



Evaluation of a Second Daily Passenger Train Between Minnesota and Chicago

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We all have a stake in **A  B**



Second Train Study

- ▶ MNDOT, WisDOT and La Crosse County requested Amtrak to complete a feasibility study of adding a second daily intercity passenger train between the Twin Cities (or St. Cloud) and Chicago, IL.
 - RTC modeling task was added after FRA requested validation of CP's infrastructure cost estimates
- ▶ Existing Empire Builder route through Illinois and Wisconsin, with several end points in Minnesota.
- ▶ The purpose of a second daily train is to offer more options to travelers in the corridor by providing better eastbound reliability and increased train frequency.



Second Train Study Benefits

- ▶ Potential mobility benefits of the proposed service include:
 - more reliable service with better on-time performance (particularly eastbound)
 - more convenient travel times for shorter, regional trips
 - more seating capacity on the corridor relieving pressure during peak periods
 - improved connections between other trains, intercity buses, local public transit, and air service



Purpose of the Study

- ▶ A high level, order-of-magnitude assessment of schedules, ridership, revenue, infrastructure investments, operating costs, and equipment needs associated with adding a second daily train
- ▶ This assessment will assist the project sponsors in determining whether or not to move the project to the next steps toward implementation.



Station Options

- ▶ Existing stations served by the Empire Builder plus Milwaukee Airport
- ▶ Terminal Station scenarios in Minnesota
 - Union Depot in St. Paul
 - Target Field Station in Minneapolis
 - St. Cloud with stops at Union Depot and Fridley Northstar Station in lieu of Target Field Station
 - St. Cloud with stops at Union Depot and Target Field Station



Corridor Study Area

Railroads:

- BNSF
- MN Commercial
- Canadian Pacific
- Metra
- 499.8 miles

Note; Sturtevant and Glenview are current Hiawatha stops



Schedule Options

- ▶ Schedules are designed to complement the current Empire Builder schedule, with arrival and departure times at the endpoints that maximize ridership potential.
 - The westbound train would depart Chicago at 9:25am and arrive at Union Depot at 4:42pm.
 - The study evaluated eastbound departure times from Union Depot at 2:25pm (Option A) and 12:25pm (Option B), arriving in Chicago at 9:54pm and 7:57pm.
 - A third eastbound departure time at 11:46am arriving in Chicago at 7:14pm was identified that varies departure times slightly from Option B to minimize capital infrastructure costs.

Note: Schedules are at planning level only. Schedules will be refined during further study.



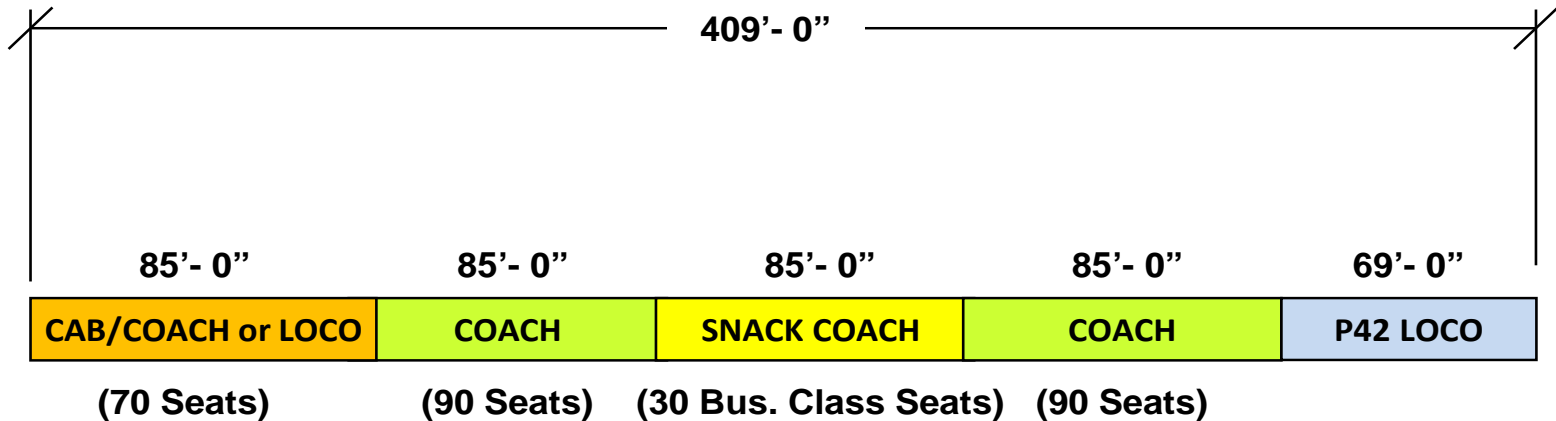
RTC Modeling Results

- ▶ CP will be hauling an increasingly large amount of rail freight traffic in 2017
- ▶ Some infrastructure improvements will be needed to support a 2nd conventional passenger train
- ▶ Suggested improvements were reviewed by MnDOT, WisDOT, FRA, CP, BNSF, Amtrak
- ▶ East Metro improvements will support 2nd passenger train schedules without negatively impacting freight service
- ▶ Stakeholders must jointly determine what the appropriate level of freight operational impact is and negotiate the improvements needed to attain that level



Equipment Needs

Train Consist



Source: Amtrak

Total Capacity = 280 seats

- ▶ Two train consists – two diesel locomotives, four bi-level coaches, two bi-level snack coaches, and two bi-level cab coaches
- ▶ Superliner-type equipment, similar to that used on current Empire Builder



Estimated Annual Ridership

- ▶ The annual ridership for all scenarios compares favorably with annual ridership on existing state-supported intercity passenger rail routes in other states with one round-trip per day.
 - Ridership varied between 117,800 and 185,100
 - Chicago–Union Depot had a ridership of 155,500
 - Chicago–St. Cloud via Minneapolis route option had the highest ridership at 185,100



Capital Investment Needs

- ▶ Railroad Infrastructure Improvements (\$95m – \$290M)
- ▶ Rolling stock (\$46.4 million)*
- ▶ Layover facilities (\$0.3–0.65 million)
- ▶ Chicago–Union Depot route option (ridership of 155,500) had:
 - revenue of \$6.8 million
 - the lowest capital cost of \$95.2 million
 - require an estimated operating support from the states of \$5.6 million/year
- ▶ Chicago–St. Cloud via Minneapolis route option (highest ridership at 185,100) had:
 - revenue at \$9 million
 - highest capital cost at \$210.2 million
 - require an estimated operating support from the states of \$4.6 million/year

* If purchased by the States



Recommendations

- ▶ MnDOT and WisDOT staff recommend moving forward with the next phase of study to fulfill environmental requirements and be eligible for federal funding
- ▶ Complete next phase of study on an initial start-up service between Chicago and Union Depot in St. Paul, serving all existing stations plus the Milwaukee Airport Rail Station



Next Steps

- ▶ Determine level of environmental clearance for infrastructure improvements based on guidance from FRA
- ▶ Conduct further RTC modeling as required by FRA
 - Determine how the 2nd train schedules will be operationally integrated with the Hiawatha Service between Milwaukee and Chicago
 - Advance the “optimized schedule” as a basis for more detailed modeling and schedule integration
- ▶ Develop environmental analysis and service development plan

