

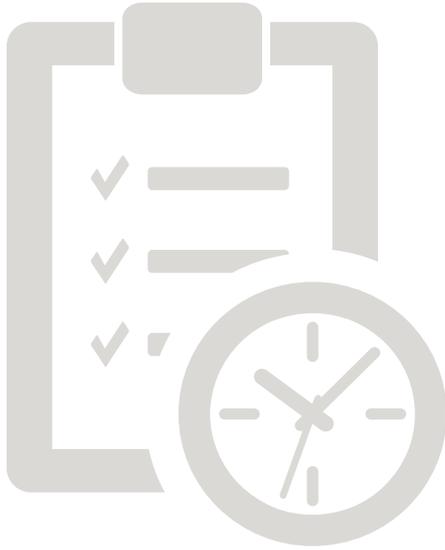
TWIN CITIES - MILWAUKEE - CHICAGO INTERCITY PASSENGER RAIL SERVICE PROJECT

# PHASE I STUDY

December 7, 2017



# AGENDA



- **Welcome and Introductions**
- **Project Background and Overview**
- **Activities**
  - Purpose and Need Statement
  - Alternatives Analysis
  - Operations Modeling
  - Infrastructure Improvements
- **Next Steps**
- **Input & Open Discussion**

# TCMC PROJECT BACKGROUND

- Amtrak conducted a feasibility study for adding a “second frequency” passenger service between Chicago Union Station and the Twin Cities area
- 2015 feasibility report indicated favorable ridership and revenue
  - **Ridership projection:** 155,500 annually
  - **Revenue:** \$6.8 million



# TCMC PROJECT BACKGROUND

- State DOTs recommended advancing the study between Chicago Union Station and Union Depot in St. Paul because of lower capital costs and less complex rail operations
- Use *Empire Builder* route between St. Paul and Chicago



# TCMC PROJECT OVERVIEW

- About **4-6 hours apart** from *Empire Builder* schedule
- Up to **13 stations**
- Train utilizes existing or proposed slot between Chicago and Milwaukee from *Hiawatha* corridor to **minimize impacts**
- **79 mph** (max) service
- **Infrastructure improvements needed** to support additional service while maintaining freight performance

# TCMC PROJECT OVERVIEW

- **Phase I Study: Jul 2016 – Q1 2018**

- Purpose and need
- Route and service alternatives analysis
- Public outreach
- Operations analysis
- Conceptual engineering and capital cost estimates

- **Phase 2 Study: next phase**

- Environmental review
- Service development plan

## PUBLIC INVOLVEMENT THROUGHOUT ALL PHASES



# PURPOSE AND NEED STATEMENT

- Describes project purpose and transportation problems it aims to resolve
- Approved by FRA and posted to project website in July 2017

## Purpose

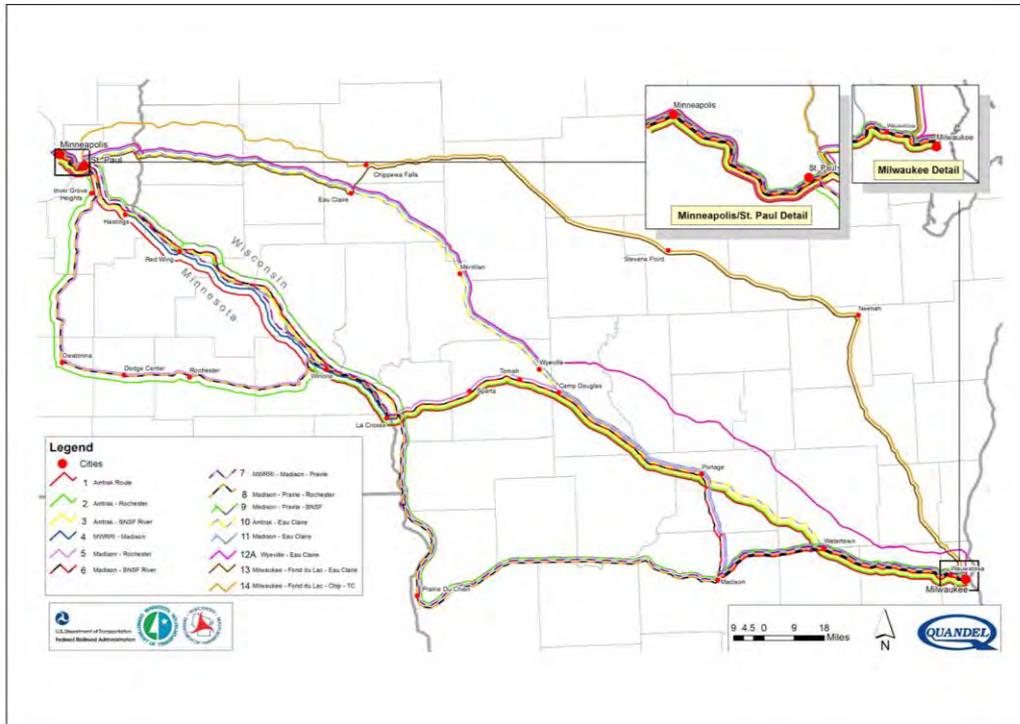
- Fill regional transportation system gaps
- Cost-effective to implement, operate and maintain
- Population increases, economic growth
- Integrate with *Hiawatha* service
- Avoid travel time delays sometimes experienced by the *Empire Builder* as it travels from the West Coast

## Need

- Insufficient non-auto transportation options for communities; once-daily trip does not provide adequate connections
- Rising population, economic growth would create more travel delays
- Insufficient schedule choices for intercity travelers
- *Empire Builder* near capacity during peak travel months, and travel demand expected to rise

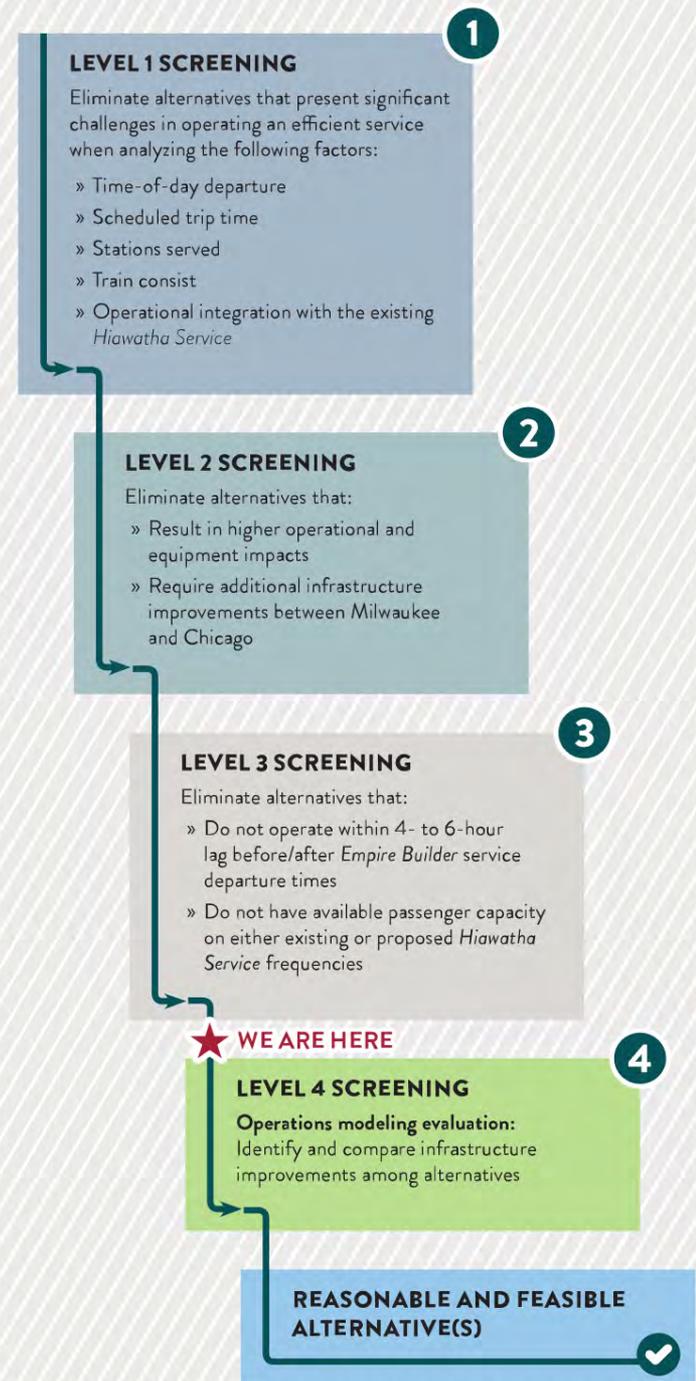
# ALTERNATIVES ANALYSIS: ROUTE ALTERNATIVES

- 11 route alternatives and a no-build alternative considered
- Utilized work completed under Midwest Regional Rail Initiative and Chicago-Milwaukee Intercity Passenger Rail Service study



# ALTERNATIVES ANALYSIS: SERVICE ALTERNATIVES

- Project team used 4-level screening process to identify reasonable and feasible service alternatives
- Each screening level provided greater level of detail in analyzing the identified alternatives



# ALTERNATIVES ANALYSIS: SERVICE ALTERNATIVES

The project team analyzed these five identified alternatives:

- **No-Build Alternative:** No additional passenger rail service provided.
- **Alternative 1 (Recommended for Operations Modeling):** TCMC service frequency operates as extension of one of the existing seven *Hiawatha* service schedules.
- **Alternative 2:** TCMC service frequency operates as extension of one of the proposed additional *Hiawatha* service schedules.
- **Alternative 3:** TCMC service frequency operates separately between St. Paul and Milwaukee, then attaches with the *Hiawatha* service to operate as one train between Milwaukee and Chicago.
- **Alternative 4 (Recommended for Operations Modeling):** TCMC service frequency operates as separate, additional frequency to existing *Hiawatha* service.

# OPERATIONS MODELING

- Evaluate and determine how TCMC service can operate most efficiently
- Operations modeling between Milwaukee and St. Paul
- Trains utilize existing or proposed *Hiawatha* service schedule slots between Chicago and Milwaukee
- Schedules complement current *Empire Builder* schedules, with arrival and departure times at endpoints that maximize ridership potential
- Develop appropriate infrastructure improvements needed for TCMC while minimizing freight and passenger rail delays and accommodating freight growth

# EXISTING *EMPIRE BUILDER* & PROPOSED TCMC SCHEDULE – ALTERNATIVE 1

Existing <i>Empire Builder</i>		
Station	WB (Read Down)	EB (Read Up)
Chicago, IL	Dp 2:15 PM	Ar 3:55 PM
Glenview, IL	2:39	3:12
Sturtevant, WI	N/A	N/A
MKE Airport, WI	N/A	N/A
Milwaukee, WI	Ar 3:52	Dp 2:07
Milwaukee, WI	Dp 3:52	Ar 2:07
Columbus, WI	5:02	12:57
Portage, WI	5:31	12:27
Wis Dells, WI	5:49	12:08 PM
Tomah, WI	6:27	11:26
La Crosse, WI	7:11	10:47
Winona, MN	7:47	10:11
Red Wing, MN	8:49	8:54
St. Paul, MN	Ar 10:03 PM	Dp 8:00 AM

Proposed TCMC – Alternative 1		
Station	WB Train 333 (Read Down)	EB Train 340 (Read Up)
Chicago, IL	Dp 10:20 AM	Ar 7:14 PM
Glenview, IL	10:42	6:46
Sturtevant, WI	11:20	6:08
MKE Airport, WI	11:34	5:55
Milwaukee, WI	Ar 11:49	Dp 5:40
Milwaukee, WI	Dp 11:54	Ar 5:40
Columbus, WI	12:58 PM	4:22
Portage, WI	1:25	3:54
Wis Dells, WI	1:44	3:36
Tomah, WI	2:23	2:56
La Crosse, WI	3:07	2:17
Winona, MN	3:42	1:39
Red Wing, MN	4:44	12:35 PM
St. Paul, MN	Ar 5:39 PM	Dp 11:47 AM

# CONGESTION AREAS, PROPOSED INFRASTRUCTURE IMPROVEMENTS – ALTERNATIVE 1

 Area of congestion

**PROPOSED INFRASTRUCTURE IMPROVEMENTS**

-  Siding extension
-  Upgrade with power switches and signals
-  New or converted track
-  Install universal crossover

**NOTE:**

These are **proposed** infrastructure improvements, subject to revisions during environmental review, and preliminary and final design work.



# TCMC NEXT STEPS

- **Phase 1 Study: Complete Q1 2018**
  - Complete operations modeling for Alternative 4
  - Complete conceptual design plans for proposed infrastructure improvements for Alternatives 1 and 4
  - Develop capital cost estimates for proposed infrastructure improvements for Alternatives 1 and 4
- **Phase 2 Study: Obtain funding/begin Phase 2**
  - Environmental review process
  - Service Development Plan
  - Preliminary Design
- **Final design, construction, operation**
  - Initiate upon completion of Phase 2 Study
  - Service could begin by 2022, pending receipt of funding

# LET'S DISCUSS ...



**Areas of concern**



**Considerations for future NEPA phase**



**Establishing contacts for this study for ongoing coordination**

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Receive project updates through “Connect with us” link on project website: [www.dot.state.mn.us/passengerrail/tc-mil-chi/](http://www.dot.state.mn.us/passengerrail/tc-mil-chi/)

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