Metro Transit
Lake Street Station at I-35W
2017 Congestion Mitigation/Air Quality (CMAQ) Transit Capital Application
metrotransit.org/orangeline
**INSTRUCTIONS:** Complete and return completed application to the Metropolitan Council. Applications must be received by 12:00 PM at the Metropolitan Council on April 11, 2014.

### I. GENERAL INFORMATION

1. **APPLICANT:** Metro Transit  
2. **JURISDICTIONAL AGENCY (IF DIFFERENT):** MnDOT  
3. **MAILING ADDRESS:** 560 Sixth Avenue North  
   - **CITY:** Minneapolis  
   - **STATE:** MN  
   - **ZIP CODE:** 55411  
   - **4. COUNTY:** Hennepin  
4. **CONTACT PERSON:** Mary Gustafson  
   - **TITLE:** Grants Manager  
   - **PHONE NO.** (612)349-7603  
5. **CONTACT E-MAIL ADDRESS:** mary.gustafson@metrotransit.org

### II. PROJECT INFORMATION

6. **PROJECT NAME:** Lake Street Station at I-35W  
7. **BRIEF PROJECT DESCRIPTION:** CMAQ funds will be used towards construction of a fully-accessible, two-story bus rapid transit station in the median of I-35W at Lake Street. The design and timing of the project is closely coordinated with MnDOT’s I-35W Transit/Access Project, which will replace and reconstruct the I-35W mainline and related bridges in this area.  
8. **INDICATE PROJECT OR PROGRAM CONSTRUCTION LETTING, COMPLETION, OR FULLY OPERATION DATES:** Construction in 2017; complete and operational in 2019.

### III. PROJECT FUNDING

9. Are you applying for funds from another source(s) to implement this project?  
   - Yes [ ]  
   - No [x]  
   If yes, please identify the source(s): Federal Small Starts, State, Counties Transit Improvement Board, County  
10. **FEDERAL CMAQ AMOUNT REQUESTED:** $7,000,000  
11. **MATCH AMOUNT:** $33,970,100  
12. **PROJECT TOTAL:** $40,970,100  
13. **SOURCE OF MATCH FUNDS:** CTIB, State  
14. **TITLE:** Senior Manager, Metro Transit BRT/Small Starts

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For application questions, please contact Christina Morrison at 612-349-7690 or christina.morrison@metrotransit.org.
1. Project Description

Lake Street Station is the keystone of the planned METRO Orange Line BRT project connecting Minneapolis, Richfield, Bloomington, and Burnsville (see project map in Appendix A). The Orange Line will use roadway improvements, upgraded transit stations, park-and-ride facilities, and improved bus service to provide fast, frequent and reliable all-day travel options along I-35W.

The I-35W South corridor has been the region’s most heavily-traveled express bus corridor since the 1970s. All-day, frequent BRT service will complement local and express bus routes along I-35W, providing competitive running times for station-to-station trips and a new option for reverse-commute markets. The Lake Street Station will be served by both BRT and express routes on I-35W, and local service on Lake Street, with over 100 buses per hour utilizing the freeway-level platforms during peak times.

Coordinating with the I-35W Transit/Access Project, MnDOT will replace the existing highway bridge over Lake Street with three separate bridges, using the center structure for a highway-level BRT station with direct MnPASS access. Large lobbies on the street level will provide vertical circulation to two side platforms above. The current shoulder bus stop at Lake Street on I-35W requires operators to merge across two lanes of congestion in order to serve passengers, causing delay and unpredictable service. The planned design will provide an accessible median station with improved pedestrian connections and amenities.

Benefits and Opportunities

- Eliminates current shift to and from inside MnPASS lane and Lake Street shoulder
- Restores peak-hour transit service to I-35W at Lake Street, which is currently restricted due to inability to serve existing facilities
- Reduces trip time by over 5 minutes for 14,000 current weekday bus passengers
- By 2030, the Lake Street Station will serve 700 daily bus trips carrying 20,000 riders
- Over 8,000 jobs and 12,000 households are located within a 10-minute walk of this station
- Extensive design and community engagement process is already underway
- A fully-accessible station and streetscape enhancements add value to the street and surrounding properties, and improves personal safety and comfort
- Potential for significant transit-oriented redevelopment and infill development in the station area

CMAQ funding would be used towards the construction of the station infrastructure, including the transit bridge and the two-story station.
2. Regional Significance

A. Background & Vision

I-35W BRT Study (2005). Because of a long-held regional interest in improving public transit in the I-35W South corridor, the State Legislature passed a bill in 2003 requiring MnDOT to study the feasibility of BRT in the corridor and make recommendations for its implementation. Principles were developed to help guide the study: allow buses to operate at posted speeds, maximize freeway capacity, minimize impacts on the right-of-way, make transit a competitive choice to automobile travel, and utilize existing resources to the greatest extent possible.

Several recommendations from this study have already been implemented: an online station at 46th Street, creation of a shared BRT/HOV lane to Downtown Minneapolis, providing a mix of express, station-to-station and local service, a new park-and-ride facility, and express service to Lakeville. Planning for all other recommendations is underway: planning for additional station sites at 66th and 98th Streets, understanding fleet needs, and coordinating the planning of BRT stations in the redesign of the I-35W and I-494 interchange.

Transportation Policy Plan (2004, 2009). BRT was first adopted as the Locally Preferred Alternative for I-35W in the 2020 Transportation Policy Plan (TPP) in 2004. The 2030 TPP was adopted in 2010, and cites I-35W as a BRT line already under construction (the MnPASS Lanes, Marquette and Second Avenues side-by-side transit-only lanes, and 46th Street BRT station were all opened in 2010). At the time of adoption, I-35W BRT was planned for opening in 2012 without a median Lake Street Station; however, due to unexpected changes in congestion with the Crosstown Commons opening, the project was tabled for further station design and roadway planning.

Minnesota Go (2012). MnDOT’s “Minnesota Go” Statewide Multimodal Transportation Plan visioning process recommended use of multimodal solutions that ensure a high return-on-investment, given constrained resources. In the Twin Cities, examples include active traffic management and the development of a managed lane system in coordination with expanded transit service. Highway BRT on I-35W is highlighted as a planned transitway.

Existing and Planned Transit Linkages. The Orange Line will connect to the METRO system, the planned Arterial BRT system, and regular-route bus service. By implementing the Lake Street Station, the following transit connections are possible:

- METRO Green and Blue Lines, in downtown Minneapolis;
- Bus routes 18, 21, 27 and 53 at Lake Street Station in Minneapolis;
- Planned Lake Street Arterial BRT at Lake Street Station in Minneapolis;
- Planned Midtown Corridor rail service at Lake Street Station in Minneapolis;
- Bus routes 11, 18 and 46 at 46th Street Station in Minneapolis;
- Bus route 515 at 66th Street and I-35W in Richfield;
- Bus routes 540 and 558 at 76th Street and Knox Avenue in Richfield;
- Bus routes 4, 538, 539 and 542 at American Boulevard and Knox Avenue in Bloomington;
- Planned American Boulevard Arterial BRT at American Boulevard and Knox Avenue in Bloomington;
- Bus routes 18, 535, 539, 554, 597, and 465 at 98th Street and I-35W in Bloomington;
- Bus routes 421, 426, 444, 460, and 465 at Burnsville Transit Station; and
- Jefferson Lines at Burnsville Transit Station.

B. Population and Jobs within a Half Mile

Over 8,000 jobs¹ and 12,000 households² are located within a 10-minute walk of the Lake Street Station. As a part of

1 Source: Longitudinal Employer-Household Dynamics
2 Source: 2010 Census Tracts
the METRO system, the Orange Line will connect people across the region to job centers, housing options, transit stations, and key destinations in the I-35W South corridor. The Orange Line will improve access to 162,000 jobs and 64,000 residents, including 30,000 jobs and 40,000 residents outside of downtown Minneapolis.

C. Regional Job and Activity Centers

The Lake Street station area has a large concentration of office and retail uses, and includes major regional employers like Wells Fargo Home Mortgage and Allina Health. Lake Street will also connect people to jobs in other Orange Line station areas, which together contain 10.4% of the jobs within the seven-county metropolitan area at over 4,600 businesses. Orange Line BRT will connect five identified job and activity centers.

<table>
<thead>
<tr>
<th>Lake Street Station Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
</tr>
<tr>
<td>Households</td>
</tr>
<tr>
<td>Jobs</td>
</tr>
</tbody>
</table>

3. Usage and Impacts of the Project

Transit carries 14,000 rides in the I-35W South corridor on a typical weekday today. On an annual basis, this translates to more than three million passengers today and around seven million annual passengers in the future. Lake Street Station is located at the transit “maximum load point” in the corridor, so any delay or congestion at this location impacts nearly all transit service and customers on I-35W. Lake Street Station is as important for people getting on and off routes at the station as it is for the transit passengers passing through the area.

As Minnesota’s busiest commuter highway, I-35W has 210,000 average daily vehicles at its most congested point. This high demand creates several hours of congestion each day and significant delays for both people and freight traveling to and though the area. In 2010, MnDOT opened MnPASS lanes on I-35W between Lakeville and downtown Minneapolis as a part of the Urban Partnership Agreement. However, as traffic has grown, buses weaving from the center-running MnPASS Lane to the shoulder to serve transit stops has become operationally unviable. Since 2010, the northbound stop at Lake Street has increased bus travel time by five minutes or more, and presented challenges for merging buses safely during peak hours.

Effective in 2011, Metro Transit terminated service to the northbound Lake Street bus stop in the morning peak hours, and restricted non-peak service to drop-off only. Southbound, the stop continues to be served by 25 express bus routes and the limited-stop Route 535. The bus stop restriction has been necessary until such time as the current bus stop on I-35W at Lake Street is replaced by the Lake Street Station in the median.

A. Total Estimated Ridership in Opening Year

Metro Transit estimates that with the Orange Line opening in 2019, there will be 253,000 annual riders using the station, with roughly 112,000 riders boarding on the freeway level, and 141,000 riders using local buses at the Lake Street level.

B. New Ridership in Opening Year

Due to the current congestion and service restrictions, Lake Street at I-35W is vastly underserved by the transit service that is warranted by the population and housing in the immediate area. By 2019, a fully-accessible station is estimated to attract more than 139,000 annual new riders, with roughly 42,000 new riders boarding on the freeway level, and 97,000 annual new riders using local buses at the Lake Street level.3

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3 Annual existing riders were calculated from August 2013 automatic passenger counts. Annual projected riders in opening year were interpolated from 2011 I-35W BRT Ridership Forecasting.
C. Expected Operating Cost Savings and Increases

Traffic congestion has added over five minutes to every northbound bus trip during peak hours, resulting in significant cuts to freeway-level transit service at Lake Street and I-35W. The addition of a median station will allow over 100 trips in the peak hour to return service to Lake Street without this costly per-trip delay, and allow 830 trips per day to serve the station without leaving the center of the freeway. This positively impacts recovery and reliability on every trip, in addition to greatly reducing the required running time on every route.

Annual service costs associated with returning transit to the freeway level are estimated in the following table\(^4\). For less than a 6% increase in annual service costs, all 830 trips are able to reinstate service to Lake Street, including a doubling of off-peak and reverse-commute trips with the addition of the Orange Line.

<table>
<thead>
<tr>
<th></th>
<th>Daily Platform Hours</th>
<th>Annual Cost</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Annual Freeway-Level Platform Hours (all routes)</td>
<td>789</td>
<td>$22,733,018</td>
<td>-</td>
</tr>
<tr>
<td>2019 Annual Freeway-Level Platform Hours (all routes with Orange Line)</td>
<td>830</td>
<td>$23,911,551</td>
<td>$1,178,534</td>
</tr>
<tr>
<td>Lake Street Station Maintenance</td>
<td>-</td>
<td>$50,000</td>
<td>$50,000</td>
</tr>
<tr>
<td><strong>Total Increase in Operating Cost</strong></td>
<td></td>
<td><strong>$1,228,534</strong></td>
<td></td>
</tr>
</tbody>
</table>

4 Daily platform hours include all providers and all routes that currently travel on I-35W through Lake Street. Increase in platform hours in 2019 reflects the replacement of Route 535 with Orange Line BRT.

4. Equity

A. Serving Low-Income and Minority Populations

Existing population and employment densities, income and auto deficiencies densities, access to critical transit connections, and expected growth all justify implementation of the Lake Street Station. I-35W and Lake Street is within our region’s Transit Market Area I, which has the highest density of population, employment, and people who depend on transit. Because of this, Market Area I is able to support the region’s most intensive regular route transit service. Currently, the I-35W/Lake Street area provides connections to over thirty 30 weekday routes.

Population density. Lake Street Station has the highest residential density of any location along I-35W, at 23 persons per acre. Lake Street’s existing development is a strong mix of residential and commercial uses.

Affordable housing. The Metropolitan Council has established a regional goal of integrating land use plans, affordable housing, and development strategies along emerging transitways. In Hennepin County, Orange Line Station area census tracts contain 30% of the county’s affordable housing units on 3% of the county’s land area. The Lake Street Station will greatly increase reliable, frequent transit access to this housing.

Socio-economic and ethnic diversity. In 2011, the median household income for the region was $64,712. The Orange Line households with the lowest incomes are located south of downtown Minneapolis at the Lake Street Station. This area is known for its ethnic diversity and is home to many first generation immigrants, many from Latin America and East Africa.

Auto Deficiency. Auto deficiency density in each station area is determined by subtracting the number of available autos from the population that is 16 years and older within the station areas. Within a half-mile radius of the station,
more than 6,000 individuals do not have access to a vehicle, representing 46% of residents. Often, areas with lower income and zero-car households use transit more than higher income households or households with one or more autos.

**Racial and Ethnic Makeup.** The Orange Line corridor is more racially diverse than the seven-county population and has a significantly higher percentage of black/African American population. In addition to the higher proportion of black/African American population, there is also a greater American Indian and multiracial presence. There is a smaller Asian and Pacific Islander population in the corridor when compared to the seven-county metropolitan area. When Hispanic ethnicity is considered, this corridor has twice the proportion of Hispanic residents as the region as a whole.

**B. Existing Populations**

Compared to the seven-county metro area, the half-mile radius surrounding Lake Street Station has significantly higher percentages of low-income and minority populations. The area surrounding Lake Street Station has twice as many low-income individuals and three times as many minority individuals.

<table>
<thead>
<tr>
<th></th>
<th>Population in Lake Street Station Area</th>
<th>% of Lake Street Station Area Population</th>
<th>Overall Seven-County %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-Income Individuals</td>
<td>2,401</td>
<td>14%</td>
<td>7%</td>
</tr>
<tr>
<td>Minority Individuals</td>
<td>12,407</td>
<td>73%</td>
<td>24%</td>
</tr>
</tbody>
</table>

**C. Racially Concentrated Areas of Poverty (RCAP)**

The Lake Street Station is located within the South Minneapolis RCAP. This area consists of 18 contiguous census tracts where more than 50% of residents are people of color and more than 40% of residents have incomes less than or equal to 185% of the federal poverty line.

**5. Project Readiness**

The I-35W South corridor has a long history of integrated investments, and the Lake Street station design reflects the opportunity to implement transit improvements in coordination with major upcoming roadway and bridge projects. The schedule for the I-35W Transit/Access Project is being driven by Minnesota Laws Chapter 152. This bridge program focuses on those bridges classified as either structurally deficient or fracture critical and requires replacement by June 30, 2018. Two bridges under this program, the southbound I-35W from I-94 West bridge, and the Northbound I-35W to I-94 West flyover, are in the vicinity of the Lake Street Station and planned I-35W mainline reconstruction.

Environmental impacts and benefits related to Lake Street Station infrastructure are being considered under the larger scope of the I-35W Transit/Access Project, which includes roadway, transit, and bridge improvements along I-35W from 46th Street to I-94. The Federal Highway Administration (FHWA), in cooperation with MnDOT, is preparing an Environmental Assessment (EA) for the Transit/Access Project, and FHWA has requested that the Federal Transit Administration (FTA) become a Cooperating Agency. Transit service to the Lake Street Station will be considered under the scope of the Orange Line environmental process, the path for which will be determined later this year.

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5 A low-income person is defined by the Census as individuals with income that is less than 150% of the poverty level. Source: American Community Survey 5-Year Estimates at the Census block group level.

6 A minority is defined by the Census as individuals that identify as any other group than non-Hispanic white. Source: 2010 Census block groups.
The Lake Street Station is currently under 60% design and is moving into final design in 2015. Lake Street transit and highway work will be bid as a single project to provide the best pricing for all components, and to minimize impact to the traveling public and adjacent neighborhoods.

The Lake Street Station has been in planning and development since 2010. The following timeline is anticipated for coordinated METRO Orange Line implementation:

- Pre-Project Development: early 2014
- Begin Orange Line Environmental Process: mid-2014
- Apply to the Federal Small Starts Program: mid-2014
- Engineering: 2015-2017
- Construction: 2017-2019
- Open for Service: late 2019

For the completed project implementation checklist, see Appendix B.

6. Project Costs

A. Detailed Project Budget

The estimated capital budget for station infrastructure is shown to the right. This budget does not include costs for design and construction engineering, professional services, and unallocated contingency. With these soft costs, Metro Transit’s total budget for engineering and constructing the station is $52.3 million.

B. Sources & Distribution

The following sources are anticipated for the transit share of Lake Street Station funding:

<table>
<thead>
<tr>
<th>Source</th>
<th>Request</th>
<th>Percent Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal CMAQ</td>
<td>$7,000,000</td>
<td>17.1%</td>
</tr>
<tr>
<td>Federal 5309 Small Starts</td>
<td>$13,485,050</td>
<td>32.9%</td>
</tr>
<tr>
<td>CTIB</td>
<td>$12,291,030</td>
<td>30.0%</td>
</tr>
<tr>
<td>State</td>
<td>$4,097,010</td>
<td>10.0%</td>
</tr>
<tr>
<td>Local or Additional State</td>
<td>$4,097,010</td>
<td>10.0%</td>
</tr>
<tr>
<td>Total</td>
<td>$40,970,100</td>
<td>100%</td>
</tr>
</tbody>
</table>

Lake Street Transit Capital Components | Current Year Dollars
--- | ---
Pavement | $3,138,995
Bridges | $12,090,864
Noisewall Costs | $413,160
Retaining wall Costs | $6,664,272
Median Barrier | $156,809
Transit Station Infrastructure | $12,000,000
Right-of-Way Acquisition | $1,400,000
Drainage | $5,106,000

Construction Total | $40,970,100

7 These MnDOT cost estimates include 20% risk/contingency on all retaining walls and transit station elements and 10% risk/contingency on all other construction elements.
CTIB is currently updating its Transit Investment Framework (TIF). Following adoption of its updated TIF, CTIB is expected in mid-2014 to initiate its grant process to award 2015 grants. This project will apply for a 2015 grant. The Orange Line project will also apply for entry into the Federal Small Starts program in mid-2014. The request amount shown above is a portion of the $75 million total Orange Line request to the federal Small Starts program. The significant investments at the Lake Street Station are about one-third of the total cost to build Orange Line BRT.

Funding the Lake Street Station leverages a total of $150.2 million of coordinated roadway, transit, and bridge investments as part of the I-35W Transit/Access Project. Current cost affiliations for Transit/Access Project partner agencies are as follows:

- MnDOT: $60.2M;
- Metro Transit (Lake Street Station): $52.3; and
- Hennepin County: $37.6M.

### 7. Emissions Reduction

With the addition of an accessible station and greatly increased service on both the freeway and street level, Lake Street Station will facilitate many new trips and transfers that are not possible in our current transit system. This will result in fewer drivers on the I-35W South corridor and on Lake Street, avoiding an estimated 537,260 annual vehicle miles traveled (VMT).

\[
(\text{Annual New Riders}^8) \times (\text{Average Trip Length}^9) = \text{Annual VMT Reduced by Lake Street Station}
\]

<table>
<thead>
<tr>
<th></th>
<th>Annual Existing Riders</th>
<th>Annual Projected Riders in 2019</th>
<th>Annual New Riders in 2019</th>
<th>Average Existing Trip Length</th>
<th>Annual VMT Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freeway level – All routes</td>
<td>69,870</td>
<td>112,225</td>
<td>42,355</td>
<td>6.99</td>
<td>296,061</td>
</tr>
<tr>
<td>Street Level – Route 21</td>
<td>40,183</td>
<td>125,201</td>
<td>85,017</td>
<td>2.08</td>
<td>176,836</td>
</tr>
<tr>
<td>Street level – Route 53</td>
<td>3,940</td>
<td>15,474</td>
<td>11,535</td>
<td>5.58</td>
<td>64,363</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>113,993</strong></td>
<td><strong>252,900</strong></td>
<td><strong>138,907</strong></td>
<td></td>
<td><strong>537,260</strong></td>
</tr>
</tbody>
</table>

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8 Annual existing riders were calculated from August 2013 automatic passenger counts. Annual projected riders in opening year were interpolated from 2011 I-35W BRT Ridership Forecasting.

9 Average existing trip length on various routes was calculated from the Travel Behavior Inventory.
Lake Street Station at I-35W
Appendix A: Project Map

- 5th St Station
- 7th St Station
- 9th St Station
- 11th St Station
- Lake St Station
- 46th St Station
- 66th St Station
- 76th St Station
- American Blvd Station
- 98th St Station
- Burnsville Transit Station

METRO Orange Line BRT Corridor

Lake Street Station Platform Location

Lake Street Station Platform Layout
Project Implementation Schedule

1) Project Scope
   - Stakeholders have been identified
   - Meetings or contacts with Stakeholders have occurred

2) Layout or Preliminary Plan
   - Layout or Preliminary Plan started
   - Layout or Preliminary Plan completed
   Anticipated date or date of completion: 2016

3) Environmental Documentation
   - EIS
   - EA
   - PM
   Document Status
     - Document not started
     - Document in progress; environmental impacts identified
     - Document submitted to State Aid for review
     - Document approved (include copy of signed cover sheet)
   Anticipated date or date of completion/approval: 2014

4) Right-of-Way
   - No right-of-way or easements required
   - Right-of-way or easements required, parcels not identified
   - Right-of-way or easements required, parcels identified
   - Right-of-way or easements required, appraisals made
   - Right-of-way or easements required, offers made
   - Right-of-way or easements has/have been acquired
   Anticipated date or date of acquisition 2016

5) Railroad Involvement
   - No railroad involvement on project
   - Railroad Right-of-Way Agreement required; negotiations not begun
   - Railroad Right-of-Way Agreement required; negotiations have begun
   - Railroad Right-of-Way Agreement required; Agreement has been initiated
   - Railroad Right-of-Way Agreement is executed (include signature page)
   Anticipated date or date of executed Agreement

6) Construction Documents/Plan
   - Construction plans have not been started
   - Construction plans in progress; at least 30% completion
   - Construction plans submitted to State Aid for review
   - Construction plans completed/approved (include signed title sheet)
   Anticipated date or date of completion:

7) Letting
   Anticipated Letting Date: 2017
April 8, 2014

Susan Haigh, Chair
Metropolitan Council
390 Robert Street North
St. Paul, MN 55101-1805

Dear Chair Haigh,

On behalf of Dakota County Regional Railroad Authority (DCRRA) I am pleased to provide this letter indicating our support for the Metropolitan Council’s request for 2017 Congestion Mitigation and Air Quality (CMAQ) funds for improvements to the METRO Orange Line, I-35W and Lake Street Station. The Orange Line will provide Dakota County citizens with enhanced connections to important regional destinations.

I-35W is Minnesota’s busiest commuter highway and most heavily-traveled express bus corridor with 14,000 bus riders each weekday. The Orange Line will build on the existing success of transit in the corridor by providing a catalyst for planned development, improve access to jobs, and better serve all-day, evening and weekend service. The DCRRA recognizes that the I-35W and Lake Street Station is a critical element of the successful implementation of the Orange Line and supports the CMAQ funding request as a means to advance this project.

The DCRRA looks forward to working with the Metropolitan Council towards the planned launch of the Orange Line in 2019. Please contact me or Kristine Eliwood, Transit Office Manager, at 952-891-7104 if you need further information.

Sincerely,

Paul J. Krause, Chair
Dakota County Regional Railroad Authority

c: Arlene McCarthy, Metropolitan Council
Brian Lamb, Metro Transit
Charles Carlson, Metropolitan Council