



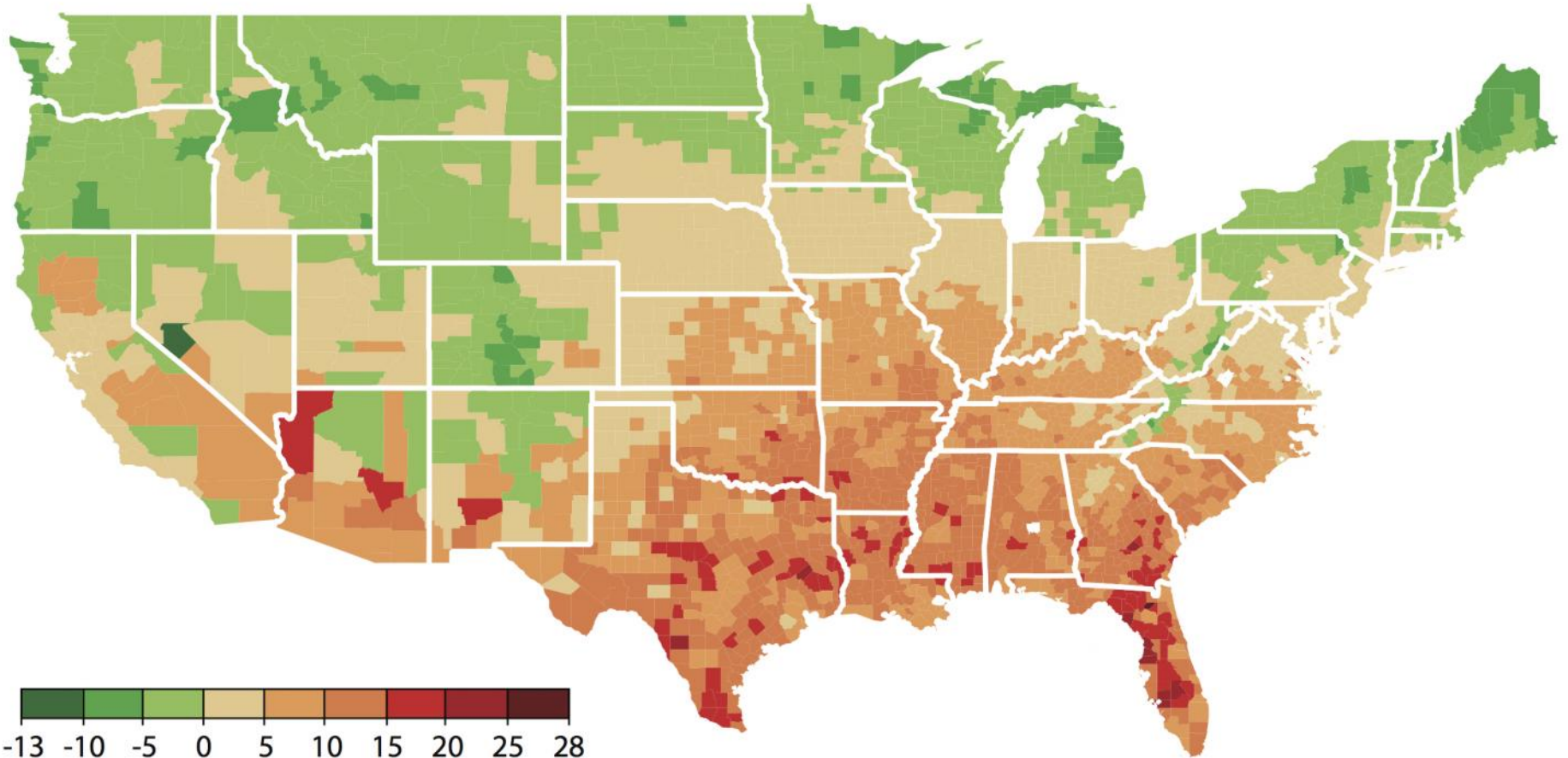
Midwest Intercity Rail Planning Update

RailNation

Chicago

November 3, 2017

The Big Picture



-13 -10 -5 0 5 10 15 20 25 28
Total economic damage (% county GDP)

Hsiang, Kopp, Jina, Rising, et al. (2017)

Midwest Regional Rail Planning Study

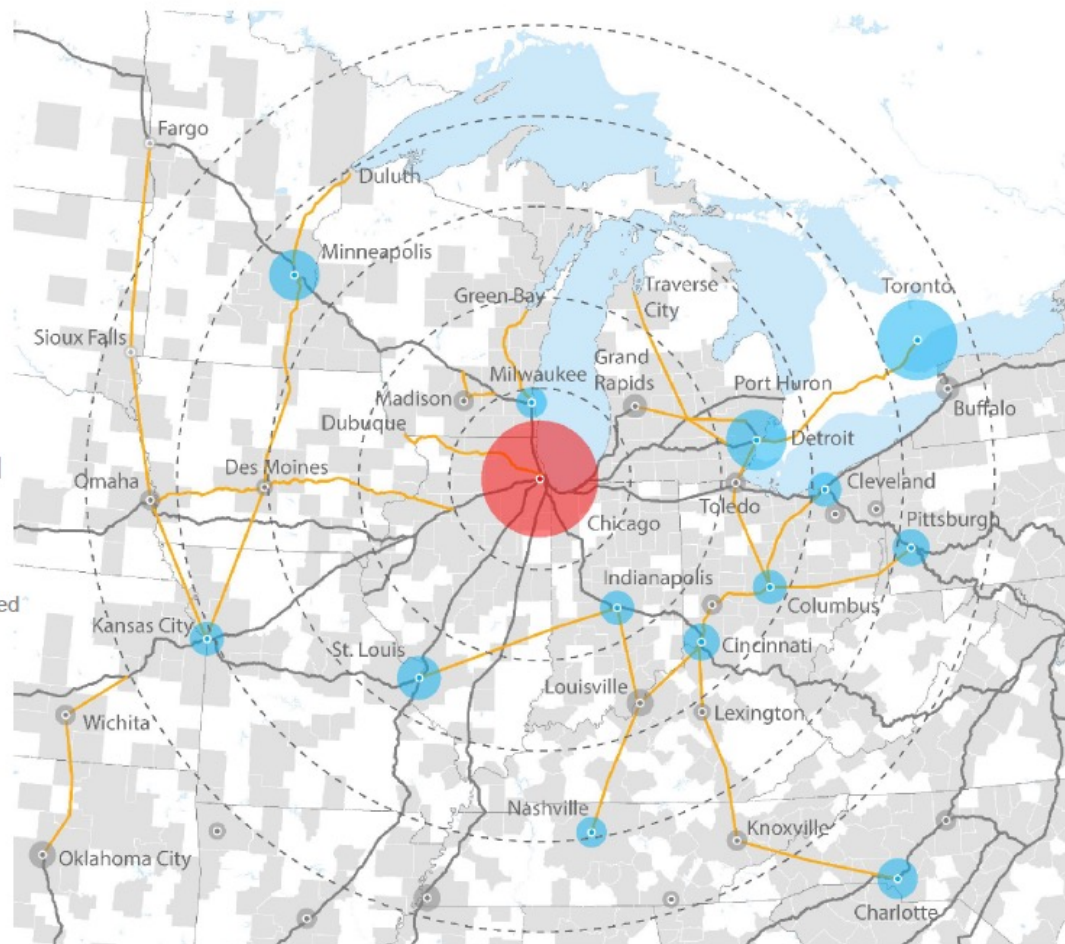
FRA
State DOTs
WSP
Others

Cities/Markets

- Primary
- Major
- Regional
- Other

Passenger Rail Corridors

- Existing service
- Stakeholder-suggested service









FRA Corridor Investment Levels

Corridors	Top Speeds (mph)	Other Common Characteristics	Primary Markets Served	Minimum Reliability Target (On-time Performance)
Core Express	over 125	Frequent service; dedicated tracks, except in terminal areas; electric-powered	Serving major metropolitan centers	99%
Regional	90–125	Frequent service; dedicated and shared tracks; electric- and diesel-powered	Connecting mid-sized urban areas with each other or with larger metropolitan areas	95%
Emerging / Feeder	Up to 90	Shared tracks	Connecting mid-sized and smaller urban areas with each other or with larger metropolitan areas	85%

CONNECT Analysis Findings



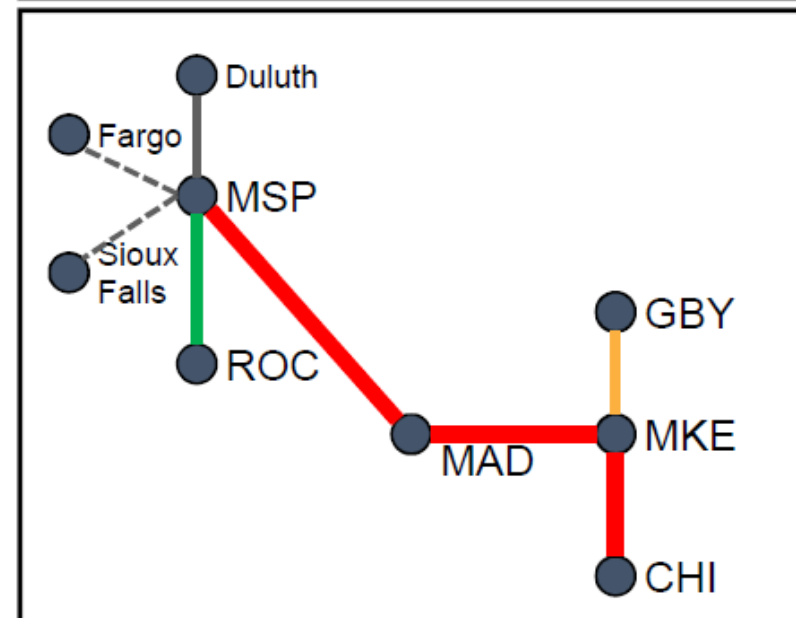
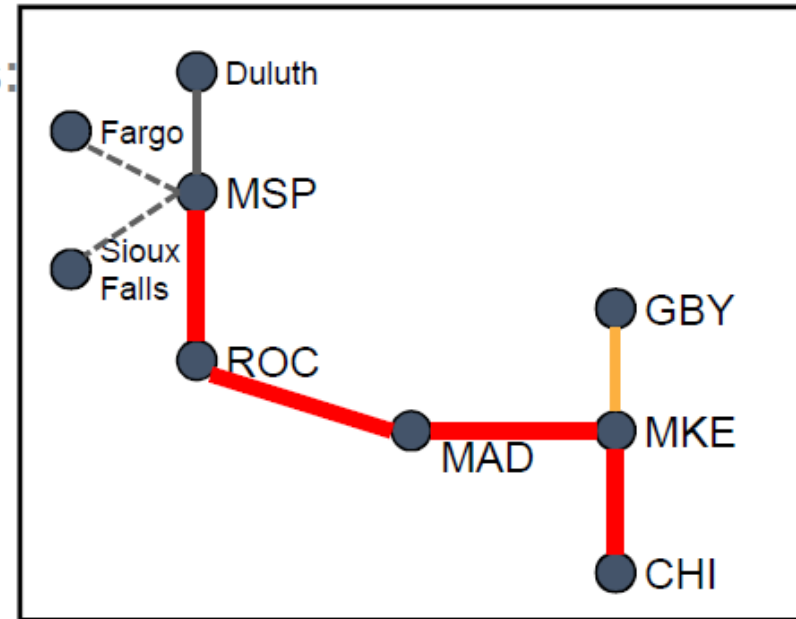
Corridors	Top Speeds (mph)
Core Express	over 125
Regional	90–125
Emerging / Feeder	Up to 90

-  Core Express
-  Regional w/ Core Express Potential
-  Regional
-  Emerging-Integral to Network
-  Emerging-Independent of Network
-  Small Market-Independent of Network

Northwest: Major Corridor - Chicago-Twin Cities

Preliminary Proposed Network Options:

- Service Tier CHI-MSP: Core Express
- Route: via MKE and MAD
- Routing option either via Rochester or with Rochester as branch from MSP
- Green Bay as connecting Emerging service from MKE
- Duluth as connecting service from MSP



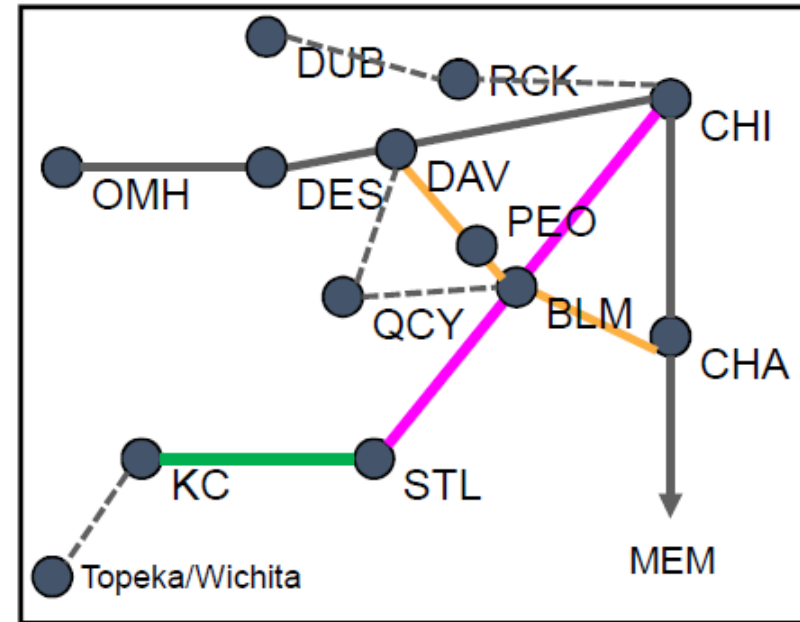
- Core Express
- Regional w/ Core Express Potential
- Regional
- Emerging-Integral to Network
- Emerging-Independent of Network
- Small Market-Independent of Network



Southwest: Major Corridor – STL/KC - Chicago

Recommended Network:

- Service Tier STL-CHI: Regional
- Route via Bloomington/Springfield
- Regional service St Louis to Kansas City; Kansas City – Chicago service via St Louis
- Emerging circumferential route once mainline is built out
- Other corridors recommended as Emerging and somewhat independent of other network considerations



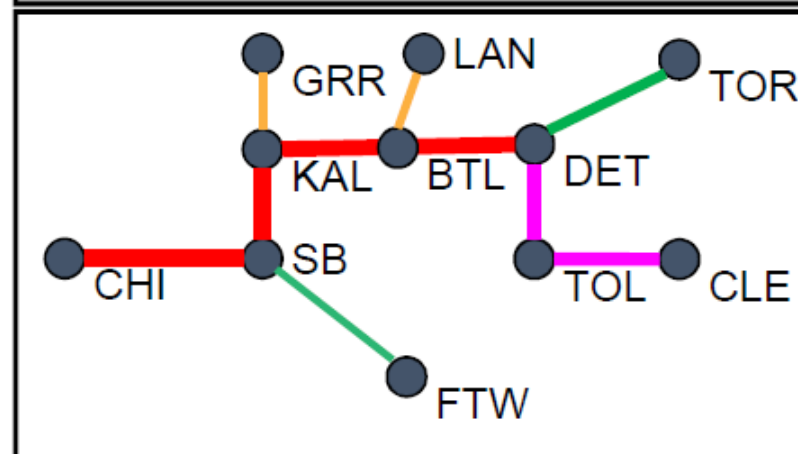
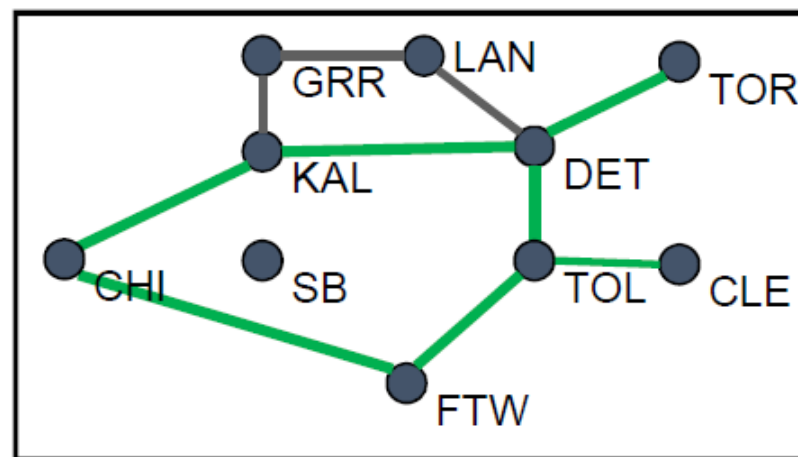
- Core Express
- Regional w/ Core Express Potential
- Regional
- Emerging-Integral to Network
- Emerging-Independent of Network
- Small Market-Independent of Network



Northeast: Major Corridor – CHI-DET

Preliminary Proposed Network Options:

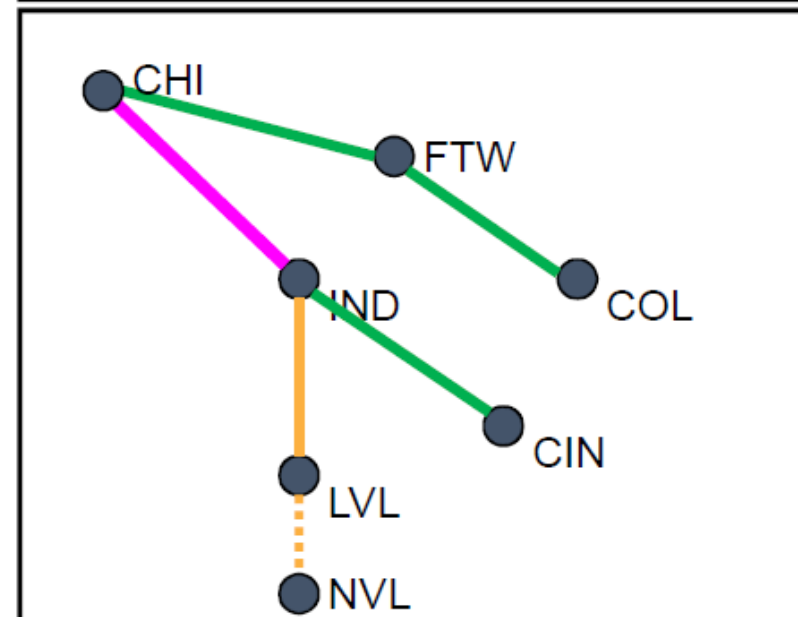
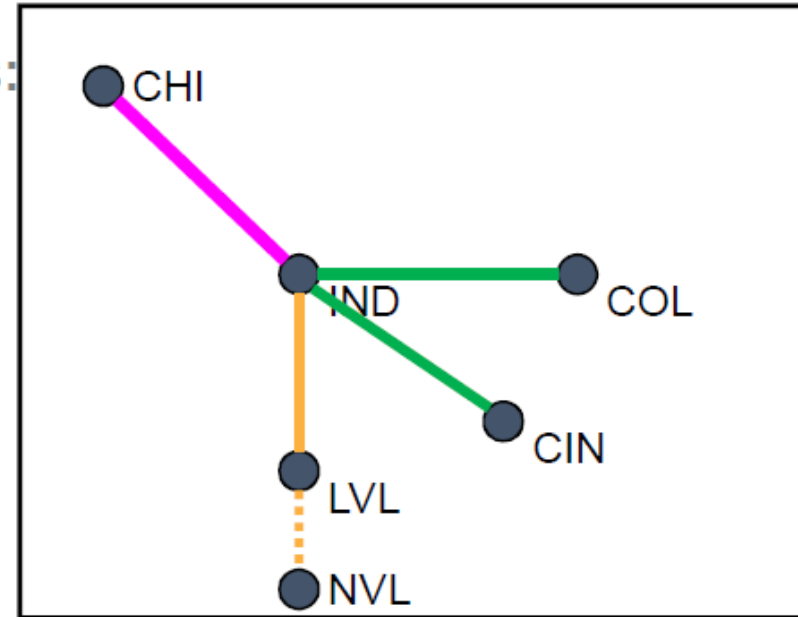
- Service Tier: Regional or Core Express
- Routing Options
 - Core Express via South Bend or
 - Regional via existing mainline
- Regional Service to Toronto
- Regional service Cleveland/Toledo – Detroit (Independent of whether that is route to Chicago)
- Trade offs for route Toledo/Cleveland to Chicago (but rule out connection point at Ann Arbor)
- Tradeoffs with how to serve Fort Wayne
- Coast-to-Coast route with Regional mainline or connections to mainline with Core Express



Southeast: Major Corridor – Indianapolis - Chicago

Preliminary Proposed Network Options:

- Service Tier: Regional with Core Express Potential
- Route direct via Lafayette
- Tradeoff with how Columbus market is served.
- Emerging to Regional service to Louisville, Cincinnati and Columbus with connections at Indianapolis



- Core Express
- Regional w/ Core Express Potential
- Regional
- Emerging-Integral to Network
- Emerging-Independent of Network
- Small Market-Independent of Network



Midwest Regional Rail Planning Study



The Midwest Regional Rail Planning Study

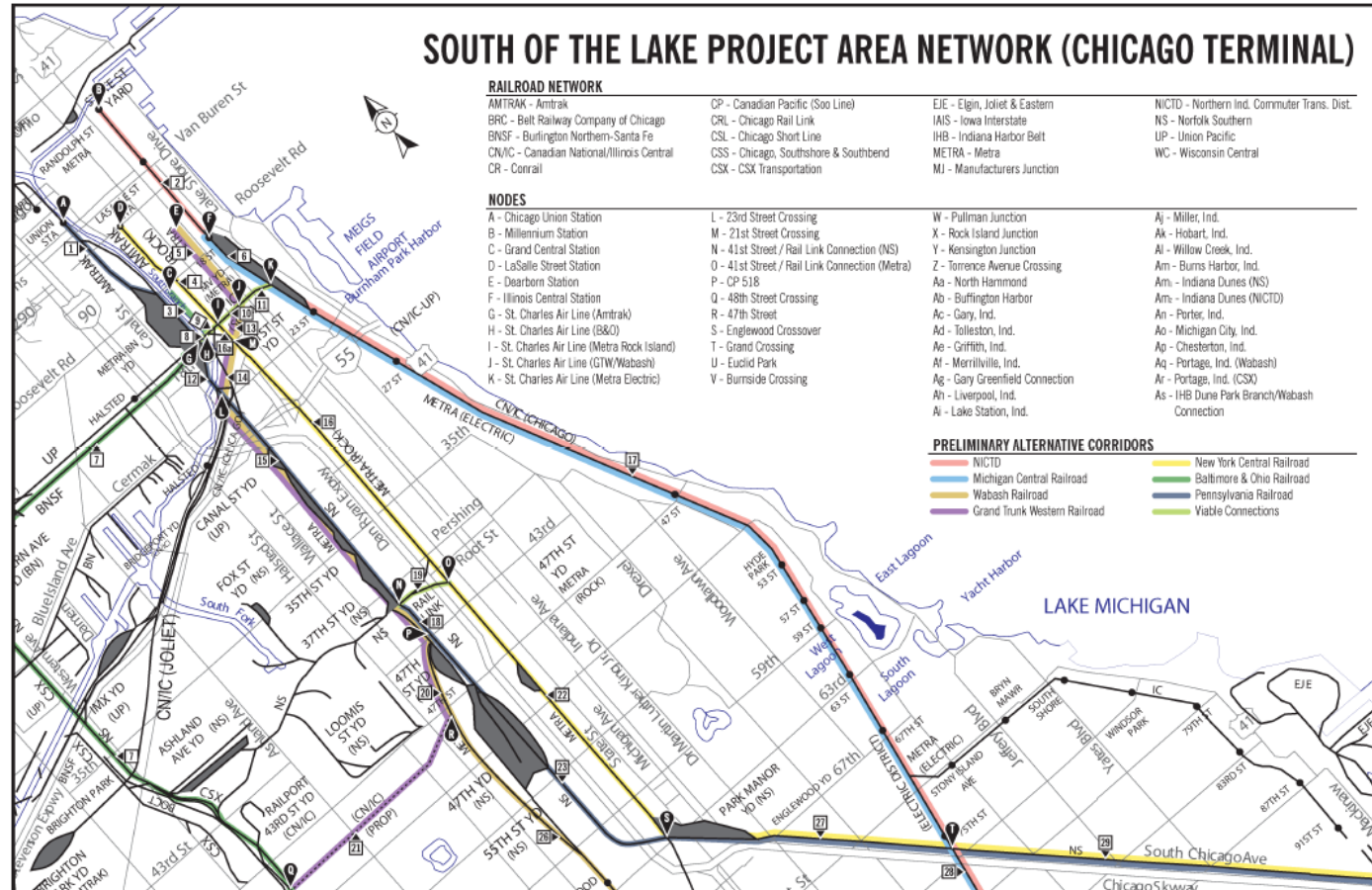
The Federal Railroad Administration (FRA) is embarking on a project to explore the potential for a high-performance, multi-state intercity passenger rail network in the Midwest region. The study will build on current rail planning efforts within the twelve states of Illinois, Missouri, Iowa, Michigan, Wisconsin, Ohio, Nebraska, Kansas, South Dakota, North Dakota, Indiana, and Minnesota and will explore the potential for a fully integrated passenger rail network linking communities throughout the region.

www.midwestrailplan.org

Chicago Terminal Planning Study

Purpose

- Identify preferred passenger rail alignments to CUS from all directions
- Integrate findings of previous corridor-level studies



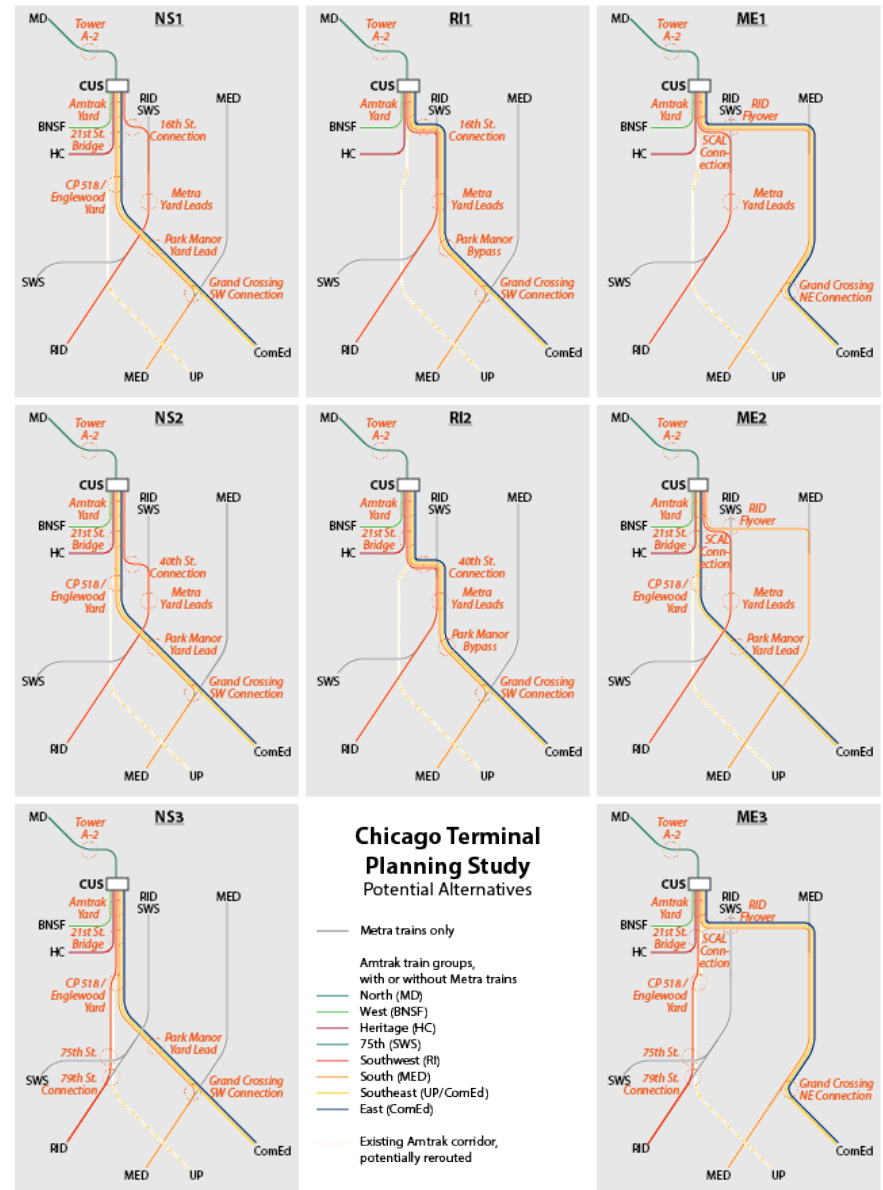
Chicago Terminal Planning Study

Approach

- Compare performance, impacts, and costs of at least 8 potential alternatives

Product

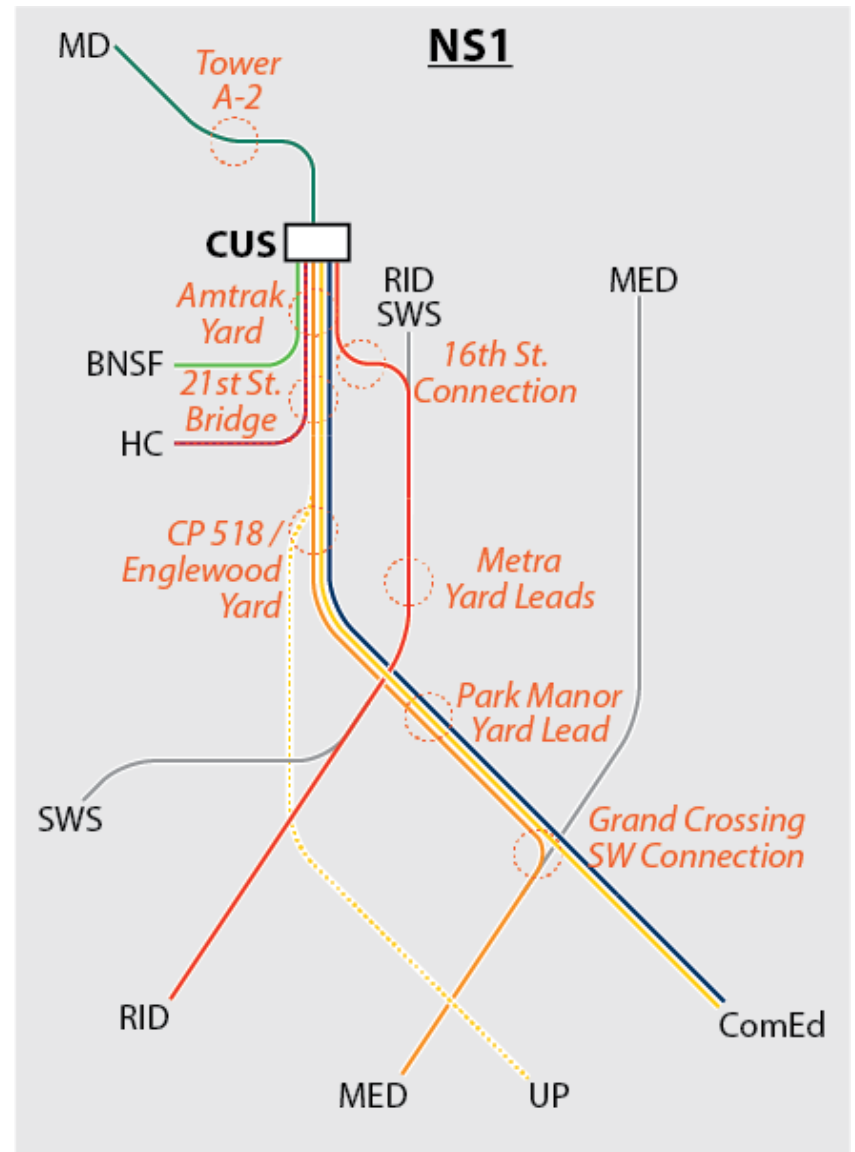
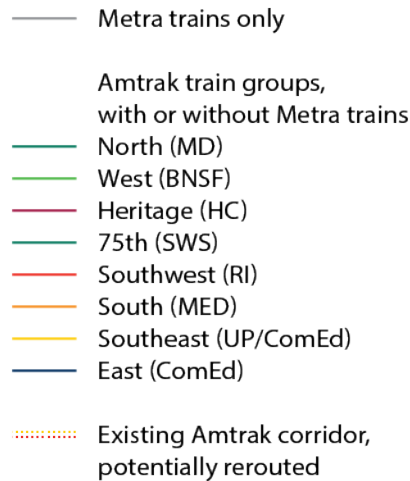
- FRA Service Development Plan



Chicago Terminal Planning Study

Alternative NS1

- Combines CHI-DET Route 2/4/5 and CHI-STL 16th Street alternatives
- Requires new river crossing near downtown

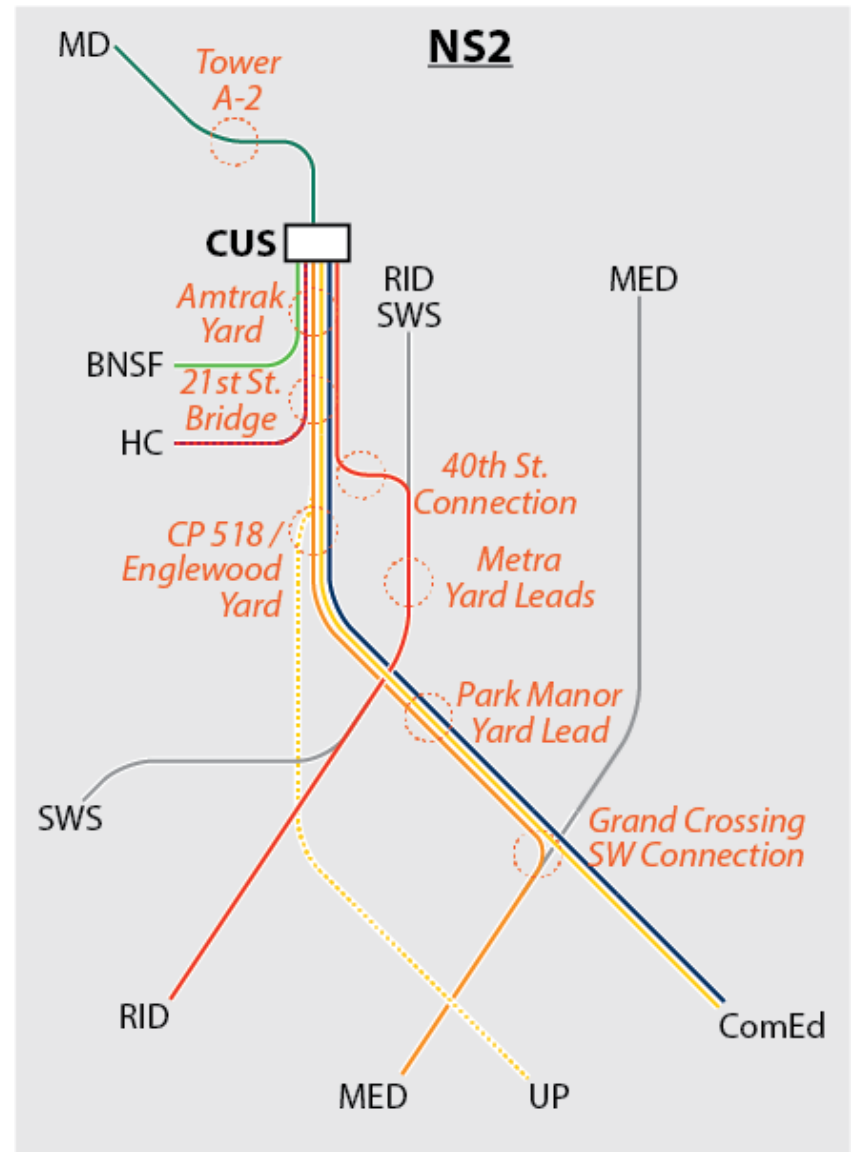


Chicago Terminal Planning Study

Alternative NS2

- Combines CHI-DET Route 2/4/5 and CHI-STL 40th Street alternatives
- Requires upgraded 40th Street connection
- All south lines use 21st Street bridge

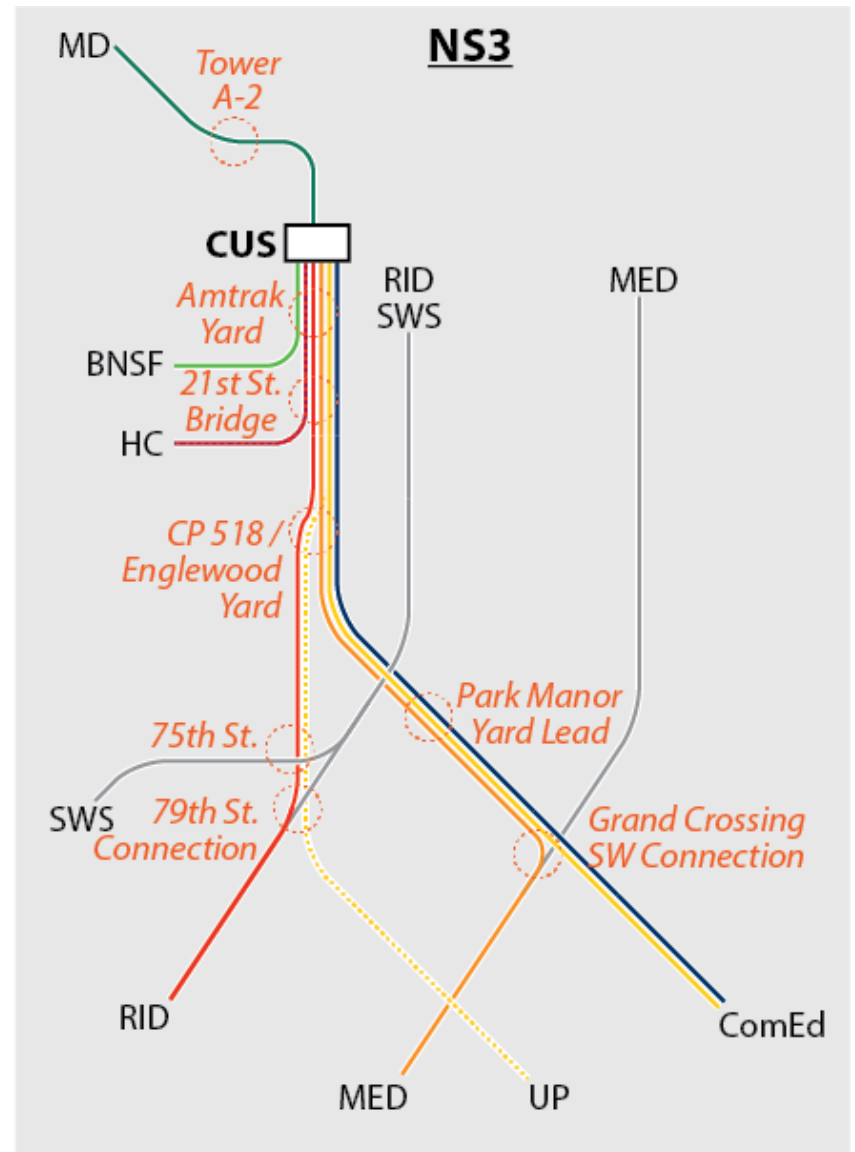
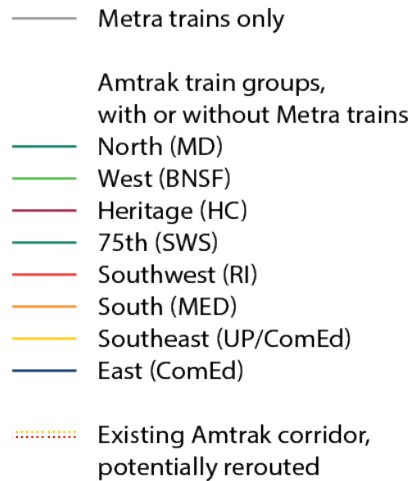
- Metra trains only
- Amtrak train groups, with or without Metra trains
- North (MD)
- West (BNSF)
- Heritage (HC)
- 75th (SWS)
- Southwest (RI)
- South (MED)
- Southeast (UP/ComEd)
- East (ComEd)
- ⋯ Existing Amtrak corridor, potentially rerouted



Chicago Terminal Planning Study

Alternative NS3

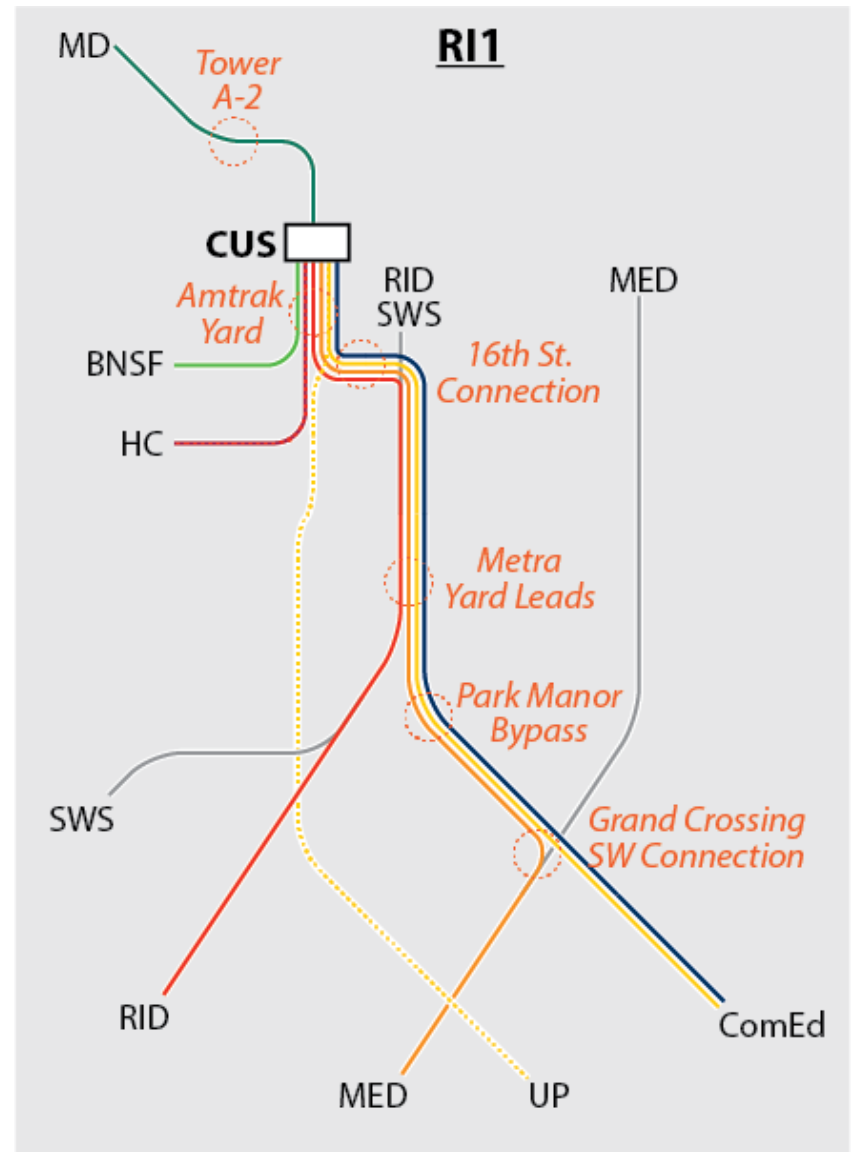
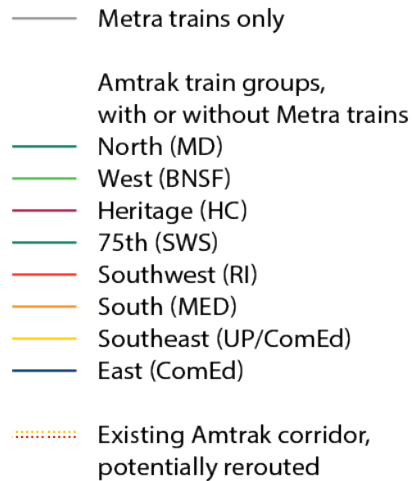
- Minimal new infrastructure
- Design and operational challenges near 75th Street freight corridor
- All south lines use 21st Street bridge



Chicago Terminal Planning Study

Alternative RI1

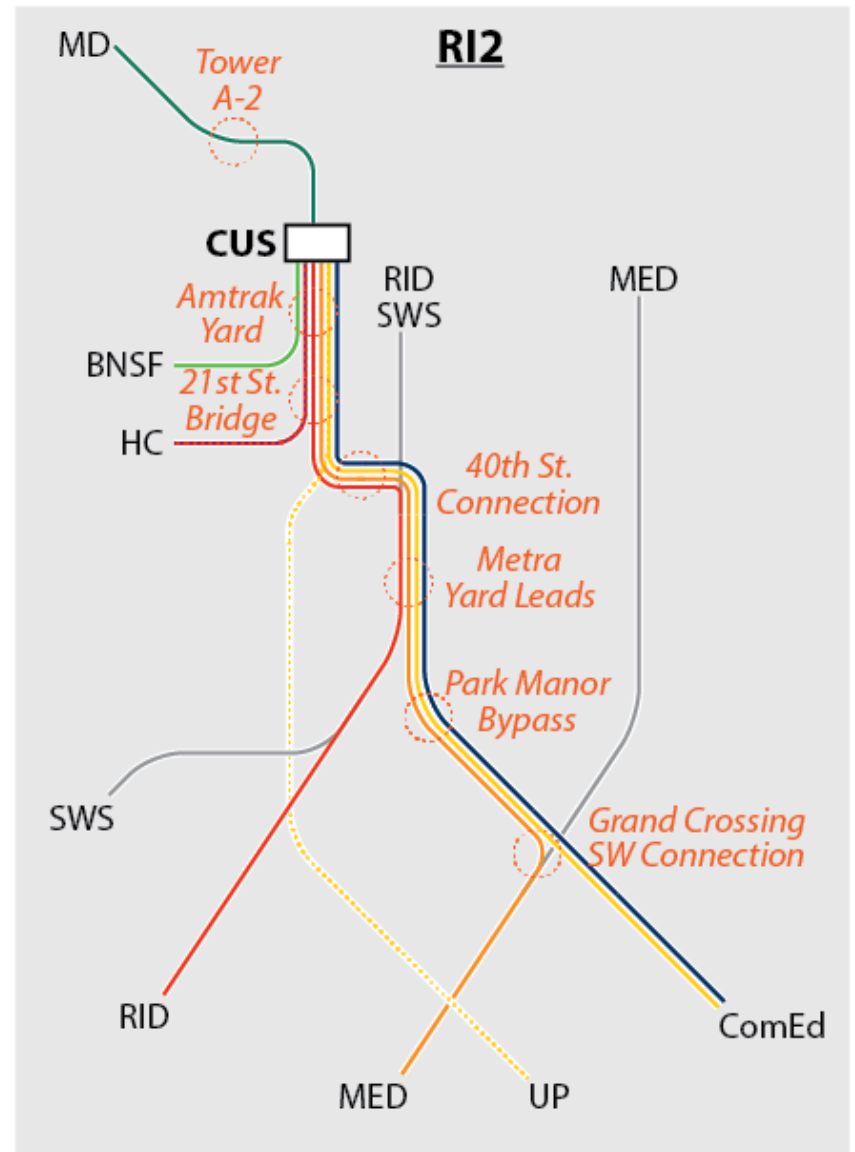
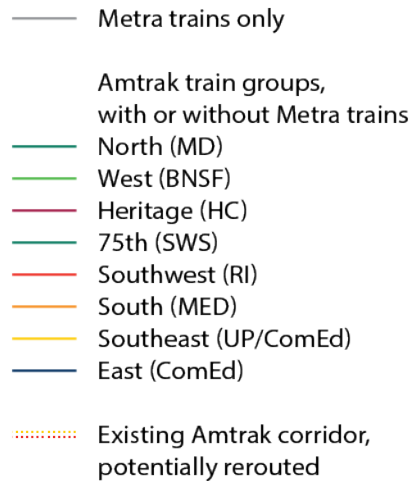
- Creates publicly-owned passenger corridor on Metra Rock Island District
- New bypass required at NS Park Manor yard
- New river crossing required near downtown



Chicago Terminal Planning Study

Alternative RI2

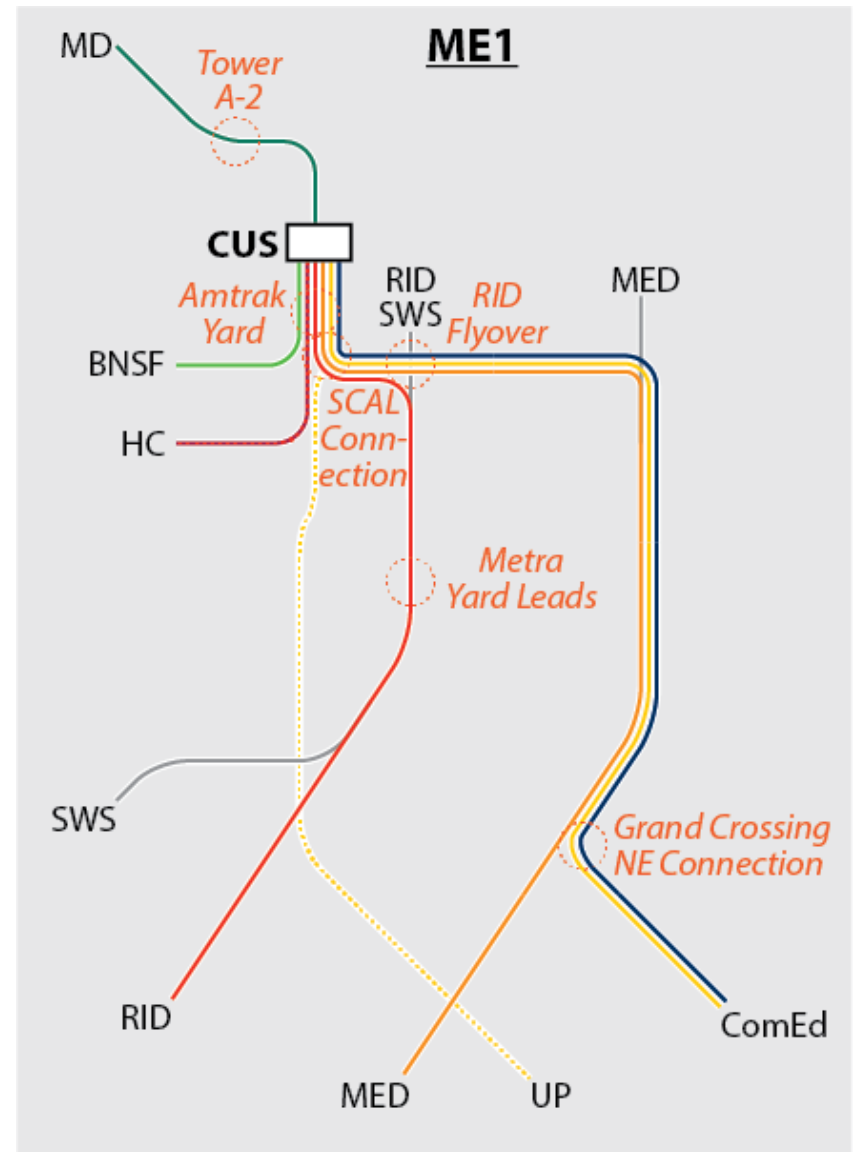
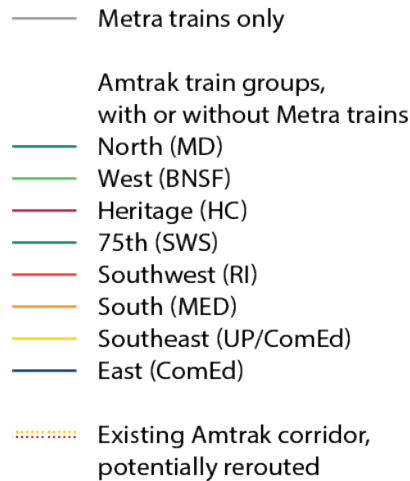
- Creates publicly-owned passenger corridor on Metra Rock Island District
- Requires new bypass at NS Park Manor yard
- Requires upgraded 40th Street connection
- All south lines use 21st Street bridge



Chicago Terminal Planning Study

Alternative ME1

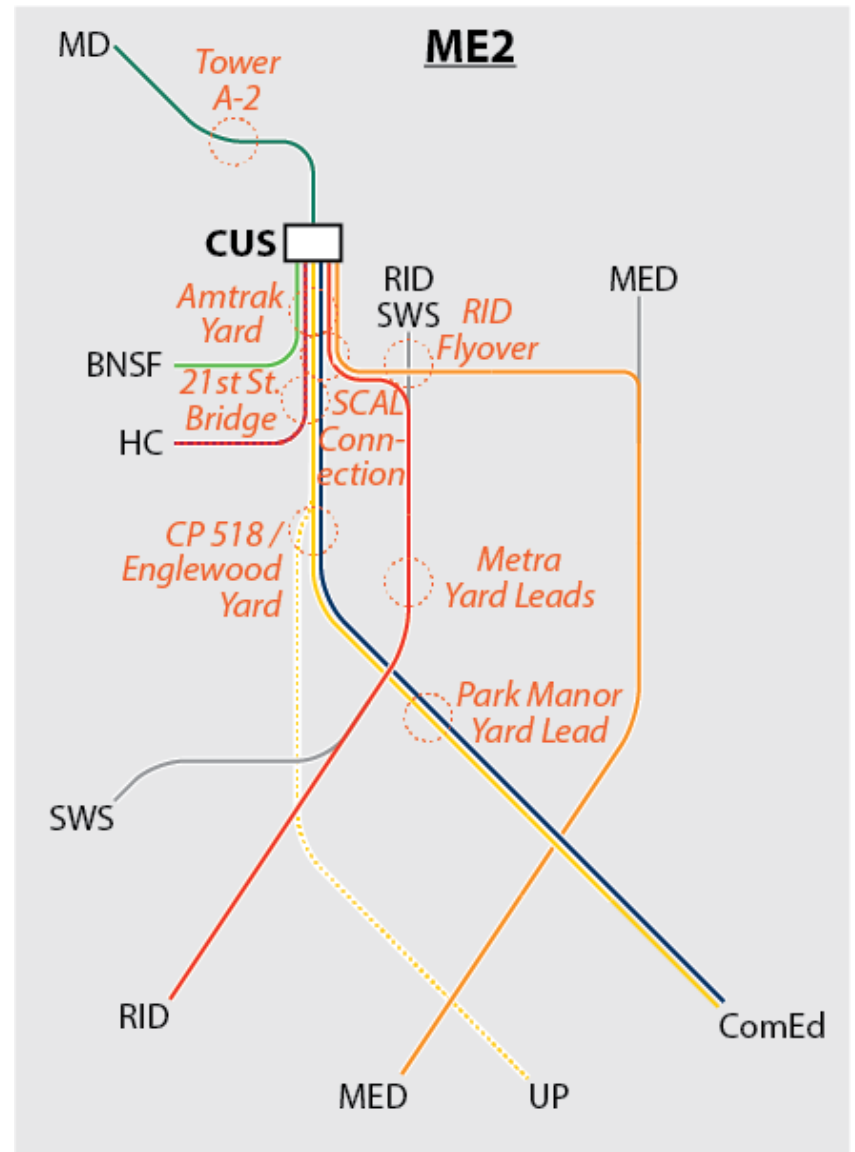
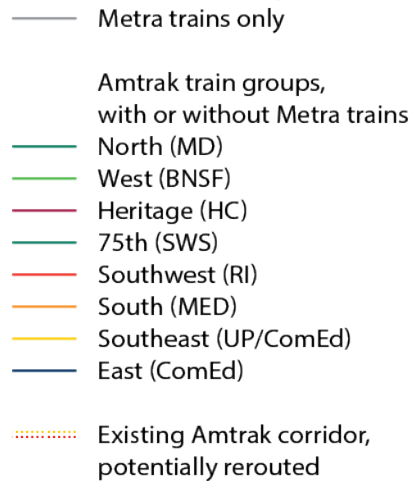
- Combines CHI-DET Route 1/9 and CHI-STL 16th Street alternatives
- New river crossing required near downtown
- Supports St Charles Air Line commuter options
- Potential lakefront stations
- Excludes CREATE Project P4



Chicago Terminal Planning Study

Alternative ME2

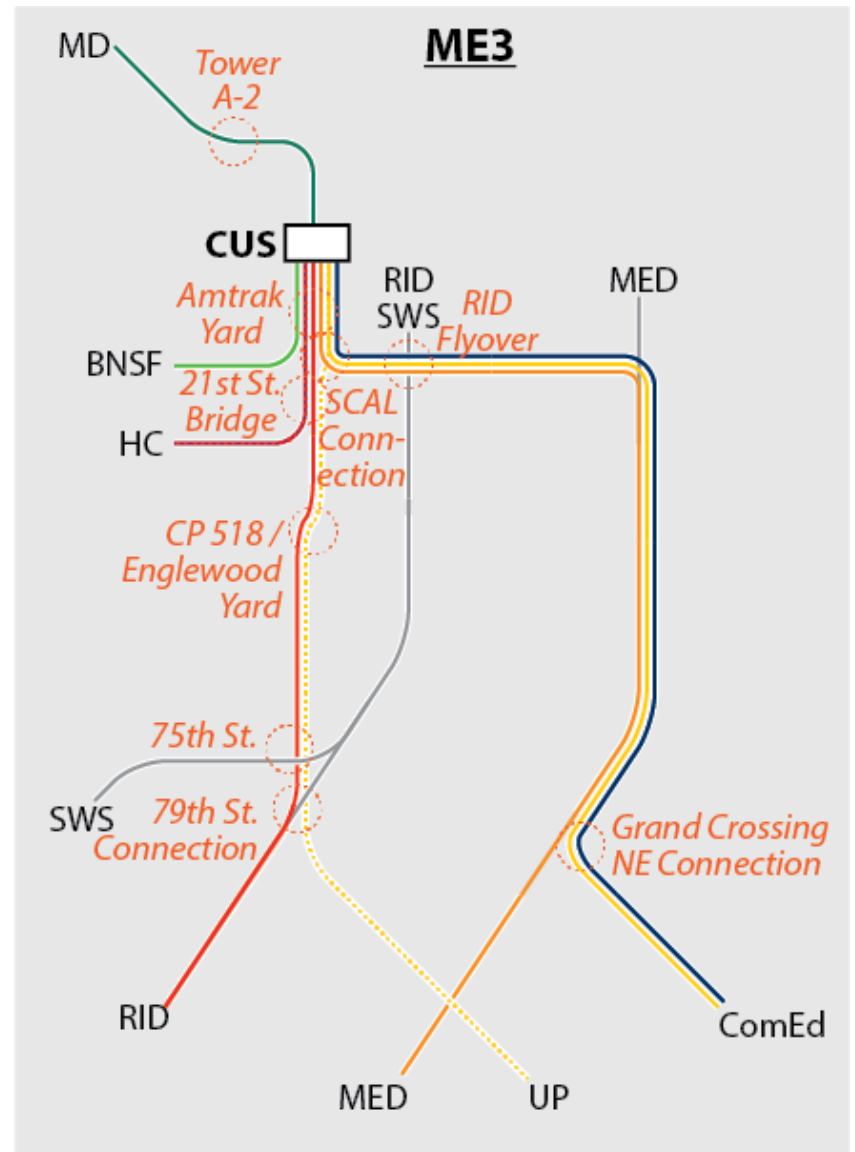
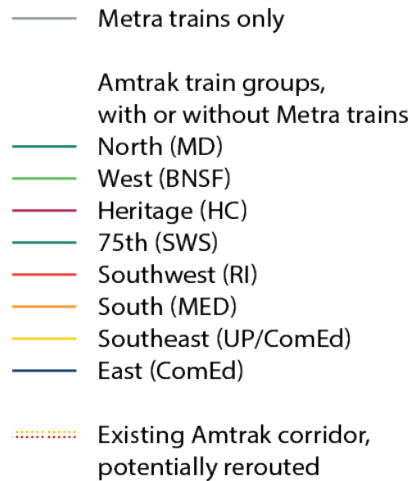
- Spreads traffic, greatest track-miles
- New river crossing required near downtown
- Supports St Charles Air Line commuter options
- Fewer trains at lakefront stations
- East lines use 21st Street bridge
- Excludes CREATE Project P4



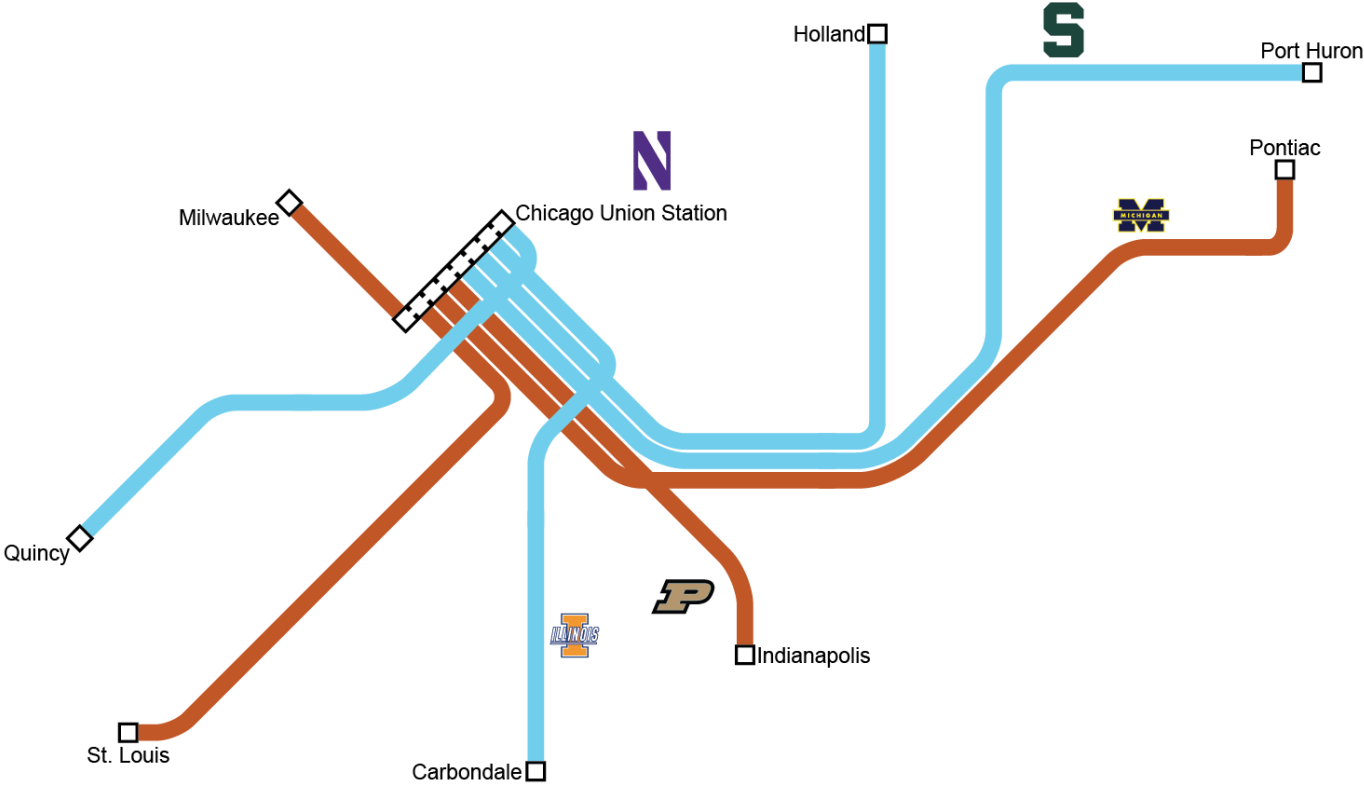
Chicago Terminal Planning Study



Alternative ME3

- New river crossing required near downtown
- Supports St Charles Air Line commuter options
- Design and operational challenges near 75th Street freight corridor
- Excludes CREATE Project P4

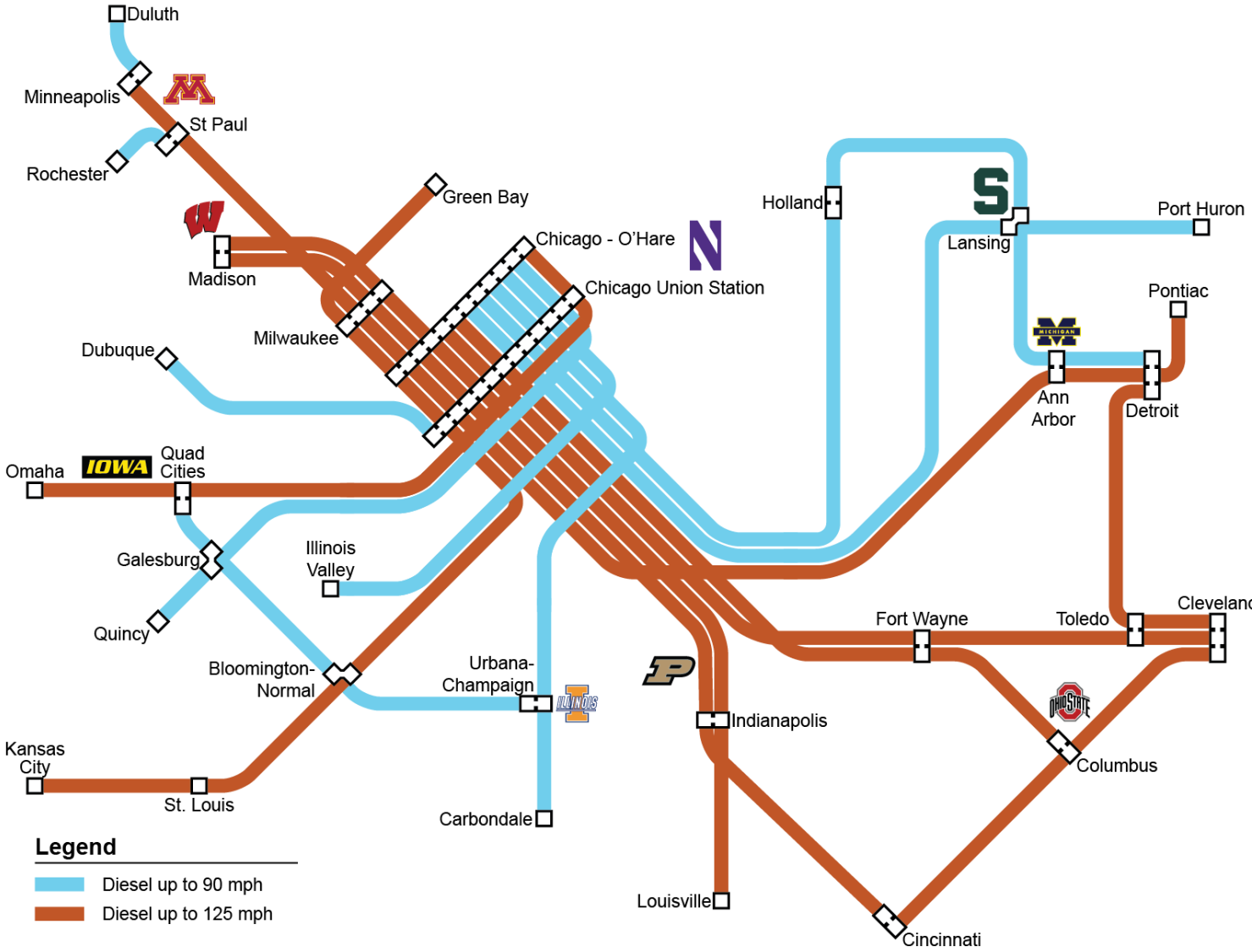


Food for Thought

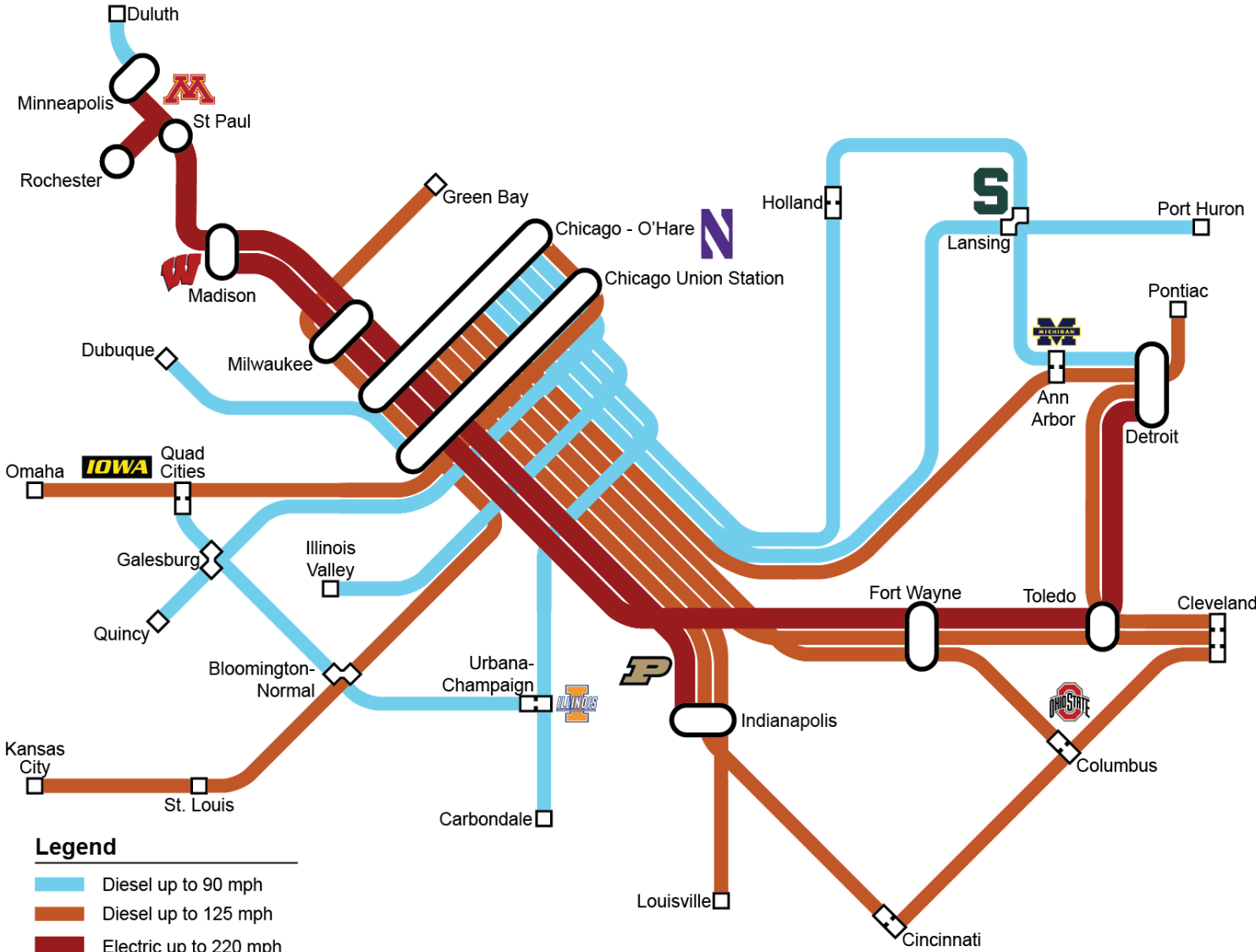


- Legend**
-  Diesel up to 90 mph
 -  Diesel up to 125 mph

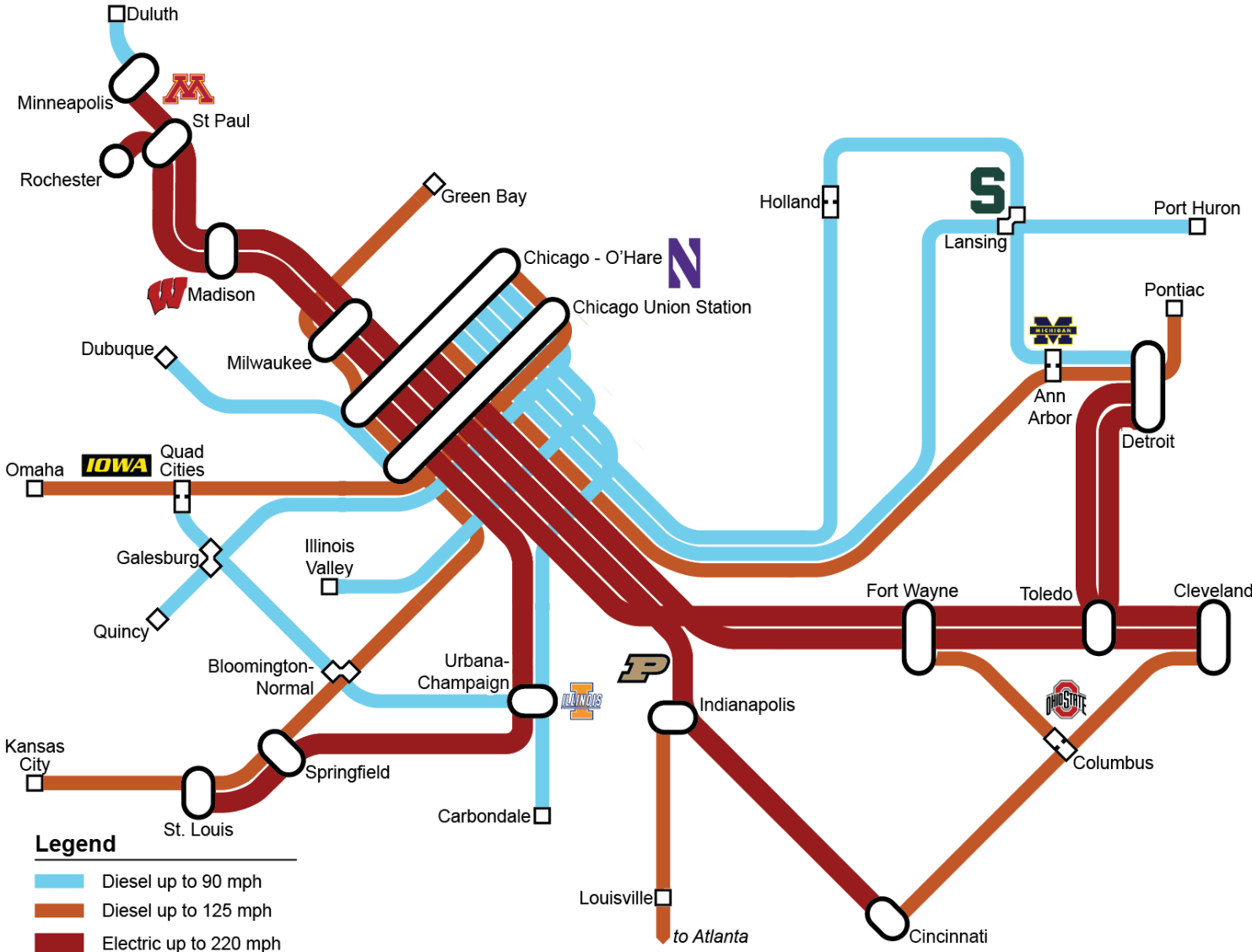
Food for Thought



Food for Thought



Food for Thought



Discussion