



Application

04778 - 2016 Transit System Modernization

04842 - Improving Communication About Detours and Service Disruptions

Regional Solicitation - Transit and TDM Projects

Status: Submitted

Submitted Date: 07/15/2016 12:25 PM

Primary Contact

Name:* Ms. Laura Jean Matson
Salutation First Name Middle Name Last Name

Title: Transit Information Project Coordinator

Department: Customer Services and Marketing

Email: Laura.Matson@metrotransit.org

Address: 560 N 6th Ave

***:** Minneapolis Minnesota 55411
City State/Province Postal Code/Zip

Phone:* 612-349-7771
Phone Ext.

Fax:

What Grant Programs are you most interested in? Regional Solicitation - Transit and TDM Projects

Organization Information

Name: Metro Transit

Jurisdictional Agency (if different):

Organization Type: Metropolitan Council

Organization Website:

Address: 560 Sixth Avenue North

* Minneapolis Minnesota 55411
City State/Province Postal Code/Zip

County: Hennepin

Phone:* 651-602-1000
Ext.

Fax:

PeopleSoft Vendor Number METROTRANSIT

Project Information

Project Name Improving Communication about Transit Detours and Service Disruptions

Primary County where the Project is Located Multiple

Jurisdictional Agency (If Different than the Applicant):

The purpose of this project is to improve how Metro Transit communicates detours and service disruptions. Every day, there are disruptions to transit service due to unpredictable circumstances. For instance, a bus may have to be re-routed to avoid a water main break or a traffic accident. Metro Transit is able to announce and communicate planned detours (e.g., those due to scheduled events), but lacks the technology necessary to be able to notify riders about unpredictable, day-to-day disruptions. Further, due to technology limitations, even planned short-term detours are not reflected in many customer-facing information tools such as the online trip planner or route information feeds used by third-party apps and Google Maps. Being caught unaware of these service disruptions is a major source frustration for transit riders; indeed, this uncertainty makes choosing transit less reliable and desirable.

Brief Project Description (Limit 2,800 characters; approximately 400 words)

The funding would support a technology upgrade and development services such that as transit detours are created, this information will be shared more quickly through a variety of customer-facing platforms. Specifically, the service disruption information will: (1) populate Metro Transit's online trip planner (6.3 million trips per year); (2) be shared automatically with Transit Information Center staff (responds to 1.2 million calls per year); (3) be shared with customers who opt-in to receive email or text message updates about particular routes via Metro Transit's online Rider Alerts program; (4) update NexTrip, Metro Transit's real-time bus departure information to reflect if trips have been eliminated (83.7 million requests per year); (5) populate a web page where customers can check for the latest detour information; (6) shares the information via Metro Transit's mobile application (forthcoming in fall 2016); and (7) create a web service or application programming interface

(API) that makes the information available for third-party apps and tools such as Google Maps to have access to the most up-to-date information.

After implementation, this project would allow transit riders to subscribe to customizable detour/service notifications. For instance, if a rider cares about service disruptions for a particular route only during rush hours, she could customize her subscription preferences so she would receive only pertinent notifications. In addition, the project would create a robust online resource where transit riders would be able to access up-to-date service notices for all Metro Transit routes.

Please note: This project covers all Metro Transit routes, stops, and stations. It was not possible to add all Metro Transit service to the map tool used for this application. Consequently, the maps show Metro Transit's 10 highest ridership routes.

Include location, road name/functional class, type of improvement, etc.

TIP Description Guidance (will be used in TIP if the project is selected for funding)

Improving Communication about Transit Detours and Service Disruptions

Project Length (Miles)

0

Project Funding

Are you applying for funds from another source(s) to implement this project?

No

If yes, please identify the source(s)

Federal Amount

\$200,000.00

Match Amount

\$50,000.00

Minimum of 20% of project total

Project Total

\$250,000.00

Match Percentage

20.0%

Minimum of 20%

Compute the match percentage by dividing the match amount by the project total

Source of Match Funds

Metro Transit

A minimum of 20% of the total project cost must come from non-federal sources; additional match funds over the 20% minimum can come from other federal sources

Preferred Program Year

Select one: 2020

For TDM projects, select 2018 or 2019. For Roadway, Transit, or Trail/Pedestrian projects, select 2020 or 2021.

Additional Program Years: 2017, 2018, 2019

Select all years that are feasible if funding in an earlier year becomes available.

Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	\$0.00
Removals (approx. 5% of total cost)	\$0.00
Roadway (grading, borrow, etc.)	\$0.00
Roadway (aggregates and paving)	\$0.00
Subgrade Correction (muck)	\$0.00
Storm Sewer	\$0.00
Ponds	\$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	\$0.00
Traffic Control	\$0.00
Striping	\$0.00
Signing	\$0.00
Lighting	\$0.00
Turf - Erosion & Landscaping	\$0.00
Bridge	\$0.00
Retaining Walls	\$0.00
Noise Wall (do not include in cost effectiveness measure)	\$0.00
Traffic Signals	\$0.00
Wetland Mitigation	\$0.00
Other Natural and Cultural Resource Protection	\$0.00
RR Crossing	\$0.00
Roadway Contingencies	\$0.00
Other Roadway Elements	\$0.00
Totals	\$0.00

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Path/Trail Construction	\$0.00
Sidewalk Construction	\$0.00
On-Street Bicycle Facility Construction	\$0.00
Right-of-Way	\$0.00
Pedestrian Curb Ramps (ADA)	\$0.00
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	\$0.00
Pedestrian-scale Lighting	\$0.00
Streetscaping	\$0.00
Wayfinding	\$0.00
Bicycle and Pedestrian Contingencies	\$0.00
Other Bicycle and Pedestrian Elements	\$0.00
Totals	\$0.00

Specific Transit and TDM Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Fixed Guideway Elements	\$0.00
Stations, Stops, and Terminals	\$0.00
Support Facilities	\$0.00
Transit Systems (e.g. communications, signals, controls, fare collection, etc.)	\$0.00
Vehicles	\$0.00
Contingencies	\$0.00
Right-of-Way	\$0.00
Other Transit and TDM Elements	\$0.00
Totals	\$0.00

Transit Operating Costs

Number of Platform hours	0
Cost Per Platform hour (full loaded Cost)	\$0.00
Subtotal	\$0.00
Other Costs - Administration, Overhead,etc.	\$200,000.00

Totals

Total Cost	\$200,000.00
Construction Cost Total	\$0.00
Transit Operating Cost Total	\$200,000.00

Requirements - All Projects

All Projects

1. The project must be consistent with the goals and policies in these adopted regional plans: Thrive MSP 2040 (2014), the 2040 Transportation Policy Plan, the 2040 Regional Parks Policy Plan (2015), and the 2040 Water Resources Policy Plan (2015).

Check the box to indicate that the project meets this requirement. Yes

2. The project must be consistent with the 2040 Transportation Policy Plan. Reference the 2040 Transportation Plan objectives and strategies that relate to the project.

This project supports the following goal from the 2040 Transportation Policy Plan (TPP), "People and businesses prosper by using a reliable, affordable, and efficient multimodal transportation system that connects them to destinations throughout the region and beyond" (p. 62).

In addition, by making transit service more reliable and predictable, the project supports the following Objectives outlined in the 2040 TPP:

- Increase travel time reliability and predictability for travel on highway and transit systems.
- Increase transit ridership and the share of trips taken using transit, bicycling and walking.
- Improve multimodal travel options for people of all ages and abilities to connect to jobs and other opportunities, particularly for historically underrepresented populations. (p. 2.8)

List the goals, objectives, strategies, and associated pages:

Further, the project supports the following Strategies from the 2040 TPP:

C11. The Council and regional transit providers will expand and modernize transit service, facilities, systems, and technology, to meet growing demand, improve the customer experience, improve access to destinations, and maximize the efficiency of investments. (p. 2.9)

D3. The Council and its partners will invest in regional transit and bicycle systems that improve connections to jobs and opportunity, promote economic development, and attract and retain businesses and workers in the region on the established transit corridors. [...] Improve the customer experience. Many transit users choose to ride because of the quality of the experience. Those who rely on transit deserve a great customer experience as well. The region will need to invest in improvements to the transit experience that

address factors such as transfers, customer information, comfort, technology, safety and perceived safety and security, and amenities. (p. 2.34)

3. The project or the transportation problem/need that the project addresses must be in a local planning or programming document. Reference the name of the appropriate comprehensive plan, regional/statewide plan, capital improvement program, corridor study document [studies on trunk highway must be approved by the Minnesota Department of Transportation and the Metropolitan Council], or other official plan or program of the applicant agency [includes Safe Routes to School Plans] that the project is included in and/or a transportation problem/need that the project addresses.

This project addresses the need of transit riders to know when and where to board buses when there are service disruptions and detours in effect. There have always been and will always be unpredictable disruptions to fixed route transit service. Transit riders need information about where to go and what to do when service is re-routed. This project would make that information available to transit riders using a variety of strategies. Instead of waiting until a rider arrives at an affected stop where there may be a sign about the detour, this project makes these detours less disruptive and makes transit a more reliable and predictable mode of transportation. In addition, this project makes transit more accessible by providing information electronically and in formats more readily accessible to those with disabilities.

List the applicable documents and pages:

4. The project must exclude costs for studies, preliminary engineering, design, or construction engineering. Right-of-way costs are only eligible as part of bicycle/pedestrian projects, transit stations/stops, transit terminals, park-and-ride facilities, or pool-and-ride lots. Noise barriers, drainage projects, fences, landscaping, etc., are not eligible for funding as a standalone project, but can be included as part of the larger submitted project, which is otherwise eligible.

Check the box to indicate that the project meets this requirement. Yes

5. Applicants that are not cities or counties in the seven-county metro area with populations over 5,000 must contact the MnDOT Metro State Aid Office prior to submitting their application to determine if a public agency sponsor is required.

Check the box to indicate that the project meets this requirement. Yes

6. Applicants must not submit an application for the same project elements in more than one funding application category.

Check the box to indicate that the project meets this requirement. Yes

7. The requested funding amount must be more than or equal to the minimum award and less than or equal to the maximum award. The cost of preparing a project for funding authorization can be substantial. For that reason, minimum federal amounts apply. Other federal funds may be combined with the requested funds for projects exceeding the maximum award, but the source(s) must be identified in the application. Funding amounts by application category are listed below.

Transit Expansion: \$500,000 to \$7,000,000

Travel Demand Management (TDM): \$75,000 to \$300,000

Transit System Modernization: \$100,000 to \$7,000,000

Check the box to indicate that the project meets this requirement. Yes

8.The project must comply with the Americans with Disabilities Act.

Check the box to indicate that the project meets this requirement. Yes

9.The project must be accessible and open to the general public.

Check the box to indicate that the project meets this requirement. Yes

10.The owner/operator of the facility must operate and maintain the project for the useful life of the improvement.

Check the box to indicate that the project meets this requirement. Yes

11.The project must represent a permanent improvement with independent utility. The term independent utility means the project provides benefits described in the application by itself and does not depend on any construction elements of the project being funded from other sources outside the regional solicitation, excluding the required non-federal match. Projects that include traffic management or transit operating funds as part of a construction project are exempt from this policy.

Check the box to indicate that the project meets this requirement. Yes

12.The project must not be a temporary construction project. A temporary construction project is defined as work that must be replaced within five years and is ineligible for funding. The project must also not be staged construction where the project will be replaced as part of future stages. Staged construction is eligible for funding as long as future stages build on, rather than replace, previous work.

Check the box to indicate that the project meets this requirement. Yes

13.The project applicant must send written notification regarding the proposed project to all affected state and local units of government prior to submitting the application.

Check the box to indicate that the project meets this requirement. Yes

Requirements - Transit and TDM Projects

For Transit Expansion Projects Only

1.The project must provide a new or expanded transit facility or service(includes peak, off-peak, express, limited stop service on an existing route, or dial-a-ride).

Check the box to indicate that the project meets this requirement.

2. The applicant must have the capital and operating funds necessary to implement the entire project and commit to continuing the service or facility project beyond the initial three-year funding period for transit operating funds.

Check the box to indicate that the project meets this requirement.

3.The project is not eligible for either capital or operating funds if the corresponding capital or operating costs have been funded in a previous solicitation. However, Transit Modernization projects are eligible to apply in multiple solicitations if new project elements are being added with each application.

Check the box to indicate that the project meets this requirement.

Transit Expansion and Transit System Modernization projects only:

4.The applicant must affirm that they are able to implement a Federal Transit Administration (FTA) funded project in accordance with the grant application, Master Agreement, and all applicable laws and regulations, using sound management practices. Furthermore, the applicant must certify that they have the technical capacity to carry out the proposed project and manage FTA grants in accordance with the grant agreement, sub recipient grant agreement (if applicable), and with all applicable laws. The applicant must certify that they have adequate staffing levels, staff training and experience, documented procedures, ability to submit required reports correctly and on time, ability to maintain project equipment, and ability to comply with FTA and grantee requirements.

Check the box to indicate that the project meets this requirement. Yes

Measure A: Project Location Relative to Jobs, Manufacturing, and Education

Existing Employment within 1/4 (bus stop) or 1/2 mile (transitway station) buffer 398843

Post-Secondary Enrollment within 1/4 (bus stop) or 1/2 mile (transitway station) buffer 182991

Existing employment outside 1/4 or 1/2 mile buffer to be served by shuttle service (Letter of Commitment required)

Upload the "Letter of Commitment" on the 'Other Attachments' Form.

Existing Post-Secondary Enrollment outside 1/4 or 1/2 mile buffer to be served by shuttle service (Letter of Commitment required)

Upload the "Letter of Commitment" on the 'Other Attachments' Form.

Explanation of last-mile service, if necessary (Limit 1,400 characters; approximately 200 words):

Upload Map 1468545082921_RegEconomyMap.pdf

Measure B: Transit Ridership

Select multiple routes

Existing transit routes directly connected to the project

2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 14, 16, 17, 18, 19, 20, 21, 22, 23, 25, 27, 30, 32, 39, 46, 53, 54, 59, 61, 62, 63, 64, 65, 67, 68, 70, 71, 74, 75, 80, 83, 84, 87, 94, 111, 113, 114, 115, 118, 120, 121, 122, 123, 124, 129, 133, 134, 135, 141, 146, 156, 219, 223, 225, 227, 250, 252, 261, 262, 263, 264, 265, 270, 272, 275, 288, 294, 350, 351, 353, 355, 361, 364, 365, 375, 415, 417, 452, 467, 515, 535, 537, 538, 539, 540, 542, 552, 553, 554, 558, 578, 579, 587, 588, 589, 597, 604, 614, 615, 643, 649, 652, 663, 664, 667, 668, 670, 671, 672, 673, 674, 675, 677, 679, 705, 716, 717, 721, 722, 723, 724, 755, 756, 758, 760, 761, 762, 763, 764, 765, 766, 767, 768, 801, 805, 824, 825, 831, 850, 852, 854, 860, 865, 888-Northstar Commuter Rail, 901-METRO Blue Line, 902-METRO Green Line

Planned Transitways directly connect to the project (mode and alignment determined and identified in the 2040 TPP)

I-35W BRT (METRO Orange Line Extension), Southwest LRT (METRO Green Line Extension), Bottineau LRT (METRO Blue Line Extension), American Boulevard Arterial BRT, Central Avenue Arterial BRT, Nicollet Avenue Arterial BRT, West Broadway Avenue BRT, Robert Street BRT, Chicago Ave BRT, Emerson/Fremont Aves BRT, Snelling Avenue BRT (A Line), East 7th Street BRT, West 7th Street BRT, Penn Avenue Arterial BRT (C Line), Gateway BRT (METRO Gold Line)

Upload Map 1468545156906_TransitConnectionsMap.pdf

Response

Average number of weekday trips 0

Measure: Usage

Existing Transit Routes on the Project

2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 14, 16, 17, 18, 19, 20, 21, 22, 23, 25, 27, 30, 32, 39, 46, 53, 54, 59, 61, 62, 63, 64, 65, 67, 68, 70, 71, 74, 75, 80, 83, 84, 87, 94, 111, 113, 114, 115, 118, 120, 121, 122, 123, 124, 129, 133, 134, 135, 141, 146, 156, 219, 223, 225, 227, 250, 252, 261, 262, 263, 264, 265, 270, 272, 275, 288, 294, 350, 351, 353, 355, 361, 364, 365, 375, 415, 417, 452, 467, 515, 535, 537, 538, 539, 540, 542, 552, 553, 554, 558, 578, 579, 587, 588, 589, 597, 604, 614, 615, 643, 649, 652, 663, 664, 667, 668, 670, 671, 672, 673, 674, 675, 677, 679, 705, 716, 717, 721, 722, 723, 724, 755, 756, 758, 760, 761, 762, 763, 764, 765, 766, 767, 768, 801, 805, 824, 825, 831, 850, 852, 854, 860, 865, 888-Northstar Commuter Rail, 901-METRO Blue Line, 902-METRO Green Line

Measure A: Project Location and Impact to Disadvantaged Populations

Select all that apply:

- Projects service directly connects to Area of Concentrated Poverty with 50% or more of residents are people of color (ACP50). Yes
- Projects service directly connects to Area of Concentrated Poverty Yes
- Projects service directly connects to census tracts that are above the regional average for population in poverty or population of color Yes
- Projects service directly connects to a census tract that is below the regional average for population in poverty or populations of color, or includes children, people with disabilities, or the elderly Yes

This project enables Metro Transit to provide as much advance warning as possible about service disruptions. This has particular benefits for low-income populations, people of color, children, people with disabilities, and the elderly. These populations are more likely to depend on transit service to meet their travel needs, including accessing employment opportunities. Advance notification of service disruptions helps people to adjust their travel plans and still use transit reliably, which has particular benefits for those with less flexible travel options. For instance, if a transit rider doesn't have access to a personal automobile as a back-up travel mode, getting advance notice of disruptions is particularly important to ensure they are still able to reach their destination reliably and on time.

Response (Limit 2,800 characters; approximately 400 words)

Further, this project enables information to be disseminated through multiple channels, including telephone, text message, email, website, electronic signs at transit stations, and mobile apps. This means that riders will be served regardless of how they access information. As a result, the information does not depend on smart phone ownership or other factors in order to access the latest information.

The project offers particular benefits for people with disabilities. Currently, unplanned disruptions are communicated to transit riders with printed signs posted at affected bus stops. By distributing detour information electronically and in real-time, riders with visual impairments can access notifications via screen readers and other tools. Similarly, those with physical impairments or limited mobility may benefit from this advance notification so extra effort is not expended traveling to closed stops.

There are no anticipated negative effects of providing riders more accurate information about

transit service disruptions.

[Upload Map](#)

1468546033765_SocioEconomicConditionsMap.pdf

Measure B: Affordable Housing

City/Township	Number of Stops in City/Township
Anoka	98.0
Arden Hills	22.0
Baytown Township	5.0
Big Lake Township	1.0
Birchwood Village	3.0
Blaine	226.0
Bloomington	775.0
Brooklyn Center	223.0
Brooklyn Park	490.0
Champlin	110.0
Circle Pines	22.0
Columbia Heights	124.0
Columbus	1.0
Coon Rapids	337.0
Cottage Grove	94.0
Crystal	166.0
Deephaven	41.0
East Bethel	1.0
Edina	324.0
Elk River	2.0
Excelsior	21.0
Falcon Heights	47.0
Forest Lake	7.0
Fort Snelling (unincorporated)	23.0
Fridley	170.0
Golden Valley	242.0
Greenwood	18.0
Ham Lake	1.0
Hilltop	3.0
Hopkins	135.0

Independence	3.0
Inver Grove Heights	173.0
Lake Elmo	36.0
Lakeville	1.0
Landfall	3.0
Lauderdale	10.0
Lexington	16.0
Lino Lakes	21.0
Little Canada	78.0
Long Lake	17.0
Mahtomedi	36.0
Maple Grove	10.0
Maple Plain	5.0
Maplewood	295.0
Mendota Heights	123.0
Minneapolis	2615.0
Minnnetonka	327.0
Minnnetonka Beach	16.0
Minnetrista	4.0
Mound	52.0
Mounds View	77.0
New Brighton	112.0
New Hope	169.0
Newport	46.0
North Oaks	11.0
North Saint Paul	51.0
Oak Park Heights	8.0
Oakdale	105.0
Orono	81.0
Plymouth	11.0
Ramsey	2.0
Richfield	260.0
Robbinsdale	86.0
Roseville	250.0
Saint Anthony	84.0

Saint Louis Park	402.0
Saint Paul	1793.0
Saint Paul Park	52.0
Shoreview	153.0
Shorewood	32.0
South Saint Paul	141.0
Spring Lake Park	43.0
Spring Park	19.0
Stillwater	77.0
Tonka Bay	24.0
Vadnais Heights	17.0
Wayzata	27.0
West Saint Paul	166.0
White Bear Lake	109.0
White Bear Township	8.0
Willernie	2.0
Woodbury	28.0
	12019

Affordable Housing Scoring - To Be Completed By Metropolitan Council Staff

City/Township	Number of Stops in City/Township	Total Number of Stops	Score	Number of Stops/Total Number of Stops	Housing Score Multiplied by Segment percent
		0	0	0	0

Affordable Housing Scoring - To Be Completed By Metropolitan Council Staff

Total Number of Stops in City	12019.0
Total Housing Score	0

Measure A: Project Elements that Reduce VMT/SOV Trips and Improve Energy Efficiency

This project is expected to attract and retain riders. The project reduces the uncertainty and fear associated with riding transit. Travel behavior studies have found that unreliable service may cause more inconvenience and dissatisfaction than long travel times and other service factors. This reduced confidence in the reliability of transit has been associated with lost ridership and customer dissatisfaction. Likewise, a particularly dissatisfying event ? such as being unaware of a disruption or change ? can result in a travel mode change away from transit. Providing adequate information is essential in fostering rider loyalty and confidence. Indeed, this has been a persistent and significant source of customer complaints for Metro Transit. (References are included in the Other Attachments: Additional Project Information document.)

Response (Limit 2,100 characters; approximately 300 words)

In 2015, Metro Transit provided an average of 276,408 daily rides. Assuming this project increases rider retention and attracts new riders at a rate of 0.5%, this would result in 1,382 new daily transit riders.

1,382 new daily rides * 4.5 miles of average travel distance = 6,219 VMT reduced

Based on the emissions factors provided, this results in:

CO reduced = 14,863

NOx reduced = 995

CO2e reduced = 2,279,885

PM2.5 reduced = 31.1

VOCs reduced = 186.6

Measure A: Travel Time

Current Passenger Travel Time (Minutes)	0
Proposed Passenger Travel Time (Minutes)	0
Reduction in Travel Time	0%

Measure B: Operating Costs

Current Annual Transit Operating Costs	0
Proposed Annual Transit Operating Costs	0
Reduction in Operating Cost	0%

Description of how the proposed cost change was determined
(Limit 2,800 characters: approximately 400 words).

There would be no additional operating costs that would result from this project. There are no additional software licensing fees or staff required to support this as an ongoing program. Currently, Street Operations staff create service disruption messages and, for long-term events, the Transit Information department determines the customer impact, re-writes the message for customers and distributes the alert. After the technology upgrade covered by this project, similar staffing would create the initial service disruption messages. However, customer messaging can be created automatically and distributed to customer-facing platforms, including for short-term disruptions and trip cuts. Similarly, Transit Information will continue to review customer impact, rewrite, and distribute special messages as necessary.

Measure C: Improvements and Amenities

This project provides robust, timely and vastly improved communication to transit users about service disruptions. Service disruptions are an inevitable challenge with fixed route transit service. Every day, there are short-term service disruptions (e.g., a trip gets cut or has to be temporarily re-routed to avoid a traffic accident or parade). Likewise, there are longer-term detours at all times (generally due to construction). For example, on July 14, 2016, there were over 300 active construction and event-related detours affecting Metro Transit stops, routes, and service.

Response (Limit 2,800 characters; approximately 400 words)

Currently, Metro Transit is able to communicate planned detours and service disruptions through its electronic Rider Alerts. Unplanned and short-term detours are only communicated for rail lines via social media. Unplanned and short-term detours of bus service are not communicated because the current technology for detours means that by the time the disruption has been communicated, it will have been resolved. Further, only long-term detours are reflected in most customer information tools such as the online trip planner, NexTrip real-time departure information, and the route and trip planning data used by third-parties like Google. This technological gap results in inadequate communication to customers. This is a major and persistent source of customer frustration and complaints.

Improving information about service disruptions is an important priority in improving transit customers' experiences. Many researchers have found that reliable service is essential to attracting and retaining transit riders. Unpredictable service, excessive wait times (especially out of vehicle), and experiencing service problems have all been associated with lost ridership. (References are included in the Other Attachments: Additional Project Information document.)

This project will reduce confusion by providing clear customer information in diverse user-friendly formats. It responds to customer demand and improves the customer experience with transit.

Measure A: Roadway, Bicycle, and Pedestrian Improvements

Response (Limit 2,800 characters; approximately 400 words)

Although this is a transit-specific project, most transit riders are also pedestrians as they approach and leave their transit stops. Having advance notice about detours and service cuts makes it easier for these pedestrians and bicyclists to plan safe routes and budget adequate time for their travel to and from replacement bus stops.

Transit Projects Not Requiring Construction

If the applicant is completing a transit or TDM application that is operations only, check the box and do not complete the remainder of the form. These projects will receive full points for the Risk Assessment.

Park-and-Ride and other transit construction projects require completion of the Risk Assessment below.

Check Here if Your Transit Project Does Not Require Construction Yes

Measure A: Risk Assessment

1) Project Scope (5 Percent of Points)

Meetings or contacts with stakeholders have occurred

100%

Stakeholders have been identified

40%

Stakeholders have not been identified or contacted

0%

2) Layout or Preliminary Plan (5 Percent of Points)

Layout or Preliminary Plan completed

100%

Layout or Preliminary Plan started

50%

Layout or Preliminary Plan has not been started

0%

Anticipated date or date of completion

3) Environmental Documentation (5 Percent of Points)

EIS

EA

PM

Document Status:

Document approved (include copy of signed cover sheet)

100%

Document submitted to State Aid for review

75%

date submitted

Document in progress; environmental impacts identified; review request letters sent

50%

Document not started

0%

Anticipated date or date of completion/approval

4) Review of Section 106 Historic Resources (10 Percent of Points)

No known historic properties eligible for or listed in the National Register of Historic Places are located in the project area, and project is not located on an identified historic bridge

100%

Historic/archeological review under way; determination of no historic properties affected or no adverse effect anticipated

80%

Historic/archaeological review under way; determination of adverse effect anticipated

40%

Unsure if there are any historic/archaeological resources in the project area

0%

Anticipated date or date of completion of historic/archeological review:

Project is located on an identified historic bridge

5) Review of Section 4f/6f Resources (10 Percent of Points)

4(f) Does the project impacts any public parks, public wildlife refuges, public golf courses, wild & scenic rivers or public private historic properties?

6(f) Does the project impact any public parks, public wildlife refuges, public golf courses, wild & scenic rivers or historic property that was purchased or improved with federal funds?

No Section 4f/6f resources located in the project area

100%

No impact to 4f property. The project is an independent bikeway/walkway project covered by the bikeway/walkway Negative Declaration statement; letter of support received

100%

Section 4f resources present within the project area, but no known adverse effects

80%

Project impacts to Section 4f/6f resources likely coordination/documentation has begun

50%

Project impacts to Section 4f/6f resources likely coordination/documentation has not begun

30%

Unsure if there are any impacts to Section 4f/6f resources in the project area

0%

6)Right-of-Way (15 Percent of Points)

Right-of-way, permanent or temporary easements not required

100%

Right-of-way, permanent or temporary easements has/have been acquired

100%

Right-of-way, permanent or temporary easements required, offers made

75%

Right-of-way, permanent or temporary easements required, appraisals made

50%

Right-of-way, permanent or temporary easements required, parcels identified

25%

Right-of-way, permanent or temporary easements required, parcels not identified

0%

Right-of-way, permanent or temporary easements identification has not been completed

0%

Anticipated date or date of acquisition

7)Railroad Involvement (25 Percent of Points)

No railroad involvement on project

100%

Railroad Right-of-Way Agreement is executed (include signature page) 100%

Railroad Right-of-Way Agreement required; Agreement has been initiated

60%

Railroad Right-of-Way Agreement required; negotiations have begun

40%

Railroad Right-of-Way Agreement required; negotiations not begun

0%

Anticipated date or date of executed Agreement

8)Interchange Approval (15 Percent of Points)*

**Please contact Karen Scheffing at MnDOT (Karen.Scheffing@state.mn.us or 651-234-7784) to determine if your project needs to go through the Metropolitan Council/MnDOT Highway Interchange Request Committee.*

Project does not involve construction of a new/expanded interchange or new interchange ramps

100%

Interchange project has been approved by the Metropolitan Council/MnDOT Highway Interchange Request Committee

100%

Interchange project has not been approved by the Metropolitan Council/MnDOT Highway Interchange Request Committee

0%

9)Construction Documents/Plan (10 Percent of Points)

Construction plans completed/approved (include signed title sheet)

100%

Construction plans submitted to State Aid for review

75%

Construction plans in progress; at least 30% completion

50%

Construction plans have not been started

0%

Anticipated date or date of completion

10)Letting

Anticipated Letting Date

Measure: Cost Effectiveness of Emissions Reduction

Total Annual Operating Cost:	\$0.00
Total Annual Capital Cost of Project	\$25,000.00
Total Annual Project Cost	\$25,000.00

Total project cost = \$250,000

Project lifespan = 10 years

Assumption Used (Limit 1400 Characters; approximately 200 words):

Project costs include: assessment of customer needs and technical options; purchasing software; paying developers to customize the software to integrate with Metro Transit's information tools; user acceptance testing; and trouble-shooting support. These cost amounts are based on estimates provided by vendors that provide these products and similar software development / customization projects.

Metro Transit's current detour tracking technology has been in place for ten years. A similar lifespan is anticipated for this software upgrade.

As noted in the "Operating Costs" section, no additional operating costs are expected from this software upgrade.

(Limit 1400 Characters; approximately 200 words)

Points Awarded in Previous Criteria

Cost Effectiveness	\$0.00
---------------------------	--------

Other Attachments

File Name	Description	File Size
Agency_LocalMatch_Letter.pdf	Agency local match letter	210 KB
SupplementalInfo.pdf	Additional Project Information	396 KB

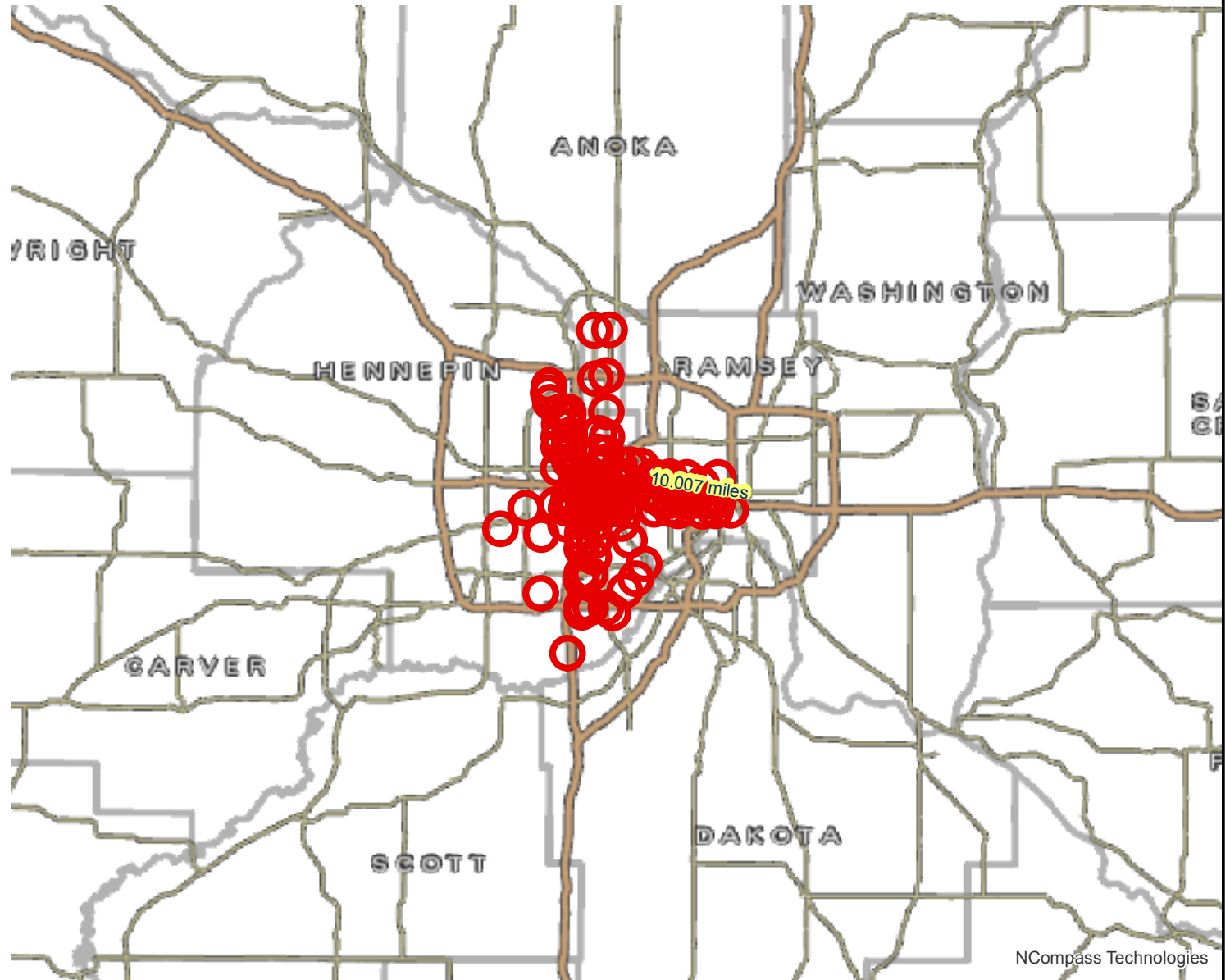
Regional Economy

Results

WITHIN ONE MI of project:

Total Population: 212933
Total Employment: 398843
Mfg and Dist Employment: 27312

Postsecondary Students:
182991



 Project Points

 Project



Created: 7/14/2016
LandscapeRSA5



For complete disclaimer of accuracy, please visit
<http://giswebsite.metc.state.mn.us/gissitenew/notice.aspx>



491 492 493 515 535 538 539 540 542 552 553
 554 558 578 579 587 588 589 597 643 649 652
 674 675 675
 679 684 690 691 692 695 697 698 699 717 721
 722 723 724 742 747 755 756 758 760 761 762
 763 764 765 766 767 768 772 774 776 777 780
 781 782 783 785 790 793 795 801 824 825 850
 852 854 860 865 887 888 901 902 903 921

- *American
- *West Broadway
- *Central
- *Chicago-Fremont
- *East 7th
- *Hennepin
- *Lake
- *Nicollet
- *Robert
- *Orange Line
- *Orange Line
- *Green Line Extension
- *Blue Line Extension
- *Blue Line Extension
- *C Line

Transit within HALF mile of project:

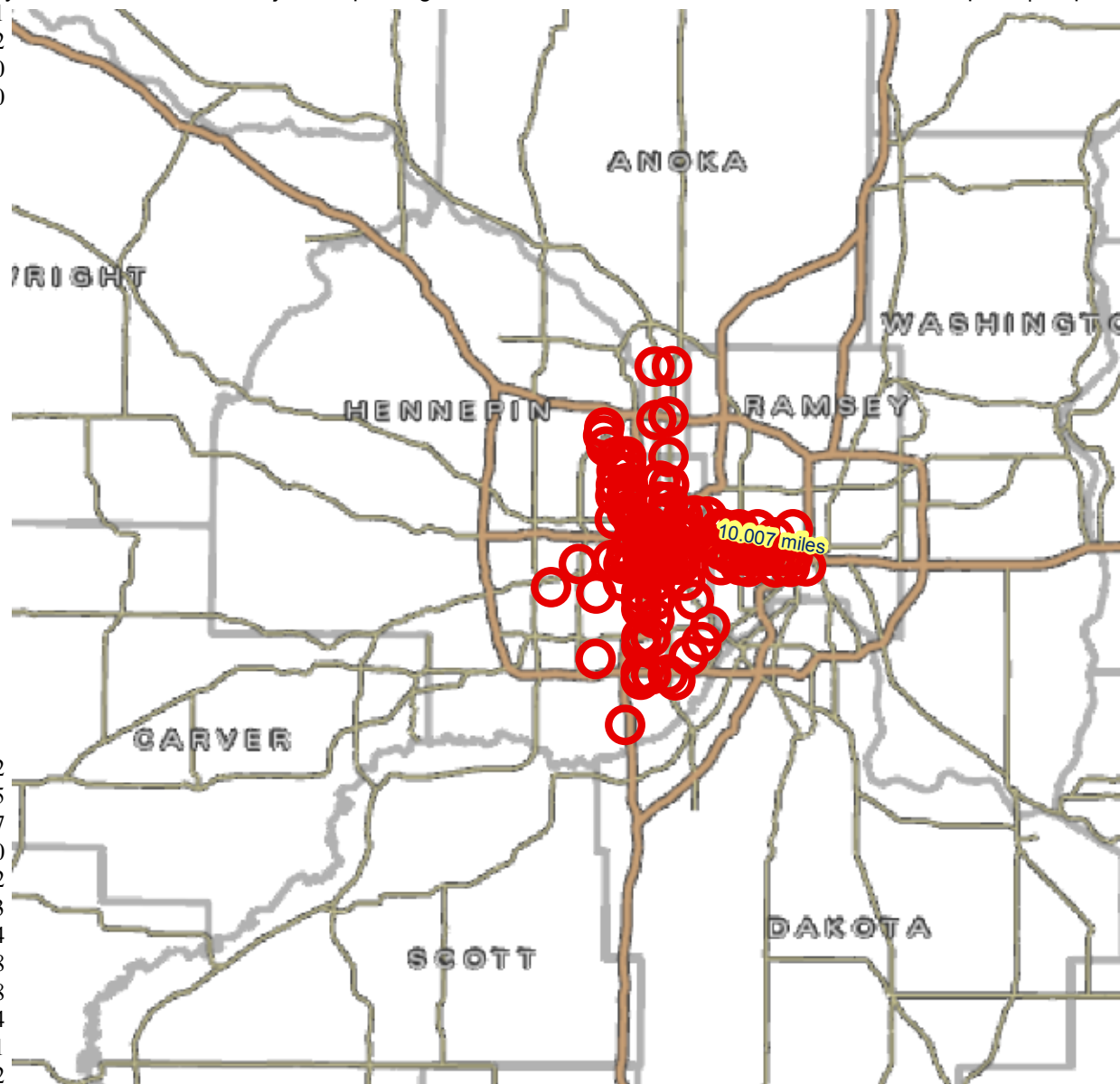
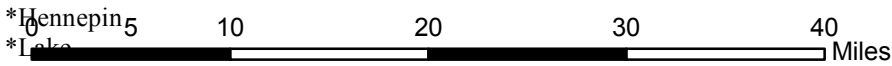
2 3 4 5 6 7 9 10 11 12 14
 16 17 18 19 20 21 22 23 25 27 30
 32 39 46 53 54 59 61 62 63 64 65
 67 68 70 71 74 75 83 84 87 94 111
 113 114 118 120 121 122 129 133 134 135 141
 146 156 250 252 261 262 263 264 265 270 272
 275 288 294 350 351 353 355 361 364 365 375
 415 417 436 440 444 446 452 460 464 465 467
 470 472 475 476 477 478 479 480 484 489 490
 491 492 493 515 535 537 538 539 540 542 552
 553 554 558 578 579 587 588 589 597 615 643
 649 652 663 664 667 668 670 671 672 673 674
 675 677 679 684 690 691 692 694 695 697 698
 699 717 721 722 723 724 742 747 755 756 758
 760 761 762 763 764 765 766 767 768 772 774
 776 777 780 781 782 783 785 790 793 795 801
 824 825 850 852 854 860 865 887 888 901 902
 903 921

- *American
- *West Broadway
- *Central
- *Chicago-Fremont
- *East 7th
- *Hennepin
- *Lake
- *Nicollet
- *Robert
- *Gold Line

Project Points



Project



NCompass Technologies

Created: 7/14/2016
 LandscapeRSA3

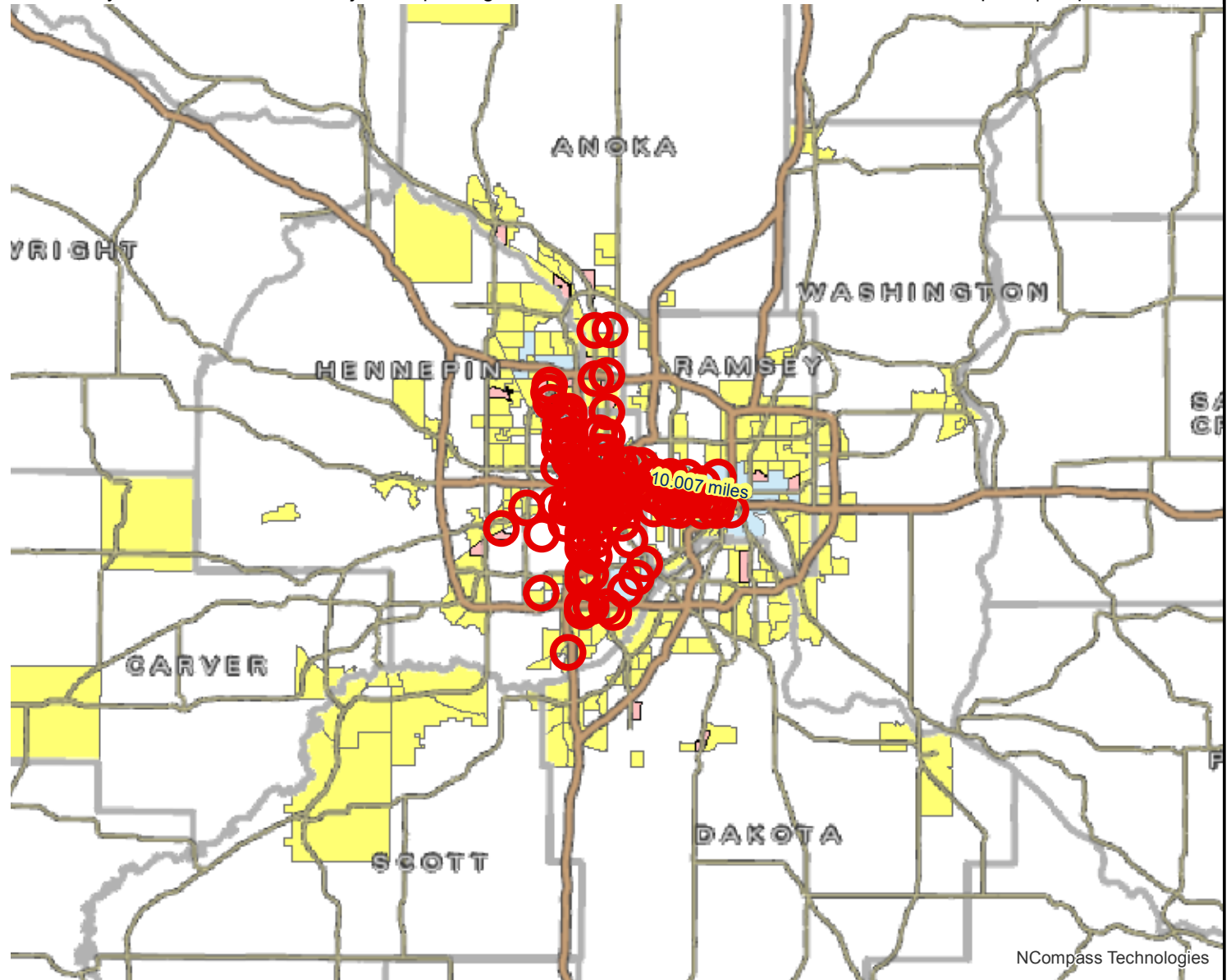





For complete disclaimer of accuracy, please visit
<http://giswebsite.metc.state.mn.us/gissitenew/notice.aspx>





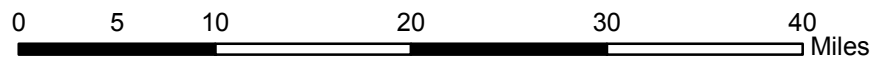
Results

Project located **IN**
Area of Concentrated Poverty
with 50% or more of residents
are people of color (ACP50):
(0 to 30 Points)



-  Project Points
-  Project
-  Area of Concentrated Poverty > 50% residents of color

-  Area of Concentrated Poverty
-  Above reg'l avg conc of race/poverty



Created: 7/14/2016
LandscapeRSA2



For complete disclaimer of accuracy, please visit
<http://giswebsite.metc.state.mn.us/gissitenew/notice.aspx>





July 15, 2016

Elaine Koutsoukos
TAB Coordinator
390 N. Robert St
St Paul, MN 55101

RE: Regional Solicitation Applications

Dear Ms. Koutsoukos:

Metro Transit submits a Transit Modernization application for Improving Communication about Transit Detours and Service Disruptions.

This letter corresponds to Metro Transit's commitment to providing local match for this project.

- Metro Transit has control over these assets and commits to maintain and support these technological upgrades for their useful life.
- Metro Transit will provide the required minimum 20% local match through Metropolitan Council Regional Transit Capital or other eligible non-federal funds available to Metro Transit in the program year.
- Metro Transit commits to comply with FTA and grantee requirements.

We look forward to developing the project. Please contact me with any questions or clarifications.

Sincerely,

A handwritten signature in black ink that reads 'Brian J. Lamb'.

Brian J. Lamb
General Manager, Metro Transit

CC: Bruce Howard, Director, Metro Transit Customer Services & Marketing
Mary Gustafson, Grants Manager Metro Transit

A service of the Metropolitan Council

Improving Communication about Detours and Service Disruptions

Additional Project Information

Project Maps

This project affects all Metro Transit service and stops; it is a system-wide upgrade. It was not possible to include all 12,000+ Metro Transit bus stops or 153 routes within the mapping tool used for this application. By their nature, detours and service disruptions are unpredictable. They affect all types of service – urban local, suburban express, suburban local, and limited stop routes all experience detours and are affected by disruptions. It is impossible to know which routes will experience the most detours or disruptions over the next 10 years.

Consequently, the maps included in this application show major points along the ten Metro Transit routes with the highest ridership – Metro Green Line, Metro Blue Line, and bus routes 3, 5, 6, 10, 17, 18, and 19. Since only one line was possible, the line reflects the alignment of the Metro Green Line. Because these routes serve the most customers, this provides one way of evaluating geographic areas that serve to benefit most from this improved communication and information. It is worth noting, however, that the “Project Location Relative to Jobs, Manufacturing, and Education” figures reflect this limited piece of Metro Transit’s overall service and the scope of this project.

“Equity and Housing Performance, Measure B: Affordable Housing”

This section includes a count of transit stops served by Metro Transit routes by City/Township. Not all transit stops are equal however. These stop counts by jurisdiction do not reflect ridership, service frequency, or other factors.

“Service and Customer Improvements, Measure A: Travel Time”

This project is not expected to change in-vehicle travel time; hence the “Reduction in Travel Time = 0%” for this question. However, an important element of customer satisfaction is the customer’s overall travel time, which includes wait time. Customers experience unnecessarily long waits when they are not aware of service cuts, detours, closed stops, and other unforeseen disruptions. This project is expected to reduce these waits and therefore enhance the transit riding experience.

References

- Carrel, A., Halvorsen, A. and Walker, J.L. 2013. Passengers’ perception of and behavioral adaptation to unreliability in public transportation. *Transportation Research Record* 2351: 153–162.
- Chen, C., Skabardonis, A. and Varaiya, P. 2003. Travel-time reliability as a measure of service. *Transportation Research Record* 1855: 74-79.
- Friman, M., Edvardsson, B. and Gärling, T. 2001. Frequency of negative critical incidents and satisfaction with public transport services. *Journal of Retailing and Consumer Services* 8.2: 95–104.
- Nam, D., Park, D. and Khamkongkhun, A. 2005. Estimation of value of travel time reliability. *Journal of Advanced Transportation* 39.1: 39-61.
- Perk, V., Flynn, J., and Volinski, J. 2008. Transit Ridership, Reliability, and Retention. *National Center for Transit Research Report No. 776-07*. Retrieved from: <http://www.nctr.usf.edu/pdf/77607.pdf>