



Northeast Regional Working Group Meeting

February 3, 2023

Agenda – Northeast Regional Working Group Meeting

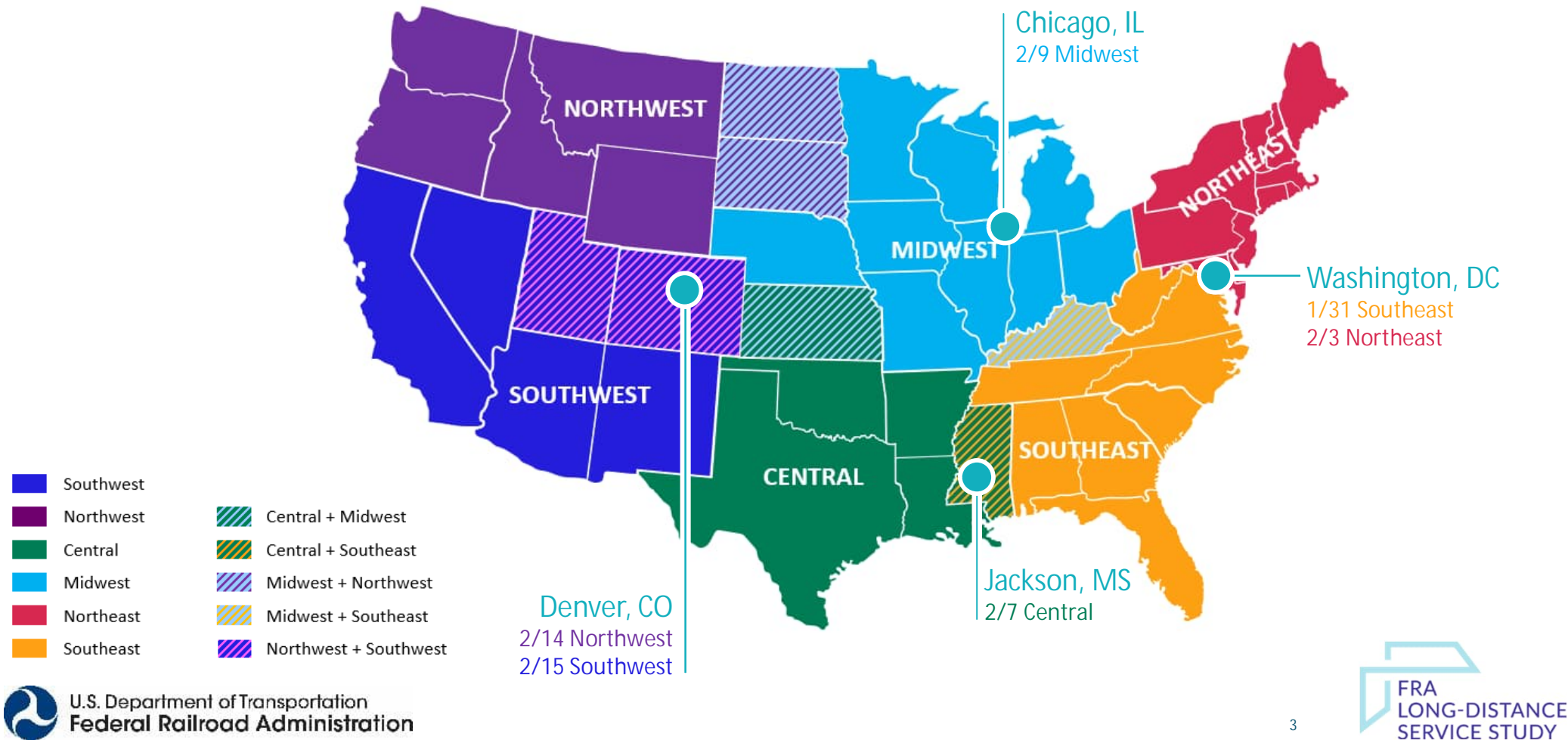
- Welcome & Introductions
- Long-Distance Service 101 and Study Overview
- Current Long-Distance Network and Routes
- Pre-1971 and Discontinued Routes
- Baseline and Market Conditions
- Potential New Market Connections and Opportunities
- Evaluation Factors Review and Discussion
- Amtrak and Communities Working Together
- Closing and Next Steps

This document contains materials specific to the Northeast Region for the following agenda items:

- Current Long-Distance Network and Routes
- Baseline and Market Conditions

Additional materials about the FRA Long-Distance Service Study presented at each Regional Working Group Meeting are available on the project website:
<https://fralongdistancerailstudy.org/meeting-materials/>

Long-Distance Service Study: Working Group Meeting 1 (Northeast)

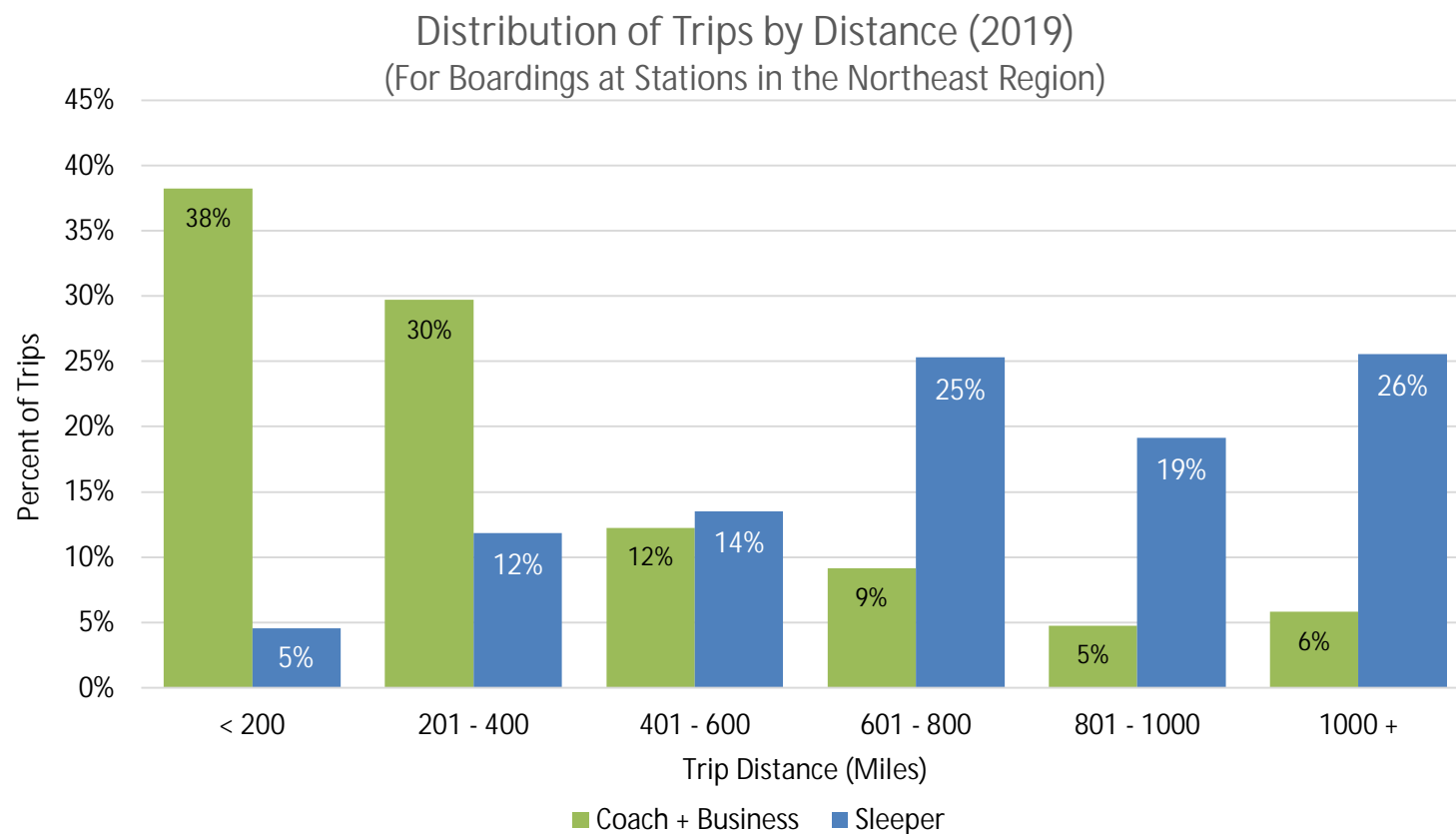


CURRENT LONG- DISTANCE NETWORK & ROUTES – NORTHEAST

Northeast Long-Distance Service and Performance

Average Trip Length: Northeast Region

- Distribution of trips by trip distance for Long-Distance routes at stations in the Northeast Region
- 68% of Coach and Business Class trips are less than 400 miles, compared to 61% for Long-Distance overall
- Only 26% of Sleeper Class trips are greater than 1,000 miles, compared to 41% for Long-Distance overall



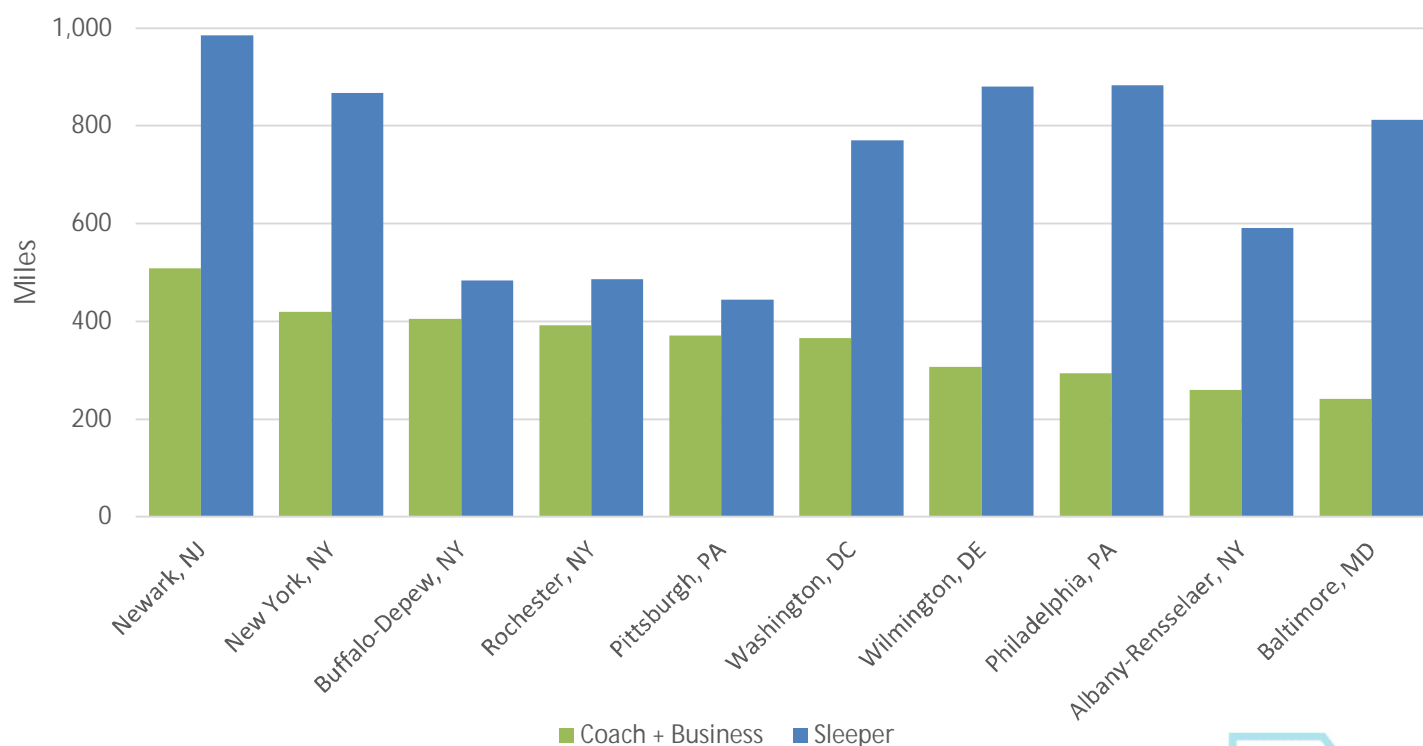
Source: Amtrak, Fiscal Year 2019. Data on trips by route, service class, and trip distance.
Note: One Long-Distance route in the Northeast Region, the *Palmetto*, includes Business Class in addition to Coach Class.

Northeast Long-Distance Service and Performance

Trip Length by Service Class

- Average trip length by service class for riders on Long-Distance routes boarding at stations in the Northeast Region
- Newark, NJ, and New York, NY, served by the *Cardinal*, *Crescent*, *Lake Shore Limited*, *Palmetto*, *Silver Meteor*, and *Silver Star*, have the longest trips by distance on average
- Trips at stations not on the Northeast Corridor tend to be shorter

Top 10 Stations in the Northeast Region by Total Boardings (2019)
Average Trip Distance by Service Class



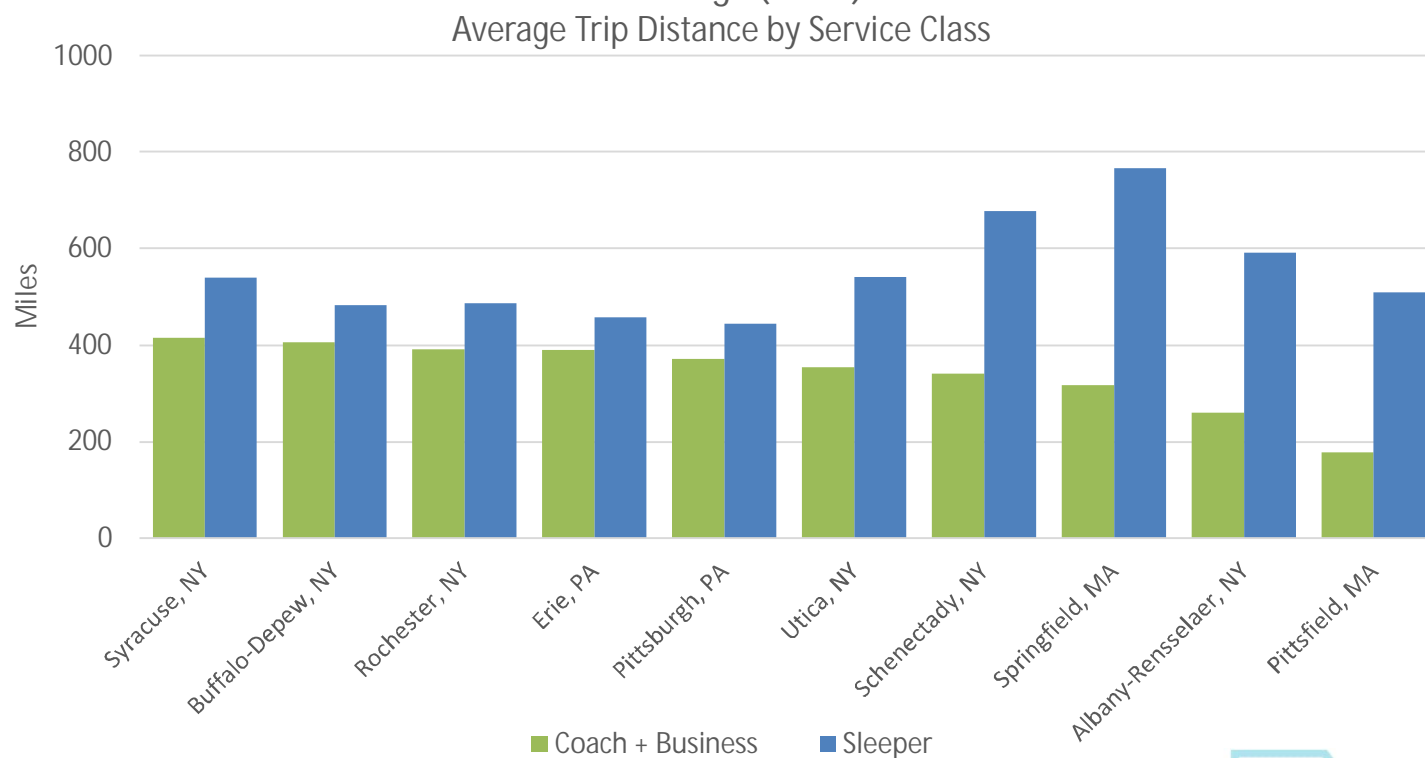
Source: Amtrak, Fiscal Year 2019. Data on trips by route, service class, and trip distance.
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Northeast Long-Distance Service and Performance

Trip Length by Service Class

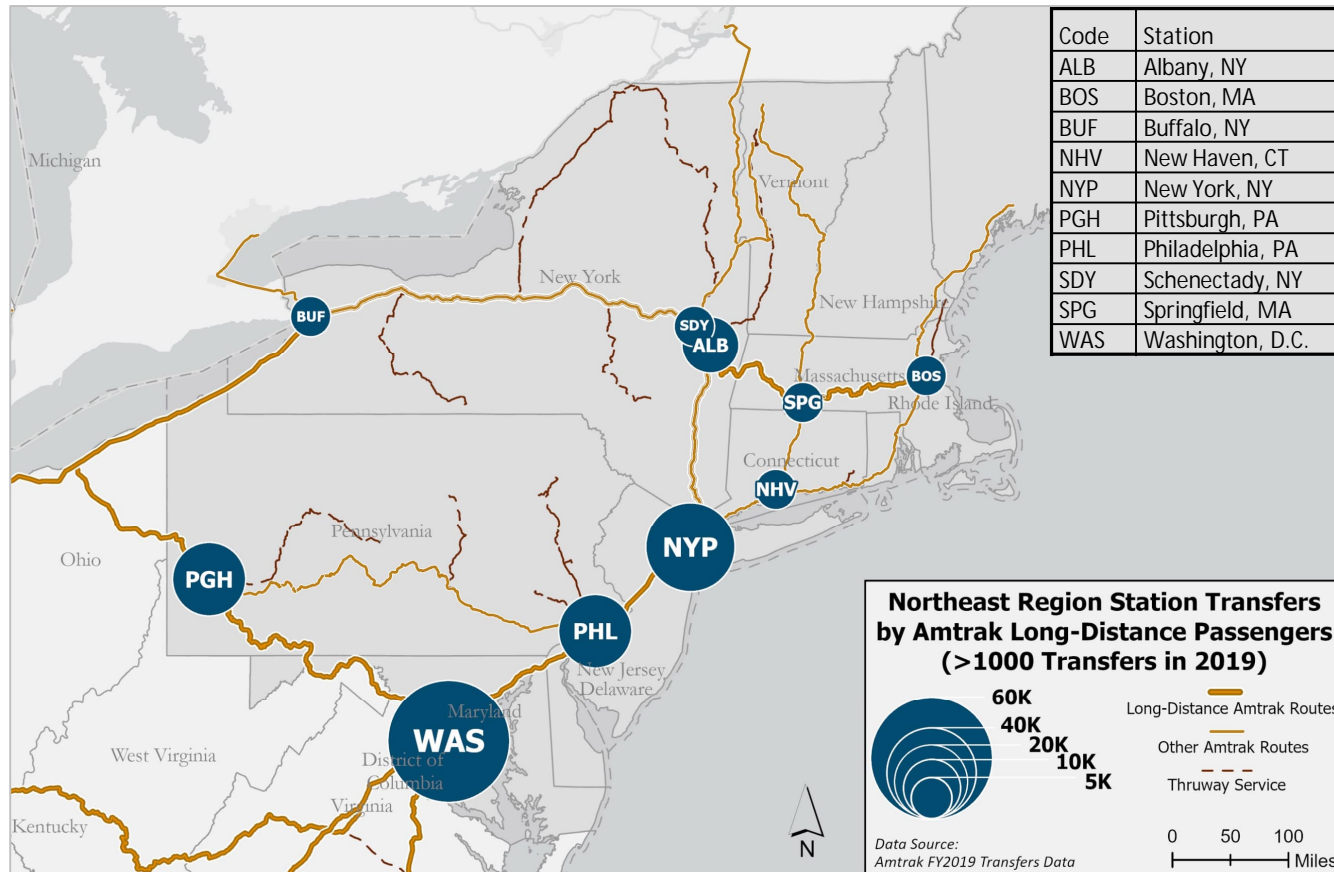
- Average trip length by service class for riders on Long-Distance routes boarding at stations in the Northeast Region not on the Northeast Corridor
- Stations are served by the *Lake Shore Limited* and *Capitol Limited*

Top 10 Stations Outside the NEC in the Northeast Region by Total Boardings (2019)



Source: Amtrak, Fiscal Year 2019. Data on trips by route, service class, and trip distance.
Note: Long-distance routes in the Northeast Region include Coach and Business Class service combined.

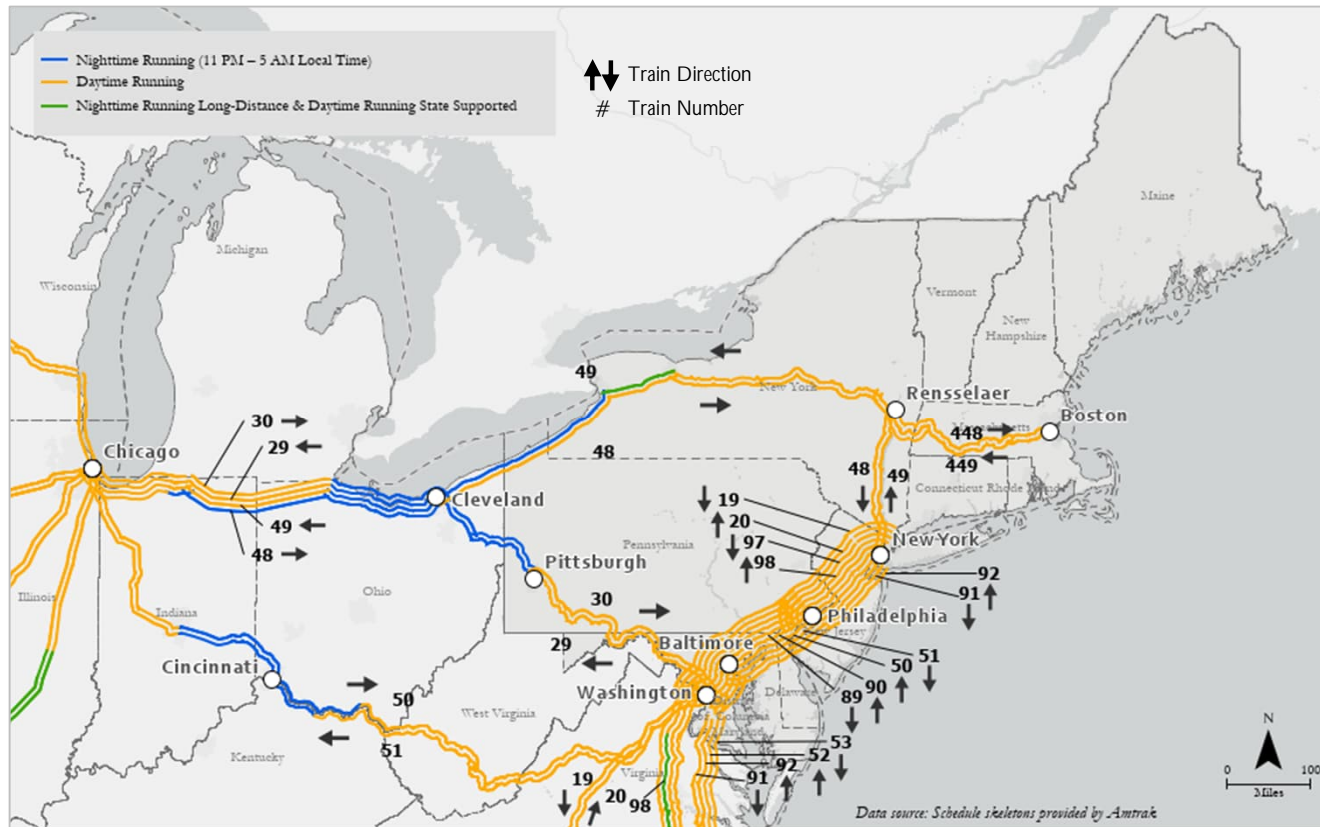
Northeast Service and Performance Characteristics



Long-Distance Passenger Transfers in the Northeast Region*

- Stations with more than 1,000 transfers in 2019
- Top transfer stations
 - Washington, DC (58K)
 - New York City (38K)
 - Pittsburgh (19K)
- New Haven is not served by a Long-Distance route, but some Long-Distance passengers do make transfers at New Haven during their complete journey
- New Haven is served by the *Northeast Regional*, *Vermont*, and *Acela* State-Supported and NEC Services

Northeast Service and Performance Characteristics



Daytime and Nighttime Service

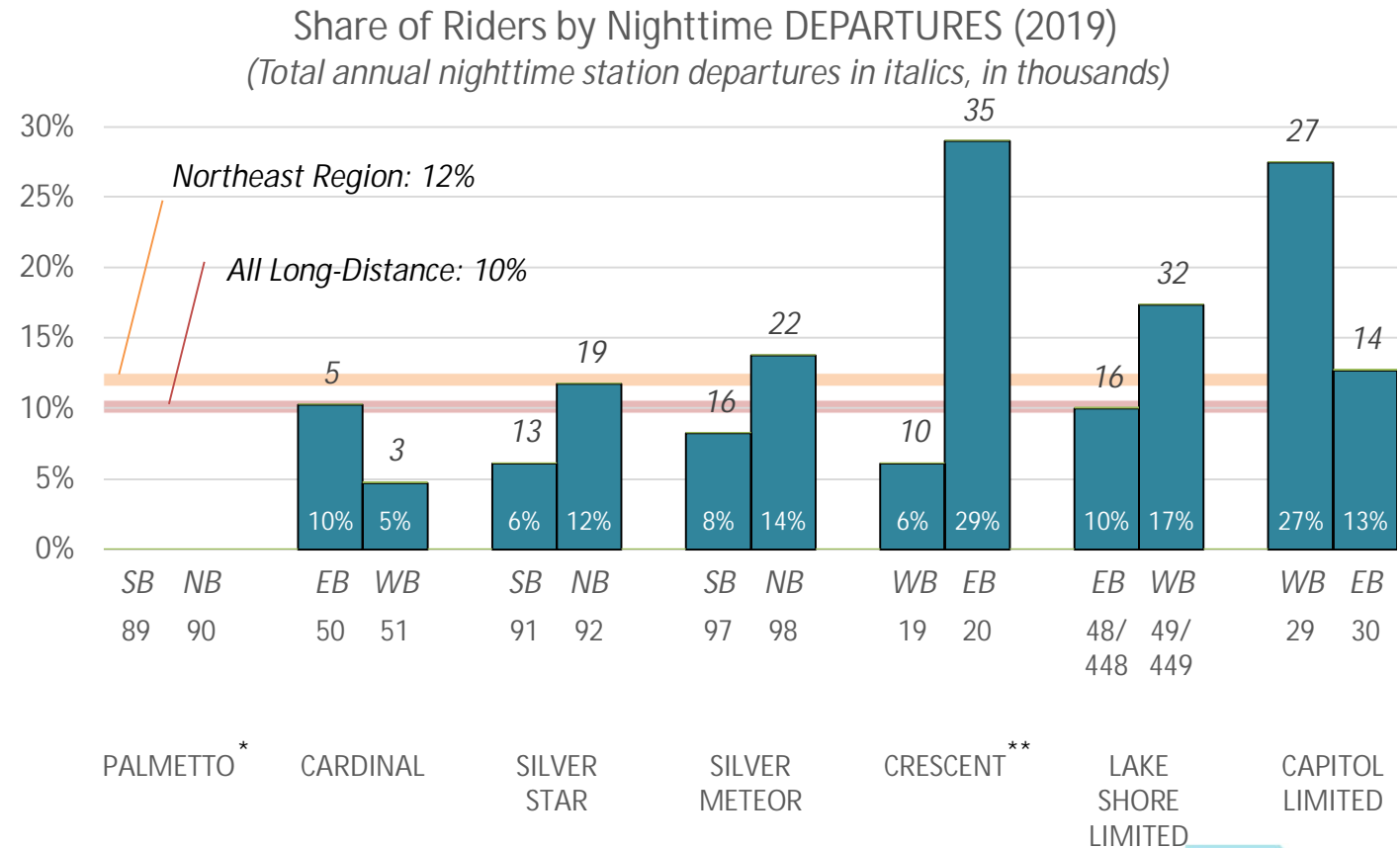
■ Larger markets served at night:

- *Cardinal*
 - Cincinnati (EB/WB)
- *Capitol Limited*
 - Cleveland (EB/WB)
 - Pittsburgh (WB)
- *Lake Shore Limited*
 - Cleveland (WB)
 - Buffalo (WB)
 - Rochester (WB)

Northeast Long-Distance Service and Performance

Time of Day Analysis: Nighttime Departures

- Departures at stations in the Northeast Region only
- Eastbound *Crescent* has the highest share of nighttime departures as a result of nighttime service in Atlanta



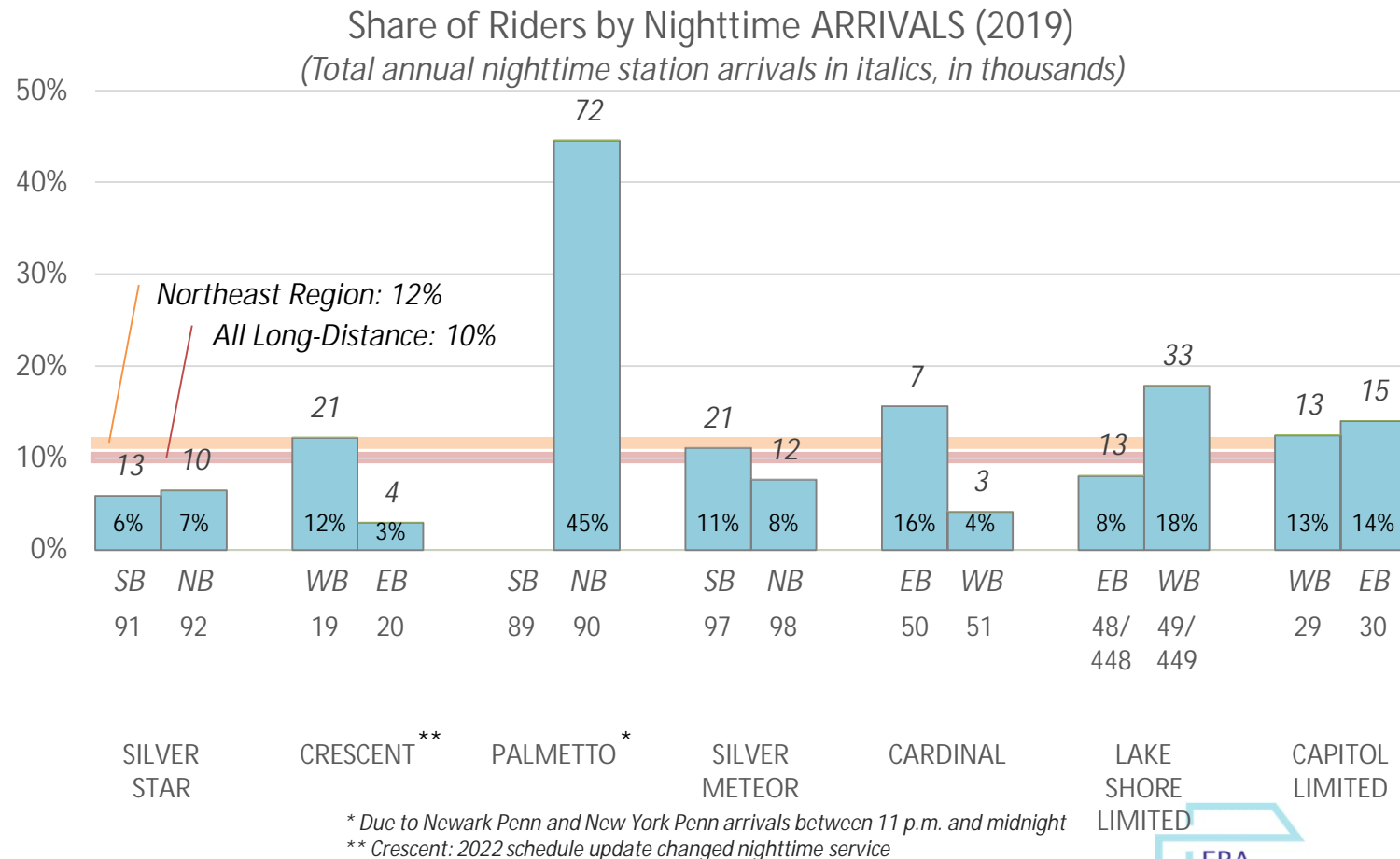
* Palmetto does not have nighttime departures

** Crescent: 2022 schedule update changed nighttime service

Northeast Long-Distance Service and Performance

Time of Day Analysis: Nighttime Arrivals

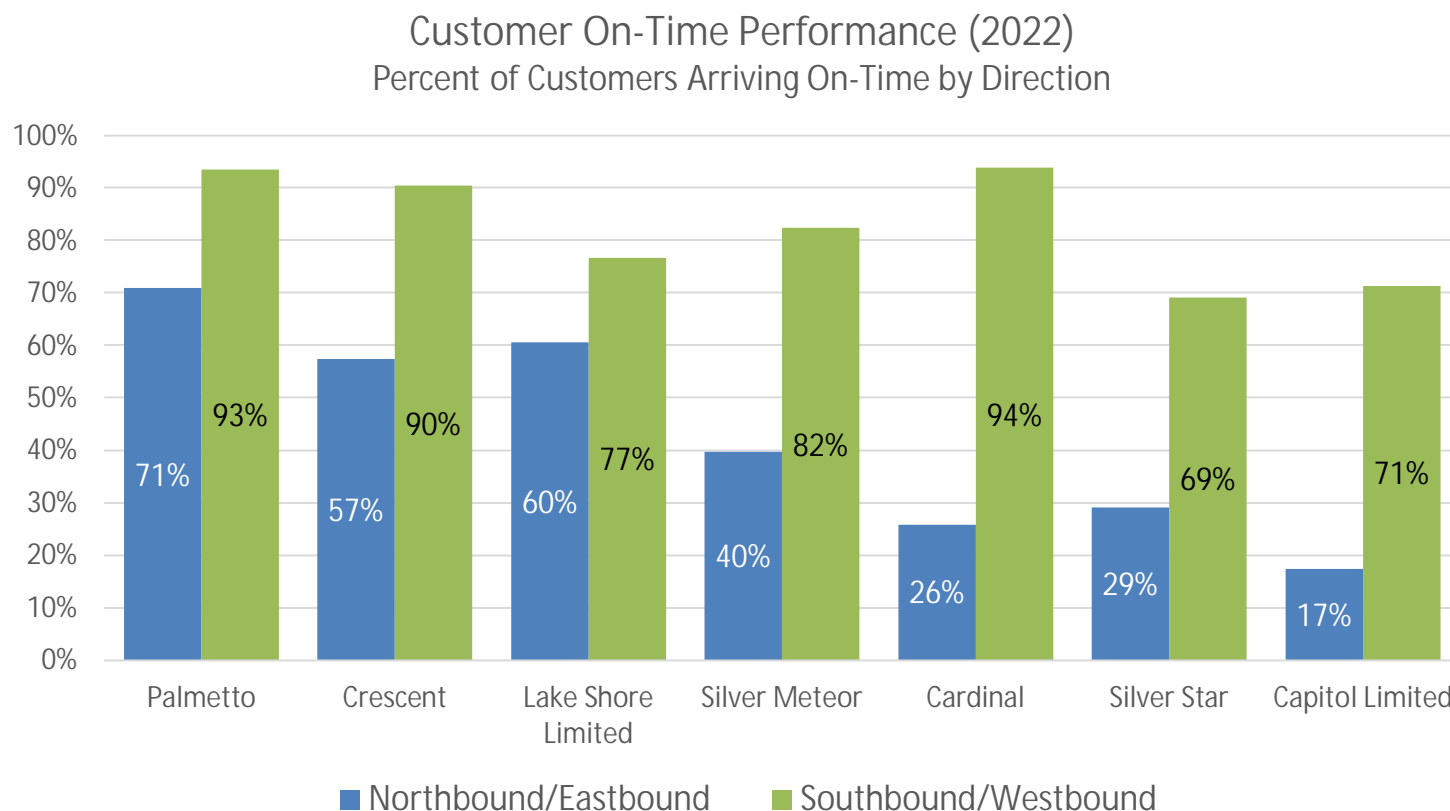
- Arrivals at stations in the Northeast Region only
- The greatest share of nighttime arrivals occur on the northbound *Palmetto* – this is mainly due to its scheduled arrival time after 11 p.m. at Newark, NJ and New York Penn Station
- Second largest share of nighttime arrivals is the westbound *Lake Shore Limited*



Northeast Long-Distance Service and Performance

Customer On-Time Performance

- On-time is defined as percent of customers arriving at a destination station in the Northeast Region within 15 minutes of the scheduled arrival time
- 60% of Long-Distance customers in the Northeast Region arrive on-time

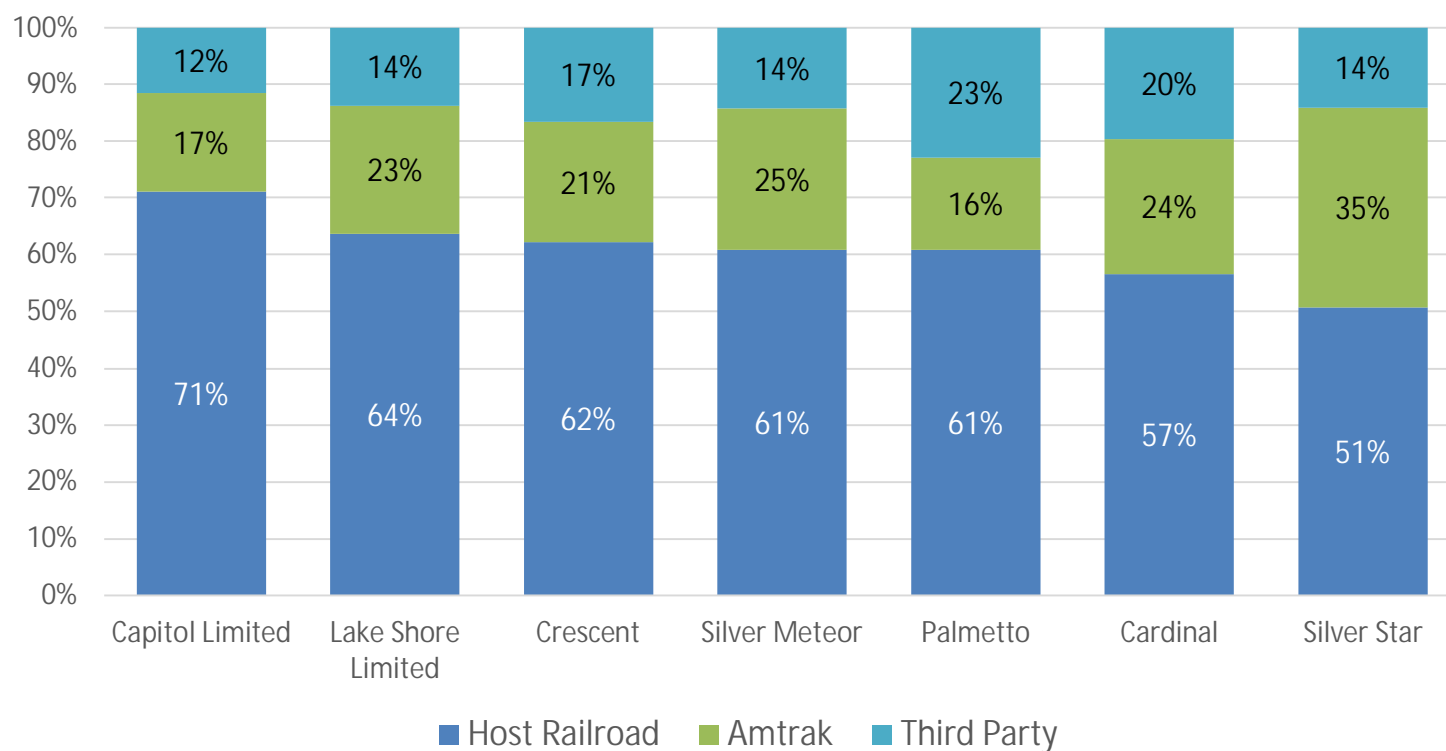


Northeast Long-Distance Service and Performance

Amtrak-Reported Delay Minutes: Reason for Delay

- Three types of delay minute responsibility: Amtrak-responsible, Host Railroad-responsible, and third-party
- Amtrak is the host railroad for much of the Northeast Corridor – Host Railroad delay minutes with Amtrak as host are included with Host Railroad Delays
- Freight train interference is the top source of Host Railroad delays for routes serving the Northeast Region
- Delays related to crews are the largest source of Amtrak responsible delay, accounting for 23% of Amtrak responsible delay minutes for routes serving the Northeast Region

Percent Delay Minutes by Responsible Party (2022)



Current Long-Distance Network & Routes – Northeast Summary

- Trips originating in the Northeast Region are shorter than for Long-Distance service overall
 - 68% of Coach and Business Class trips are less than 400 miles on routes serving the Northeast Region compared to 61% for Long-Distance overall
 - 26% of Sleeper Class trips are over 1,000 miles on routes serving the Northeast Region compared to 41% for Long-Distance overall
- 60% of Long-Distance customers in the Northeast Region arrive on-time (within 15 minutes of schedule)
 - Northbound / Eastbound: 49% customer on-time performance
 - Southbound / Westbound: 82% customer on-time performance
- Long-Distance routes on the Northeast Corridor provide additional frequency for trips between Washington, DC, and New York City
- Long-Distance connections with state-supported and NEC Services support broader system connectivity

BASELINE AND MARKET CONDITIONS – NORTHEAST

Overview of Sources and Methods

- Trip Flow Data:
 - Total trips for all modes between MSAs from Federal Highway Administration's (FHWA) Next-Gen National Household Travel Survey National Passenger origin-destination (O-D) data (2020) (<https://nhts.ornl.gov/od/>)
 - Represents annual trips by the U.S. population throughout all of 2020
 - 2020 data impacted by COVID-19 conditions
 - Provides insights into travel demand between cities
- Amtrak O-D Pairs Data:
 - Volume of trips on Long-Distance passenger trains from Amtrak (2019) between station pairs
 - Provides insights into Long-Distance passenger train travel between stations
- Trips analyzed were at least 100 miles in length

Definitions

Market

- Trip making to or from a community (for example, a city or a larger geography such as an entire region)

MSA

- Metropolitan Statistical Area: A standardized county or equivalent-based area having at least one urbanized area of 50,000 or more population

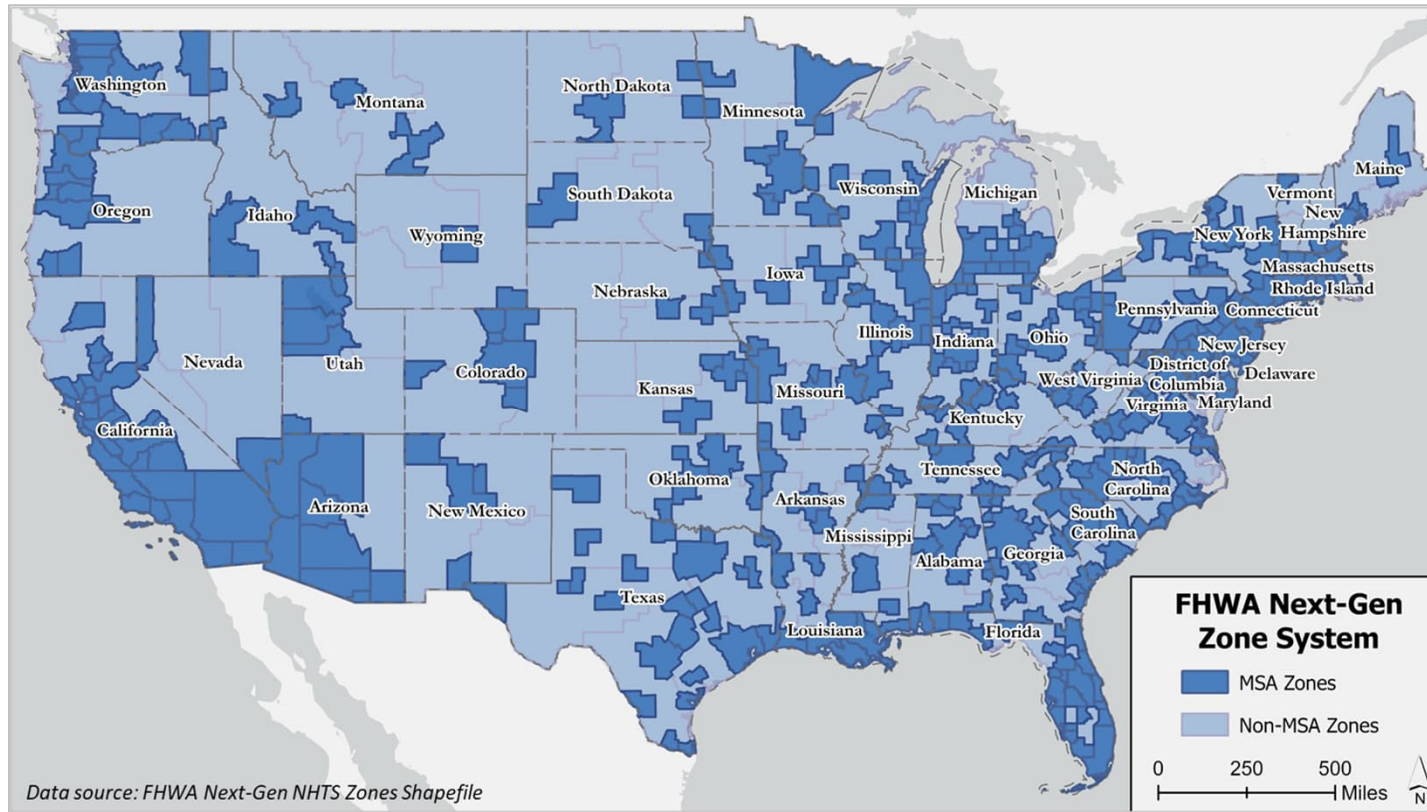
Smaller MSA

- MSA with a population less than 250,000 residents

Small Community

- Community served by an Amtrak station located outside an MSA

FHWA Next-Gen Zones



- FHWA Next-Gen data represent trips between and within zones
- About 600 zones nationwide
- About 450 zones are either an MSA or part of an MSA
- Areas outside of MSAs are grouped into non-MSA zones. Non-MSA zones often are large in terms of land area

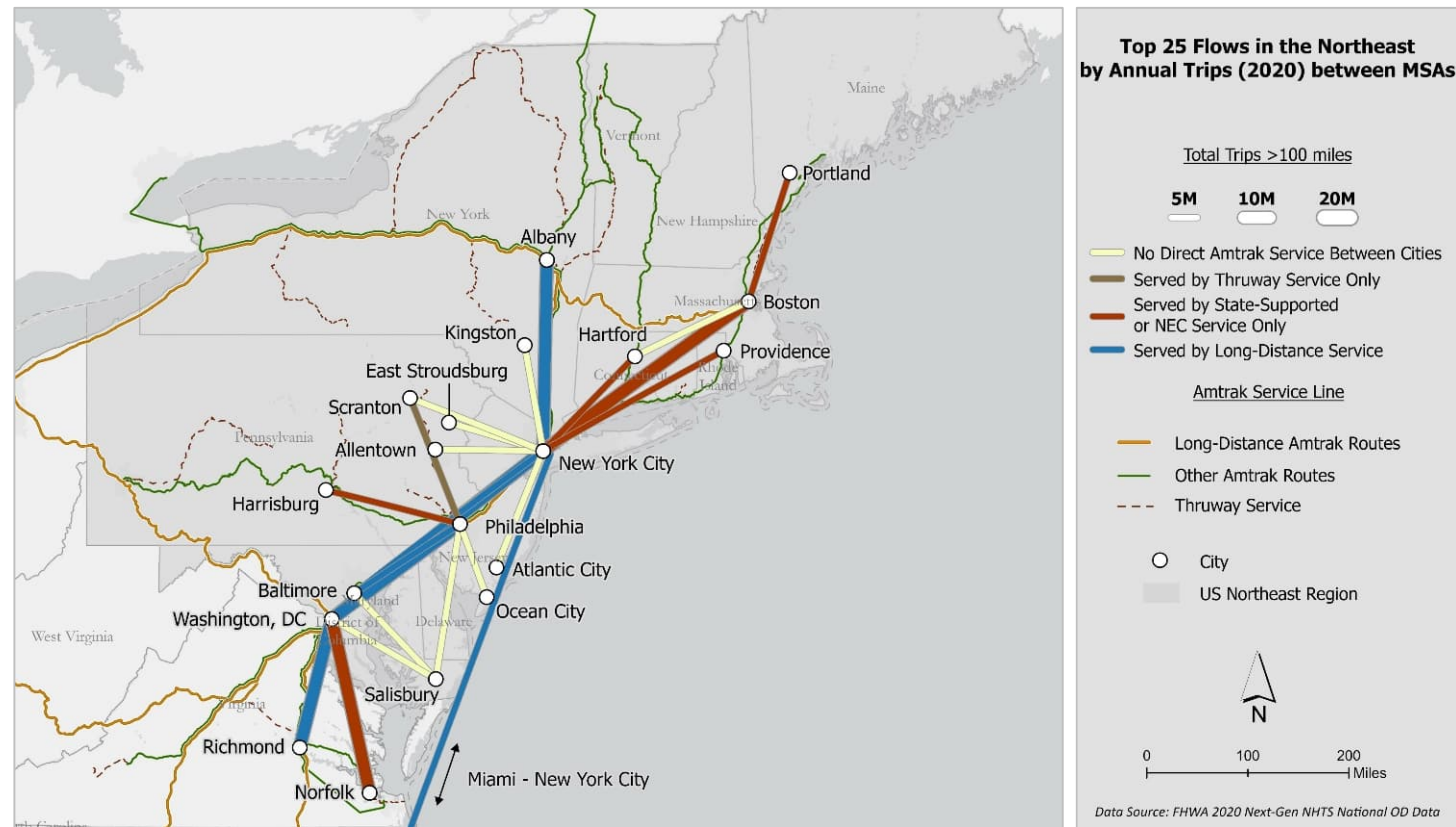
Northeast Region – Market Opportunities

- The next few slides are based on FHWA Next-Gen data for all trips and all travel modes

Northeast Region – Market Opportunities

Top 25 Trip Flows

- Trip flows between MSAs with one trip end in an MSA in the Northeast Region
- Based on Next-Gen and showing total trips over 100 miles across all modes
- Trip flow colors indicate availability of Amtrak service between MSAs

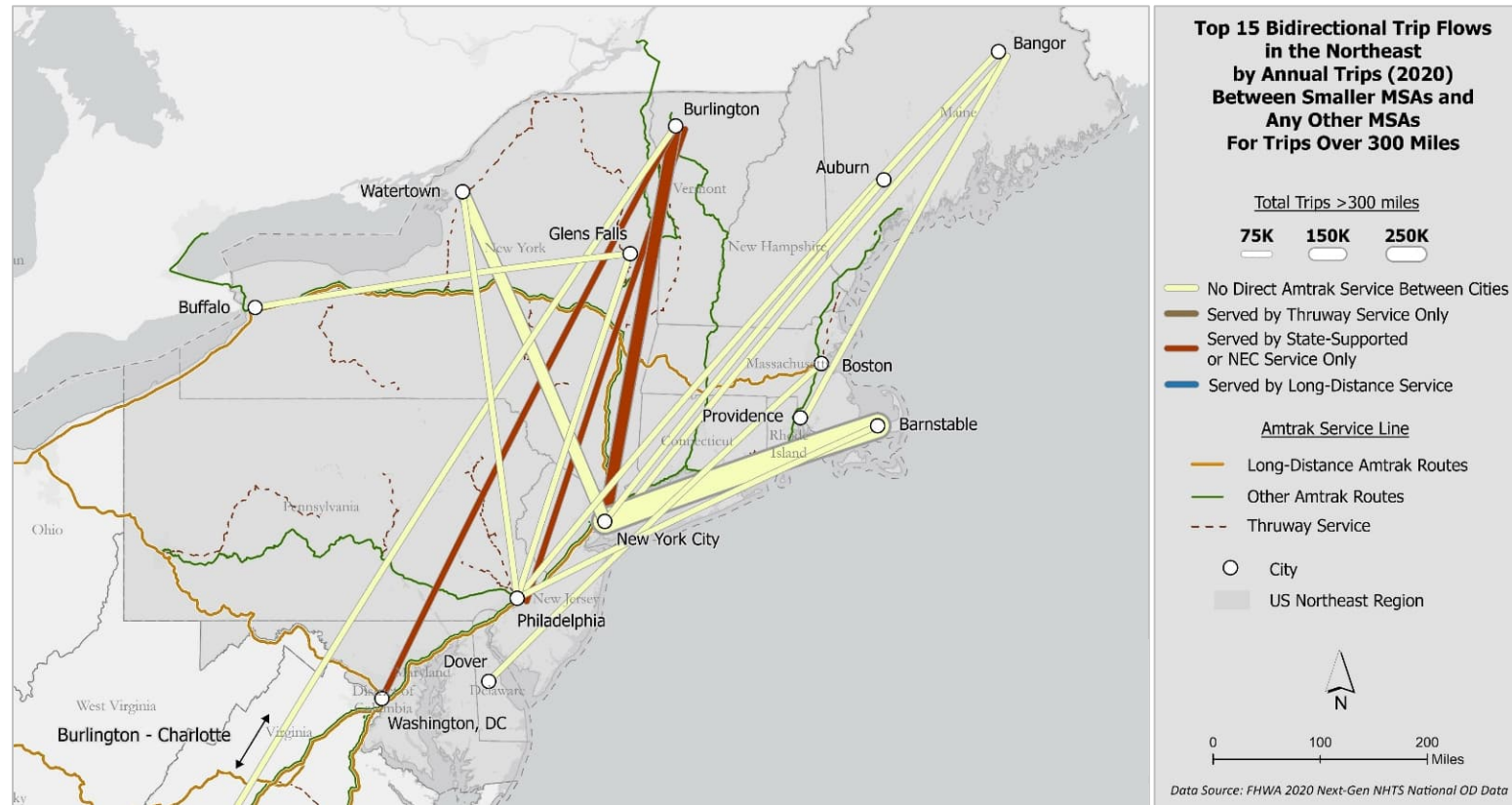


May not show all Thruway Bus Services

Northeast Region – Market Opportunities for Smaller MSAs

Top 15 Trip Flows Connecting Smaller MSAs

- Trip flows between MSAs with one trip end in a smaller MSA in the Northeast Region
- Total trips over 300 miles across all modes
- Top flows are mostly between MSAs not directly connected by Amtrak service
- State-supported service is available between Burlington and New York City



May not show all Thruway Bus Services

Northeast Region – Current Amtrak O-D Pairs

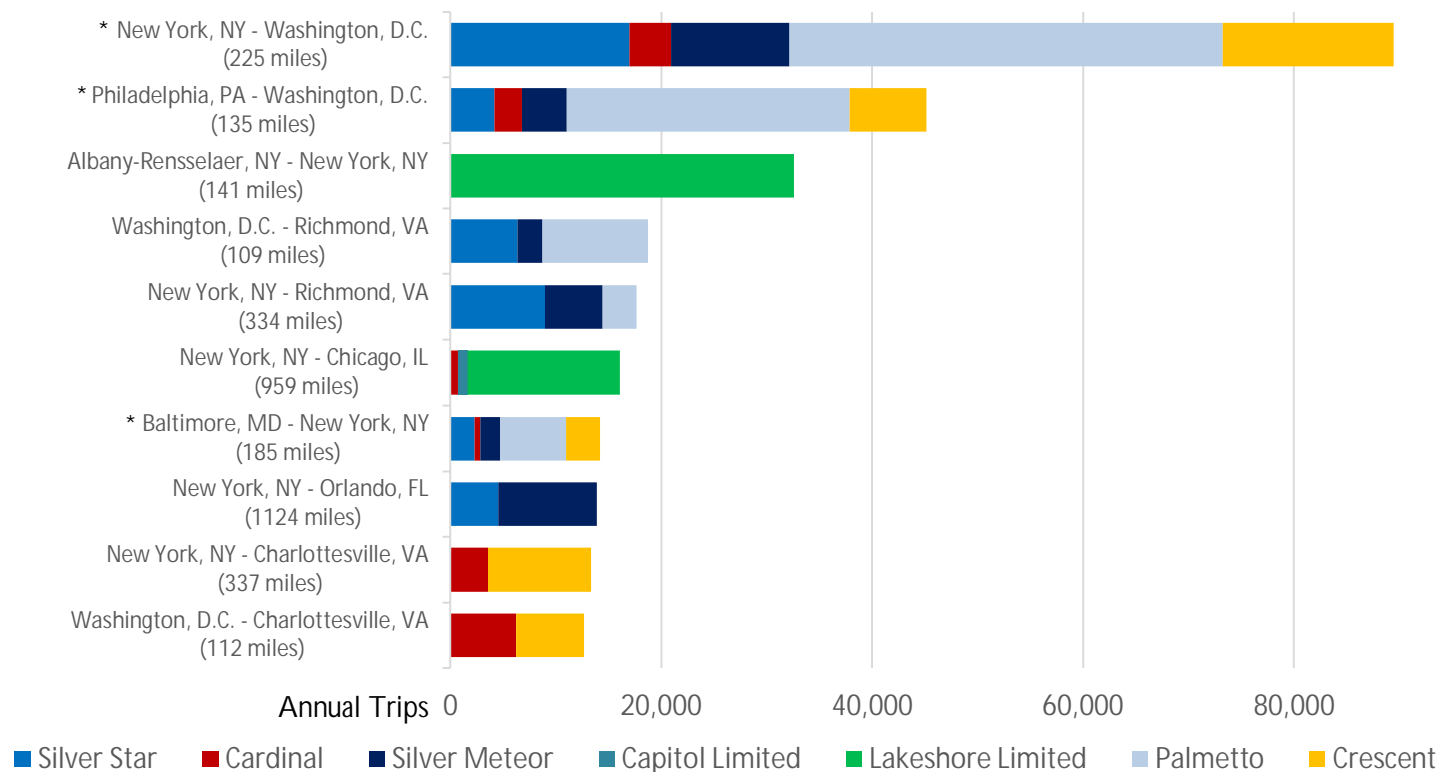
- The next few slides are based on Amtrak FY 2019 ridership data for rail trips over 100 miles in length on Long-Distance passenger trains
- The slides focus on top station pairs overall and on trips connecting to a small community

Northeast Region – Current Amtrak O-D Pairs

Amtrak Ridership: Top 10 Station Pairs

- Intra-Regional: Four pairs connect stations within the Northeast Region, including three on the Northeast Corridor
- Three trains connect Chicago and New York City, with *Lakeshore Limited* accounting for 90% of New York City – Chicago trips
- *Silver Service* accounts for 54% of all Long-Distance trips in the Northeast Region

Top 10 Long-Distance Station Pairs by Volume of Annual Trips (2019)



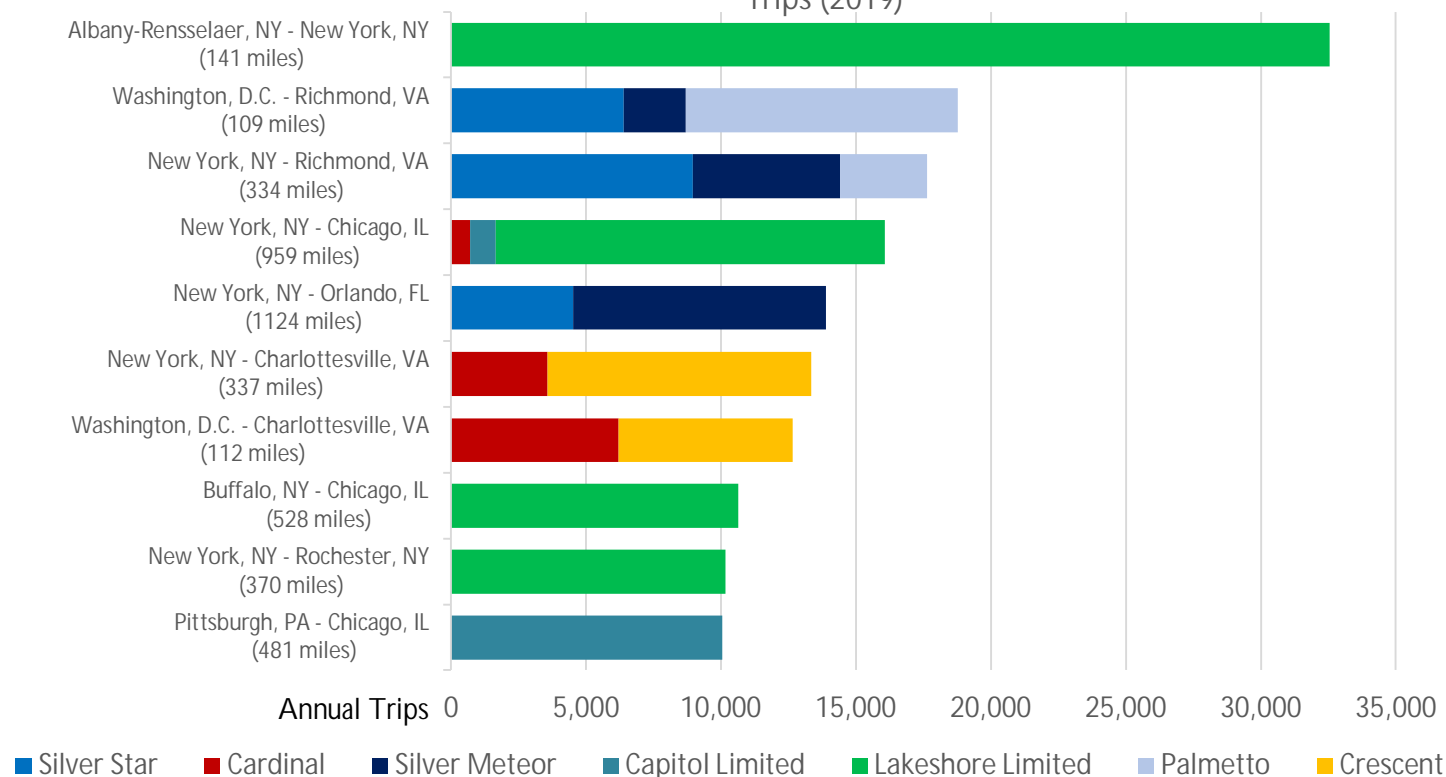
* Northeast Corridor Station Pair

Northeast Region – Current Amtrak O-D Pairs

Amtrak Ridership: Top 10 Station Pairs Outside the NEC

- Interregional Trips: 8 of the 10 pairs connect outside the Northeast Region
- Four pairs connect the Northeast Region with locations in Virginia
- Two pairs do not connect to the NEC: Buffalo, NY and Pittsburgh, PA connecting with Chicago, IL
- Six of the 10 pairs are connected by state-supported services

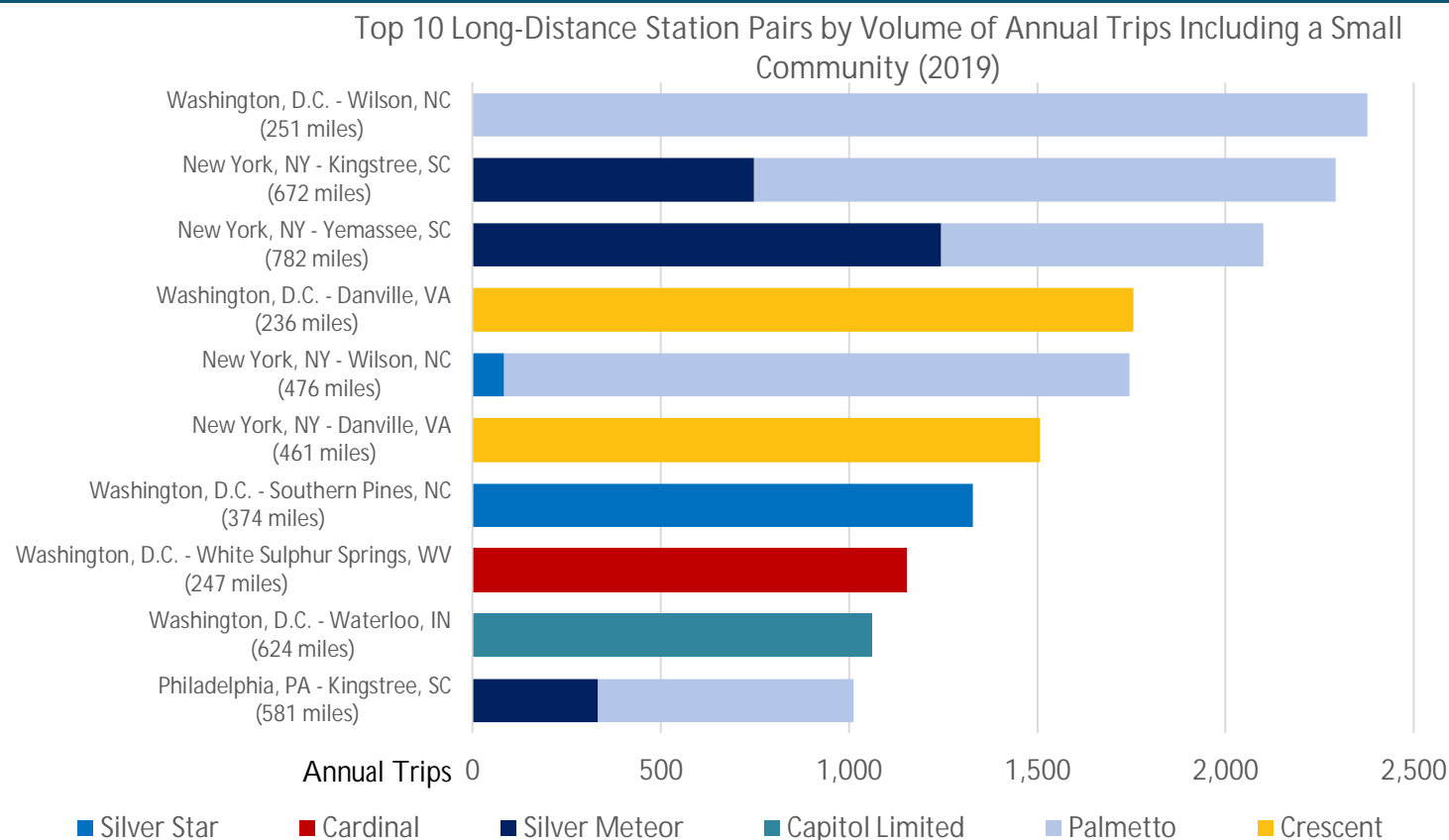
Top 10 Long-Distance Station Pairs Connecting Outside the NEC by Volume of Annual Trips (2019)



Northeast Region – Current Amtrak O-D Pairs

Amtrak Ridership: Top 10 Station Pairs Serving Small Communities

- No stations in the Northeast Region are in “small communities”
- All station pairs leave the Northeast Region
- Nine pairs connect with the Southeast Region



Northeast Market Conditions Summary

- Long-Distance routes on the Northeast Corridor provide additional frequency for trips between Washington, DC and New York City
- Long-Distance Service, State-Supported services and NEC Services serve many of the top city pairs for total trips in the Northeast Region
- Outside the Northeast Corridor, Long-Distance routes make interregional connections to the Southeast Region and the Midwest Region