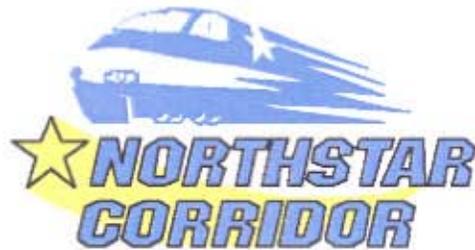


Northstar Corridor Rail Project

Work Group Report



Required by 2003 Minnesota Legislature

Minnesota Session Laws of 2003

1st Special Session

Chapter 19

Section 75

Report Date: January 15, 2004

Northstar Work Group Report Draft

January 15, 2004

Introduction

The Northstar Corridor Rail Project is a proposed commuter rail project running northwest from downtown Minneapolis near the trunk highway 10 corridor. Potential stations, in addition to downtown, are Northeast Minneapolis, Fridley, Coon Rapids-Foley, Coon Rapids-Riverdale, Anoka, Elk River, Big Lake, Becker, St. Cloud East, and Rice. The state share of funding for the project has been debated by the Minnesota Legislature since the 2000 session, but has not been authorized.

Minnesota Session Laws of 2003, 1st Special Session, Chapter 19, Section 75 (see appendix A) required the commissioner of transportation, in conjunction with the Northstar Corridor Development Authority (NCDA), to convene a work group to perform two specific tasks: 1) Update ridership forecasts for Northstar commuter rail based on 2000 census data and 2) Seek updated information from the Burlington Northern Santa Fe railroad (BNSF) regarding capacity improvements, railroad usage rights, construction, risk and liability allocation, and other related issues. The commissioner must report this to chairs and ranking members of legislative committees having jurisdiction over transportation and capital investment by January 15, 2004.

A work group was formed comprised of 22 people from the Minnesota Department of Transportation (Mn/DOT), NCDA, Northstar Corridor counties, and the Metropolitan Council with expertise in planning, transportation investment, project management, railroading, and the Northstar corridor. Meetings were held in an open environment and were attended by BNSF staff, interested legislators, legislative staff, and reporters. The information described in this report is from presentations and documents provided to the work group from various sources.

The work group focused its efforts on objectively addressing the issues specifically identified in the law. Several issues important to policy makers in consideration of the proposed project, e.g. a comprehensive update of all costs related to the project, local options for sharing in capital and operating costs, subjective debate on the merits of commuter rail vs. other transportation alternatives, etc. were not addressed by the work group and are not addressed in this report. Information and data on a wide range of issues related to this project is available from a variety of sources.

Ridership Forecast

Previous Ridership Forecast

Based on 1990 census figures, the previous Northstar commuter rail ridership forecast was for 10,800 one-way trips per day in the year 2020 for an 11-station line from Rice to downtown Minneapolis. Calculated in 1999, this forecast was consistent with Federal Transit Administration (FTA) guidance and ridership forecasting methodology at that time. It is this forecast the Legislature sought to update.

The previous forecast included the use of a stated preference survey in which residents of the Twin Cities area were asked to describe their preferences for travel. This was used to

estimate the mode(s) by which they would travel. The forecast was based on estimates of future population and future household and employment levels projected by the Metropolitan Council, Sherburne County and the St. Cloud Area Planning Organization. Based on this forecast and many other measures for the Northstar project, the FTA approved the project to enter into Preliminary Engineering in 2000, gave the project a "recommended" rating in both the fiscal year 2002 and 2003 reports to Congress, and approved the final environmental impact statement in 2002.

Changes in FTA's Approach to Project Evaluation

In updating the previous ridership forecast, it is important to note that the FTA has significantly changed its required ridership forecasting methodology. Comparing ridership forecasts generated under previous modeling and those generated under the FTA's new modeling is not an "apples-to-apples" comparison.

Since 1999, to achieve more consistency in the methods used by projects competing for federal transit funding, FTA introduced a new measure for transit projects and changed its approach to ridership forecasting. Rather than trying to optimize ridership, projects are now encouraged to achieve the best possible cost effectiveness index. Known as the "Cost per Transportation System User Benefit," this new measure identifies the cost of saving a user of the transportation system one hour of time per year. In striving for the optimal cost effectiveness index, it can be advantageous to alter a project in ways that actually reduce projected ridership. In addition, the FTA no longer allows the use of stated preference surveys as the basis for calibration of models. For the Northstar project, the FTA's changes resulted in significant differences between ridership forecasts generated under the previous and new models.

Model Changes

To modify the Northstar ridership model to comply with the FTA's new methodology and to generate an updated ridership forecast, the NCDA retained the services of AECOM Consulting. AECOM, a well-respected firm in the transit industry, was recommended for this work by the FTA.

New Ridership Forecast

The updated Northstar ridership forecast is based on 2000 census data, as instructed in the 2003 Northstar work group legislation, and was developed under the new FTA modeling guidelines.

To optimize Northstar's cost effectiveness index, AECOM, in consultation with FTA, Mn/DOT, and NCDA support staff, proposed several changes to the Northstar project. The proposed line was shortened by approximately 40 miles, running now from Big Lake to Minneapolis. Rail stations at Coon Rapids-Foley and Northeast Minneapolis were removed from the plan.

- These design changes and the FTA's new modeling methodology resulted in a new ridership forecast of 5,600 one-way trips per day in 2025.
- When applied to the longer, previously proposed 11-station line from Rice to Minneapolis, the new model resulted in a ridership forecast of 5,700 one-way trips per day in 2025. (Because the CEI was unsatisfactory for this scenario, no time was spent optimizing this run of the new model. Therefore, ridership was lower than if more time were spent.)
- It is instructive to note, for comparison, that when the previous FTA forecast model is updated with 2000 census data, the result is a projected ridership of 15,800 one-way

trips per day in 2025 for the 11-station Rice to Minneapolis line, an increase of 46 percent (see table in Appendix C for comparison of forecasts).

How FTA Uses the Ridership Forecast

The ridership forecast is a factor in several project justification measures considered by the FTA. In addition to those measures, the FTA rates a project on land use planning (based on current and future corridor population and employment and on development of transit-supportive land use plans in station areas) and local and state financial commitment. They combine in-depth examination of information from these three categories in a rigorous analysis to identify projects that should receive federal funding.

BNSF Information

BNSF was asked to update their information and cost estimates regarding capacity improvements in the proposed Northstar corridor, railroad usage rights, construction, risk and liability allocation, and other related issues. The railroad was very cooperative in providing information and attending most of the work group meetings. BNSF emphasized that a final determination of the necessary improvements in the corridor and the cost of those improvements could not be determined until negotiations with the state and final design of the project were complete. Final design would be the next phase for the Northstar rail project, if the project receives state funding.

To build the work group's knowledge about commuter rail negotiations with host freight railroads, Frank Mulvey, Democratic Staff Director of the U.S. House of Representatives Committee on Transportation and Infrastructure, Subcommittee on Railroads, gave a presentation about a U.S. General Accounting Office (GAO) study that was underway. The (GAO) interviewed freight railroads, existing and proposed commuter rail operators, federal officials and industry leaders. They identified agreement on capacity improvements, compensation, and liability as some of the major challenges facing commuter rail start-ups.

Capacity Improvements

For background, BNSF submitted to the work group documentation showing their previous estimates of rail improvements and associated costs needed to support proposed commuter rail service in the Northstar corridor without causing harm to their freight service. BNSF then submitted updated estimates which were largely consistent with the company's original estimates.

The current BNSF estimate includes 19 track and signal improvements over the Rice to Minneapolis route totaling \$132.2 million in 2004 dollars. This covers final design and construction costs and includes engineering, construction management, flagging, overtime, and BNSF supervision. A contingency fund totaling 15% of track improvements and 20% of signal improvements is also included. (The single alteration from the original BNSF estimate was that one improvement totaling \$2 million had been found to be duplicative and was removed.) At the suggestion of BNSF, all items beyond Big Lake were removed to provide an initial estimate of the cost of improvements for the Big Lake to Minneapolis segment. In 2004 dollars, those track and signal improvements from Big Lake to Minneapolis totaled \$103.3 million. See Appendix D for a table of costs and list of improvements.

It should be noted that during the work group's deliberations, Lt. Governor and state transportation Commissioner Carol Molnau requested that, on behalf of the state, NCDA

begin negotiations with BNSF regarding track improvements and operating agreements needed to support Northstar commuter rail service. The goal is to narrow differences between BNSF's estimates of needed improvements and associated costs and those of the NCDA prior to the 2004 legislative session. The NCDA has hired a consultant for this effort and talks with BNSF have begun.

Operating Costs

Past negotiations with BNSF had not covered operating costs in any detail. The work group provided BNSF with the previous estimate of all operating costs for the Northstar service and requested updated estimates for any elements that would be the responsibility of BNSF. BNSF's responses to date are for a Rice to Minneapolis route.

- For Train Operations, BNSF estimated an annual cost of \$1,400,000 in 2003 dollars for the combined labor costs of engineers and conductors. This compared to \$1,346,257 in the previous cost estimate for Rice to Minneapolis and \$848,016 in the new Big Lake to Minneapolis estimate (all in 2003 dollars).
- Also under Train Operations, BNSF projected an annual cost of \$7,000 for drug and alcohol testing (one element of train crew expenses). Total train crew expenses in the previous estimate were \$61,160 for Rice to Minneapolis and are \$149,699 in the new Big Lake to Minneapolis estimate.
- For Contract Operator Fees, BNSF estimated the cost for Superintendents and Trainmasters at \$350,000. This falls within the Transportation Supervision area, which was combined with General/Administrative in the previous estimate at a total of \$316,234 for Rice to Minneapolis and \$198,747 in the new Big Lake to Minneapolis estimate.
- Also under Contract Operator Fees, BNSF reported the Overhead and Management Fee and the Performance Payments would be subject to negotiation.
- BNSF stated the Track Maintenance and User Fee would be subject to negotiation.

The previous estimate of the total operating costs for Rice to Minneapolis service was \$13.44 million per year in 2003 dollars. The updated Rice to Minneapolis estimate is \$13.88 million and the new Big Lake to Minneapolis is \$9.69 million per year (all in 2003 dollars). See Appendix E for a summary table of operating costs.

Risk and Liability

Work on the Northstar commuter rail liability issue has been underway for some time. Major issues include the level of liability coverage needed to operate commuter rail service, what entity is responsible for carrying liability coverage, the role of the federal government in dictating liability coverage requirements and levels, whether the state's tort liability cap applies to commuter rail, etc. While the many liability issues remain unresolved, work is proceeding. The Minnesota Department of Administration's Risk Manager has also been involved in reviewing project risk and estimating insurance costs.

The previous estimate of Northstar operating costs included a line item expense of \$1,625,000 for \$200 million coverage per incident in liability insurance. The \$200 million coverage level had been previously identified by BNSF as their requirement for state coverage in order to operate commuter service in the Northstar corridor. BNSF reaffirmed to the work group that their required level of state liability coverage remains at \$200 million. BNSF's liability coverage requirement is consistent with their commuter rail operating contract with Sound Transit in Seattle, Washington.

Consultants updated the operating cost estimate on behalf of the NCDA. In it, liability insurance was estimated to be \$2,205,000 per year in 2003 dollars for a Rice to Minneapolis route and \$1,297,000 for Big Lake to Minneapolis.

Conclusion

The Northstar work group obtained a new ridership forecast and compiled updated information from the BNSF as required by the 2003 Minnesota Legislature. Other project information is available from:

Mike Schadauer
Mn/DOT
395 John Ireland Blvd., Mail Stop 430
St. Paul, MN 55155
651-282-5366

Tim Yantos
NCDA
2100 Third Ave.
Anoka, MN 55303
763-323-5692



Appendices

- A Northstar Work Group Legislation
- B Northstar Work Group Membership and Attendees
- C Northstar Ridership Forecasts
- D Northstar Track & Signal Improvement Cost Estimates
 - BNSF Track & Signal Cost Estimate Summary
 - BNSF List of Track & Signal Improvements (Rice to Minneapolis)
 - BNSF List of Track & Signal Improvements (Big Lake to Minneapolis)
- E Northstar Operating Cost Estimates

Appendix A

Northstar Work Group Legislation

Minnesota Session Laws 2003, 1st Special Session, Chapter 19

Sec. 75. [NORTHSTAR COMMUTER RAIL STUDY.]

The commissioner of transportation, in conjunction with the Northstar Corridor Development Authority, shall convene a work group to further study the feasibility of constructing the Northstar commuter rail. The work group shall update ridership forecasts for the commuter rail based on 2000 census data and seek updated information from the Burlington Northern Santa Fe railroad regarding capacity improvements, railroad usage rights, construction, risk and liability allocation, and other related issues. By January 15, 2004, the commissioner shall report the work group's findings to the chairs and ranking members of the legislative committees having jurisdiction over transportation and capital investment. The commissioner of transportation shall not pay for any outside consultant expenses related to this work.

Appendix B

Northstar Work Group Membership

NCDA

Tim Yantos, Project Director
Mary Richardson, Richardson, Richter & Associates
Ken Stevens, Consultant
Gary Erickson, Hennepin County
Brian Bensen, Sherburne County
Jon Olson, Anoka County
David Loch, Benton County

Metropolitan Council

Natalio Diaz/Jim Barton, Transportation & Transit Development
Mark Filipi, Travel Demand Forecasting

Mn/DOT

Bob McFarlin, Assistant to the Commissioner, Chair
Donna Allan/Mike Schadauer, Office of Transit
Cecil Selness/Susan Aylesworth, Office of Freight and CVO
Abby McKenzie/Ed Idzorek, Office of Investment Management
Betsy Parker, Office of Government Relations
Frank Pafko/Brian Isaacson, Metro District
Jim Povich/Terry Humbert, District 3

Other Northstar Work Group Attendees

BNSF

DJ Mitchell
Patricia Casler
Clyde Stack
Brian Sweeney

Legislature

Senator Mady Reiter, District 53
Senator Don Betzold, District 51
Representative Kathy Tingelstad, District 49B
Representative Phil Krinkie, District 53A

Legislative Staff

Craig Stone, House Capital Investment Committee
Anna Deusterman, Senator Ourada
Margaret Amundson, House Transportation Policy Committee
Becky Girvan, House Transportation Finance Committee

Shirley Koderick, Representative Tingelstad
Dan Miller, Representative Kuisle
Erica Ulstrom, Senate Republican Research Director

U.S. House of Representatives Staff

Frank Mulvey, Democratic Staff Director, Committee on Transportation and
Infrastructure, Subcommittee on Railroads

Mn/DOT

Donna Lindberg, Communications
Eric Rudeen, Government Affairs
Lynn Isaacson, Staff to Assistant to the Commissioner
Paul Czech, Mn/DOT Metro District

NCDA

Cliff Greene
Bill Schreiber

Reporters

Toni Coleman, Pioneer Press/Dispatch
Tim Budig, ECM Publishers

There was no sign in sheet at the large work group meeting held on December 22, 2003. Many legislative staff people were invited to this meeting. In addition, many other people attended.

Appendix C

Northstar Ridership Forecasts

Comparison of Northstar Ridership Forecasts

Termini	Model	Census	Forecast Year	Forecast (one-way trips per day)
Rice to Minneapolis	Previous	1990	2020	10,800
Rice to Minneapolis	Previous	2000	2025	15,800 ¹
Rice to Minneapolis	New	2000	2025	5,700 ²
Big Lake to Minneapolis	New	2000	2025	5,600

¹A forecast of ridership for the Northstar Corridor Commuter Rail line between Rice and Minneapolis using the new Year 2000 Census Based trip tables applied within the original Mn/DOT commuter rail demand forecasting model was prepared to better understand how the forecasts have evolved since the previous round of projections. The input person trip tables used for this analysis are based on two sources:

- Inside the Metropolitan Council 7-County area: current Year 2000 and 2025 trip tables were used from the adopted Metropolitan Planning Organization forecasting models to ensure consistency with other regional planning efforts
- Outside the Metropolitan Council 7-County area: trip table forecasts were developed using the MCD-level Year 2000 Census Journey to Work file. This file is a table showing the labor force classified by both Minor Civil Division (MCD) of residence and work location. This table was converted to represent daily person travel by assuming that each journey-to-work record represents 1.5 home-based work (HBW) trips. This factor allows for the fact that travelers to work make two daily trips (to and from work) but that vacations, illness, off-site business, and trip-chaining reduce the number of daily home-to-work trips. The previous version of the model (1990 census) assumed that 1.3 HBW trips were generated for each journey-to-work record. For this update, a higher factor was used for the Northstar corridor to account for the fact that very long trips to the central business district (CBD) are much less likely to be associated with part-time work and that even if some trip chaining occurs, the resulting trip will still have the properties of a HBW trip for purposes of computing mode share.

Finally, Year 2000 Census data was converted to represent Year 2025 conditions by scaling trips according to the projected 2000 to 2025 population growth forecasted by the Minnesota State Data Center and employment growth forecasted by Economy.com.

A comparison of the previous 2020 trip table and the new 2025 person trip table shows that the new 2025 trip table has 60 to 80 percent more travel to the CBD from the Corridor between Anoka and Elk River than the earlier forecast trip table. Travel between St. Cloud/Rice and the CBD is 32 percent higher and the Mid-Corridor area is forecasted to have more than twice as many trips as forecasted in the earlier study. Approximately 15 percent of this difference is due to the difference in the factor used to convert Journey-To-Work trip records to person trips. The remainder is due to the fact that more travel was recorded in the 2000 CTPP than was predicted from the 1990 Census factored to represent 2005 travel demand.

The 2025 forecasting model derived from the 2000 Census shows higher levels of ridership at each station, averaging 51 percent more riders for the line as a whole.

² Because the CEI was unsatisfactory for the Rice to Minneapolis scenario, no time was spent optimizing this run of the new model. Therefore, ridership was lower than if more effort were spent.

Big Lake to Minneapolis Ridership Forecast by Station

Based on new model and 2000 census data

Station	Daily Boardings
Big Lake	620
Elk River	790
Anoka	270
Coon Rapids-Riverdale	770
Fridley	500
Downtown Minneapolis	2,650
Total	5,600

Appendix D

Northstar Track and Signal Improvement Cost Estimates

BNSF Track & Signal Cost Estimate Summary
BNSF List of Track & Signal Improvements (Rice to Minneapolis)
BNSF List of Track & Signal Improvements (Big Lake to Minneapolis)

BNSF Track & Signal Cost Estimate Summary (Rice to Minneapolis) (2004 dollars, unless stated otherwise)

Improvement	Track Cost	Signal Cost	Total
1	\$7,430,117	\$2,137,136	\$9,567,253
2	\$0	\$7,833,723	\$7,833,723
3	\$0	\$3,782,372	\$3,782,372
4	\$0	\$2,243,648	\$2,243,648
5	\$2,562,141	\$2,635,080	\$5,197,221
6	\$2,521,989	\$2,117,155	\$4,639,144
7	\$2,786,335	\$2,117,155	\$4,903,490
8	\$20,859,312	\$5,598,429	\$26,457,741
9	\$0	\$0	\$0
10	\$2,315,584	\$0	\$2,315,584
11	\$5,749,773	\$2,884,672	\$8,634,445
12	\$1,659,055	\$726,197	\$2,385,252
13	\$7,378,475	\$4,663,945	\$12,042,420
14	\$626,334	\$0	\$626,334
15	\$4,975,088	\$796,914	\$5,772,002
16	\$1,065,251	\$1,156,996	\$2,222,247
17	\$6,389,092	\$2,454,852	\$8,843,944
18	\$3,558,820	\$1,499,044	\$5,057,864
19	\$9,913,735	\$2,561,643	\$12,475,378
20	\$3,288,058	\$3,894,415	\$7,182,473
Total (2004 \$)	\$83,079,161	\$49,103,374	\$132,182,535
Total (2007 \$)	\$90,782,843	\$53,656,583	\$144,439,426

BNSF used a 3% rate to inflate from 2004 to 2007 dollars. Calendar year 2007 dollars are considered equivalent to fiscal year 2008 dollars.

BNSF Track & Signal Cost Estimate Summary (Big Lake to Minneapolis)

(2004 dollars, unless stated otherwise)

Improvement	Track Cost	Signal Cost	Total
1	\$7,430,117	\$2,137,136	\$9,567,253
2	\$0	\$7,833,723	\$7,833,723
3	\$0	\$3,782,372	\$3,782,372
4	\$0	\$2,243,648	\$2,243,648
5	\$2,562,141	\$2,635,080	\$5,197,221
6*	\$1,260,995	\$1,058,578	\$2,319,573
7*	\$1,393,168	\$1,058,578	\$2,451,746
8*	\$0	\$0	\$0
9	\$0	\$0	\$0
10	\$2,315,584	\$0	\$2,315,584
11	\$5,749,773	\$2,884,672	\$8,634,445
12	\$1,659,055	\$726,197	\$2,385,252
13	\$7,378,475	\$4,663,945	\$12,042,420
14	\$626,334	\$0	\$626,334
15	\$4,975,088	\$796,914	\$5,772,002
16	\$1,065,251	\$1,156,996	\$2,222,247
17	\$6,389,092	\$2,454,852	\$8,843,944
18	\$3,558,820	\$1,499,044	\$5,057,864
19	\$9,913,735	\$2,561,643	\$12,475,378
20	\$3,288,058	\$3,894,415	\$7,182,473
NCDA 5*	\$1,308,010	\$1,081,371	\$2,389,381
Total (2004 \$)	\$60,873,696	\$42,469,164	\$103,342,860
Total (2007 \$)	\$67,719,142	\$47,244,960	\$114,964,102

A rate of 2.7% per year, provided by the Minnesota Department of Finance, was used to inflate from 2004 to 2007 dollars. Calendar year 2007 dollars are considered equivalent to fiscal year 2008 dollars.

* To arrive at the above figures, items beyond Big Lake were eliminated from the table on the previous page. This consisted of half of items 6 and 7, and all of item 8. To replace double track in item 8 that would extend through the Big Lake station, item 5 from the NCDA's list was added with a proportional amount of BNSF flagging and overtime. Then engineering costs were applied at 20% and contingency costs at 15% for track and 20% for signals.

BNSF – TRACK IMPROVEMENTS FOR
NORTHSTAR CORRIDOR SCHEDULE B 2003

- 1) **Construct double track through Northtown Yard (43rd Avenue to 35th Avenue), with double crossover at 43rd. Construct replacement of May Brothers Lead capacity.**
- 2) **Install CTC signaling system from Elk River to Coon Creek on Staples Subdivision.**
 - No track improvements
- 3) **Install CTC signaling system from Big Lake to Elk River on Staples Subdivision.**
 - No track improvements
- 4) **Install CTC signaling system from Harrison Street to Holden Street on Wayzata Subdivision.**
 - No track improvements
- 5) **Construct double crossovers using #24 turnouts at Elk River (MP 39.3) and Ramsey (MP 29.3) on Staples Subdivision.**
- 6) **Construct double crossovers using #24 turnouts at Becker (MP 57.3) and MP 45.1 on Staples Subdivision.**
- 7) **Construct double crossovers using #24 turnouts at MP 51.2 and MP 32.9 on Staples Subdivision.**
- 8) **Construct double track from Becker to Big Lake**
- 9) **Construct high-speed siding from MP 17.2 to MP 15.5 on the south side of the main line for staging inbound freight trains or running commuter trains around freight trains parked on the main line.**
(Eliminated as Item #19 replaces this Item)
- 10) **Upgrade “Old Main 2” on Midway Subdivision to 30mph/25mph.**
- 11) **Upgrade siding from Holden Street to Harrison Street to mainline and extend double track through west leg of the Minneapolis Jct. Wye.**

BNSF – TRACK IMPROVEMENTS FOR
NORTHSTAR CORRIDOR SCHEDULE B 2003

- 12) **Construct crossover using #24 turnouts at MP 11.3 on Wayzata Subdivision to allow eastbound commuter trains to cross over into the depot.**
- 13) **Extend double track from Minneapolis Jct. to St. Anthony on Midway Subdivision.**
- 14) **Upgrade crossover at MP 11.11 on Midway Subdivision to 30 mph/25 mph.**
- 15) **Upgrade mainline on Midway Subdivision east of University (MP 11.7) to 45 mph/45 mph.**
- 16) **Extend Midway Subdivision Main 2 from MP 11.7 to MP 12.3.**
- 17) **Construct siding at Anoka on Staples Subdivision.**
ANOKA (Begin siding @ MP 25.46 & end siding @ MP 27.35) ~ 10,000'
- 18) **Construct siding at Coon Creek on Staples Subdivision.**
COON CREEK (Begin new siding @ MP 18.76 & end siding @ MP 20.65) ~ 10,000'
- 19) **Construct third main from Coon Creek to Interstate.**
Triple track from MP 15.55 to MP 20.65 = 5.1 mi. = 26,928'
(This Item replaces Item #9)
- 20) **Connect South Runner as a continuous track from Interstate to Main 1 on the St. Paul Subdivision at University. Construct another track adjacent to the south runner to replace the lost capacity of the south runner.**

Appendix E

Northstar Operating Cost Estimates

The work group gave the existing Northstar commuter rail operating cost estimate to Burlington Northern Santa Fe Railroad (BNSF) and asked for a cost estimate for any items pertaining to BNSF. BNSF identified six items as summarized in the table below.

Annual Operating and Maintenance Costs (2003 dollars)

Item	Previous Estimate	BNSF Estimate or Comment	New Estimate	New Estimate
Termini	(Rice-Mpls)	Rice to Minneapolis	Rice-Mpls	Big Lake-Mpls
Train Operations (Labor—Engineers and Conductors)	\$1,346,257	\$1,400,000	\$848,016	\$848,016
Train Crew Expenses	\$61,160	\$7,000 for annual drug and alcohol testing costs should be included	\$149,699	\$149,969
Transportation Supervision and General / Administrative	\$316,234	Cost for Superintendent and Trainmaster would be \$350,000. Office space, phone, fax, supplies and vehicles would be provided by Northstar	\$198,747	\$198,747
General / Administrative, Management Fee, Performance Payments	\$316,234 \$349,239 \$490,347	All subject to negotiation	\$198,747 \$508,549 \$470,452	\$198,747 \$365,119 \$470,452
Track Maintenance & User Fee	\$2,411,133	Subject to negotiation	\$2,460,821	\$1,209,352
Total Annual Operating Costs (this entails more than the above items)	\$13,439,835	Not commented on by BNSF	\$13,879,666	\$9,686,612