



Midwest Regional Working Group Meeting

February 9, 2023



U.S. Department of Transportation
Federal Railroad Administration

Agenda – Midwest 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

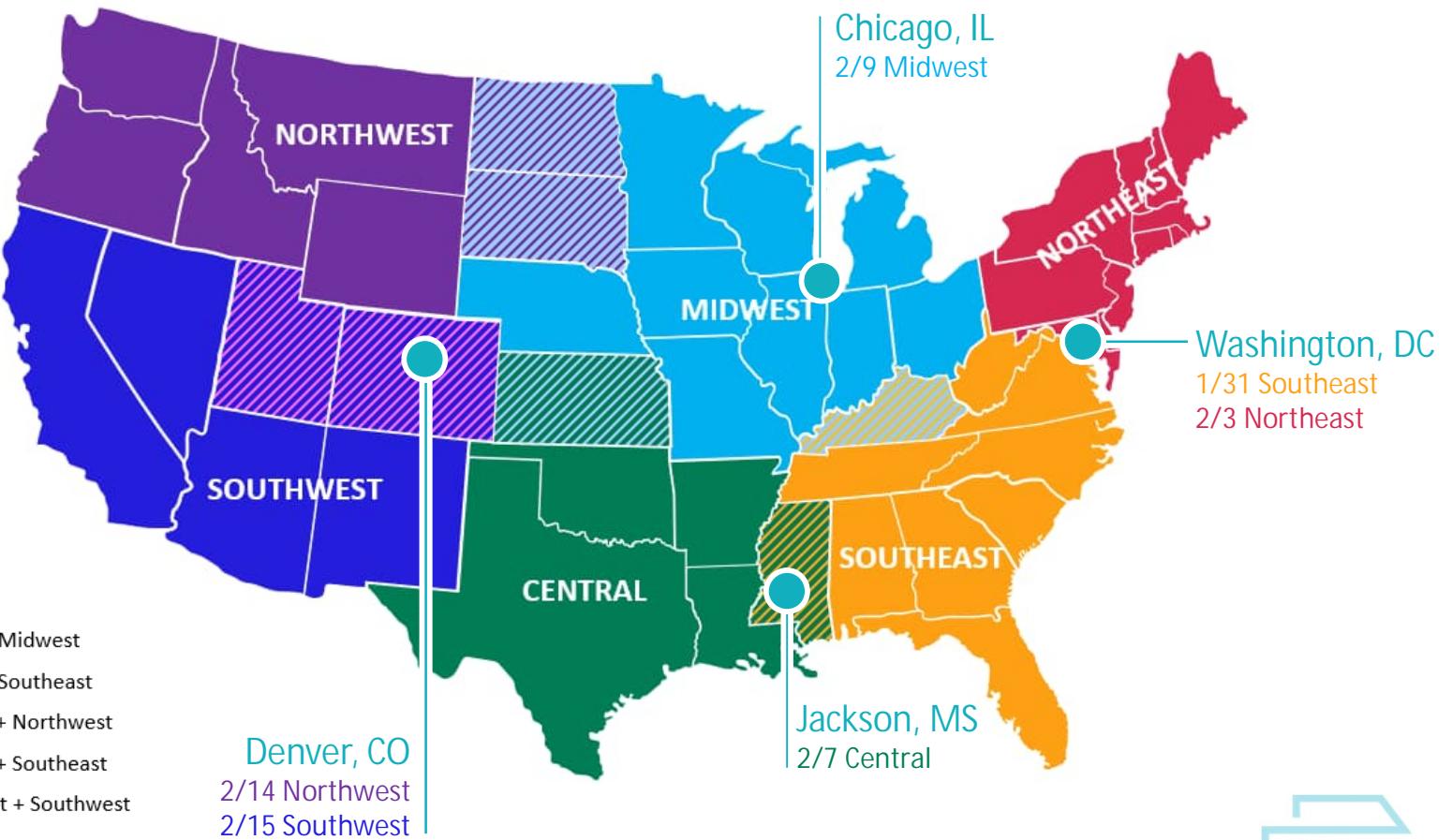
This document contains materials specific to the Midwest Region for the following agenda items:

- 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 (Midwest)



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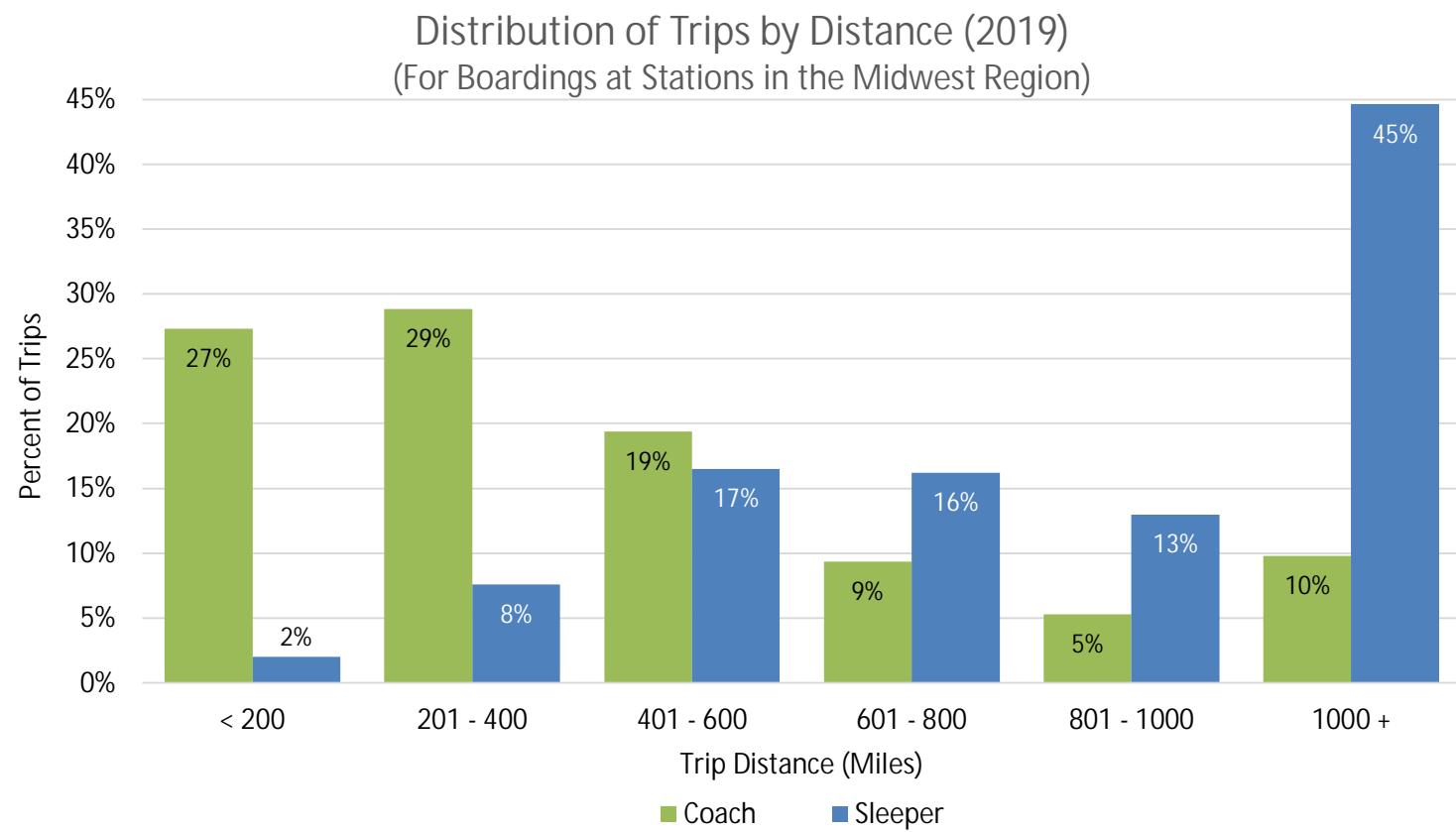
CURRENT LONG- DISTANCE NETWORK & ROUTES – MIDWEST



Midwest Long-Distance Service and Performance

Average Trip Length: Midwest Region

- Distribution of trips by trip distance for Long-Distance routes at stations in the Midwest Region
- Business Class is not offered on Long-Distance routes in the Midwest Region
- 56% of Coach Class trips are less than 400 miles, compared to 61% for Long-Distance overall
- 45% of Sleeper Class trips are greater than 1,000 miles, compared to 41% for Long-Distance overall



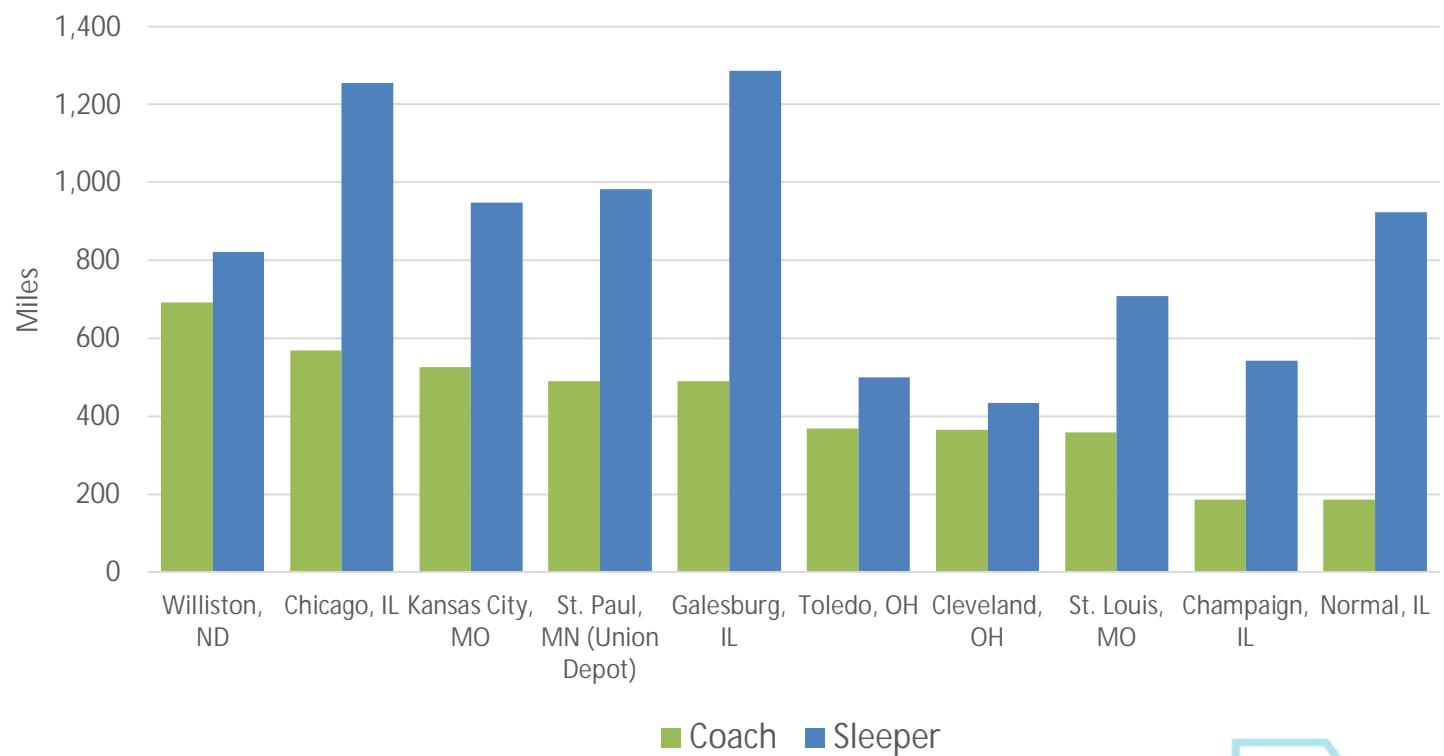
Source: Amtrak, Fiscal Year 2019. Data on trips by route, service class, and trip distance.

Midwest Long-Distance Service and Performance

Trip Length by Service Class

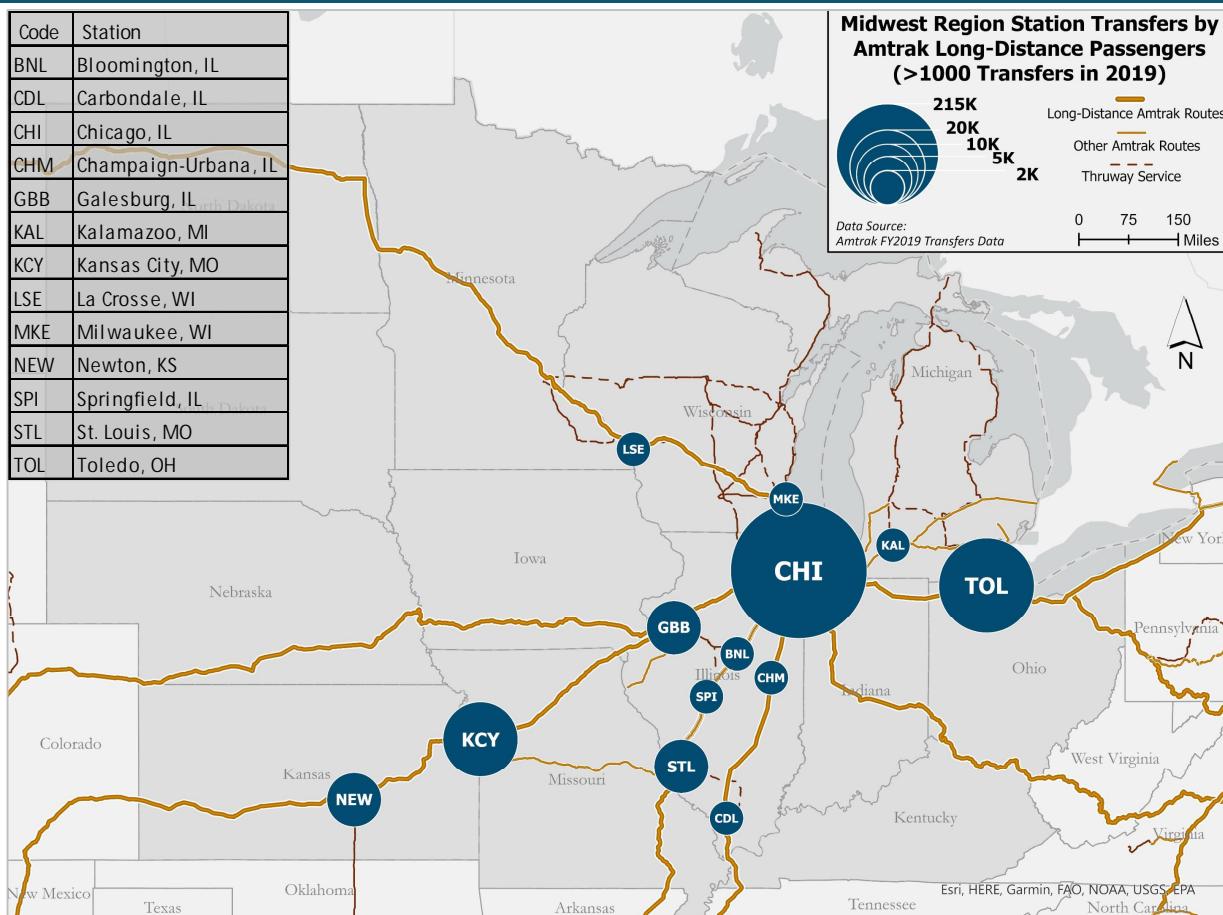
- Average trip length by service class for riders on Long-Distance routes boarding at stations in the Midwest Region
- Williston, ND, served by the *Empire Builder*, has the longest Coach Class trips on average

Top 10 Stations in the Midwest 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.

Midwest Service and Performance Characteristics



Long-Distance Passenger Transfers in the Midwest Region*

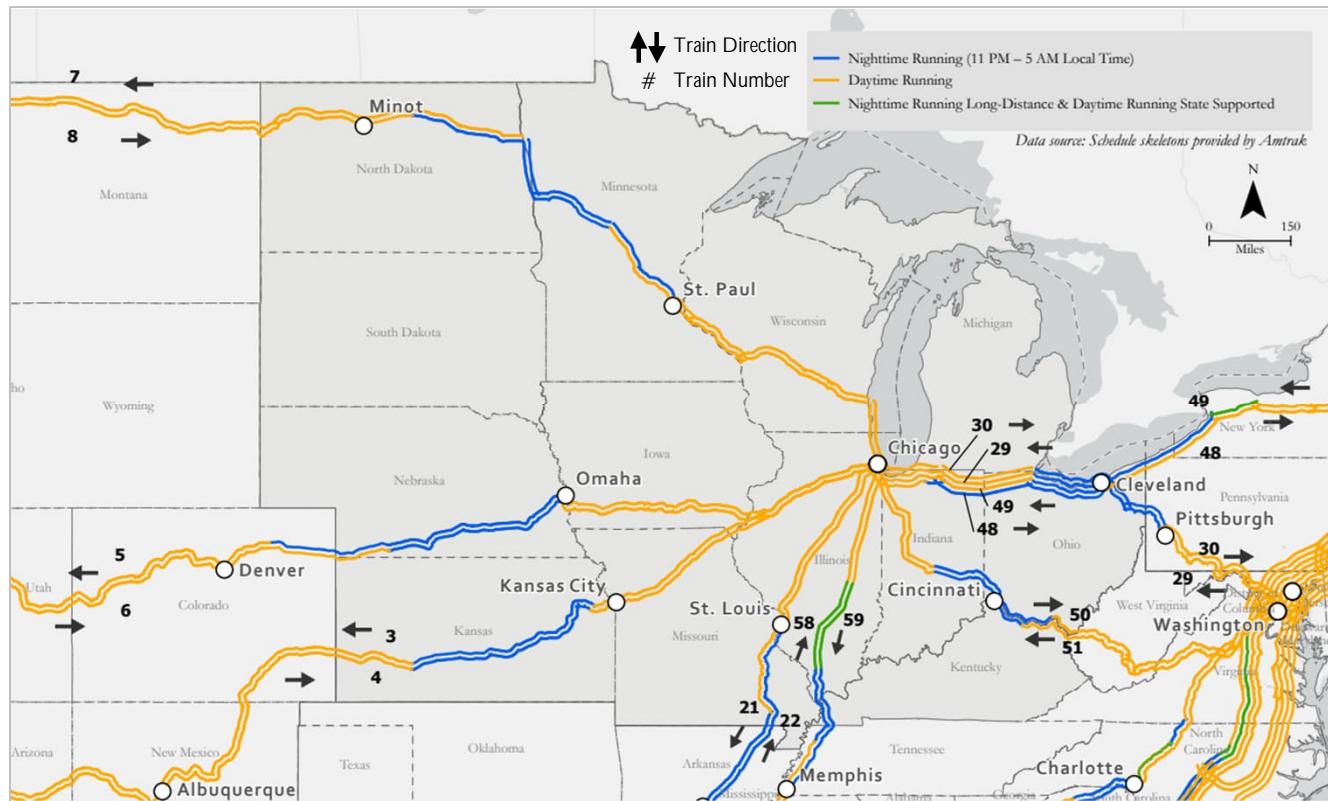
- Stations with more than 1,000 transfers in 2019
- Top transfer stations
 - Chicago (213K)
 - Toledo (16K)
 - Kansas City (6K)
- Kalamazoo, MI is not served by a Long-Distance route, but some Long-Distance passengers do make transfers at Kalamazoo during their complete journey
- Kalamazoo is served by the *Wolverine* and *Blue Water* state-supported routes

* Includes Long-Distance passenger transfers between Amtrak Services (Long-Distance service, State-Supported services, Amtrak Thruway Bus services). Map may not show all Thruway Bus Services.

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Midwest Service and Performance Characteristics



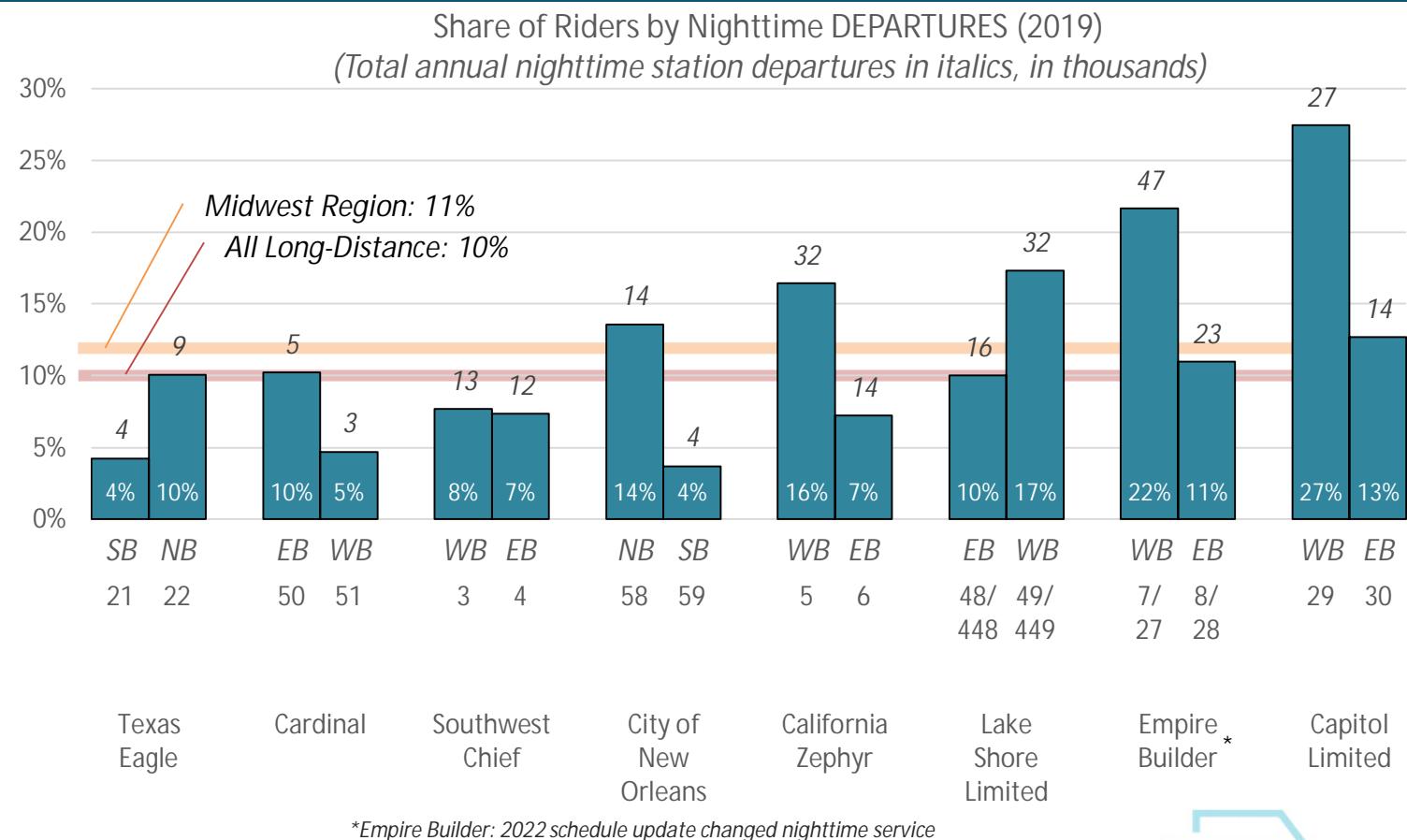
Daytime and Nighttime Service

- Larger markets served at night:
 - *Capitol Limited* and *Lake Shore Limited*
 - ✓ Cleveland (EB/WB)
 - *Cardinal*
 - ✓ Cincinnati (EB/WB)
 - *Empire Builder*
 - ✓ St. Paul (WB)
 - *California Zephyr*
 - ✓ Omaha (WB)
 - *Southwest Chief*
 - ✓ Newton, KS and Topeka, KS (EB/WB)

Midwest Long-Distance Service and Performance

Time of Day Analysis: Nighttime Departures

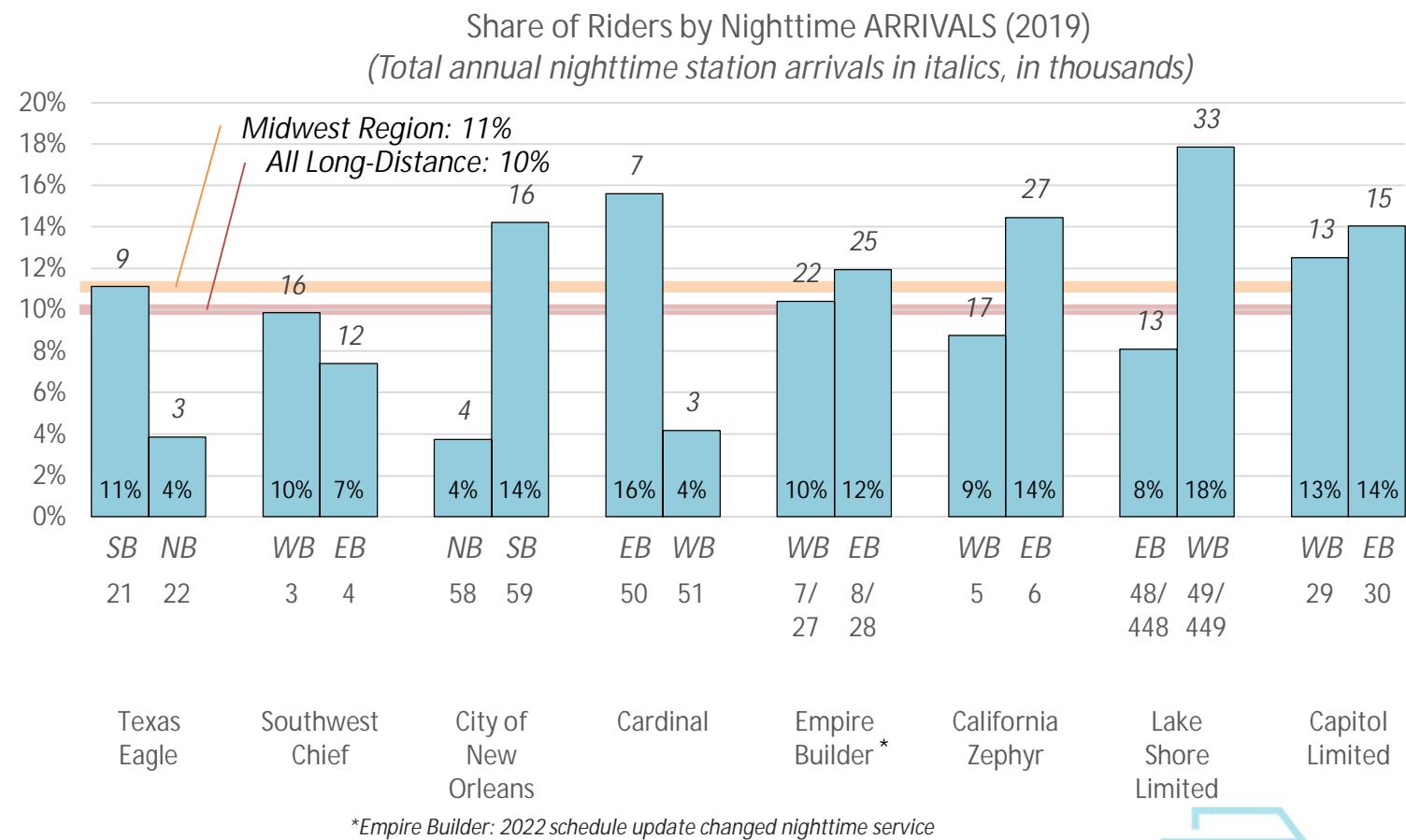
- Departures at stations in the Midwest Region only
- The greatest share of nighttime departures is on the westbound *Capitol Limited*, due to nighttime service in Cleveland, OH
- The greatest share of nighttime departures on the *Empire Builder* occur in St. Paul, MN in both directions



Midwest Long-Distance Service and Performance

Time of Day Analysis: Nighttime Arrivals

- Arrivals at stations in the Midwest Region only
- The *California Zephyr*, *Empire Builder*, and *Lake Shore Limited* have the highest nighttime arrivals by volume
- By volume, there are fewer nighttime alightings than boardings in the Midwest Region
- Long-Distance services are scheduled to both arrive and depart Chicago, IL during the day

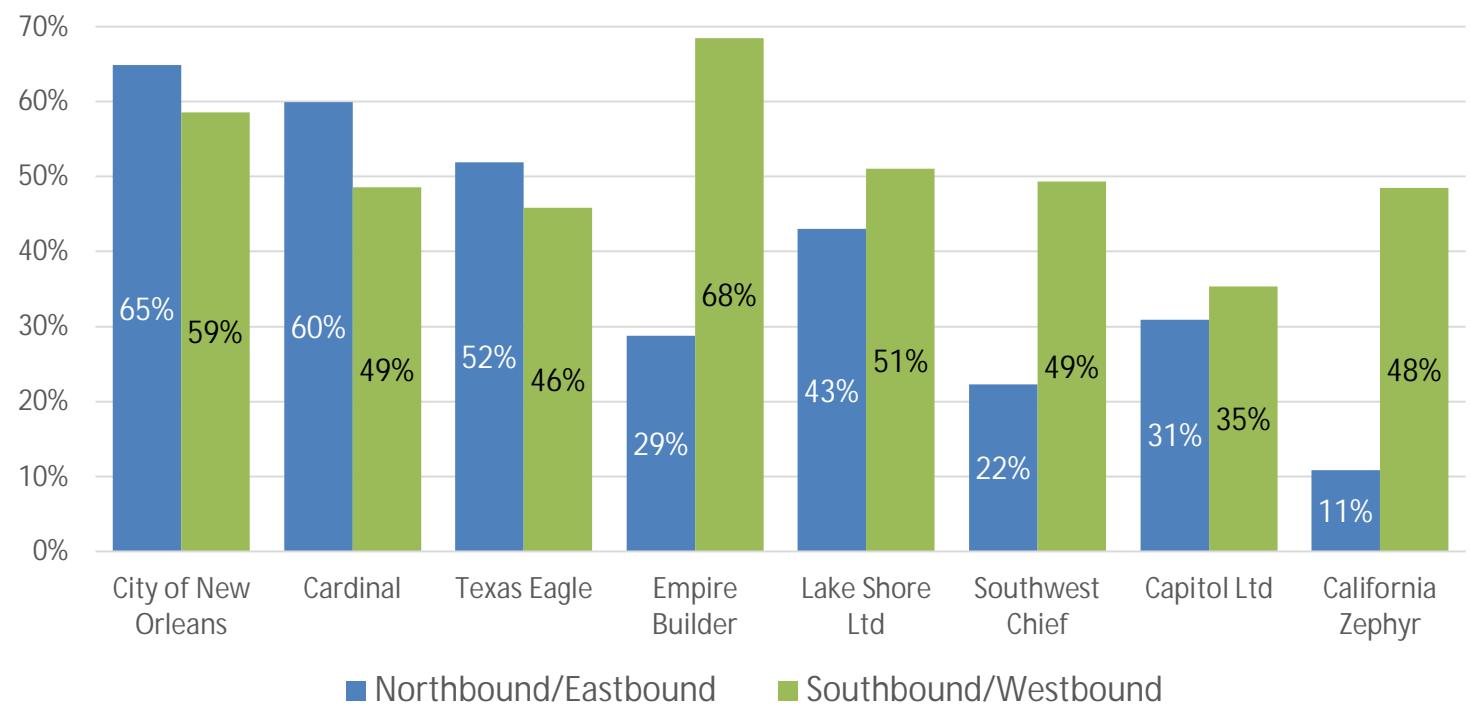


Midwest Long-Distance Service and Performance

Customer On-Time Performance

- On-time is defined as percent of customers arriving at a destination station in the Midwest Region within 15 minutes of the scheduled arrival time
- 44% of Long-Distance customers in the Midwest Region arrive on-time

Customer On-Time Performance (2022)
Percent of Customers Arriving On-Time by Direction



Source: Amtrak, Fiscal Year 2022. Performance data by route and station.

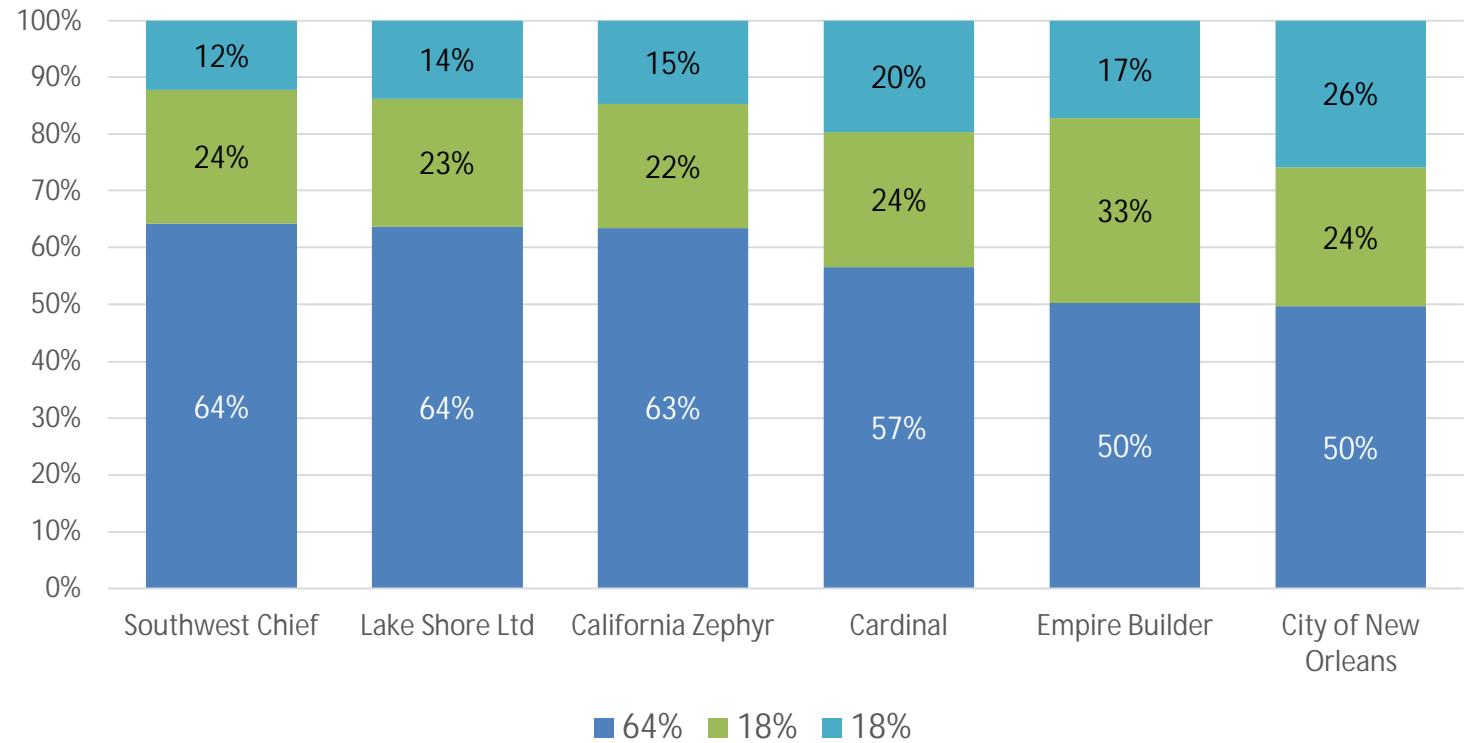
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Midwest Long-Distance Service and Performance

Amtrak-Reported Delay Minutes: Reason for Delay

- Three types of delay minute responsibility: Amtrak-responsible, Host Railroad-responsible, and third-party
- Freight train interference is the top source of Host Railroad delays for routes serving the Midwest Region
- Delays related to crews are the largest source of Amtrak responsible delay, accounting for 21% of Amtrak responsible delay minutes for routes serving the Midwest Region

Percent Delay Minutes by Responsible Party (2022)



Source: Amtrak. Long-Distance Route Delay Minutes Fiscal Year 2022

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Current Long-Distance Network & Routes – Midwest Summary

- The Midwest Region, Chicago specifically, is a hub for Long-Distance transfers
 - 27% of all transfers made by Long-Distance passengers nation-wide take place in Chicago
 - Long-Distance connections with State-Supported and Amtrak Thruway Bus support broader system connectivity
- Routes in and out of Chicago are daytime trips
 - West of Chicago, large markets in Minnesota, North Dakota, Nebraska, and Kansas are served at night (*Empire Builder*, *California Zephyr*, and *Southwest Chief*)
 - East of Chicago, Ohio is served at night (*Lake Shore Limited* and *Capitol Limited*)
- Customer on-time performance at stations in the Midwest Region is greatest for the *Cardinal* (Indiana, Kentucky, Ohio) and *City of New Orleans* (Illinois)
- Trains originating in Chicago typically have the best on-time performance in the Midwest Region

BASELINE AND MARKET CONDITIONS – MIDWEST



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

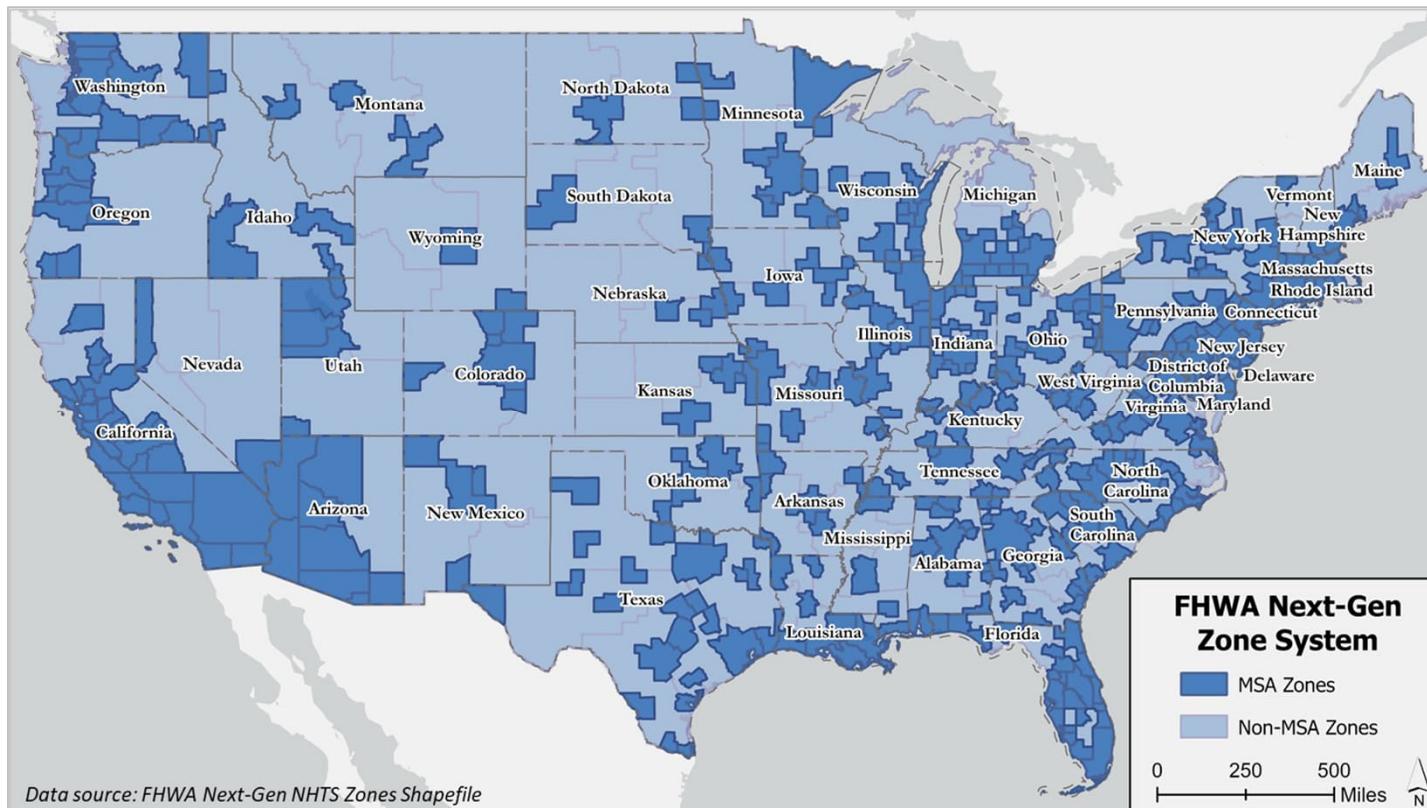
Smaller MSA

- 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

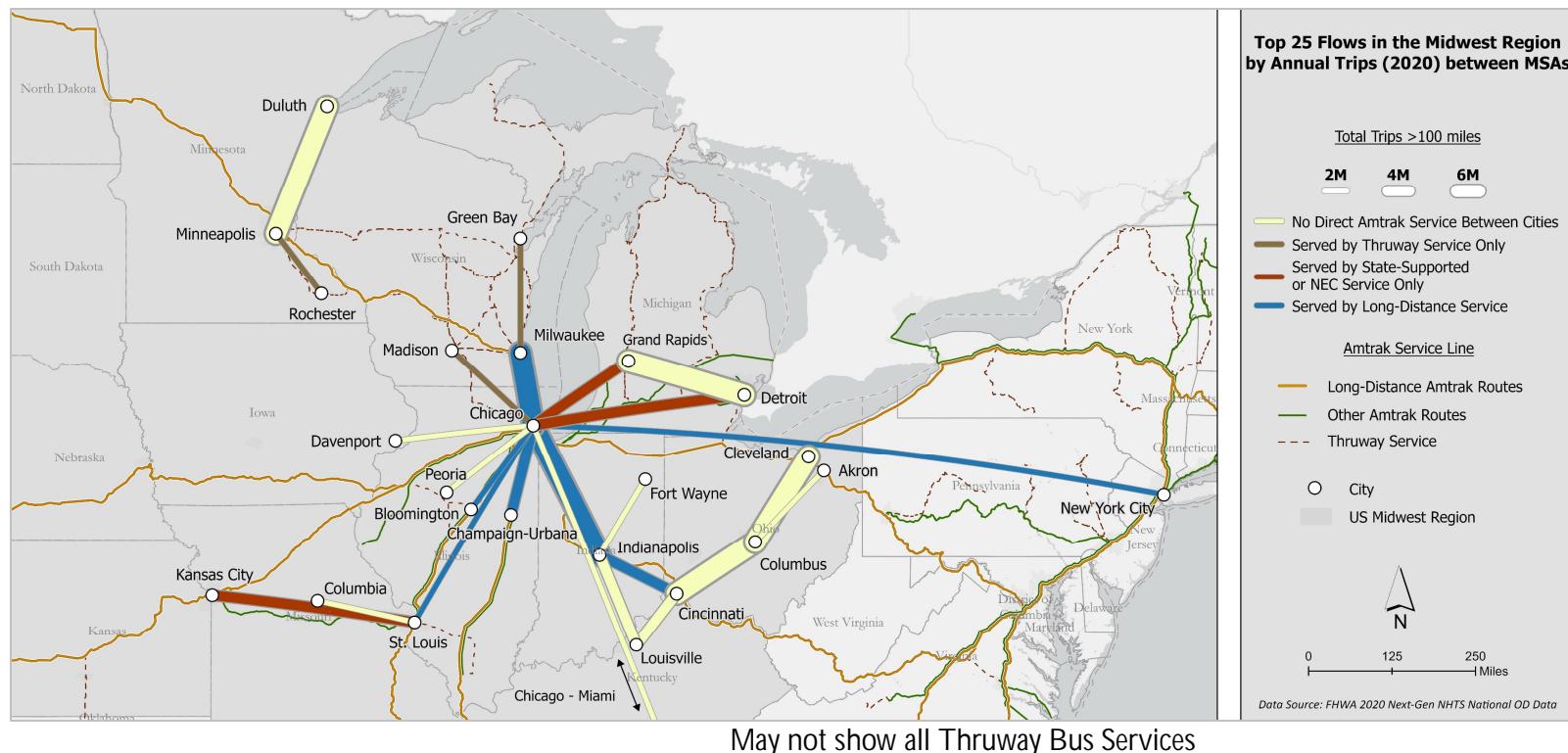
Midwest Region – Market Opportunities

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

Midwest Region – Market Opportunities

Top 25 Trip Flows

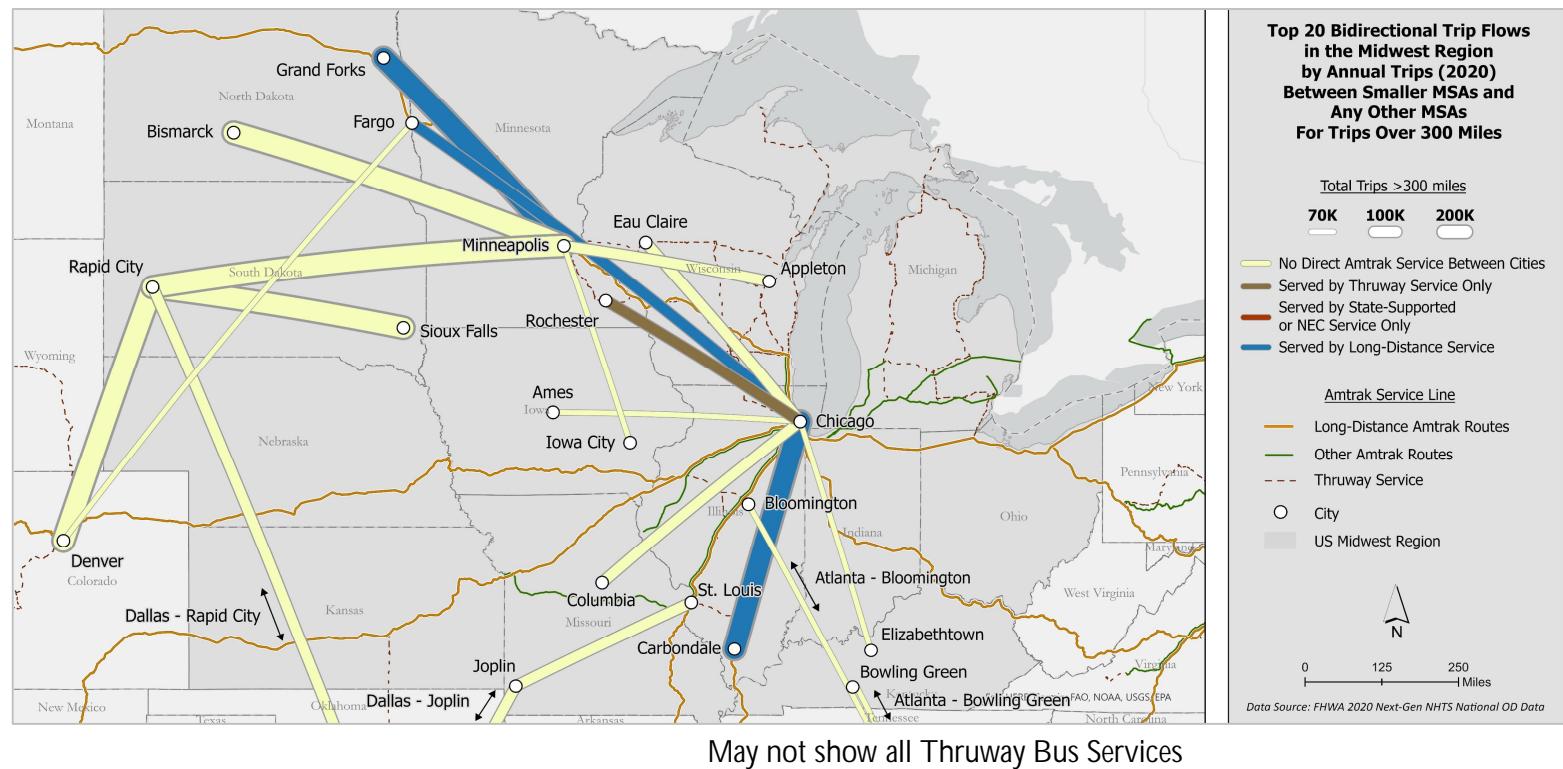
- Trip flows with one trip end in the Midwest
- Based on Next-Gen and showing total trips over 100 miles across all modes
- Trip flow colors indicate availability of Amtrak service between MSAs



Midwest 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 Midwest
- Total trips over 300 miles across all modes
- Top flows are mostly between MSAs not directly connected by Amtrak service



Midwest Region – Current Amtrak O-D Pairs

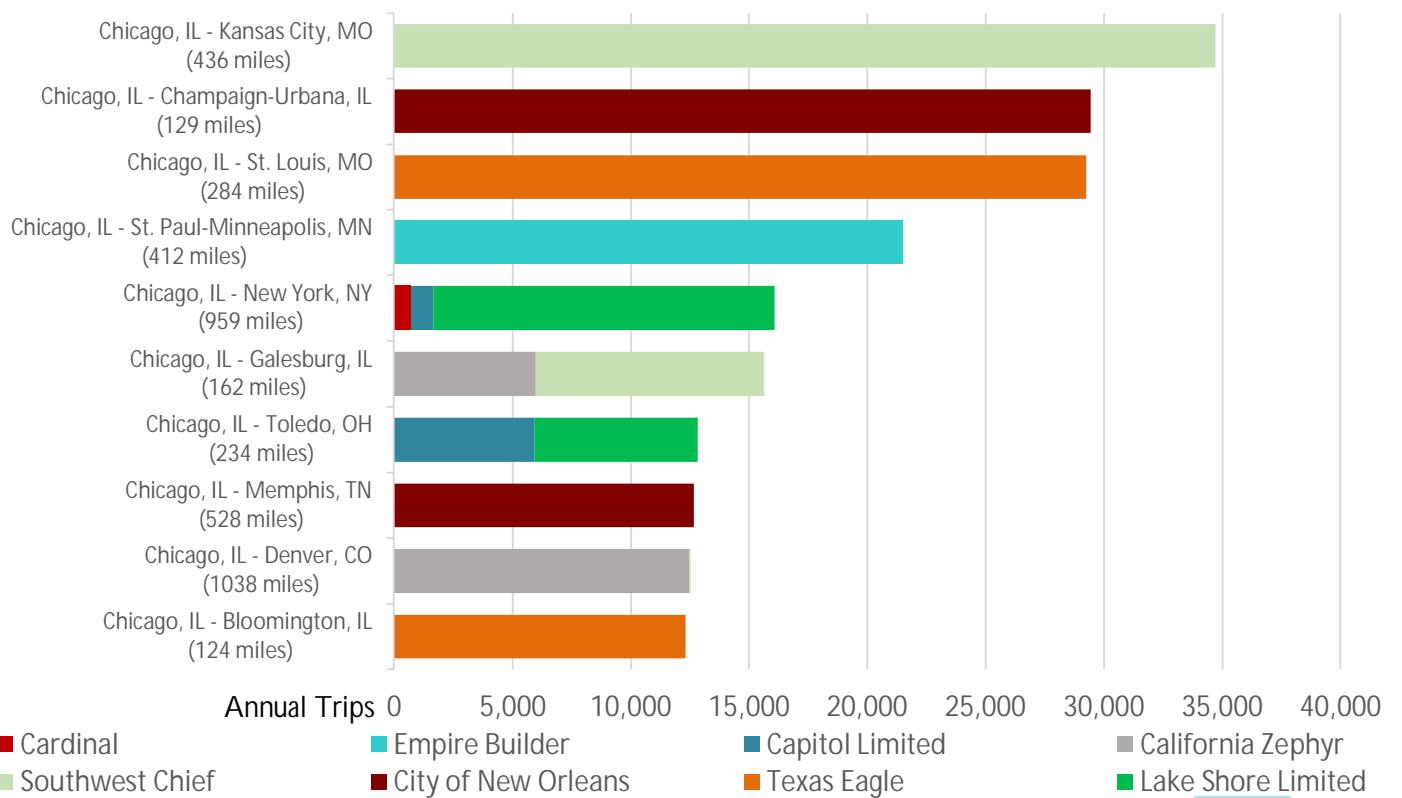
- The next few slides are based on Amtrak FY 2019 ridership data for rail trips over 100 miles in length on Long-Distance passenger trains
- The slides focus on top station pairs overall and on trips connecting to a small community

Midwest Region – Current Amtrak O-D Pairs

Amtrak Ridership: Top 10 Station Pairs

- Chicago is a part of all 10 of the top station pairs
- Three Long-Distance routes serve Chicago – New York City trips, with *Lake Shore Limited* accounting for 90% of Chicago – New York City trips
- Seven station pairs are within the Midwest Region
- Five station pairs are connected by state-supported services

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

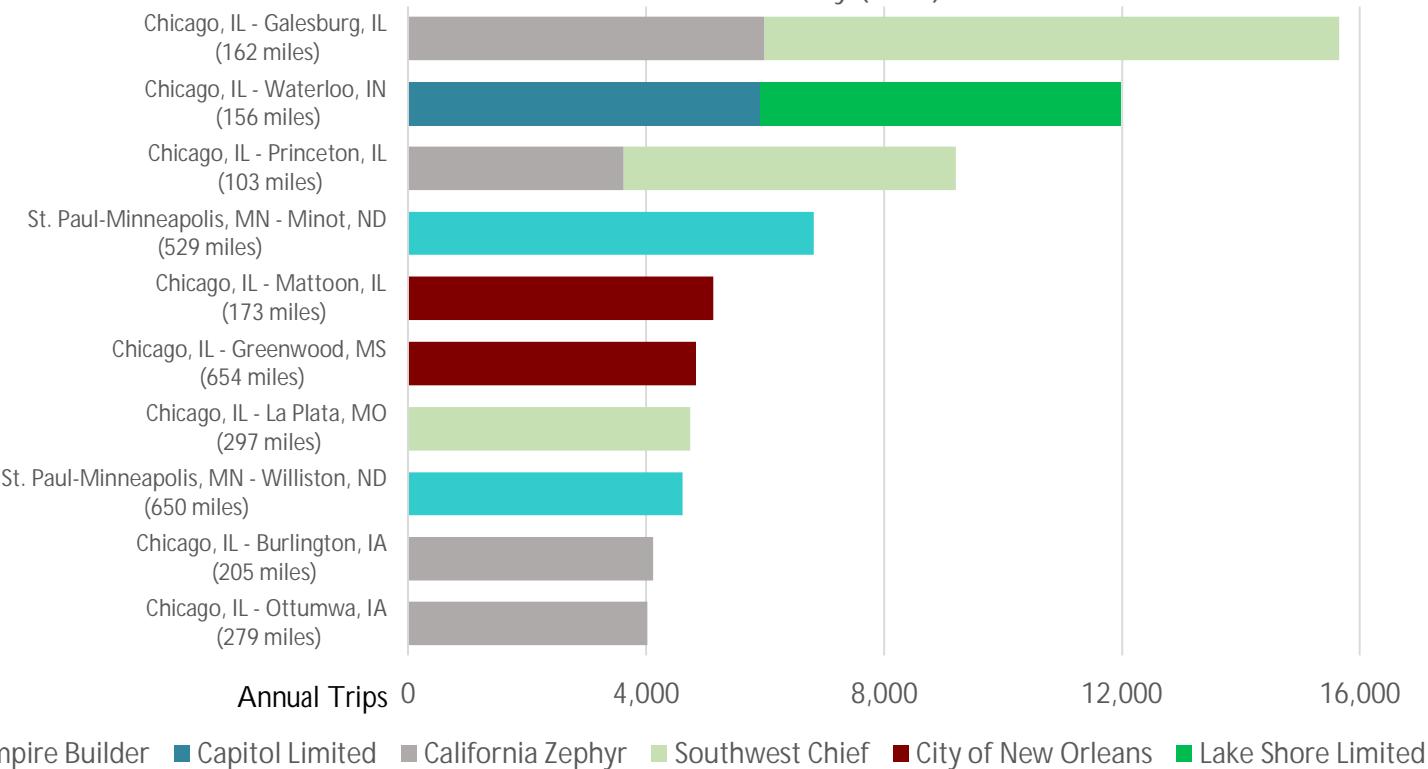


Midwest Region – Current Amtrak O-D Pairs

Amtrak Ridership: Top 10 Station Pairs Serving Small Communities

- Chicago is in eight pairs
- Eight station pairs are within the Midwest Region
- Three station pairs are connected by state-supported services
- The Chicago-Galesburg pair is also included in the overall top 10 station pairs, served by the *California Zephyr*, *Southwest Chief*, and state-supported service

Top 10 Long-Distance Station Pairs by Volume of Annual Trips Including a Small Community (2019)

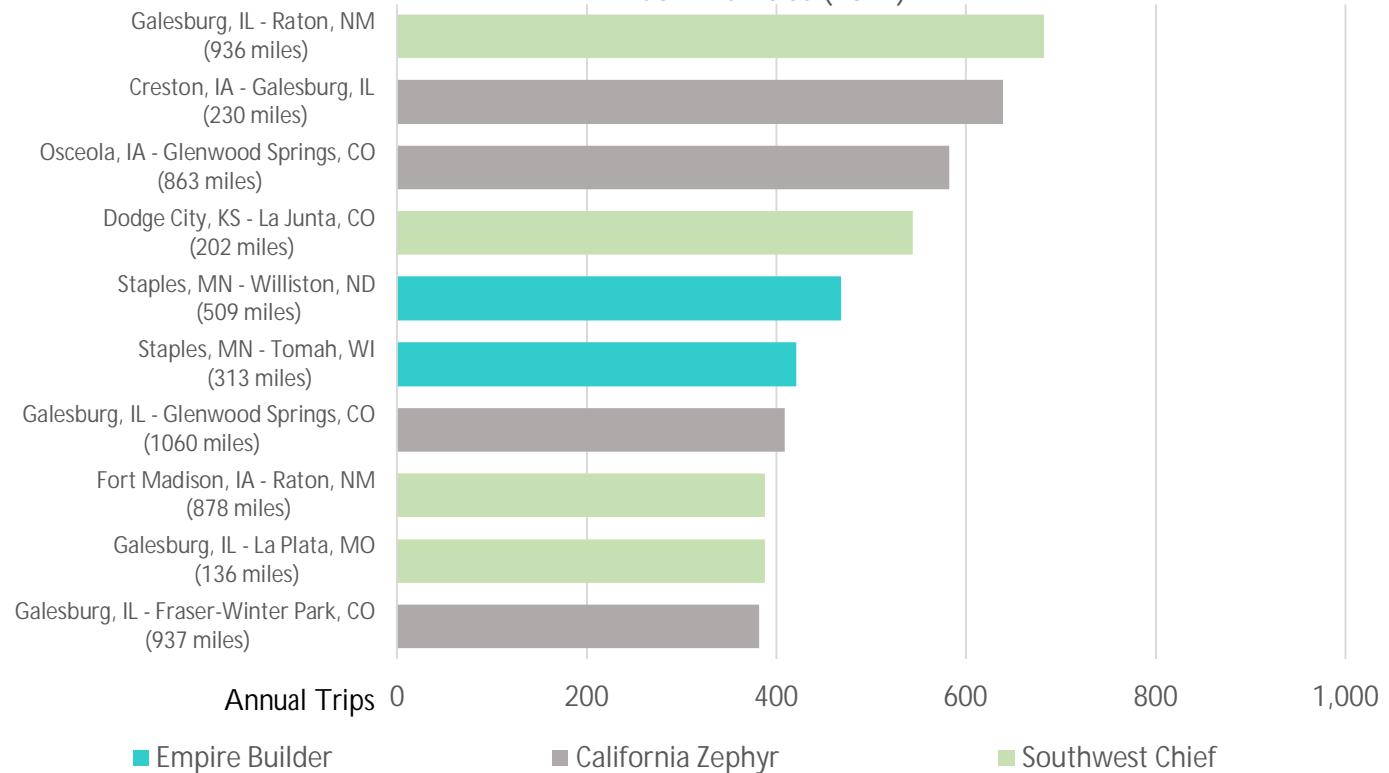


Midwest Region – Current Amtrak O-D Pairs

Amtrak Ridership: Top 10 Station Pairs Connecting Small Communities

- Six of these station pairs have a station outside the Midwest Region
- Seven of these station pairs are connected by overnight trips

Top 10 Long-Distance Station Pairs by Volume of Annual Trips Connecting Two Small Communities (2019)



Midwest Market Conditions Summary

- Travel flows in the Midwest Region are primarily intra-regional with many city pairs connecting with Chicago as a hub for all trips
- Travel flows connecting Smaller MSAs include more inter-regional city pair connections (Denver, Dallas, and Atlanta)
- The *Southwest Chief* connects many of the top station pairs in the Midwest Region, including connections to smaller communities
 - Galesburg, IL and Princeton, IL, which also have state-supported service
 - La Plata, MO