

MOVEMENT OF PEOPLE: PASSENGER RAIL

Efforts from various entities throughout the country are currently underway to bring high-speed passenger rail service to Duluth-Superior. As the regional trade center for NE Minnesota and NW Wisconsin, as well as a nationally recognized tourist destination, Duluth-Superior has the potential to both support and benefit from reestablishing passenger rail connection between the Twin Ports and the Twin Cities. The MIC is supportive of this endeavor as it relates to increasing transportation options and creating multimodal connections. Staff continues to stay connected with the studies currently underway that are consultant-led: preliminary engineering for grade crossings/roads and station location plans for both Duluth and Superior.

Accessibility & Mobility

The proposed [Northern Lights Express](#) (NLX) service, in coordination with the planning efforts of local jurisdictions, would increase transportation options for those who make the estimated 4.3 million trips between the Twin Ports and the Twin Cities annually.¹

Duluth-Superior Terminus:

Plans for local connections include stops in both Superior and Duluth. The Historic Duluth Depot has been identified as the stop in Duluth, where it will connect with an adjacent multimodal transit center that the DTA is currently building. This center is planned to bring together local and intercity bus services, taxi and rental car services, long-term parking, and amenities for cyclists.

Terminus in the Twin Cities:

The NLX's Twin Cities terminus is planned to be Target Field Station which will provide direct connections to the Northstar Corridor (St. Cloud), Blue Line light rail (to Minneapolis-St. Paul International Airport/Mall of America), and Green Line light rail (St. Paul), as well as other Metro Transit services. The Target Field Station connects to regional and metro bike trail to provide a multi-modal connection.

Operations & Maintenance

A preliminary [feasibility study](#) shows that in order to capture the greatest demand with optimal costs, service should be as follows:



Connections 2040

Return of passenger rail service to Duluth-Superior, increasing multimodal connections and transportation opportunities for commuters and travelers.

Strengths

- Viable rail corridor in place.
- Existing potential for increased mobility.
- Existing potential for strong multimodal connections.
- Reuse of historic Duluth Depot and possible reuse of a Superior depot.

Challenges

- Expensive investment required.
- Making Passenger rail a viable competitor to the personal automobile.
- Ensuring safety & security needs are met at crossings and stations.

- Train speeds of 110 mph (2-hour commute time)
- 4 trips to Duluth-Superior per day

1 MnDOT Minnesota Comprehensive Statewide Freight and Passenger Rail Plan: Passenger Rail System Draft Technical Memo 3

Rail Authority & Operator

The overall cost of operations (currently estimated at \$33.38/mile*) will be the responsibility of a future rail authority and contracted rail operator, both of which have not yet been identified. Estimates also suggest that operations will be self-sustaining through ticket sales, though the state would be looked upon to subsidize the difference.

Infrastructure

The proposed NLX service will use existing BNSF freight lines already existing along the 155 mile corridor between Minneapolis and Duluth. Cost-sharing arrangements still need to be negotiated, but BNSF will remain responsible for the maintenance of track and right-of-way. This arrangement defrays significant expense. Yet, in order to support train speeds of 110 mph, upgrades to existing track will still be required.

Results of an environmental impact assessment are still pending, and track alignments have not yet been identified in the MPO area, but new track is anticipated, as is reconstruction of the Grassy Point Bridge between Duluth and Superior.

Cost estimates as they currently exist are shown in Table 4.9.

Table 4.9: Current cost estimates for NLX project

Project component	Estimated Cost
Capital	\$ 550 million
Engineering	\$ 45 million
Administrative (includes env. impact assessment)	\$ 20 million
Total	\$ 615 million

Source: St. Louis & Lake Counties Regional Rail Alliance, 2009.

Safety & Security

Safety and security needs will require a great deal of attention during planning and preliminary engineering for the NLX. The higher-speeds will likely require significant upgrades to existing crossings and traffic control devices; as final track alignment is decided upon with additional at-grade crossings a possibility. At a minimum, the following should be conducted:

The proposed NLX would provide connection to more than the Twin Cities:

The proposed NLX passenger rail service will not only transport passengers between the Twin Cities and the Twin Ports. Three other stations are currently planned: Coon Rapids, Cambridge, and Hinckley, Minnesota (see Figure 4.33). These stops open up service to an additional estimated 355,000 trips annually.



Figure 4.33

- A system-wide risk assessment.
- A grade crossing hazard analysis.

** TEMS study: "Restoration of Intercity Rail Service in the Minneapolis-Duluth/Superior Corridor," 2007.*

Security issues also demand significant attention, not just to the surveillance of trains, tracks and facilities, but to communication and coordination efforts among all the station operators and various other agencies along the line. This will include security concerns that cross over to other operators such as the DTA's transit operations. At a minimum, the following will need to be carried out and coordinated:

- Security threat & vulnerability analysis.
- Wayside intrusion detection analysis.

Moving Towards 2040

The trend across the nation is a growing support and demand for passenger rail services. When service between Duluth-Superior and the Twin Cities will happen is still unclear, but planning for it continues, with significant work being done to determine exactly what such service will look like, and how it will be delivered. Opportunities remain to ensure that accessibility and multimodal connections are maximized, and that safety and security issues are effectively addressed.

Preparing for the Future

What's being done:

- Preliminary Engineering for at-grade crossings
- Station location study for Duluth and Superior

What needs to be done:

- Assessment of local safety and security needs.
- Operational & cost-sharing arrangements

General Recommendations Moving Forward

- Create the most direct/least inconvenient connections between NXL service and DTA transit services.
- Ensure that advanced attention is given to the planning and coordinating safety and security needs; emphasis given to communication and interoperability between NLX and both traffic and transit operations.