



## Regional Working Group Meeting 2

# WELCOME & SAFETY BRIEFING

# FRA OPENING REMARKS

# INTRODUCTIONS



# AGENDA AND MEETING OBJECTIVES

# Agenda

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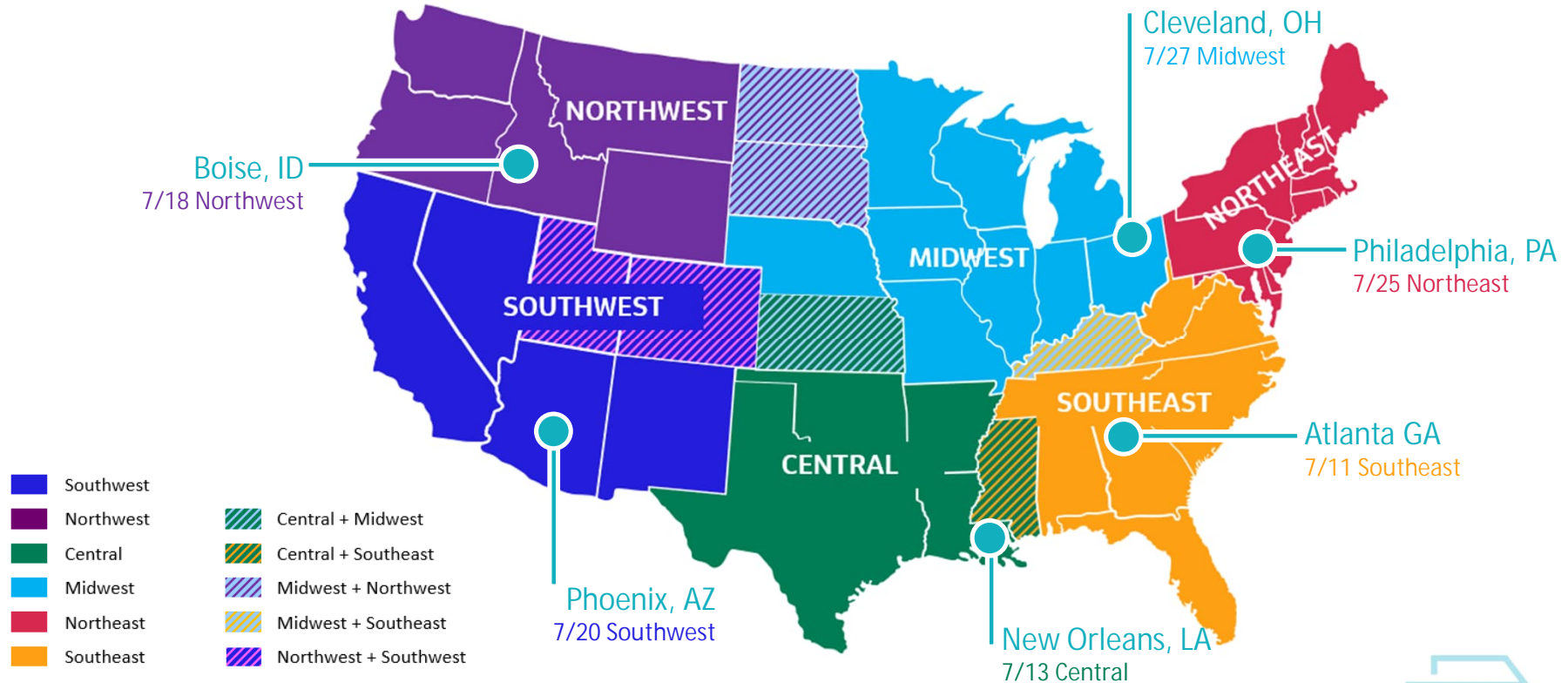
- Welcome and Introductions
- Study Overview and What We've Heard
- Baseline Network Overview
- Enhanced Network Development
- Discuss Enhanced Network
- Comparison of Enhanced and Baseline Networks
- Route Definition and Feedback
- Stakeholder Insights for Ongoing Feedback Opportunities
- Closing and Next Steps

# Meeting Objectives

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- Brief stakeholders on the study progress
- Inform stakeholders on the methodology for developing the Enhanced Network
- Receive input from stakeholders on:
  - The Baseline and Enhanced Networks
  - Potential new long-distance routes using the Enhanced Network
  - The role of FRA or other organizations in gathering feedback

# Long-Distance Service Study Regions: Stakeholder Group Meetings



# STUDY OVERVIEW



## About the FRA Long-Distance Service Study

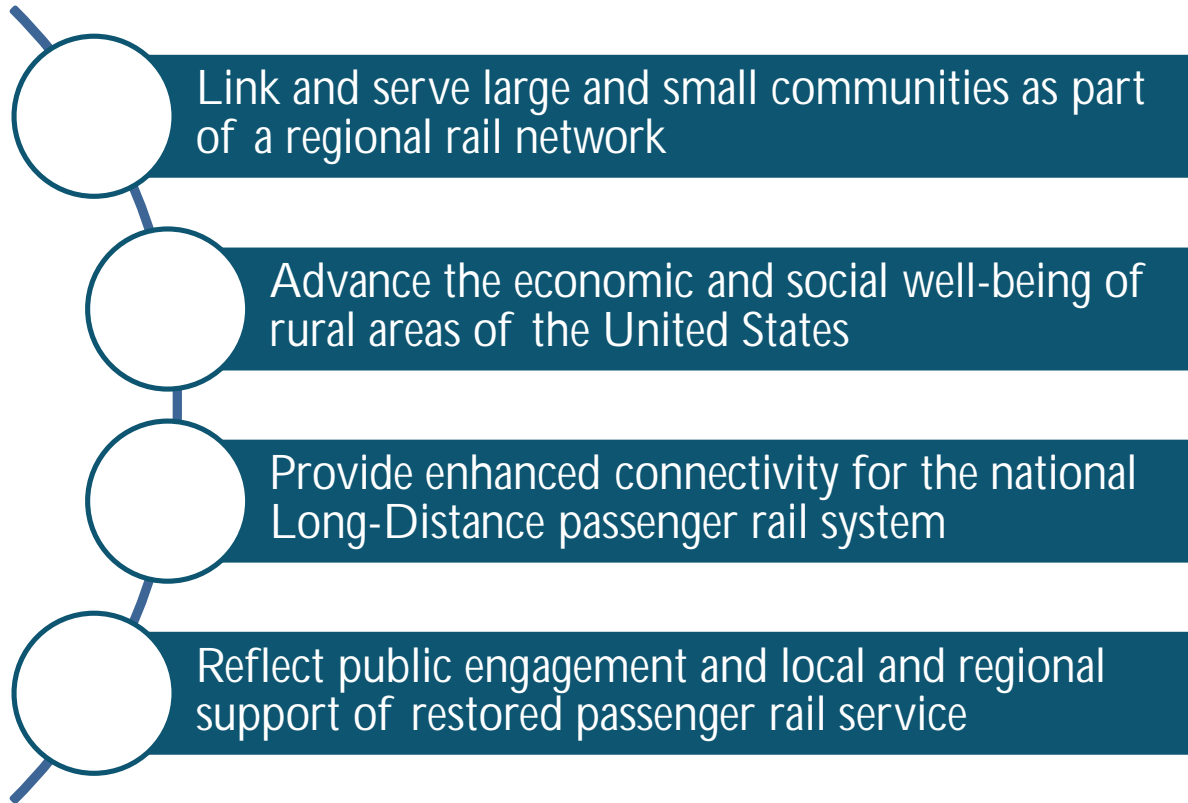
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The Infrastructure Investment and Jobs Act (IIJA) of 2021 requires the FRA to conduct a study to evaluate the restoration of daily intercity rail passenger service along —

- 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

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# FRA Long-Distance Service Study – Report to Congress

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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

# FRA Long-Distance Service Study – FRA’s Preliminary Vision

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Common long-term vision for Long-Distance passenger rail service, and capital projects needed to implement that vision, based on existing conditions, future travel demand, and the role of Long-Distance services in the linking communities across the country.

Potential institutional arrangements, financial requirements, and planning and development activities needed to implement the vision.

Strategies for Amtrak and other key stakeholders for implementation and coordination in development of Long-Distance routes, including potential opportunities and efficiencies in Amtrak’s management and implementation of Long-Distance services.

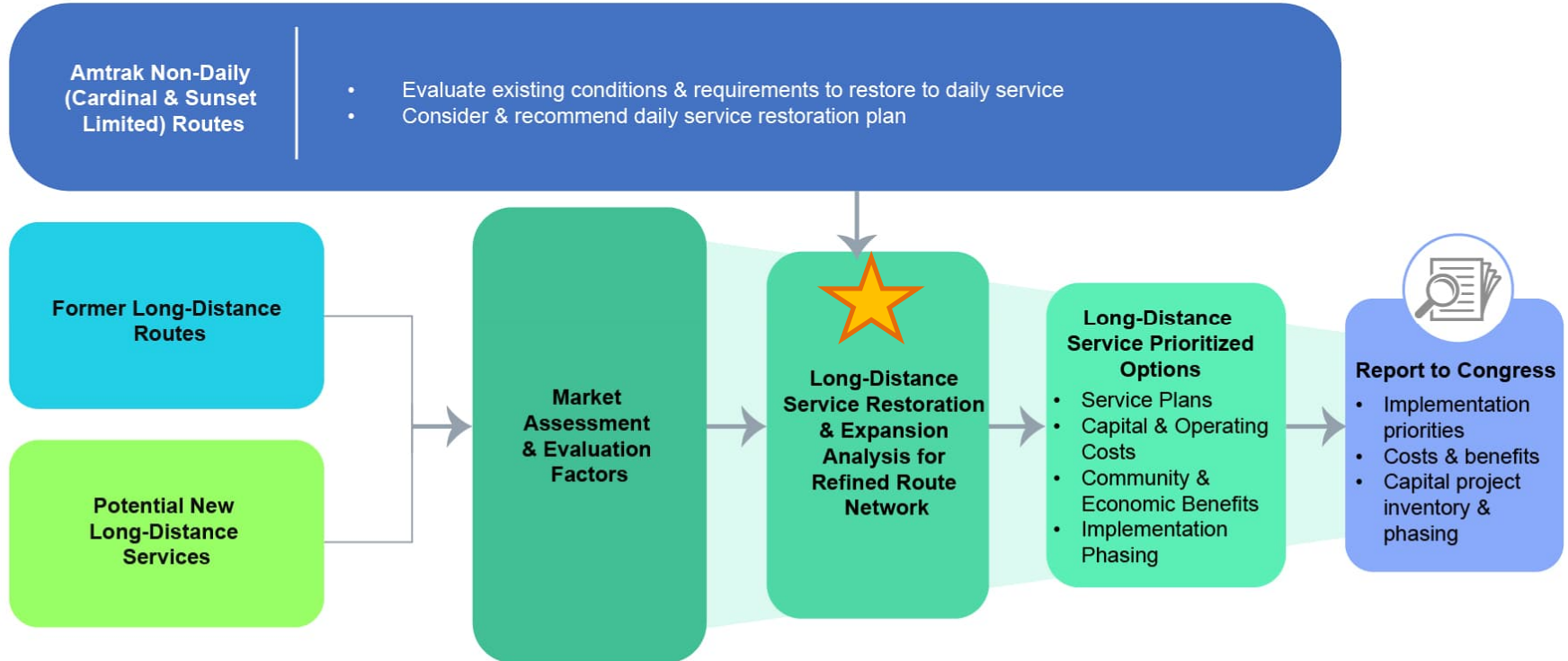
# Overview of Long-Distance Service Study Scope

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- 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



# Long-Distance Service Study Expectations

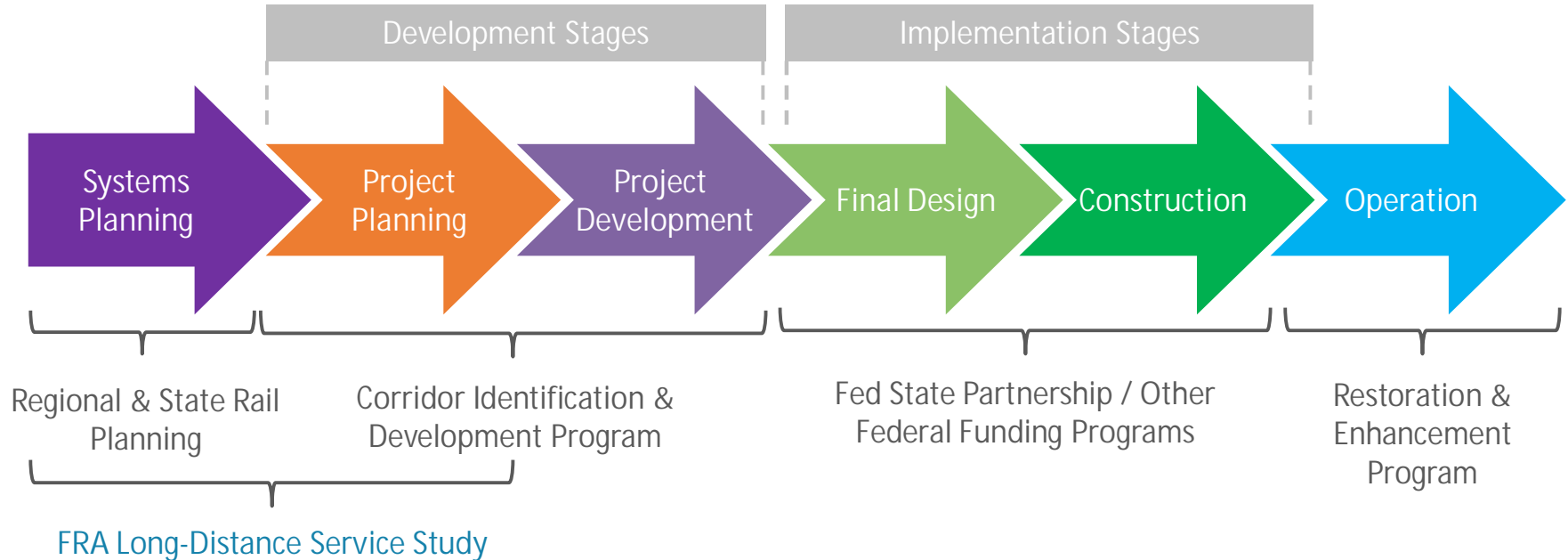
<u>What this Study IS</u>	<u>What this Study IS NOT</u>
Focused on Long-Distance Network	A “National Rail Plan”
Assessment of routes over 750 miles	Assessment of State-Supported routes
Focused on Amtrak as service provider	Identifying other service providers
Service frequencies to meet Long-Distance 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

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- Develop robust 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
- Identification of passenger-service specific projects
  - Examples: stations, rolling stock, track upgrades
  - Projects will be included as part of "prioritized inventory" mandated by the legislation
  - Decision to focus on identifying these types of projects was based on feedback from host railroads during initial LDSS outreach
- Conceptual-level identification of capacity improvements
  - LDSS is the first step in a process to help Congress understand potential for additional Long-Distance service
  - LDSS will acknowledge need for additional study and identification of capacity needs for success of any additional services
  - Provide "sketch level" capacity improvements, but not advanced enough for inclusion in prioritized inventory

# Long-Distance Service Study in the FRA Project Lifecycle Stages



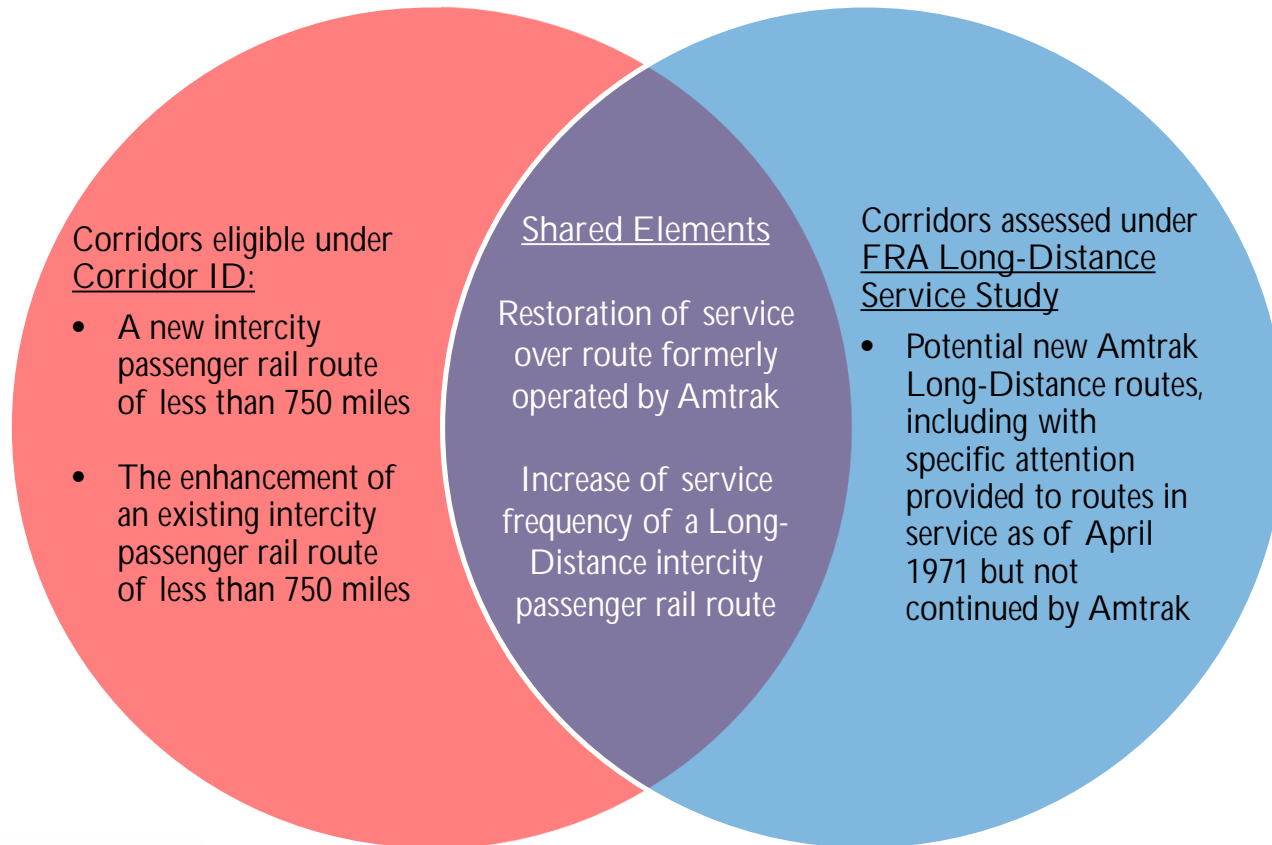
# Corridor Identification and Development Program Overview

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- The IIJA established the Corridor ID Program to facilitate the development of intercity passenger rail corridors and create a foundational framework for identifying and developing new or improved intercity passenger rail services
- Requires FRA to:
  1. Solicit proposals for implementing new or improving existing intercity passenger rail service
  2. Select proposals for development under the Program
  3. For each selected proposal, partner with the entity that submitted the proposal to prepare or update an existing Service Development Plan (SDP), which must include a corridor project inventory
  4. Establish a prioritized pipeline of projects that may be implemented with funding provided under FRA's (and potentially other federal) capital investment financial assistance programs
- 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 Study & Corridor ID Nexus




# Long-Distance Service Study Engagement Schedule



# WHAT WE HEARD

# Route and Frequency Feedback Received at Meeting Series 1

- During interactive sessions at the first regional working group meetings, attendees were asked a series of questions, including:
  - What previously discontinued long-distance services should we consider and why?
  - In thinking about existing long-distance routes – what new frequencies and service changes should we consider?
  - What new routes or communities do you want to extend long-distance service to and why?

 What previously discontinued Long-Distance services should we consider and why?



# Evaluation Factor Feedback Received at Meeting Series 1

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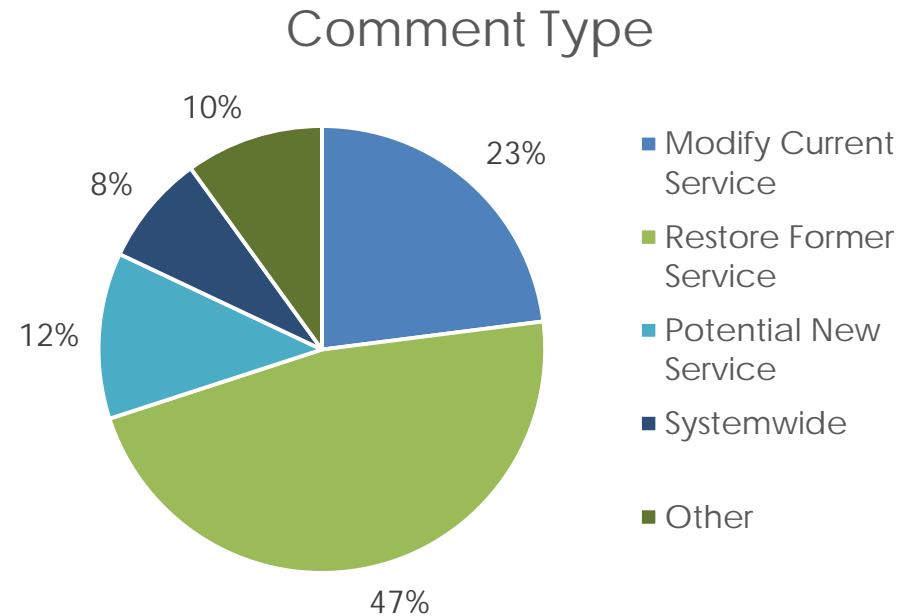
- Each region was asked about the types of evaluation factors that should be used to guide refinement and selection of previously discontinued routes.

Feedback included:

- Number of connections a route would provide to enhance the national long-distance and intercity networks
- Number of connections to large and small communities
- Number of areas with higher-than-average disadvantaged populations
- Number of city pairs with highest ridership potential
- Schedule frequency and convenience
- Connections to airports and multimodal opportunities
- Number of connections to key destinations
- Economic benefits to communities along a route

# Feedback from the Website

- Received approximately 1,000 comments as of March 17
  - The project team reviewed and categorized all comments received
  - Generally, feedback indicated support for the study and a desire for increased long-distance service



# BASELINE NETWORK OVERVIEW

# Definitions for the Network

## Existing Network

The intercity passenger rail network consists of the current long-distance services, state-supported services, and NEC services.

## Baseline Network

The passenger rail network that consists of current long-distance services, state-supported services, NEC services, and projects that meet the criteria to be included in the baseline ("Baseline Projects").

## Discontinued Network

Those long-distance routes in service as of April 1971 but were not continued by Amtrak and those long-distance routes that were previously operated by Amtrak but have since been discontinued.

## Enhanced Network

The expanded and interconnected passenger rail network for rail service restoration and expansion. The Enhanced Network is comprised of the Baseline Network, portions of the Discontinued Network, plus new segments where long-distance passenger rail service has not previously operated.



# Existing Network



Data provided by Amtrak, 2022

# Baseline Network

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Existing Long-  
Distance Services

Existing State-  
Supported Services

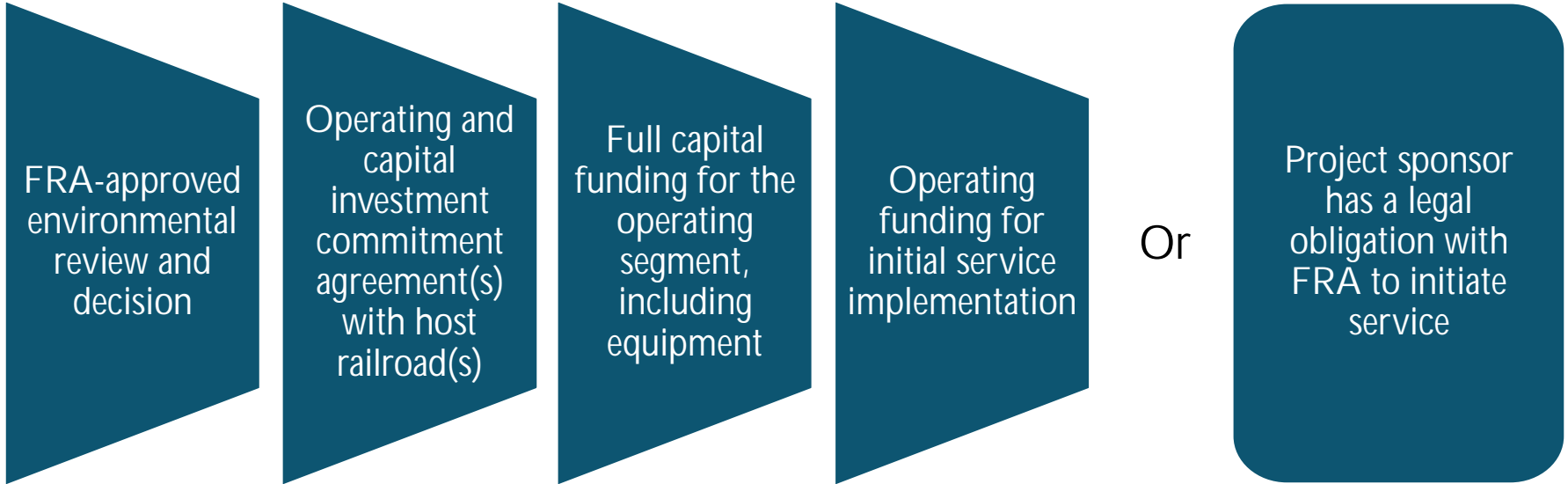
Existing Northeast  
Corridor Services

Baseline Projects  
(defined on next slide)

Does Not Include  
Corridor ID

# Baseline Projects

Related rail projects that meet the following criteria:



## Baseline Projects

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- Brightline: Orlando, FL – Miami, FL via West Palm Beach, FL
- California High-Speed Rail Early Operating Segment: Merced, CA – Bakersfield, CA
- Gulf Coast Passenger Rail: New Orleans, LA – Mobile, AL
- Twin Cities – Milwaukee – Chicago (TCMC) Regional Rail: Minneapolis/St. Paul, MN – Chicago, IL

# Baseline Network



## Legend

### Baseline Network

#### Amtrak Routes

- Long-Distance
- Northeast Corridor
- State-Supported

#### Baseline Projects

- Brightline
- Gulf Coast Passenger Rail
- Twin Cities-Milwaukee-Chicago
- CAHSR MOS

Existing Route and Station Data provided by Amtrak 2022; Baseline Projects Data provided by FRA 2023

# Discontinued Routes – History of Evaluations and Cuts

- Examination of Long-Distance routes occurred during the formation of Amtrak in 1970
  - The passenger rail network was evaluated by US DOT and a system recommended to be continued by Amtrak
  - Criteria considered included: national transportation need (available alternative modes), demand, cost competitiveness, population of endpoint cities, profitability, and required capital investment
- The Amtrak Improvement Act of 1978 required US DOT to evaluate Amtrak's network based on financial performance, resulting in removal of several routes
  - Two primary metrics for evaluating route performance were ridership density (passenger-mile/train mile) and loss per passenger-mile
- In 1996, Amtrak's Intercity Strategic Business Unit (ISBU) performed another review of its Long-Distance network, resulting in the removal of additional routes
  - Criteria considered included financial performance, costs saved by elimination, route interconnectivity, and long-term growth and profit opportunities

# Discontinued Long-Distance Routes

## Pre-1971 Routes

Route	Endpoints	Disc.
City of Miami	Chicago, IL and Miami/St. Petersburg, FL	1971
George Washington	St. Louis, MO and Washington, D.C.	1971
Pan American	New Orleans, LA and Cincinnati, IN	1971
San Francisco Chief	Richmond, CA and Chicago, IL	1971

## Former Amtrak Routes

Route	Endpoints	Disc.
James Whitcomb Riley	Chicago, IL and Washington/Newport News	1977
Mountaineer	Chicago, IL and Norfolk, VA	1977
Champion	St. Petersburg, FL and New York, NY	1979
Floridian	Chicago, IL and St. Petersburg/Miami, FL	1979
Hilltopper	Catlettsburg, KY and Boston, MA	1979
Lone Star	Dallas/Houston, TX and Chicago, IL	1979
National Limited	Kansas City, MO and New York/Washington	1979
North Coast Hiawatha	Seattle, WA and Chicago, IL	1979
Inter-American	Laredo/Houston, TX and Chicago, IL	1981
River Cities	New Orleans, LA and Kansas City, MO	1993
Gulf Breeze	Mobile, AL, and New York, NY	1995
Texas Eagle - Houston	Houston, TX and Chicago, IL	1995
Sunset Limited - West	Los Angeles, CA and New Orleans, LA	1996
Desert Wind	Los Angeles, CA and Chicago, IL	1997
Pioneer	Seattle, WA and Chicago, IL	1997
Silver Palm/Palmetto	Miami, FL and New York, NY	2004
Sunset Limited - East	New Orleans, LA and Miami, FL	1996
	New Orleans, LA and Orlando, FL	2005
Broadway Limited/Three Rivers	Chicago, IL and New York, NY	2005



# Baseline and Discontinued Routes



## Legend

### Baseline Network

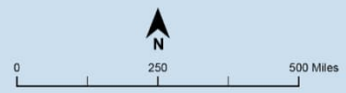
- Amtrak Routes
- Long-Distance
- Northeast Corridor
- State-Supported

### Baseline Projects

- Brightline
- Gulf Coast Passenger Rail
- Twin Cities-Milwaukee-Chicago
- CAHSR MOS

### Discontinued Network

- - - Discontinued Routes
- - - Pre-1971 Routes



Existing Route and Station Data as well as Discontinued Route Data provided by Amtrak 2022; Baseline Projects Data provided by FRA 2023



# Discontinued Network



- Legend**
- Baseline Network**
- Amtrak Routes
  - Long-Distance
  - Northeast Corridor
  - State-Supported
- Baseline Projects**
- Brightline
  - Gulf Coast Passenger Rail
  - Twin Cities–Milwaukee–Chicago
  - CAHSR MOS

- Discontinued Network**
- - - Discontinued Segment of the Discontinued Route

Existing Route and Station Data as well as Discontinued Route Data provided by Amtrak 2022; Baseline Projects Data provided by FRA 2023

# ENHANCED NETWORK DEVELOPMENT

# Legislative Considerations Guiding Enhanced Network Development

## 1 Large and Small Communities

Identify metropolitan area travel flows not served by the existing passenger rail network



*Link and serve large and small communities as part of a regional rail network*

## 2 Focus on Rural

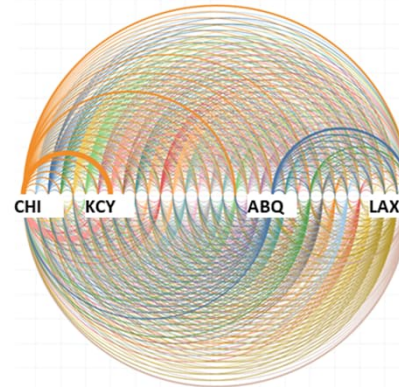
Identify rural and disadvantaged communities not served by existing passenger rail network



*Advance the economic and social well-being of rural areas of the United States*

## 3 Enhance Connectivity

Identify gaps in the passenger rail network, and reflect regional plans for passenger rail service



*Provide enhanced connectivity for the national long-distance passenger rail system*

## 4 Reflect Public Engagement

Check that Enhanced Network reflects stakeholder and public inputs



*Reflect public engagement and local and regional support for restored passenger rail service*

# Enhanced Network Development Methodology



Identifying the segments that make up the Enhanced Network:

- Focusing on the process for identifying segments, not routes, that could make up an Enhanced Network
- Segments were aligned to the North American Rail Network (NARN)
- Main line track, branch line track, and disused track were eligible
  - Feasible for potential passenger rail operations
  - Avoids new "greenfield" alignments

# Enhanced Network Development Methodology



## Developing an Enhanced Network

- Step 1: Metropolitan Area Travel Flows
- Step 2: Rural Accessibility
- Step 3: Geographic Coverage/Network Connectivity
- Step 4: Stakeholder Input
- Additional Considerations: Discontinued Network

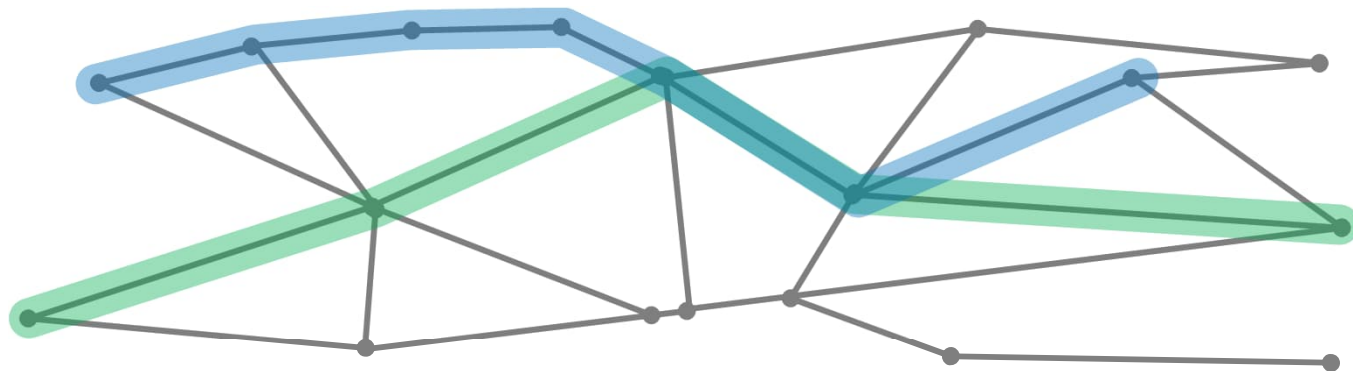
# Restoration and Expansion Concepts: Enhanced Network

<u>What Enhanced Network IS</u>	<u>What Enhanced Network IS NOT</u>
Conceptual segments for future route development consideration	Proposed network of rail routes, station locations
Consistent with legislative considerations	Rail operations and service characteristics (e.g., train consists, speeds, frequency)
Aligned to the North American Rail Network	On new “greenfield” alignments
Within the contiguous states	Extended into Canada or Mexico



# Definitions of Segments and Routes

Focus today is on identifying segments that could make up an Enhanced Network



Segment 

- Represents any portion of the NARN identified as part of the Existing, Baseline, or Enhanced Network
- Can be any length

Route 

- Made up of segments
- Start and end in major markets
- Represents an existing or potential new long-distance route
- A long-distance route is over 750 miles in length

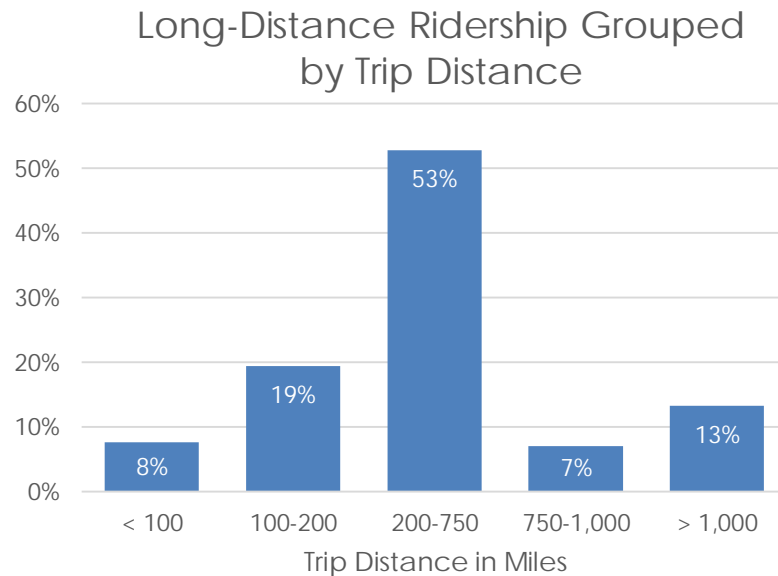
# STEP 1 – METROPOLITAN AREA TRAVEL FLOWS



# Step 1: Metropolitan Area Travel Flows

- Considers travel demand between Metropolitan Areas
- Based on Federal Highway Administration (FHWA) NextGen 2020 data:
  - Metropolitan area pairs with 500,000 annual trips or more on all modes
  - Trip length of 100 miles to 1,000 miles in length
  - Metropolitan area pairs not served directly by rail in the Existing Network

Among long-distance riders,  
79 percent of trips are 100 to 1,000  
miles in length



Does not include Auto Train  
Source: Amtrak. FY 2019. Amtrak rail ridership data.

# Step 1 of 4: Metropolitan Area Travel Flows

## Baseline Network



**Legend**

**Baseline Network**

**Amtrak Routes**

- Long-Distance
- Northeast Corridor
- State-Supported

**Baseline Projects**

- Brightline
- Gulf Coast Passenger Rail
- Twin Cities–Milwaukee–Chicago
- CAHSR MOS

Existing Route and Station Data provided by Amtrak 2022; Baseline Projects Data provided by FRA 2023

# Step 1 of 4: Metropolitan Area Travel Flows

## Trips without a direct rail connection





# Step 1 of 4: Metropolitan Area Travel Flows

## Developing a Conceptual Enhanced Network



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

#### Committed Projects

- Brightline
- Gulf Coast Passenger Rail
- Twin Cities-Milwaukee-Chicago
- CAHSR MOS

#### Travel Flows

- 500,000 to 1,000,000
- 1,000,001 to 2,000,000
- 2,000,001 to 3,000,000
- 3,000,001 to 5,000,000
- 5,000,001 to 10,000,000
- >10,000,000

#### Enhanced Network

- Segments
- Segment Options

# Segment Options

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- Segments connecting similar end points but different intermediate markets
- Will be further evaluated to recommend one segment option to move forward in future route analysis tasks
- Atlanta – Savannah, GA
  - North alignment connecting Savannah, GA via Augusta, GA
  - Middle alignment connecting Savannah, GA via Macon, GA
  - South alignment connecting south of Savannah, GA via Macon, GA
- Birmingham – Mobile, AL
  - Alignment connecting Birmingham – Mobile via the shortest path, or
  - Alignment connecting Birmingham – Mobile via Montgomery, AL

# Step 1 of 4: Metropolitan Area Travel Flows

## Developing a Conceptual Enhanced Network



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
- Twin Cities-Milwaukee-Chicago
- CAHSR MOS

**Enhanced Network**

- Segments
- - - Segment Options

Existing Route and Station Data provided by Amtrak 2022; Baseline Projects Data provided by FRA 2023



# STEP 2: RURAL ACCESSIBILITY

## Step 2: Rural Accessibility

Considers those rural and disadvantaged communities not served by the existing passenger rail network

### Rural Counties

- Counties outside Core-Based Statistical Areas (CBSAs) - CBSAs include Metropolitan Statistical Areas and Micropolitan Statistical Areas

### Tribal Lands

- American Indian and Alaska Native Land
- American Indian Tribal Subdivisions
- Bureau of Indian Affairs Regional Boundaries
- Oklahoma Tribal Statistical Areas

### USDOT Justice 40 Disadvantaged Communities

- Low-income
- Transportation disadvantaged
- Health disadvantaged



# Step 2 of 4: Rural Accessibility Baseline Network



### Legend

#### Baseline Network

##### Amtrak Routes

- Long-Distance
- Northeast Corridor
- State-Supported

##### Baseline Projects

- Brightline
- Gulf Coast Passenger Rail
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- CAHSR MOS

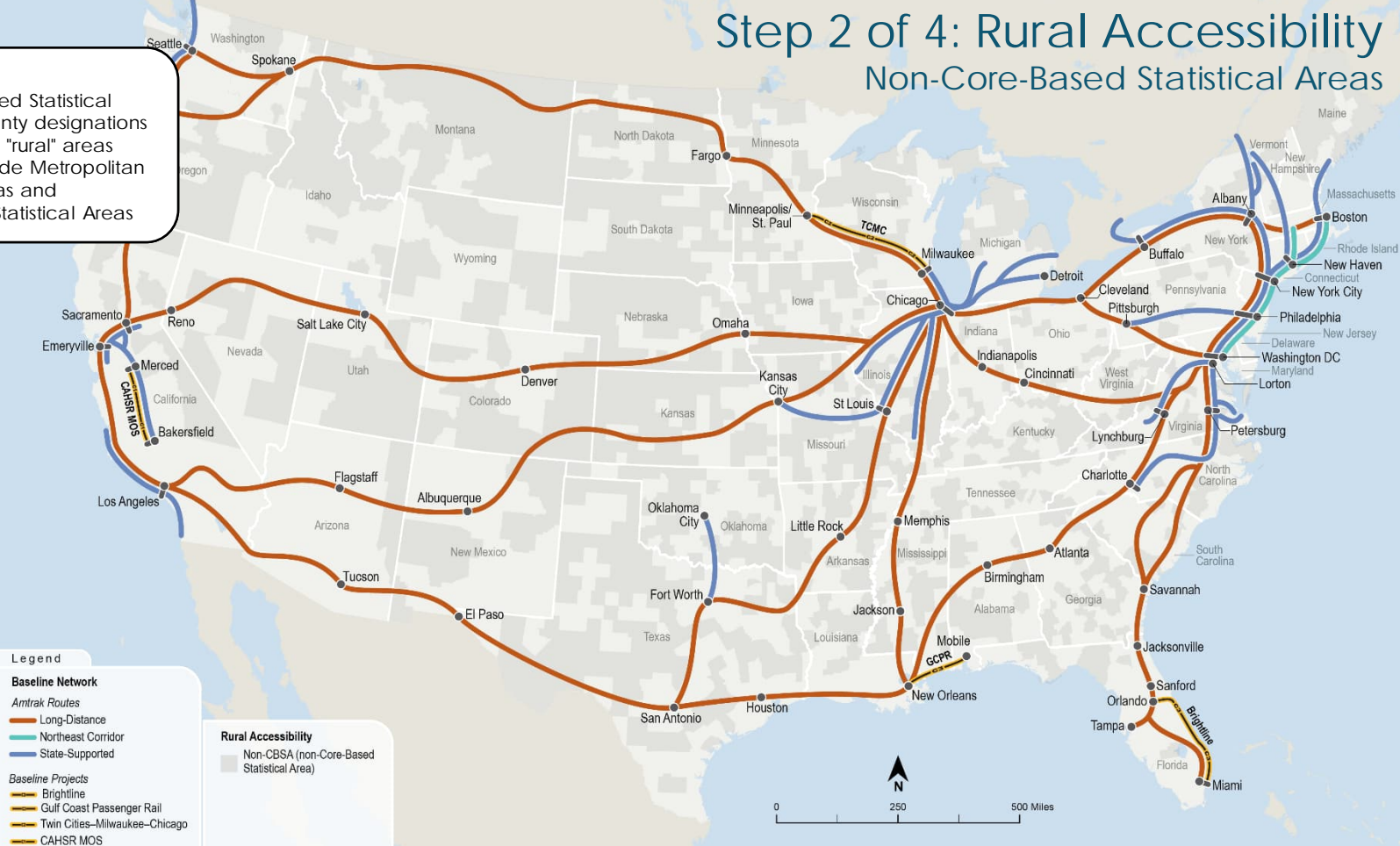
Existing Route and Station Data provided by Amtrak 2022; Baseline Projects Data provided by FRA 2023

# Step 2 of 4: Rural Accessibility

## Non-Core-Based Statistical Areas

**Rural counties:**

- Non-Core-Based Statistical Areas are county designations that represent "rural" areas
- Counties outside Metropolitan Statistical Areas and Micropolitan Statistical Areas



**Legend**

**Baseline Network**

- Long-Distance
- Northeast Corridor
- State-Supported

**Baseline Projects**

- Brightline
- Gulf Coast Passenger Rail
- Twin Cities–Milwaukee–Chicago
- CAHSR MOS

**Rural Accessibility**

- Non-CBSA (non-Core-Based Statistical Area)

Amtrak 2022; FRA 2023; U.S. Census Bureau: 2021 Housing Patterns and Core-Based Statistical Areas

# Step 2 of 4: Rural Accessibility

## Non-Core-Based Statistical Areas



### Legend

#### Baseline Network

- Long-Distance
- Northeast Corridor
- State-Supported

#### Baseline Projects

- Brightline
- Gulf Coast Passenger Rail
- Twin Cities-Milwaukee-Chicago
- CAHSR MOS

#### Rural Accessibility

- Non-CBSA (non-Core-Based Statistical Area)

Amtrak 2022; FRA 2023; U.S. Census Bureau: 2021 Housing Patterns and Core-Based Statistical Areas



# Step 2 of 4: Rural Accessibility

## Tribal Lands

### Tribal lands:

- Consists of those tribal census tracts and tribal block groups defined by the Census Bureau.

### Tribal lands include:

- American Indian Land
- American Indian Tribal Subdivisions
- Bureau of Indian Affairs Regional Boundaries
- Oklahoma Tribal Statistical Areas



### Legend

#### Baseline Network

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

#### Baseline Projects

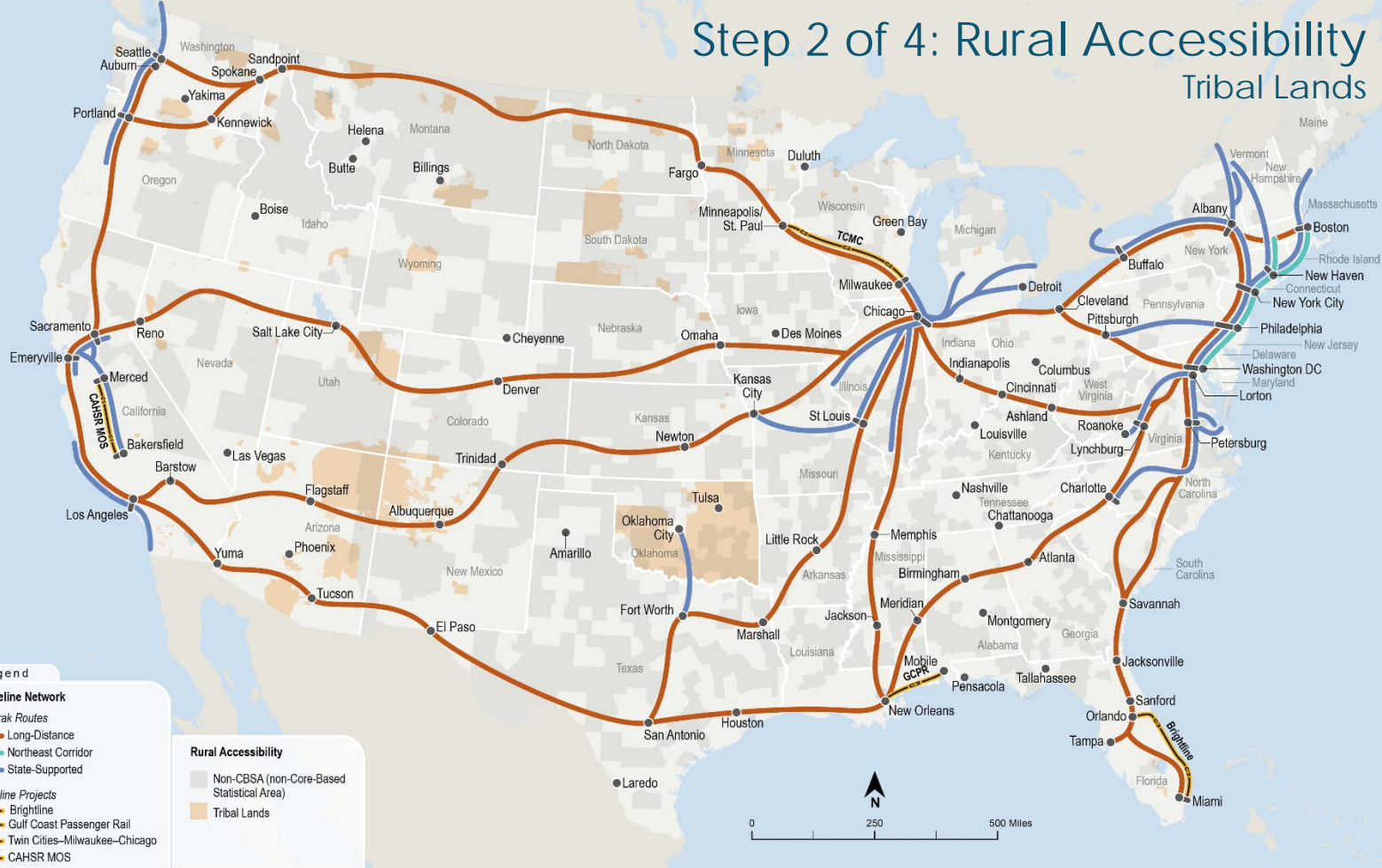
- Brightline
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- CAHSR MOS

#### Rural Accessibility

- Non-CBSA (non-Core-Based Statistical Area)
- Tribal Lands

# Step 2 of 4: Rural Accessibility

## Tribal Lands



Amtrak 2022; FRA 2023; U.S. Census Bureau: 2021 Housing Patterns and Core-Based Statistical Areas; 2020 American Indian Area Boundaries, 2020 Decennial Census



# Step 2 of 4: Rural Accessibility

## Justice 40 Disadvantaged

USDOT Justice 40 Disadvantaged areas:

- Low-income
- Health or transportation access disadvantaged communities



Amtrak 2022; FRA 2023; U.S. Census Bureau: 2021 Housing Patterns and Core-Based Statistical Areas; 2020 American Indian Area Boundaries, 2020 Decennial Census; Census Tracts defined as Transportation Disadvantaged or Health Disadvantaged based on the U.S. DOT Justice 40 Initiative: 2019 ACS Data (2015-2019 5-year estimates, 2010 Census Tract Shapefiles).

# Step 2 of 4: Rural Accessibility

## Justice 40 Disadvantaged





# Step 2 of 4: Rural Accessibility

## Developing a Conceptual Enhanced Network



**Legend**

**Baseline Network**

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

**Baseline Projects**

- Brightline
- Gulf Coast Passenger Rail
- Twin Cities-Milwaukee-Chicago
- CAHSR MOS

**Rural Accessibility**

- Non-CBSA (non-Core-Based Statistical Area)
- Tribal Lands
- Justice 40 Disadvantaged

**Enhanced Network**

- Segments
- Segment Options

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



# Step 2 of 4: Rural Accessibility

## Developing a Conceptual Enhanced Network



### Legend

#### Baseline Network

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

#### Baseline Projects

- Brightline
- Gulf Coast Passenger Rail
- Twin Cities-Milwaukee-Chicago
- CAHSR MOS

#### Rural Accessibility

- Non-CBSA (non-Core-Based Statistical Area)
- Tribal Lands
- Justice 40 Disadvantaged

#### Enhanced Network

- Newly Added Segments
- Segments
- Segment Options

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



Amtrak 2022; FRA 2023; U.S. Census Bureau: 2021 Housing Patterns and Core-Based Statistical Areas; 2020 American Indian Area Boundaries, 2020 Decennial Census; Census Tracts defined as Transportation Disadvantaged or Health Disadvantaged based on the U.S. DOT Justice 40 Initiative: 2019 ACS Data (2015-2019 5-year estimates, 2010 Census Tract Shapefiles).

# Segment Options

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- Segments connecting similar end points but different intermediate markets
- Will be further evaluated to determine one segment option to move forward in future route analysis tasks
- Cheyenne, WY – Billings, MT
  - East alignment connecting east of Billings, MT via Gillette, WY
  - West alignment connecting west of Billings, MT via Casper, WY
- Helena & Butte, MT
  - Connection via Butte, MT as per the discontinued North Coast Hiawatha on disused track, or
  - Connection via Helena, MT on main line track



# Step 2 of 4: Rural Accessibility

## Developing a Conceptual Enhanced Network



### Legend

#### Baseline Network

Amtrak Routes

— Long-Distance

— Northeast Corridor

— State-Supported

#### Baseline Projects

— Brightline

— Gulf Coast Passenger Rail

— Twin Cities-Milwaukee-Chicago

— CAHSR MOS

#### Enhanced Network

— Segments

— Segment Options

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

Existing Route and Station Data provided by Amtrak 2022; Baseline Projects Data provided by FRA 2023

# STEP 3 – GEOGRAPHIC COVERAGE/NETWORK CONNECTIVITY

## Step 3: Geographic Coverage/Network Connectivity

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Considers gaps in the passenger rail network and network connectivity:

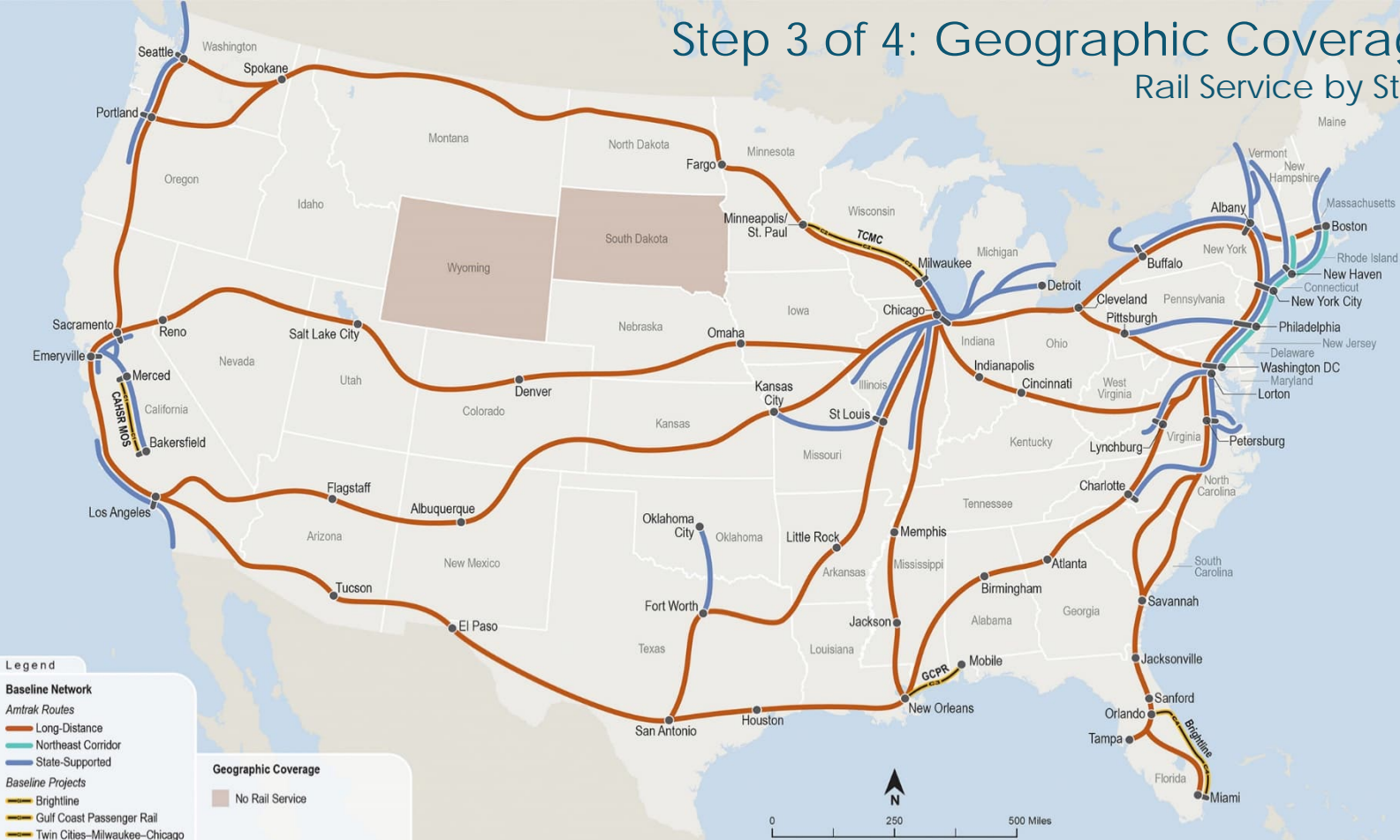
- Type of passenger rail service by state:
  - No service
  - State-supported service
  - Long-distance service
  - NEC Service
- Enhance network connectivity for long-distance passenger rail from Regional Rail Plans:
  - Southwest Multi-State Study
  - Southeast Regional Rail Plan
  - Midwest Regional Rail Plan
  - NEC FUTURE
- Regional Rail Plans may recommend corridors for high-frequency, regional, or network independent service
- The Long-Distance Service Study considered all recommendations from the regional rail plans
- Recommendations for regional or network independent service may be most relevant to long-distance service

# Step 3 of 4: Geographic Coverage Baseline Network





# Step 3 of 4: Geographic Coverage Rail Service by State



### Legend

#### Baseline Network

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

#### Baseline Projects

- Brightline
- Gulf Coast Passenger Rail
- Twin Cities-Milwaukee-Chicago
- CAHSR MOS

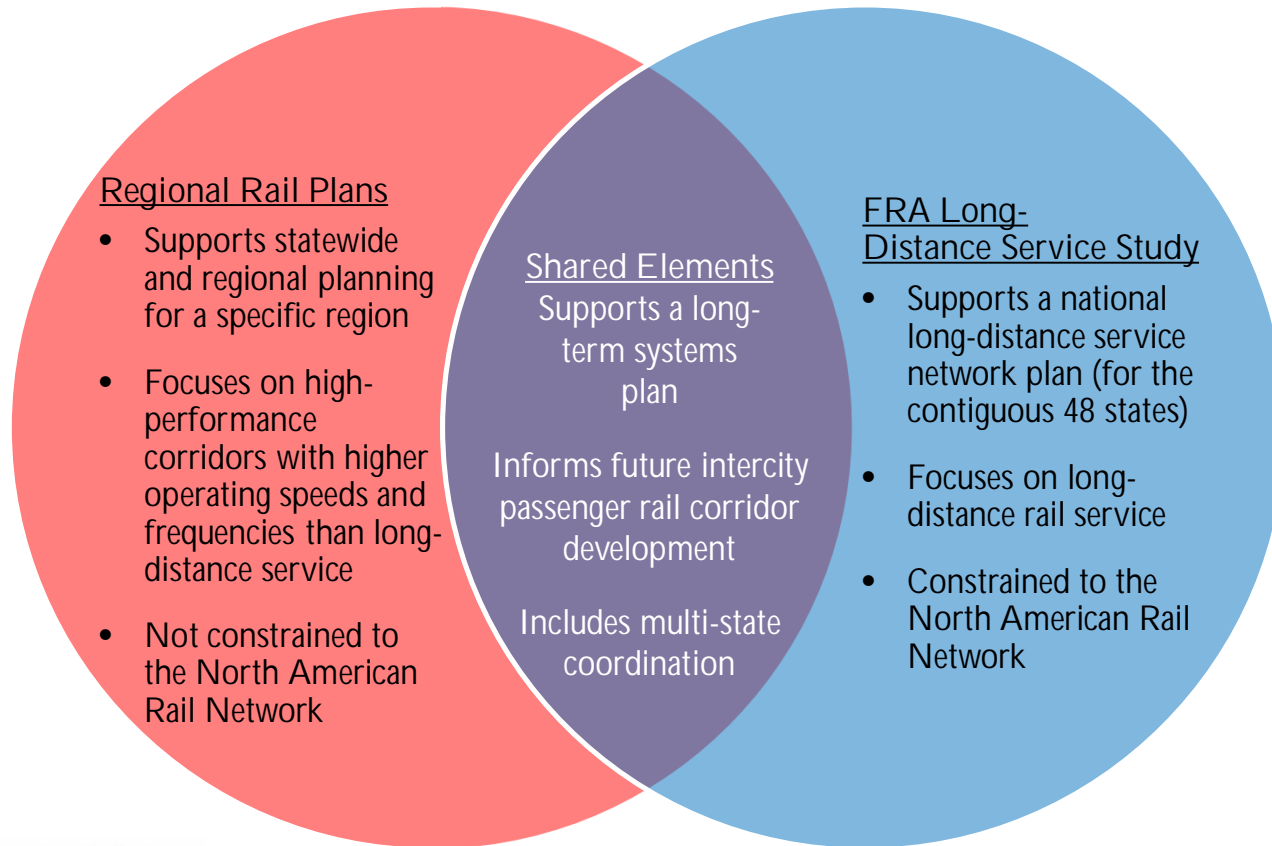
#### Geographic Coverage

- No Rail Service



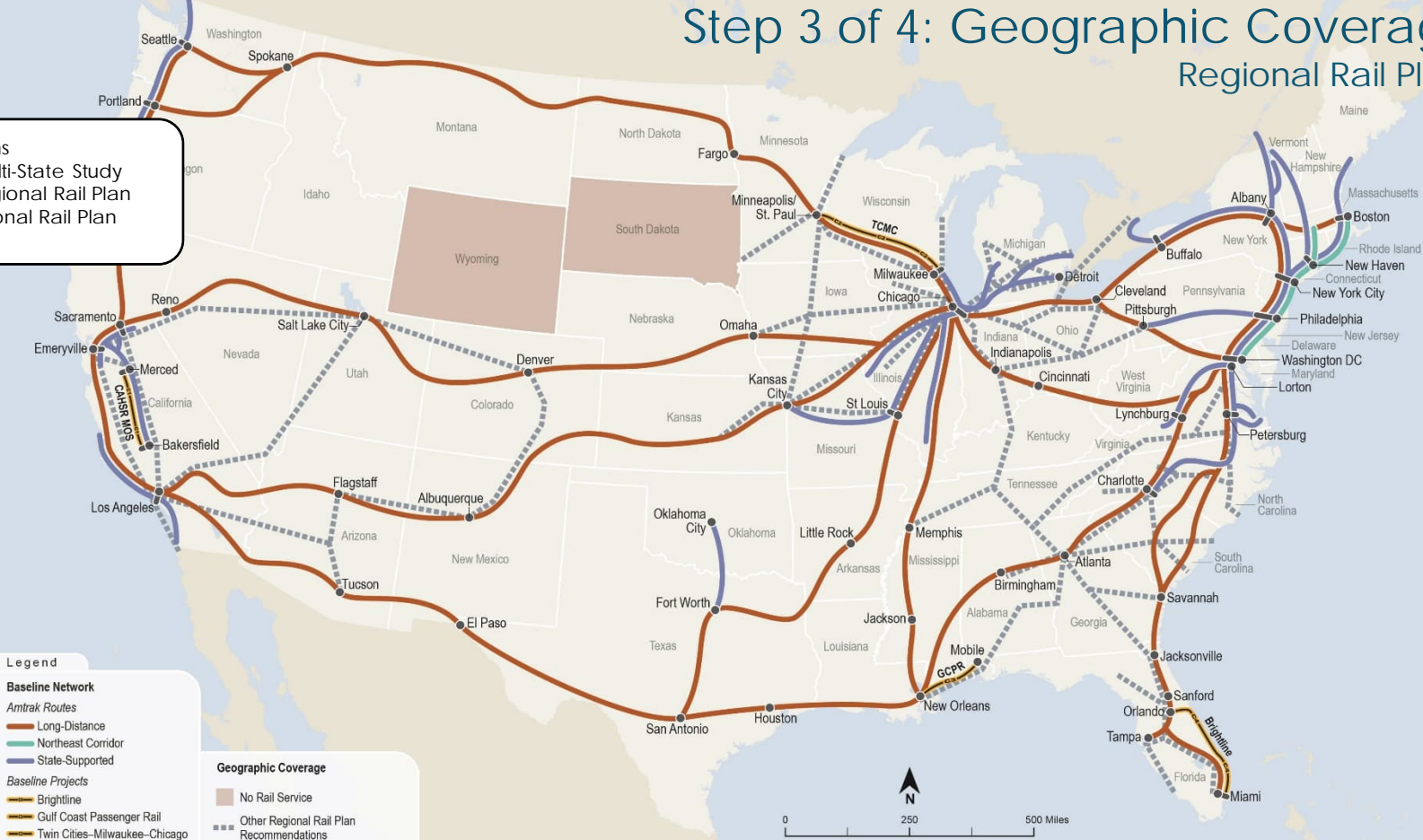
Existing Route and Station Data provided by Amtrak 2022; Baseline Projects Data provided by FRA 2023

# Long-Distance Service Study & Regional Rail Plans



# Step 3 of 4: Geographic Coverage Regional Rail Plans

- Regional Rail Plans**
- Southwest Multi-State Study
  - Southeast Regional Rail Plan
  - Midwest Regional Rail Plan
  - NEC FUTURE



**Legend**

**Baseline Network**

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

**Baseline Projects**

- Brightline
- Gulf Coast Passenger Rail
- Twin Cities-Milwaukee-Chicago
- CAHSR MOS

**Geographic Coverage**

- No Rail Service
- Other Regional Rail Plan Recommendations



# Step 3 of 4: Geographic Coverage

## Developing a Conceptual Enhanced Network



**Legend**

**Baseline Network**

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

**Baseline Projects**

- Brightline
- Gulf Coast Passenger Rail
- Twin Cities-Milwaukee-Chicago
- CAHSR MOS

**Geographic Coverage**

- No Rail Service
- Other Regional Rail Plan Recommendations

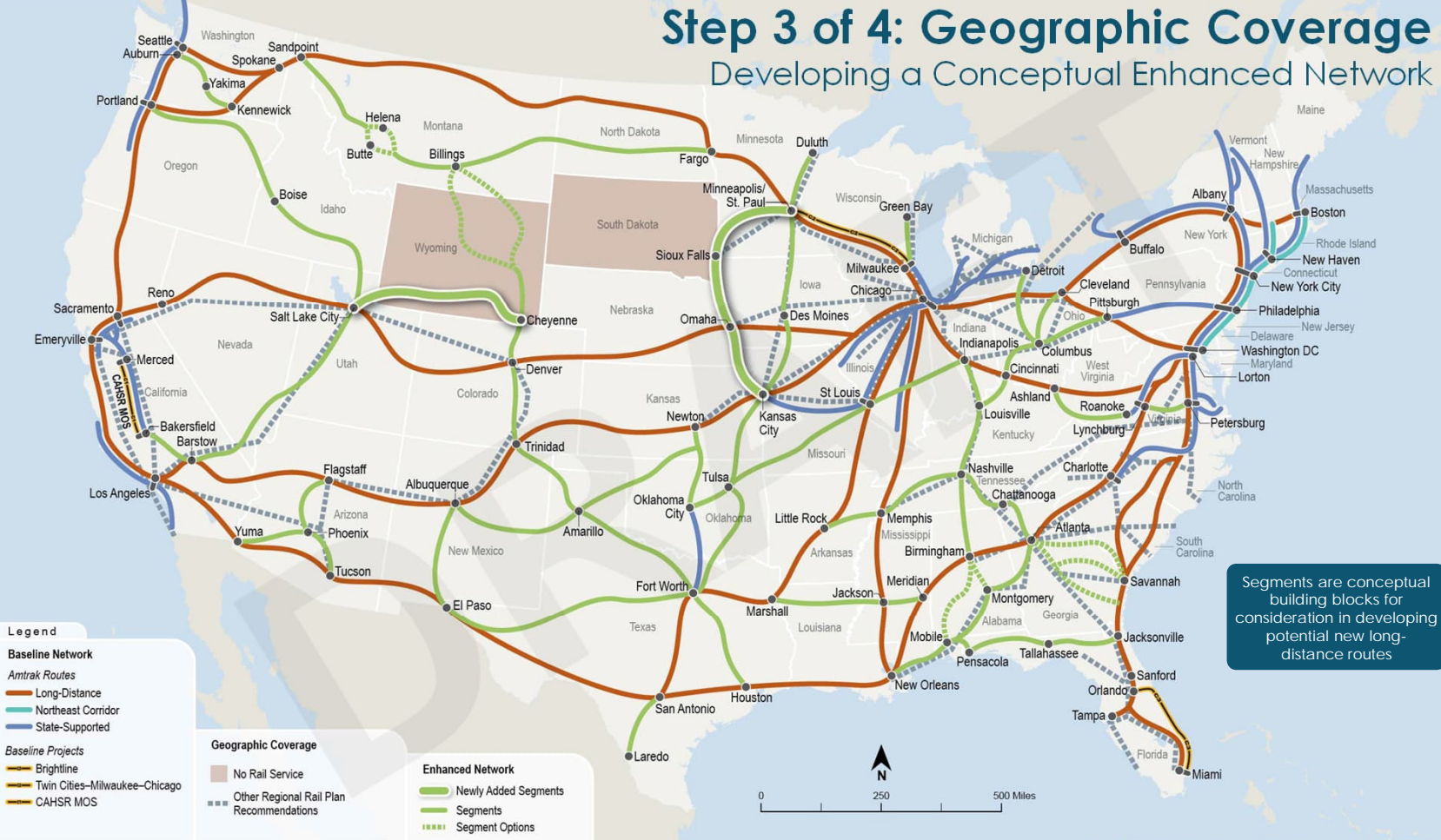
**Enhanced Network**

- Segments
- Segment Options

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

# Step 3 of 4: Geographic Coverage

## Developing a Conceptual Enhanced Network





# Step 3 of 4: Geographic Coverage

## Developing a Conceptual Enhanced Network



### Legend

#### Baseline Network

Amtrak Routes

— Long-Distance

— Northeast Corridor

— State-Supported

#### Baseline Projects

— Brightline

— Gulf Coast Passenger Rail

— Twin Cities-Milwaukee-Chicago

— CAHSR MOS

#### Enhanced Network

— Segments

— Segment Options

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



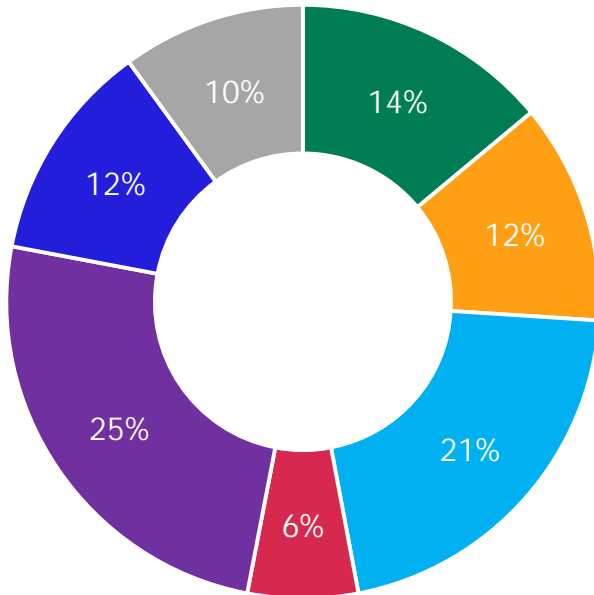
Existing Route and Station Data provided by Amtrak 2022; Baseline Projects Data provided by FRA 2023



# STEP 4 – STAKEHOLDER INPUT

# February-March Stakeholder Input on Places to Serve

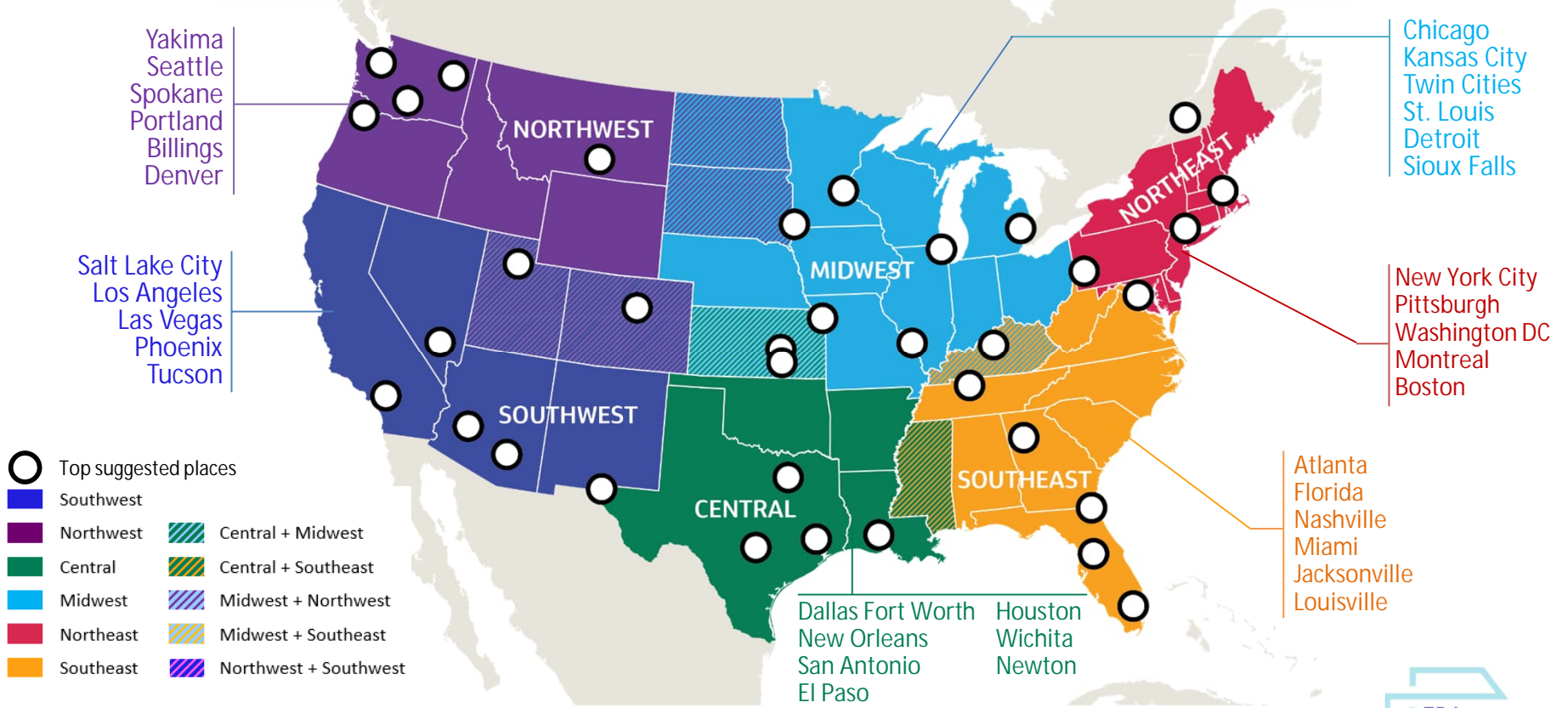
- Central
- Southeast
- Midwest
- Northeast
- Northwest
- Southwest
- Multi-region



A total of 2,154 references to places were provided.



# Top Places Suggested by Stakeholders



# Top Places Suggested by Stakeholders

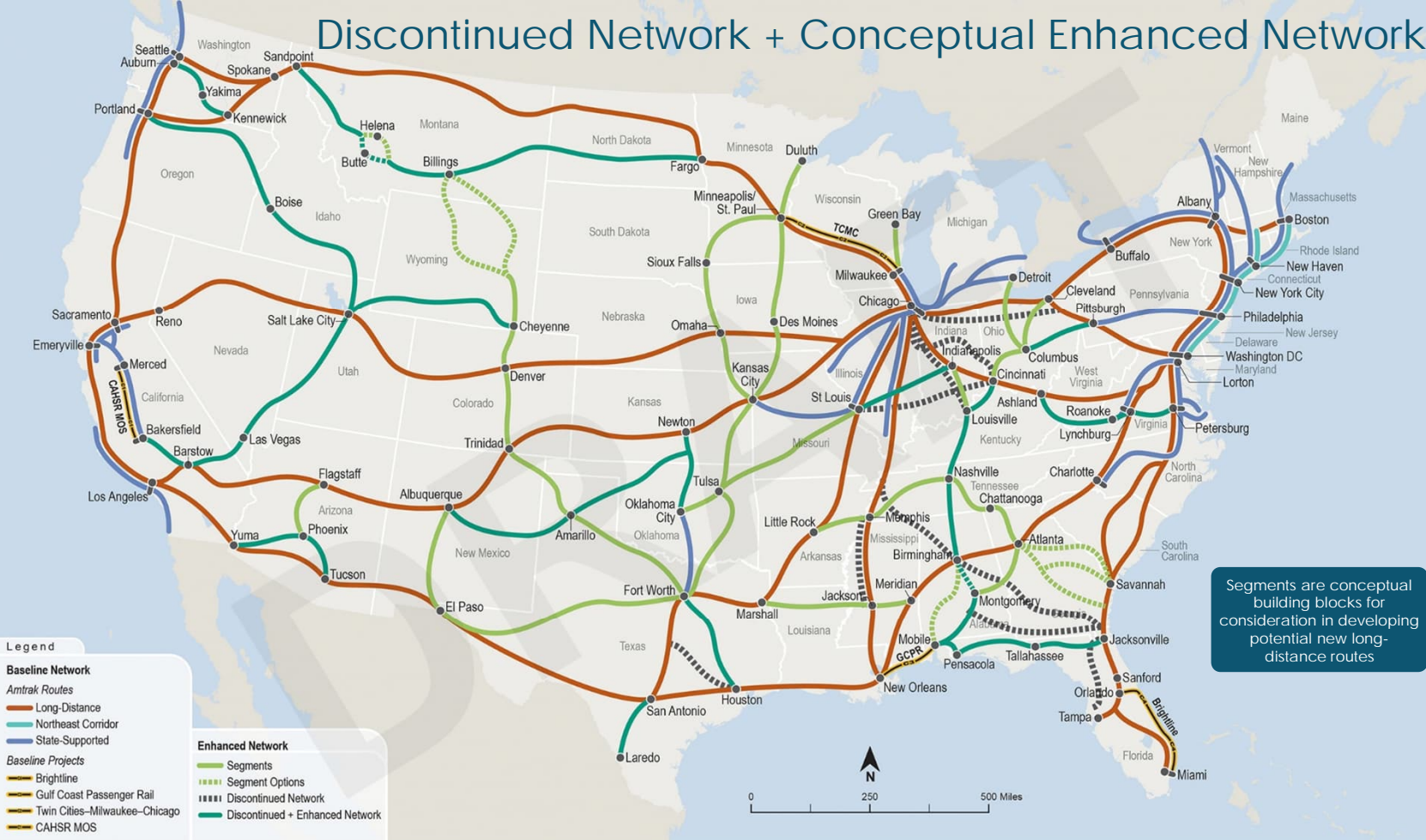




# CONSIDERATION: DISCONTINUED NETWORK



# Discontinued Network + Conceptual Enhanced Network



Existing Route and Station Data provided by Amtrak 2022; Baseline Projects Data provided by FRA 2023

# ENHANCED NETWORK

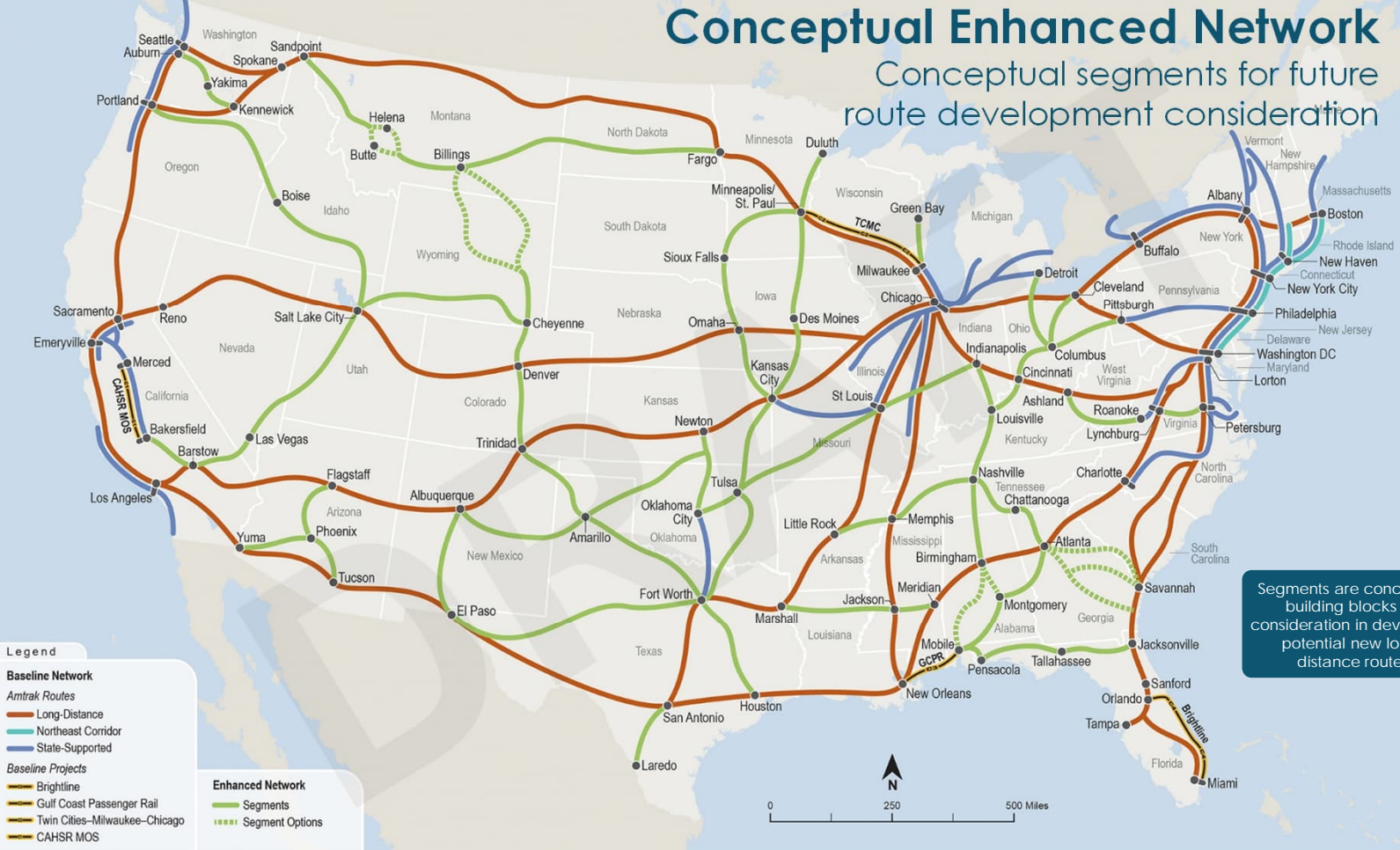
# Defining an Enhanced Network

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- The Enhanced Network includes all segments and segment options
- The Enhanced Network represents a wide range of possibilities for further consideration in developing route and service options
- Segments in the Enhanced Network are conceptual building blocks for consideration in developing potential new long-distance routes over 750 miles long
- New segments in the Enhanced Network do not constitute a replacement of state-supported efforts, such as those eligible under Corridor ID
- Potential new long-distance routes will serve some markets only at night due to the length of the route

# Conceptual Enhanced Network

## Conceptual segments for future route development consideration



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

Existing Route and Station Data provided by Amtrak 2022; Baseline Projects Data provided by FRA 2023



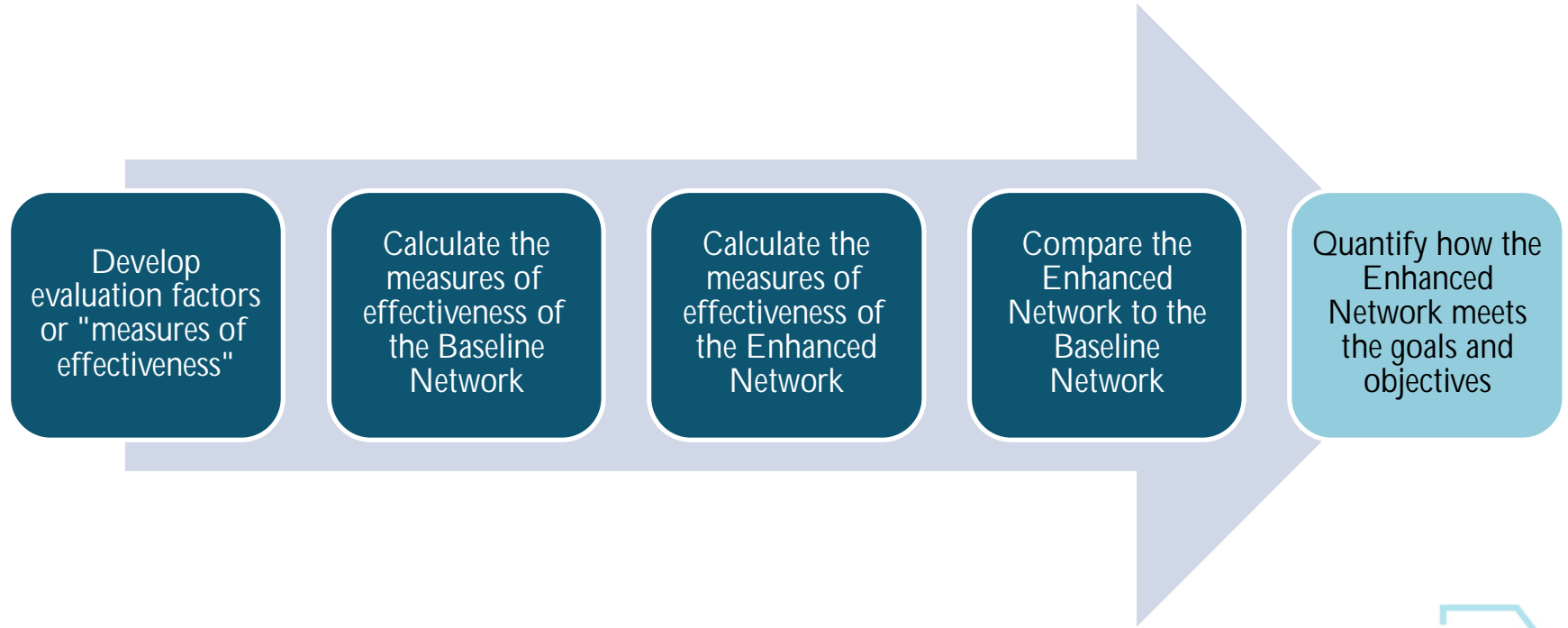
# ENHANCED NETWORK DISCUSSION



# COMPARISON OF ENHANCED AND BASELINE NETWORKS

# Analyze the Enhanced Network

## Compare the Enhanced Network to the Baseline Network



# Evaluation Factor Ideas and Feedback

Regional Workshop participants identified factors that could be used to evaluate long-distance routes. These include:

Number of connections a route would provide to enhance the national long-distance and intercity networks

Number of connections to large and small communities

Number of areas with higher-than-average disadvantaged populations

Number of city pairs with highest ridership potential

Schedule frequency and convenience

Connections to airports and multimodal opportunities

Number of connections to key destinations

Economic benefits to communities along a route

# Measures of Effectiveness

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- Feedback on the evaluation factors from previous Regional Workshop participants informed the development of goals and objectives
- Goals and Objectives:
  - Connectivity
    - ✓ Increase Passenger Access to the National Passenger Rail Network
    - ✓ Improve passenger rail geographic coverage
  - Large and Small Communities
    - ✓ Increase long-distance passenger rail connections to small communities
  - Economic and Social Well-Being of Rural Areas
    - ✓ Enhance access for historically disadvantaged populations
    - ✓ Enhance access for tribal areas
    - ✓ Enhance rural access to services
- The Project Team developed measures of effectiveness for the goals and objectives to evaluate the Enhanced Network

# Measures of Effectiveness

---

## Population with access to passenger rail

- 100 most populated Metropolitan Statistical Areas (MSAs)
- Rural areas

## Number of States with access to passenger rail

## Number of Congressional districts with access to passenger rail

## Rural population with access to passenger rail

- Transportation and health disadvantaged
- Below the poverty threshold
- Areas of persistent poverty

## Population on tribal lands with access to passenger rail

- Below the poverty threshold

## Number of services connected to passenger rail

- Public/private higher education institutions
- Medical centers
- National parks



# Places Served by the Baseline Network or Enhanced Network

## Baseline Network

- Catchment area around existing stations

## New Segment consistent with the Discontinued Network

- Catchment area around discontinued stations

## New Segment where long-distance passenger rail service has not operated

- Catchment area buffer around new segments

Catchment Area: To support network-level analysis, catchment areas are defined as a 30-mile radius where the station or new segment is in an MSA, or a 50-mile radius where the station or new segment is in a non-MSA area.

# GOAL: CONNECTIVITY

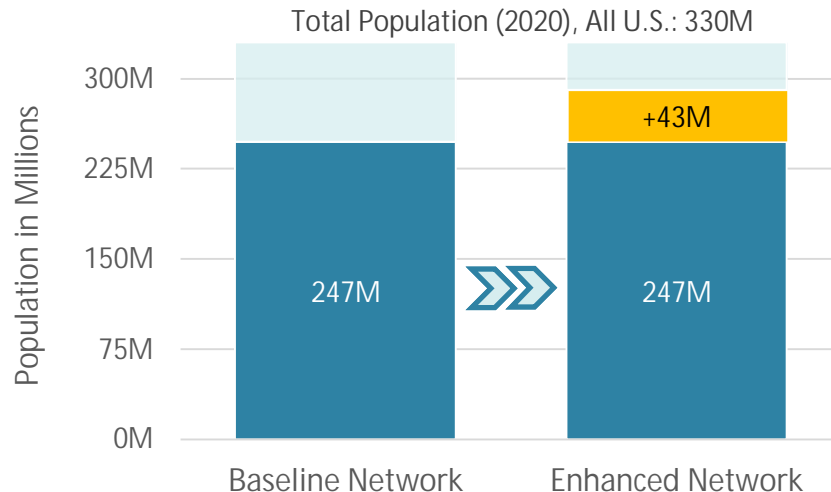
INCREASE PASSENGER ACCESS TO THE  
NATIONAL PASSENGER RAIL NETWORK

IMPROVE PASSENGER RAIL GEOGRAPHIC  
COVERAGE

# Goal: Connectivity

Objective: Increase Passenger Access to the National Passenger Rail Network

- Scope: Total U.S. Population
- 43 million more people could have access to passenger rail services
- a 17% increase

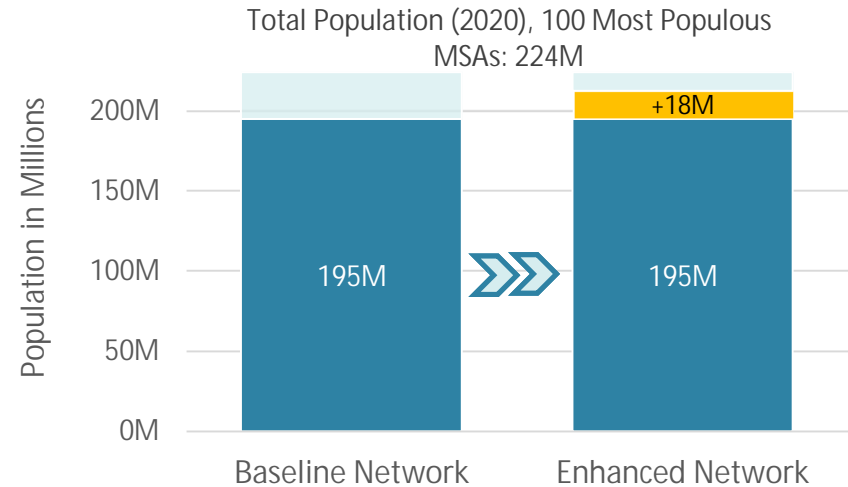


Population of census tracts served by the Baseline Network or Enhanced Network  
Source: U.S. Census Bureau. 2020 Decennial Census (census tracts)

# Goal: Connectivity

Objective: Increase Passenger Access to the National Passenger Rail Network

- Scope: Population of the 100 Most Populous MSAs
- 18 million more people could have access to passenger rail services
- a 9% increase



Population of census tracts served by the Baseline Network or Enhanced Network  
Source: U.S. Census Bureau. 2020 Decennial Census (census tracts and MSAs)

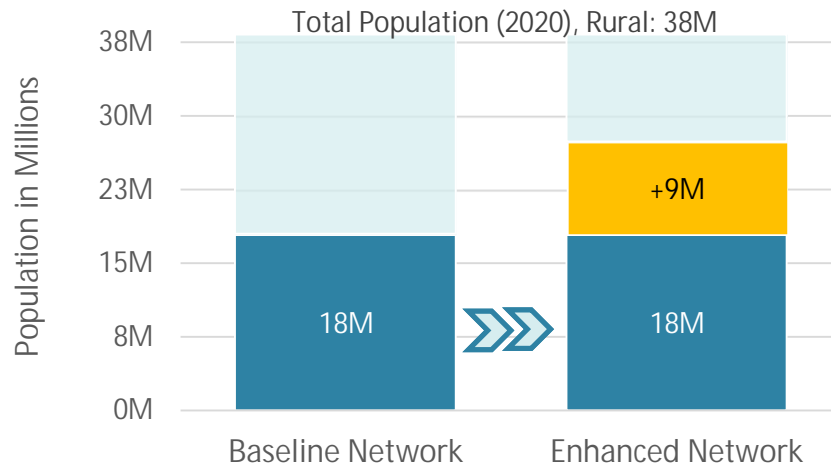
MSA: Metropolitan Statistical Areas – population greater than 50,000

# Goal: Connectivity

Objective: Increase Passenger Access to the National Passenger Rail Network

- Scope: U.S Population Outside Urbanized Areas (i.e., Rural)
- 9 million more people could have access to passenger rail services
- a 52% increase

Rural: population outside of urbanized areas, located within neither Metropolitan Statistical Areas (MSAs) nor Micropolitan Statistical Areas (MMSAs)



Population of census tracts served by the Baseline Network or Enhanced Network  
Source: U.S. Census Bureau. 2020 Decennial Census (census tracts and Urbanized Area boundaries)



# Goal: Connectivity

Objective: Improve passenger rail geographic coverage

- 2 additional states  
→ 48 states, as well the District of Columbia, could have access to passenger rail services
- 81 additional congressional districts  
→ 332 congressional districts could have access to passenger rail services



46

States

+2

New States

= 48

will have access to passenger rail



251

Congressional Districts

+81

Additional Districts (32%)

= 332

will have access to passenger rail

Baseline Network  Enhanced Network

States boundaries and congressional districts containing a segment in the Enhanced or Baseline Network; values do not include District of Columbia counted separately  
Source: U.S. Census Bureau. State and congressional district boundary shapefiles (2022)

# GOAL: LARGE AND SMALL COMMUNITIES

INCREASE LONG-DISTANCE PASSENGER RAIL  
CONNECTIONS TO SMALL COMMUNITIES

## Goal: Large and Small Communities

---

- Objective: Increase long-distance passenger rail connections to small communities
- Additional stations in the Enhanced Network could increase the connections to small communities and increase the connectivity between long-distance and state-supported services
- Stations will be identified as potential new long-distance routes using the Enhanced Network are developed later in the study



# GOAL: ECONOMIC AND SOCIAL WELL-BEING OF RURAL AREAS

ENHANCE ACCESS FOR HISTORICALLY DISADVANTAGED  
POPULATIONS

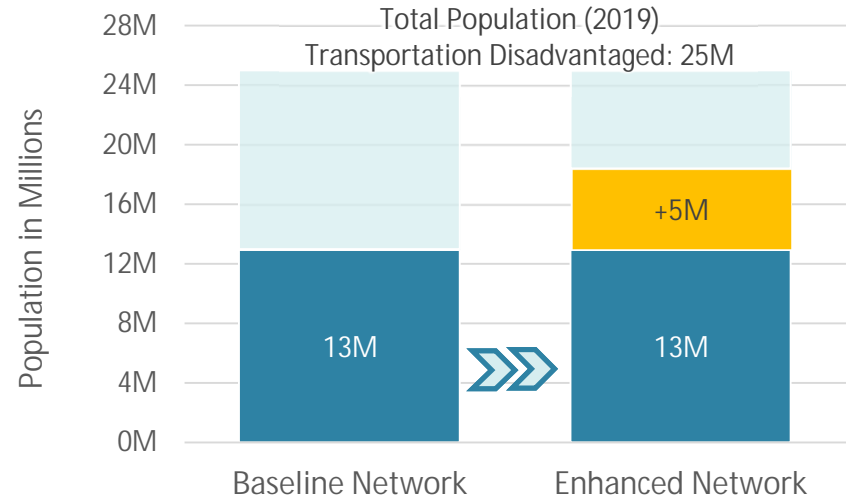
ENHANCE ACCESS FOR TRIBAL AREAS

ENHANCE RURAL ACCESS TO SERVICES

# Goal: Economic and Social Well-Being of Rural Areas

Objective: Enhance access for historically disadvantaged populations

- Scope: Population in rural *Transportation Disadvantaged* Areas (Justice 40)
- 5 million more people could have access to passenger rail services
- a 42% increase

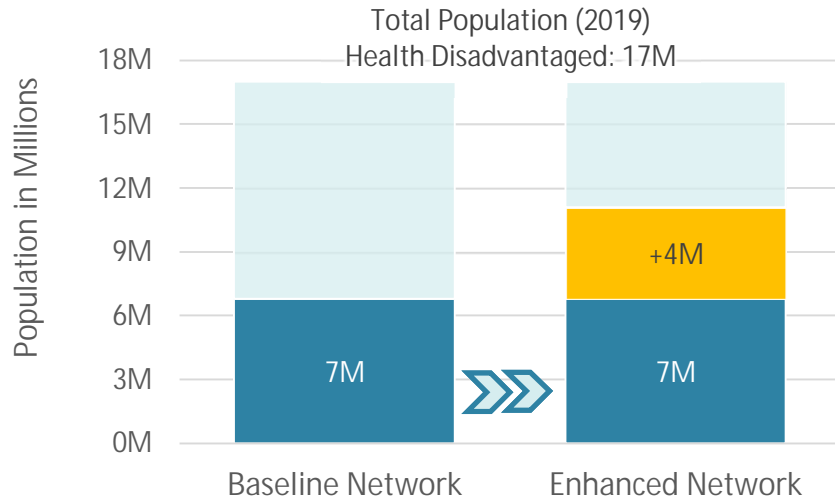


Population of census tracts outside urbanized areas served by the Baseline or Enhanced Network that are defined as Transportation Disadvantaged based on the U.S. DOT Justice 40 Initiative: ACS Data (2015-2019 5-year estimates, 2010 Census Tract Shapefiles).

Source: U.S. Census Bureau. 2020 Decennial Census, U.S. Census Bureau. 2020 Urbanized Areas boundaries, U.S. Census Bureau. ACS 2015-2019 5-year estimates (using 2010 census tract boundaries)



# Goal: Economic and Social Well-Being of Rural Areas



Objective: Enhance access for historically disadvantaged populations

- Scope: Population in rural *Health Disadvantaged* Areas (Justice 40)
- 4 million more people could have access to passenger rail services
- a 63% increase

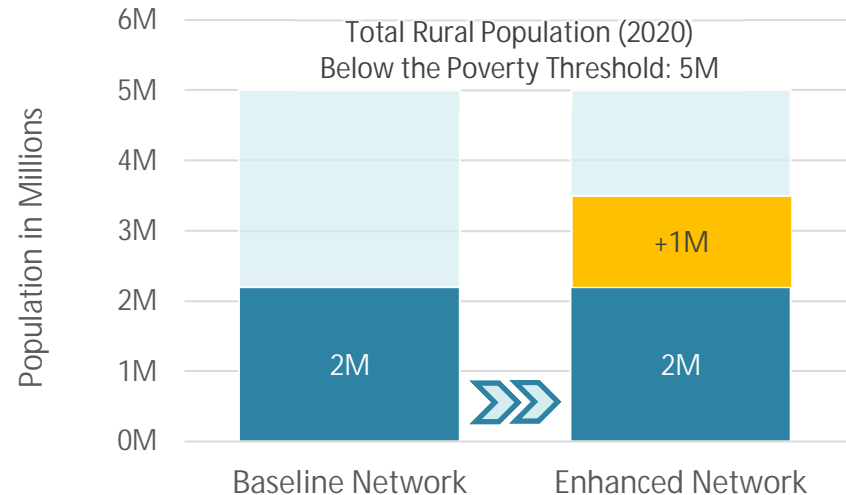
Population of census tracts outside urbanized areas served by the Baseline or Enhanced Network that are defined as Health Disadvantaged based on the U.S. DOT Justice 40 Initiative: ACS Data (2015-2019 5-year estimates, 2010 Census Tract Shapefiles).

Source: U.S. Census Bureau. 2020 Decennial Census, U.S. Census Bureau. 2020 Urbanized Areas boundaries, U.S. Census Bureau. ACS 2015-2019 5-year estimates (using 2010 census tract boundaries)

# Goal: Economic and Social Well-Being of Rural Areas

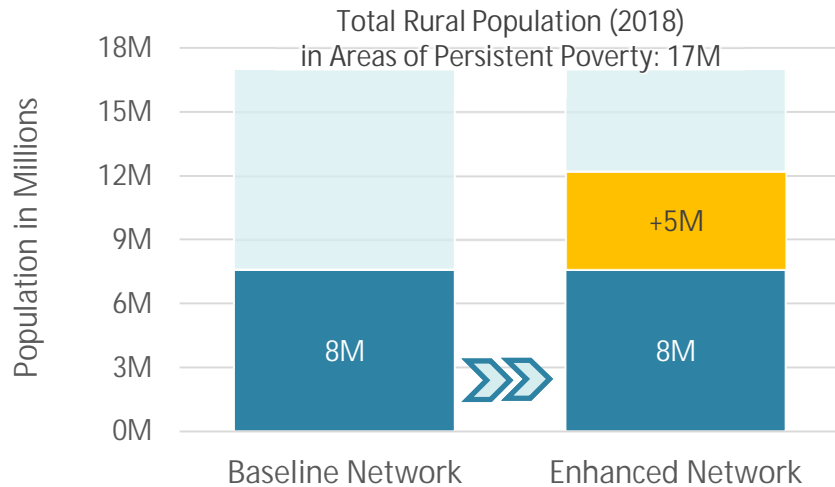
Objective: Enhance access for historically disadvantaged populations

- Scope: Rural Population Living Below the Poverty Threshold (2020)
- 1 million more people could have access to passenger rail services
- a 59% increase



Population of census tracts living below the poverty threshold outside of urbanized areas served by the Baseline Network or Enhanced Network  
Source: U.S. Census Bureau. 2020 Decennial Census, U.S. Census Bureau. 2020 Urbanized Areas boundaries, U.S. Census Bureau  
Rural: population outside of urbanized areas

# Goal: Economic and Social Well-Being of Rural Areas



Objective: Enhance access for historically disadvantaged populations

- Scope: Rural Population in Areas of Persistent Poverty (2018) – these are areas with high rates over poverty sustained over time
- 5 million more people could have access to passenger rail services
- a 61% increase

Population of census tracts in areas of persistent poverty and outside of urbanized areas served by the Baseline Network or Enhanced Network

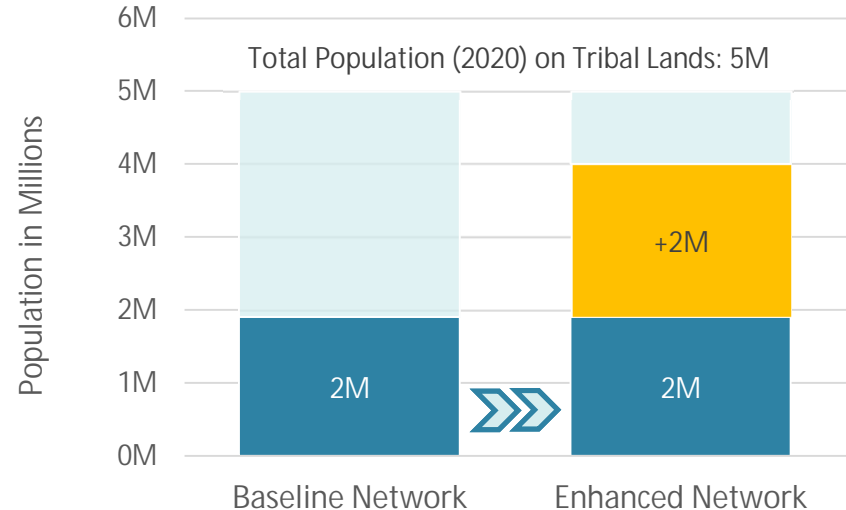
Source: U.S. Census Bureau. Census Tract with a poverty rate of at least 20 percent as measured by the 2014–2018 5-year data series available from the American Community Survey of the Bureau of the Census. 2020 Urbanized Areas boundaries were used to identify rural areas, U.S. Census Bureau (using 2010 census tract boundaries)

Rural: population outside of urbanized areas

# Goal: Economic and Social Well-Being of Rural Areas

Objective: Enhance access for tribal areas

- Scope: Population on U.S. Tribal Lands
- 2 million more people could have access to passenger rail services
- a 111% increase

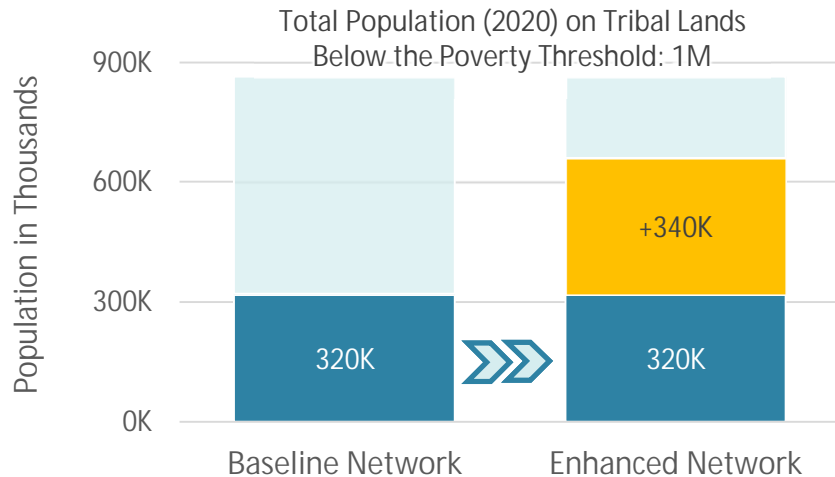


Population in census tracts covered by American Indian Tribal area boundaries served by the Baseline Network or Enhanced Network

Source: U.S. Census Bureau. 2020 Decennial Census (census tracts), U.S. Census Bureau. American Indian/Native Alaskan/Native Hawaiian Areas boundaries

Tribal lands include American Indian and Alaska Native Land, American Indian Tribal Subdivisions, Bureau of Indian Affairs Regional Boundaries, Oklahoma Tribal Statistical Areas

# Goal: Economic and Social Well-Being of Rural Areas



## Objective: Enhance access for tribal areas

- Scope: U.S. Population on Tribal Lands Living Below the Poverty Threshold
- 340 thousand more people could have access to passenger rail services
- a 106% increase

Population below the poverty threshold in census tracts covered by American Indian Tribal area boundaries served by the Baseline Network or Enhanced  
Source: U.S. Census Bureau. 2020 Decennial Census (census tracts), U.S. Census Bureau. American Indian/Native Alaskan/Native Hawaiian Areas boundaries

Tribal lands include American Indian and Alaska Native Land, American Indian Tribal Subdivisions, Bureau of Indian Affairs Regional Boundaries, Oklahoma Tribal Statistical Areas



# Goal: Economic and Social Well-Being of Rural Areas

Objective: Enhance rural access to services

- 600 additional institutions  
→ 3,300 public and private not-for-profit higher education institutions could have access to passenger rail services
- a 22% increase
- 2 million more students  
→ a total enrollment of 16 million could have access to passenger rail services
- a 16% increase



2,700

Public/Private  
Higher  
Education

+600

Additional  
Institutions  
(22%)

= 3,300

will have access  
to passenger rail



14  
million

Current  
Enrollment

+2  
million

More Students,  
Higher  
Education  
(16%)

= 16  
million

will have access  
to passenger rail

Baseline Network  Enhanced Network

Count of public and private not-for-profit institutions and sum of total enrollment of institutions in census tracts served by the Baseline Network or Enhanced Network

Source: U.S. Census Bureau. 2020 census tract boundaries, U.S. Dept. of Homeland Security 2019 (Locations and Enrollment), Homeland Infrastructure Foundation-Level Data Geoplatform (HIFLD)

# Goal: Economic and Social Well-Being of Rural Areas

Objective: Enhance rural access to services

- 73 more Medical Centers  
→ 576 medical centers could have access to passenger rail services
- a 15% increase
- 11 more National Parks  
→ 73 National Parks, Recreation Areas, and Preserves could have access to passenger rail services
- an 18% increase



503

Medical Centers

+73

Additional Medical Centers (15%)

= 580

will have access to passenger rail



62

National Parks, Recreation Areas, and Preserves

+11

Additional Parks (18%)

= 73

will have access to passenger rail

Baseline Network  Enhanced Network

Count of medical facilities (only Level I or II trauma centers, facilities with "Cancer" and/or "Veteran" in the name) census tracts served by the Baseline Network or Enhanced Network; Count of national parks (Parks, Recreation Areas, and Preserves) served by the Baseline Network or Enhanced Network (within 100-miles)  
Source: U.S. Census Bureau. 2020 census tract boundaries, U.S. Dept. of Homeland Security 2023 (Locations), Homeland Infrastructure Foundation-Level Data Geoplatform (HIFLD), National Parks Service data created by Land Resources Division 2023

Medical Centers include VA Hospitals, Level I & II Trauma Centers, and Cancer Centers

# LUNCH

# ROUTE DEVELOPMENT AND FEEDBACK ACTIVITY

## Interactive Activity: Creating Potential New Long-Distance Routes

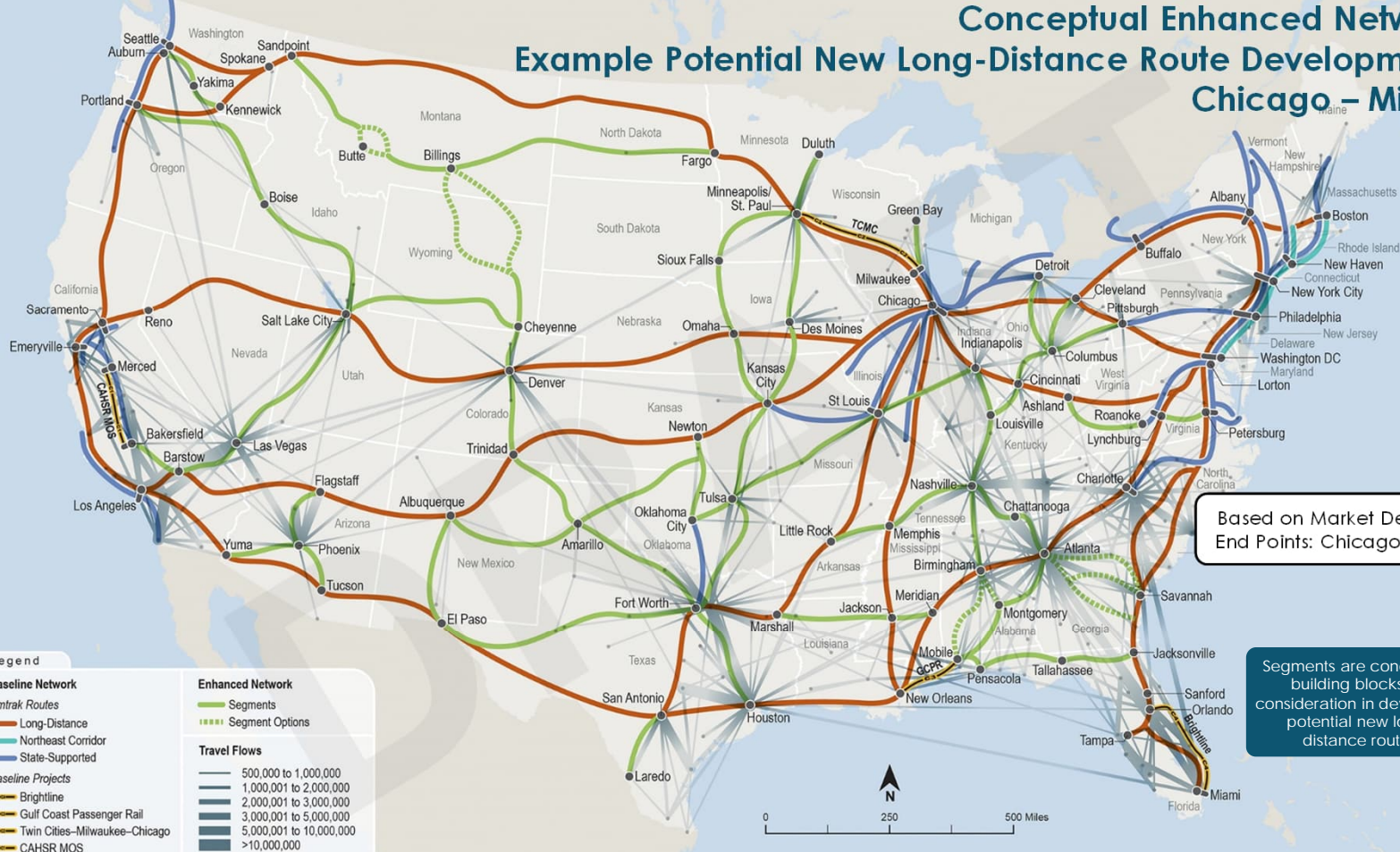
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- Activity: Create a new long-distance route using the Enhanced Network
- Instructions for developing potential new long-distance routes:
  - Routes begin and end in major market
  - Routes string together multiple markets
  - Routes generally go in one direction (i.e., avoid loops)
  - Routes are more than 750 miles



# Conceptual Enhanced Network

## Example Potential New Long-Distance Route Development: Chicago – Miami



Based on Market Demand  
End Points: Chicago-Miami

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

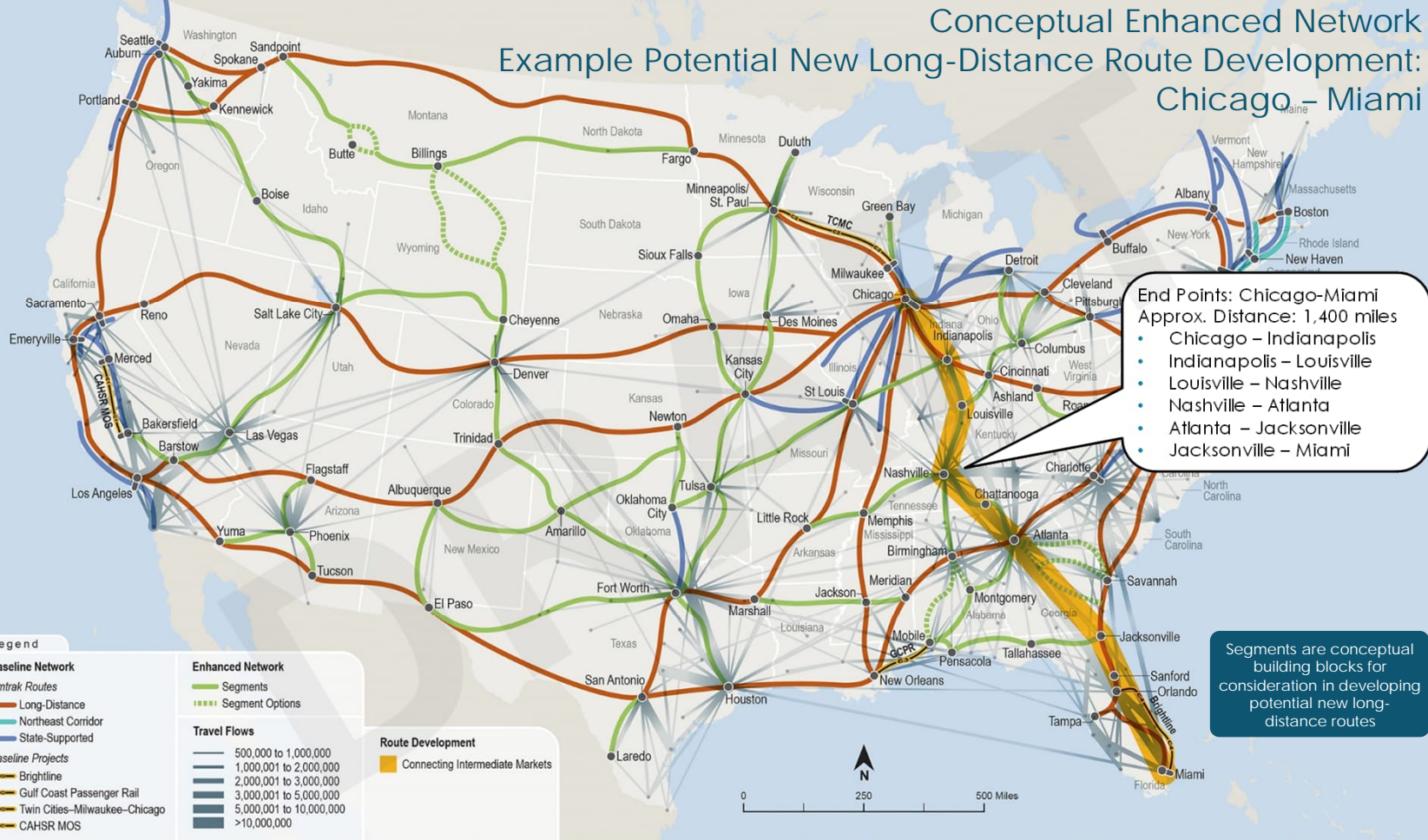
**Legend**

<b>Baseline Network</b>	<b>Enhanced Network</b>
Amtrak Routes	Segments
Long-Distance	Segment Options
Northeast Corridor	
State-Supported	
<b>Baseline Projects</b>	<b>Travel Flows</b>
Brightline	500,000 to 1,000,000
Gulf Coast Passenger Rail	1,000,001 to 2,000,000
Twin Cities-Milwaukee-Chicago	2,000,001 to 3,000,000
CAHSR MOS	3,000,001 to 5,000,000
	5,000,001 to 10,000,000
	>10,000,000



# Conceptual Enhanced Network

## Example Potential New Long-Distance Route Development: Chicago – Miami

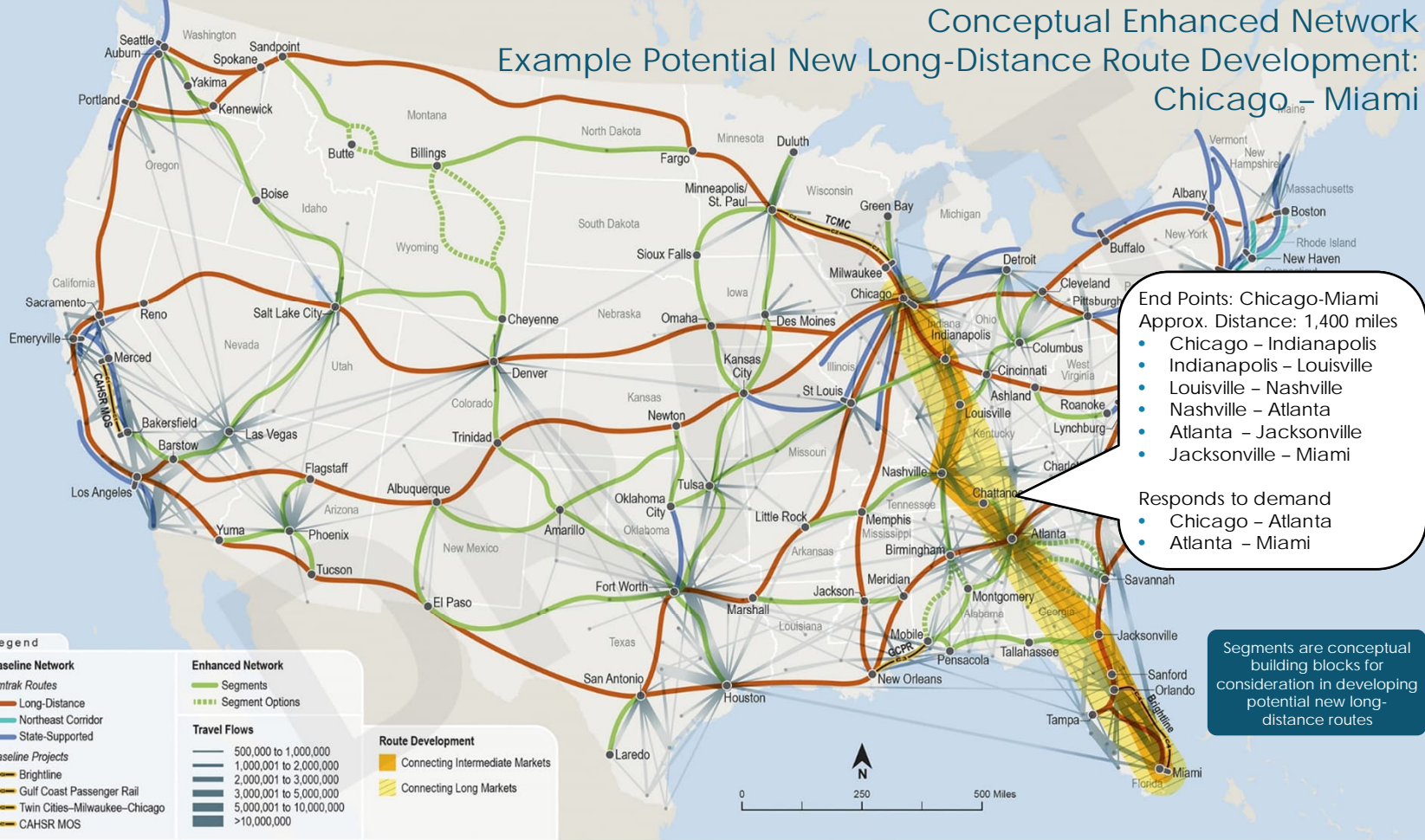


Amtrak 2022; FRA 2023; Travel Demand Data provided by Federal Highway Administration (FHWA) NextGen 2020 data



# Conceptual Enhanced Network

## Example Potential New Long-Distance Route Development: Chicago – Miami



# Conceptual Enhanced Network

## Example Potential New Long-Distance Route Development: Chicago – Miami



### Legend

#### Baseline Network

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

- #### Baseline Projects
- Brightline
  - Gulf Coast Passenger Rail
  - Twin Cities-Milwaukee-Chicago
  - CAHSR MOS

#### Enhanced Network

- Segments
- Segment Options

#### Travel Flows

- 500,000 to 1,000,000
- 1,000,001 to 2,000,000
- 2,000,001 to 3,000,000
- 3,000,001 to 5,000,000
- 5,000,001 to 10,000,000
- >10,000,000

#### Route Development

- Connecting Intermediate Markets
- Connecting Long Markets
- New Route





# STAKEHOLDER INSIGHTS FOR ONGOING FEEDBACK OPPORTUNITIES



# Infrastructure Investment and Jobs Act Direction

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

# Future Feedback Opportunities

- In moving the study forward, how can FRA and Amtrak best coordinate with stakeholders about long-distance service?

Potential Area of Focus	Questions
Current Long-Distance Service	<ul style="list-style-type: none"><li>• What types of stakeholder input are most essential?</li><li>• What groups should be involved?</li></ul>
Future Long-Distance Service	<ul style="list-style-type: none"><li>• What types of stakeholder input are most essential?</li><li>• What groups should be involved?</li></ul>

# Examples of Current Structured Stakeholder Involvement Opportunities

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- **State-Amtrak Intercity Passenger Rail Committee (SAIPRC)**
  - Directed by Congress to facilitate collaboration among members and oversee implementation of a standard cost-sharing methodology for State-Supported Intercity Passenger Rail Services
  - Multi-agency body; members include 20 agencies in 17 states, Amtrak, and FRA
- **Northeast Corridor (NEC) Commission**
  - Authorized by Congress, charged with developing a formula to allocate NEC capital and operating costs, make recommendations to Congress, and facilitate collaborative planning
  - 18 members, including representatives of each of the eight NEC states, the District of Columbia, Amtrak, and the U.S. DOT

## Future Feedback Opportunities

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Are there other examples of organizational or coordinating groups that have worked well for efforts like these?

# NEXT STEPS



## Next Steps

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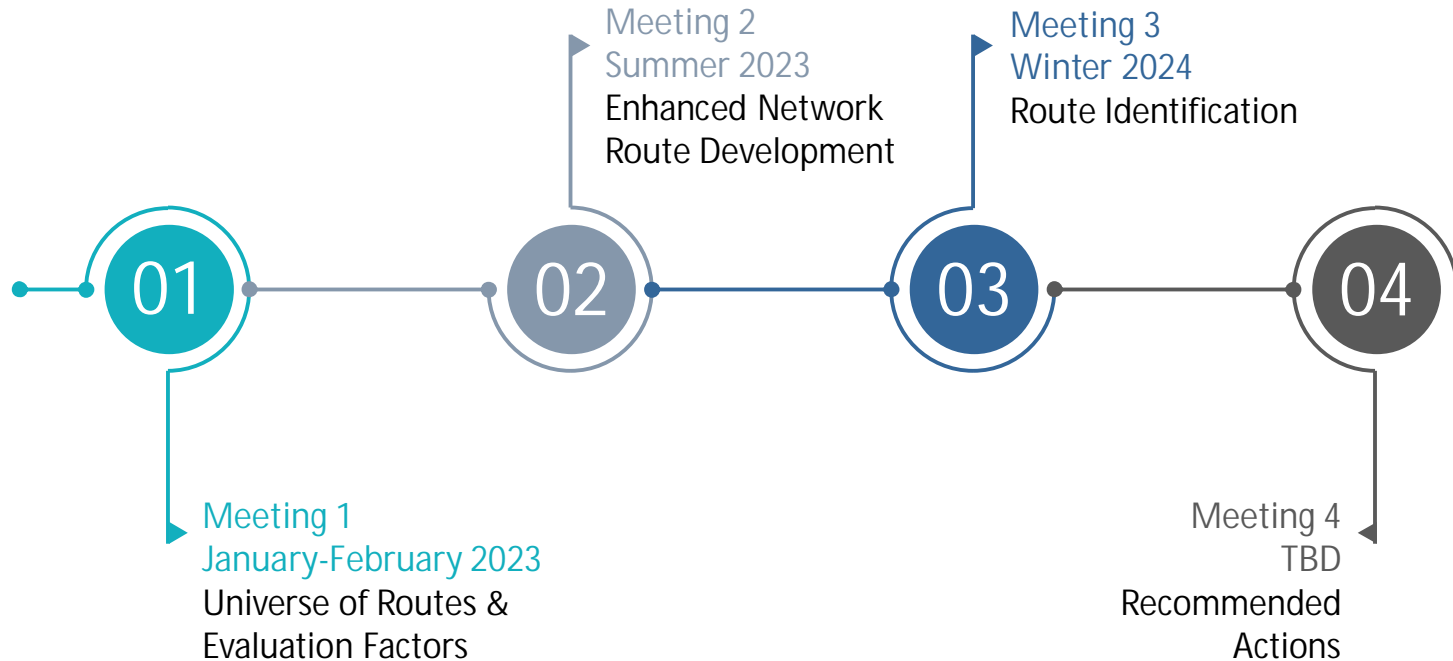
- Based on feedback received from this meeting and the other regions:
  - Confirm enhanced network based on stakeholder feedback
  - Route development
- For future meetings:
  - Review costs, benefits and financing information
  - Review draft recommendations and implementation strategies
  - Review prioritized routes
- Post all meeting materials on the project website

## Next Steps for Stakeholders

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- Encourage your communities and constituencies to review the meeting materials on the website
  - All presentations and summaries will be posted online after the completion of the meeting series
- Submit any feedback on the topics and materials from this meeting via the project website by August 21 for inclusion in our analysis and report
  - Due to the breadth of the study, it may not be possible to respond to all feedback, but all feedback will be reviewed by the team and captured in our report

# Long-Distance Service Study Engagement Schedule



# Stay Informed

FRA Long-Distance Service Study

Website: [www.fralongdistancerailstudy.org](http://www.fralongdistancerailstudy.org)

Email: [contactus@fralongdistancerailstudy.org](mailto:contactus@fralongdistancerailstudy.org)

