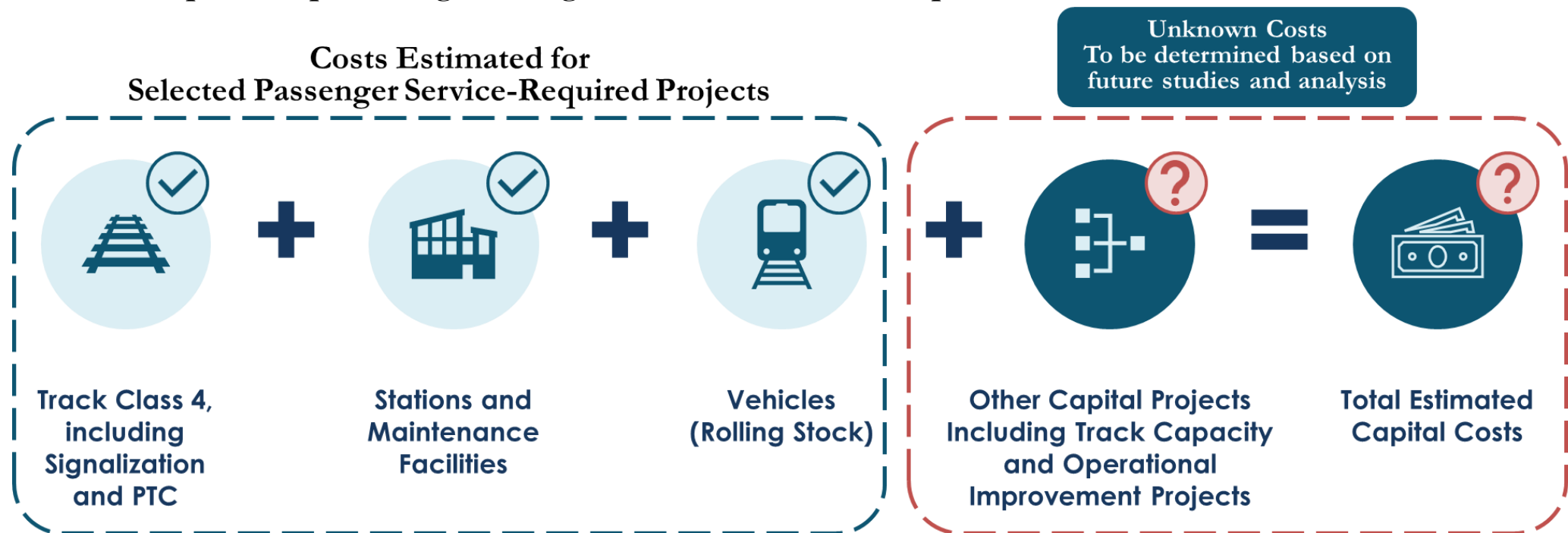
- Service Development Plan

Final Design & Construction



Key Project Planning Tasks AFTER the Study

- Prepare a Service Development Plan
 - Coordinate with host railroads and other key stakeholders
 - Refine route, service, and passenger service-required projects identified under this study
 - Identify other capital projects including potential track capacity and operational improvement projects associated with the preferred routes
 - Develop conceptual engineering and investment concepts



ONGOING LONG-DISTANCE COLLABORATION AND PLANNING

Ongoing Long-Distance Collaboration

- Currently, no permanent forum for stakeholders to discuss or engage with long-distance service.
- Based on what we heard during the regional working group meetings and receiving over 47K comments after the last round of meetings, there's a strong desire for more opportunities for feedback and discussion.
- Common themes include support for:
 - Regionally-based opportunities for engagement
 - Strong federal role in coordination
 - Independent, transparent process
 - A forum for interested parties – including state DOTs, local and regional government representatives, Tribes, non-profits, interstate compacts, and other entities - to provide feedback / guidance on proposed plans and policies.

Ideas for Ongoing Long-Distance Planning & Collaboration

■ Ongoing Long-Distance Collaboration

- FRA is considering ideas for a new Long-Distance Public Committee, which may need to be established by Congress.
- This committee could focus on **ongoing feedback for current Amtrak long-distance service**, including engagement / marketing, customer service, and other policy discussions.

■ Ongoing Long-Distance Planning

- FRA is considering ideas for a recurring, high-level long-distance planning process, potentially updated approximately every five years.
 - This process, led by FRA, could be similar to State Rail Plans or other comparable transportation investment plans, focusing on the status and needs of current Amtrak long-distance service, as well as needs for potential future service.
- FRA heard significant support for these ideas during regional working group meetings earlier this year and will continue to consider these ideas.

Long-Distance Public Committee: Potential Models for Consideration

Transit Agency Rider
Advisory
Committees

Passenger Rail
Advocacy Groups

Regional and
Federal Committees
Providing Guidance
on Transit and/or
Passenger Rail

Committees
Providing Guidance
to States with State-
Sponsored Amtrak
Service

Preliminary Findings

■ Authorization & Purpose

- Models often required state authorizing legislation to create a regional entity
- Federal group could be created by Congress – like SAIPRC, or the Northeast Corridor Commission – or via formal process for developing an Advisory Committee, with coordination across several federal entities
- Some groups are charged with specific tasks in authorizing legislation (developing policies, commenting on budgets, etc.), although scope can grow (formally and informally) over time

■ Membership & Structure

- Need clear guidelines on appointment process, including appointing entities, and requirements for member representation and terms; could be detailed in a charter or authorizing legislation
- Could be one group, or regional groups that coordinate on specific tasks, such as policy recommendations

■ Funding

- Funding options are varied – group could be funded as part of an agency budget, pass-through grant, via shared funding agreements across multiple funding partners, or other means

Ongoing Long-Distance Planning

- FRA is considering ideas for a recurring, high-level long-distance planning process, potentially updated approximately every five years, documenting:
 - ✓ Existing long-distance network needs to maintain reliable service; estimated costs; and status of ongoing projects and planning efforts.
 - ✓ Recommended long-distance passenger rail programs and investments for future service development plans, which could be used to populate a long-distance project pipeline.
- This process, led by FRA, could be similar to State Rail Plans or other comparable transportation investment plans, focusing on the status and needs of current service, as well as potential network enhancement opportunities.
- **Any new planning process would involve significant stakeholder engagement.**

Ongoing Long-Distance Planning: State Rail Plan Example

Figure 8: Passenger Corridor Priorities to implement the Governor's 25-Year Vision

Prioritization Criteria

- Population within 10 and 30 miles of corridor
- 2030 population within 30 miles of corridor
- Current and 2040 volumes on parallel highways
- Current and 2040 congestion on parallel highways
- Connections to major activity centers
- Passenger trains volumes in corridor
- Inclusion along federally-designated Southeast Corridor

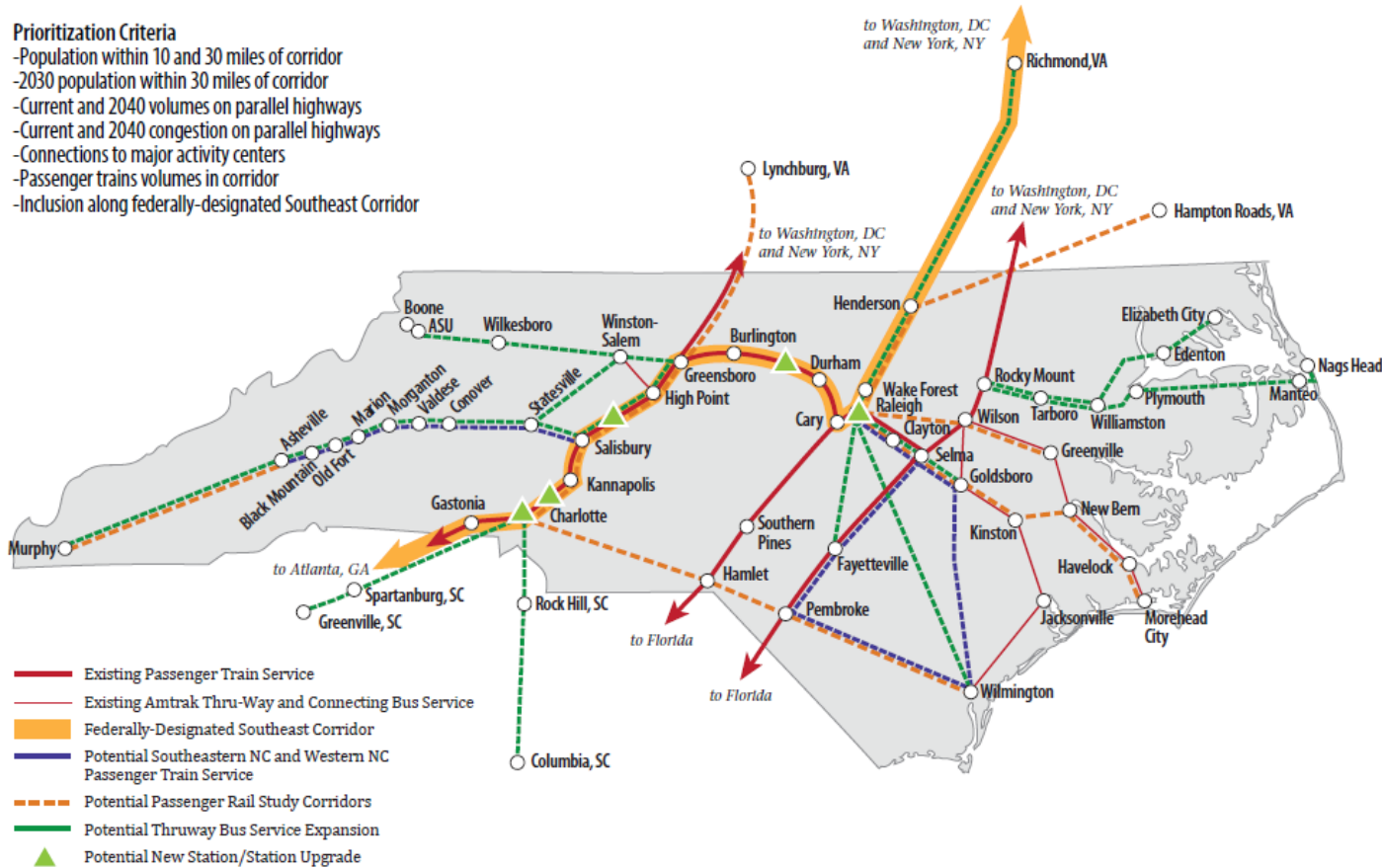


Table 7: Passenger Rail Projects

Program	Cost (2014 dollars)	Funding Source(s)	Timeframe	B Discour at 79
Southeast Corridor – Service Improvements				
Wi-Fi on Piedmont – Add Wi-Fi to 20 cars	\$630K	State Rail Program	2015-2016	2.
Positive Train Control (PTC) – installed on 8 locomotives, 5 cab control units (CCUs), and 4 spares, plus infrastructure to support PTC	\$2.125M	State Rail Program	2016	
Ongoing maintenance for PTC		State Rail Program	2016-future	
Hillsborough Station, track – Construct station and platform	\$8.4M	STI/State Rail Program, Local	2018	.
Fourth and Fifth frequencies – New equipment (locomotive, communications control unit, lounge cars, and coach cars) to add a 5th frequency and expand Capital Yard Mechanical Facility, including extending north and south lead tracks	\$35.4M	Federal, CMAQ, State Rail Program	2017-2018 (4th frequency) 2019 (5th frequency)	4 5 6.
Ongoing maintenance (4th > 2017; 5th > 2019)		State Rail Program	2017-future	
New equipment to replace existing Carolinian trainsets that are nearing the end of their service life	\$76.6M	Federal (Amtrak), State (through payments for state supported services)	2020-2035	
New Stations at Lexington and Harrisburg and associated track improvements	\$237.4M	Federal, STI/Local Funds	2020-2035	
Charlotte Gateway Station – new/relocated station and associated track improvements	\$210M	FTA grant, STI/Local funds	2020-2035	
Ongoing maintenance and operations		State Rail Program	2020-future	
Southeast Corridor – Full Implementation				
Full Southeast Corridor Implementation (Raleigh-Richmond)	\$3.8B	Federal, State	2035	
Ongoing maintenance and operations		State Rail Program	2035-future	
Western North Carolina Services				
Western NC Thruway Bus Service – Partner with Amtrak to implement Thruway bus service between the Piedmont area of NC and Asheville	N/A	Amtrak	2016	
Western NC Passenger Service* – Add new connecting rail service between Salisbury and Asheville	\$405.3M	Federal, State	2020-2035	
Andrews to Murphy	\$16.4M	Federal, State	2020-2024	
Ongoing maintenance and operations		State Rail Program	2035-future	
Eastern/Southeastern North Carolina Service				
Station improvements (Fayetteville, Wilson, Selma)	\$7.5M	Federal, State	2018-2025	

Image source: N.C. Department of Transportation Comprehensive State Rail Plan (2015)

Other new IPR Engagement: STB Passenger Rail Advisory Committee

- The Surface Transportation Board (STB) recently established a **Passenger Rail Advisory Committee (PRAC)** to **provide advice and guidance to STB on passenger rail issues**. This is a new committee. It has not yet had a meeting.
- **STB is an independent federal agency** charged with the economic regulation of various modes of surface transportation, primarily freight rail; it also has jurisdiction over certain passenger rail matters.
- **STB is separate from, and independent of, FRA, as well as Amtrak.**
- PRAC – which has members from across the rail industry, including passenger and freight rail, as well as rail funding entities and advocacy organizations – has a wide scope that includes providing recommendations to STB on issues like improving efficiency on passenger rail routes; reducing disputes between passenger rail carriers and freight rail hosts; and improving regulatory processes related to intercity passenger rail.

CLOSING AND NEXT STEPS

Final Report Elements

- Elements of the final report:
 - IIJA Study Requirements
 - Opportunities, Challenges, and Study Limitations
 - Study Approach
 - Summary of Public and Stakeholder Engagement
 - Preferred Route Options for Restoring or Enhancing Long-Distance Service
 - Inventory of Selected Capital Projects
 - Estimated Costs and Public Benefits; potential federal and non-federal funding sources
 - Recommendations for methods by which Amtrak could work with communities and organizations to improve public use of intercity passenger rail service along each route
- Final report to Congress later in 2024

Opportunities and Challenges

Opportunities

- Establishes options for potential future long-distance service, in response to legislative requirements, examining broad needs, challenges, and opportunities.
- Identifies regions where potential new service could provide economic and social benefits.
- Demonstrates support for restoring long-distance intercity passenger rail services and exploring the creation of new long-distance routes.
- Satisfies an early step in the FRA project lifecycle to identify actions needed to enhance long-distance service

- Documents high-level analysis. Substantial additional analysis and resources are required prior to implementation.
- Identifies only certain passenger service-required capital projects. Future identification and analysis of additional capital projects, including those related to capacity, requires additional time and resources, including coordination with host railroads and other stakeholders.
- Requires significant unidentified funding for planning, infrastructure improvements, fleet needs, and ongoing operating support.

Challenges

Moving Forward



Report to Congress

- Complete later in 2024
- Establish options for restoring and expanding long-distance service
- Include ideas for ongoing collaboration and planning
- Acknowledge the need for additional analysis, coordination, funding



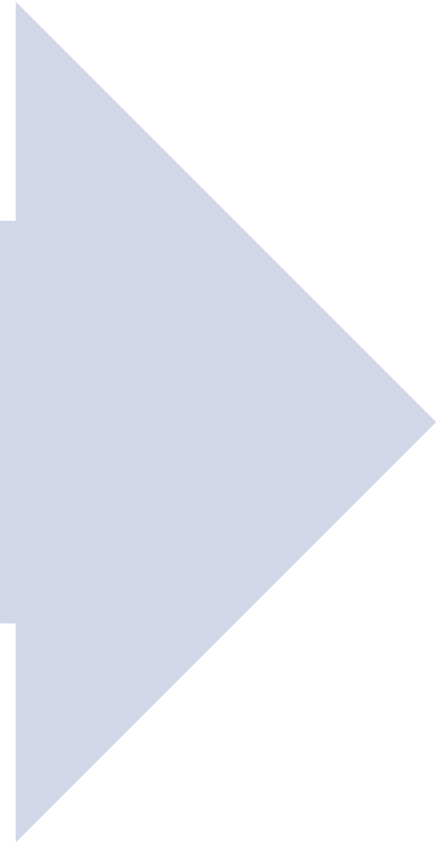
Corridor ID

- Provides sustained support for new or improved passenger corridors through planning and project development stages
- Includes some long-distance routes
 - Daily Cardinal
 - Daily Sunset Limited
 - North Coast Hiawatha



Comments Received

- Maintain a database of comments for reference in future planning processes



Thank You!

- After the final report is submitted to Congress, it will be published on the study and FRA websites.
- www.fralongdistancerailstudy.org



THANK YOU