

Northstar Corridor Rail Project

Minneapolis-Rice, Minnesota

(November 2002)

Description

The Minnesota Department of Transportation, in cooperation with the Northstar Corridor Development Authority (NCDA), is proposing to design and construct an 82-mile commuter rail line within the Northstar Corridor connecting the Minneapolis-St. Paul metropolitan area and Rice, Minnesota. The corridor also connects the Twin Cities with several northern suburban areas, including Anoka, Sherburne, Benton and Morrison counties. The proposed project also includes a 0.3-mile extension of the Hiawatha Corridor light rail transit (LRT) line (currently under construction) from its current terminus in downtown Minneapolis. The LRT extension would be located between Third Avenue North and a proposed commuter rail intermodal station at Fifth Avenue North in downtown Minneapolis. The multimodal connection would provide a direct link to the 4th Street transit center (pedestrian mall), Mall of America, and the Minneapolis-St. Paul International Airport. The commuter rail line would operate along existing Burlington Northern Santa Fe railroad tracks. The commuter rail line would provide a total of eighteen weekday trips between Rice and downtown Minneapolis with four train sets operating under 30-minute headways during peak (morning and evening) periods.

Summary Description

Proposed Project:	Commuter Rail Line; Light Rail Transit Extension
	82 Miles, 11 Stations (Commuter Rail)
	1,750 feet (LRT Extension)
Total Capital Cost (\$YOE):	\$277.9 Million (Commuter Rail)
	\$24.0 Million (LRT Extension)
Section 5309 New Starts Share (\$YOE):	\$150.9 Million (50%)
Annual Operating Cost (2020 \$YOE):	\$23.2 Million
Ridership Forecast (2020):	10,800 Average Weekday Boardings
	5,400 Daily New Riders
Opening Year Ridership Forecast (2006):	9,600 Average Weekday Boardings
FY 2004 Finance Rating:	Low-Medium
FY 2004 Project Justification Rating:	Not Rated
FY 2004 Overall Project Rating:	Not Recommended

The Northstar Corridor Rail Project would address a current lack of alternative transportation options between Minneapolis and Rice, Minnesota. Presently, only limited non-automobile oriented commuter bus (Greyhound) and limited Amtrak service link the two cities. Mobility along Trunk Highway 10/47 (TH-10/47), which generally parallels the corridor between Minneapolis and Rice, is constrained by signalized traffic intersections. Project sponsors anticipate that the commuter rail line would improve travel time for commuters by alleviating TH-10/47 traffic along major Mississippi River crossings and Interstate 94 interchanges.

The *Not Recommended* rating is primarily based on the inability of project sponsors to obtain a local financial commitment to construct and operate the proposed project. The overall project rating applies to this *Annual Report on New Starts* **and reflects conditions as of November 2002**. Project evaluation is an ongoing process. As New Starts projects proceed through development, the estimates of costs, benefits, schedules and impacts are refined. **The FTA's ratings and recommendations will be updated annually to reflect new information, changing conditions and refined financing plans.**

Status

In May 1998, the NCDA initiated a Major Investment Study/Draft Environmental Impact Statement (MIS/DEIS) to examine mobility options within the Northstar Corridor. The MIS was completed in December 1999, with the selection of a Locally Preferred Alternative (LPA) that included new crossings across the Mississippi River, Trunk Highway 10 improvements, commuter rail, feeder bus service, pedestrian and bicycle improvements and Intelligent Transportation System initiatives. The LPA is included in the Metropolitan Council's and the St. Cloud Area Planning Organization's (local Metropolitan Planning Organizations) financially constrained long range transportation plans. The proposed project is also included in the State Transportation Improvement Program. FTA approved the NCDA's request to initiate Preliminary Engineering in June 2000. NCDA and the Minnesota DOT completed the DEIS in November 2000. A Final EIS was completed in March 2002. The Minnesota DOT completed a Record of Decision on the environmental review process in December 2002. Following the solidification of the State legislature's financial commitment to the Northstar Corridor Rail Project – anticipated in early 2003 – Minnesota DOT is planning to submit a request to FTA to enter into Final Design.

Section 3030(a)(90) of TEA-21 authorizes the "Twin Cities – Northstar Corridor (Downtown Minneapolis-Anoka County-St. Cloud)" for Final Design and construction. Through FY 2002, Congress has appropriated \$14.85 million in Section 5309 New Starts funds for the project.

Evaluation

The following criteria have been estimated in conformance with FTA's *Reporting Instructions for the Section 5309 New Starts Criteria*, updated in June 2002. The project will be reevaluated for next year's *Annual Report on New Starts* and when it is ready to advance into Final Design.

Project Justification Quantitative Criteria		
Mobility Improvements Rating: Not Rated		
	<u>New Start vs. Baseline</u>	
Average Employment Per Station	3,245	
Average Low Income Households Per Station	97	
Transportation System User Benefit Per Project Passenger Mile (Minutes)	Not Rated	
Environmental Benefits Rating: Medium-High		
	<u>New Start vs. Baseline</u>	
<u>Criteria Pollutant Reduced</u> (tons)		
Carbon Monoxide (CO)	450	
Nitrogen Oxide (NO_x)	50	
Hydrocarbons	[20]	
Particulate Matter (PM₁₀)	1	
Carbon Dioxide (CO₂)	12,360	
<u>Annual Energy Savings</u> (million BTU)	161,250	
Cost Effectiveness Rating: Not Rated		
	<u>New Start vs. Baseline</u>	
Cost per Transportation System User Benefit (current year dollars/hour)	Not Rated	
Operating Efficiencies Rating: Medium		
	<u>Baseline</u>	<u>New Start</u>
System Operating Cost per Passenger Mile (current year dollars)	\$0.36	\$0.37

[] indicate an increase in emissions.

Project Justification

Rating: Not Rated

This project has not been rated. Project sponsors calculated the project's cost-effectiveness at \$7.30 per hour of transportation system user benefit. However, FTA has serious concerns about the information submitted for this measure; the underlying assumptions used by the project sponsor may have produced an inaccurate representation of the benefits of the project. FTA continues to work with project sponsors to validate the assumptions, information, and projections. A rating for this project will be made available to Congress and other interested parties when the issues are resolved. Based on 1990 Census data, the Minnesota DOT estimates that there are approximately 1,068 low-income households within a ½-mile radius of the proposed 11 stations. This represents approximately 16 percent of the total number of households located within a ½-mile radius of proposed station areas. Minnesota DOT also

estimates that the project would serve approximately 35,700 jobs that are located within a ½-mile radius of proposed station areas. The Twin Cities area is designated as an “attainment area” for ozone and carbon monoxide and a “moderate non-attainment area” for particulate matter. Minnesota DOT estimates that the Northstar Corridor Rail project has an incremental cost per incremental trip value of \$15.55.

Existing Land Use, Transit-Supportive Land Use Policies and Future Patterns **Rating: Medium**

The *Medium* land use rating acknowledges the presence of encouraging urban-scale development at several stations and the initiation of station area planning efforts to stimulate transit-oriented development. Strategies to promote transit-supportive land use patterns, coupled with high projected rates of corridor growth and the region’s growth management policies are also reflected in the rating. However, the rating also reflects the relatively low population densities of station areas located outside of the downtown Minneapolis and downtown St. Cloud areas.

Existing Conditions: Downtown Minneapolis serves as the dominant job center for the metropolitan area and the upper Midwest with approximately 140,000 employees and 20,000 residents. In the year 2000, total population within the Northstar Corridor was estimated at 430,000. Total corridor employment for the same period was estimated at 223,500. While high-density, pedestrian-friendly development is located within walking distance of the proposed downtown Minneapolis station area, immediate station area surroundings are largely industrial or undeveloped and are not pedestrian-oriented. The proposed Minneapolis-Northeast station, however, is located in a dense urban neighborhood. Development at several mid-corridor station areas is low density and single use. Proposed station areas located near the northern terminus of the commuter rail line that would serve the City of St. Cloud and the University of St. Cloud are in, or near, areas with moderate high densities. The upper northern portion of the commuter rail line (downtown St. Cloud area), located near the City of St. Cloud’s central business district, is characterized by high-density residential and mixed-use development usage with strong pedestrian amenities.

Future Plans, Policies and Performance: The Northstar Corridor has been identified locally as the growth center of the Twin Cities metropolitan area. Corridor population is projected to increase approximately 29 percent (553,200) through the year 2020. Employment is projected to increase approximately ten percent (247,000) during the same time period. Local officials consider the Twin Cities area as a high growth area. Project sponsors estimate that the region has experienced one of the highest rates of population growth in all of the major metropolitan areas in the Midwest in the last two decades. Land use plans and policies of the region’s local Metropolitan Planning Organizations (MPO) – the Metropolitan Council and the St. Cloud Area Planning Organization – in which the proposed commuter rail line would operate, support capturing growth in established urbanized areas, the reduction of sprawl, the constraint of residential growth in rural areas and the preservation of productive agricultural land. In addition, the St. Cloud Area Planning Organization currently has a plan in place to concentrate development in urban centers and limit development in rural and undeveloped areas. Station area planning efforts have also been initiated at other northern suburban areas to capture a portion of projected corridor growth in transit-supportive land use development patterns.

Other Factors

Downtown Minneapolis currently has approximately 62,000 parking spaces, which project sponsors indicate is equivalent to 0.43 spaces per employee. Moreover, project sponsors indicate that parking spaces in downtown Minneapolis are approaching capacity. The City's parking policy prohibits the creation of parking spaces at transit stations. Currently, there are no existing public parking facilities along the corridor outside of downtown Minneapolis. As part of the Northstar Corridor Rail Project, nine of the 11 proposed commuter rail stations would include the construction of park-and-ride facilities and all stations would include bus pick-up areas.

Local Financial Commitment

Rating: Low-Medium

The *Low-Medium* local financial commitment rating was determined by the *Low-Medium* rating for the capital financing plan.

Proposed Non-Section 5309 New Starts Share of Total Project Costs: 50%

Rating: Medium

The financial plan for the proposed Northstar Corridor Rail Project includes Section 5309 New Starts funds, State legislative appropriations, and bond proceeds from the Northstar Corridor Development Authority (NCDA).

Locally Proposed Financial Plan		
<u>Proposed Source of Funds</u>	<u>Total Funding (\$million)</u>	<u>Percent of Total</u>
Federal: Section 5309 New Starts	\$150.9	50.0 %
State: Minnesota General Obligation Bonds	\$123.2	40.8 %
Local: NCDA Capital Partners	\$27.8	9.2 %
Total:	\$301.9	100.0 %

NOTE: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Total may not add due to rounding.

Stability and Reliability of Capital Financing Plan

Rating: Low-Medium

The *Low-Medium* rating reflects the absence of a commitment from the State legislature to fund its portion (82 percent) of the non-Section 5309 New Starts share of the project's total estimated capital cost and the lack of information on project sponsors' capacity to fund any unexpected funding shortfalls. The rating also acknowledges the commitment of a portion (18 percent) of the non-Section 5309 New Starts share of the project's total estimated capital cost by several NCDA Capital Partners (suburban Minneapolis counties and county regional railroad authorities).

Agency Capital Financial Condition: The State of Minnesota does not directly operate public transit service. Operation of the proposed commuter rail line would be contracted out to the Burlington Northern Santa Fe railroad. Metro Transit, a division of the Metropolitan Council, would operate the proposed Hiawatha Corridor light rail extension. Standard and Poor's, and Fitch rate the State of Minnesota's bonds 'Aaa.' Moody's Investor Services rates the State's bonds as 'AAA.'

Capital Cost Estimate and Contingencies: The project's total estimated capital cost increased approximately three percent from last year's *Annual Report on New Starts*. The current capital cost estimate is based on Preliminary Engineering of individual components and vehicle fleet and equipment specifications. A contingency factor of 15 percent was applied to most major cost elements, which, at this time, is insufficient to account for variabilities related to right-of-way, track modifications and communication/signal costs.

Existing and Committed Funding: At this time, approximately \$27.8 million (18 percent) of the total non-Section 5309 New Starts share of the project's total estimated capital cost has been committed via county resolutions and county railroad authority board resolutions – backed by property tax levies. The Minnesota legislature and NCDA Capital Partners are planning to commit the remaining \$123.2 million (82 percent) in early 2003. The State's commitment of the non-Section 5309 New Starts share of the project's total estimated capital cost will need to be demonstrated before FTA can allow the project to proceed into Final Design.

New and Proposed Sources: No new sources are proposed to fund the capital cost of the Northstar Corridor Rail Project.

Stability and Reliability of Operating Finance Plan

Rating: Medium

The *Medium* rating reflects the adequacy of the revenues that are proposed to fund the operations of the Northstar Corridor Rail Project (passenger revenues, operating assistance from the State's General Fund and Section 5307 Preventative Maintenance funds). However, the rating also acknowledges the absence of supportive documentation on proposed operating sources.

Agency Operating Financial Condition: The State of Minnesota does not directly operate public transit service. Operating assistance from the State's General Fund is projected to grow at an average annual rate of less than 3.5 percent. General Fund revenues would be drawn from an

individual income tax, sales tax, corporate income tax and motor vehicle sales tax. Farebox revenues are projected to cover approximately 32 percent of operating expenses, with fares projected to increase at the rate of inflation.

Operating Cost Estimates and Contingencies: Annual operating and maintenance costs for the Northstar Corridor Rail Project, beginning in the first year of project operations (2007), are estimated at \$23.2 million (escalated dollars). Operating costs were estimated using a cost allocation model incorporating principal cost factors (vehicle hours in service, supervision, fuel, vehicle maintenance, facility maintenance, and administration) as determined through an analysis of actual operating experience(s) of new commuter rail systems similar to the proposed Northstar Corridor project. Unit costs derived from this analysis were applied to the commuter rail line's projected levels of service.

Existing and Committed Funding: All proposed sources for operating funds exist. Approximately 70 percent of the project's operating funds, Minnesota legislative appropriations, will need to be committed as part of the State's biennial general fund appropriation process. The remaining 30 percent (fare revenues) is considered committed.

New and Proposed Funding Sources: No new sources of operating funds are proposed for the Northstar Corridor Rail Project.

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Minneapolis, Minnesota

