Application

04778 - 2016 Transit System Modernization

05291 - Electric Buses

Regional Solicitation - Transit and TDM Projects

Status:	Submitted
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Primary Contact

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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 (City) / Minnesota (State/Province) / 55411 (Postal Code/Zip)
County:	Hennepin
Phone:*	651-602-1000 Ext.
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PeopleSoft Vendor Number	METROTRANSIT

Project Information

Project Name	Electric Buses
Primary County where the Project is Located	Anoka, Hennepin
Jurisdictional Agency (If Different than the Applicant):	
Brief Project Description (Limit 2,800 characters; approximately 400 words)	Metro Transit intends to purchase 5 electric buses, including bicycle racks, and 5 corresponding in-garage charging stations to replace 5 diesel powered buses. The buses will serve riders on existing metro area routes along Central Avenue. Routes 10, 59, and 118 are the targeted areas for electric bus service, all of which operate out of Heywood Garage. The project will improve Metro Transit's service by reducing greenhouse gas emissions and criteria air pollutant emissions along transit corridors. Buses will operate out of the Fred T. Heywood Garage and/or the proposed "Heywood II" Garage in downtown Minneapolis, where all of the charging stations will be located. Buses will be purchased using Matching Funds; Metro Transit and the Metropolitan Council are committed to providing a 20 percent local match via Regional Transit Capital bonds. The local share of funding will be made available for this project should a grant be awarded.

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)	The project is included in the Metropolitan Council Comprehensive Capital Improvement Plan (C.I.P)., and will be included in the TIP as bus purchase.
Project Length (Miles)	12.0

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	$4,000,000.00
Match Amount	$1,000,000.00

Minimum of 20% of project total

Project Total	$5,000,000.00
Match Percentage	20.0%

Minimum of 20%
Compute the match percentage by dividing the match amount by the project total

Source of Match Funds	Metropolitan Council Regional Transit Capital

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:	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	$15,000.00
Totals	**$15,000.00**

Specific Transit and TDM Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	**Cost**
Fixed Guideway Elements	$0.00

Stations, Stops, and Terminals	$0.00
Support Facilities	$375,000.00
Transit Systems (e.g. communications, signals, controls, fare collection, etc.)	$0.00
Vehicles	$4,175,000.00
Contingencies	$0.00
Right-of-Way	$0.00
Other Transit and TDM Elements	$435,000.00
Totals	**$4,985,000.00**

Transit Operating Costs

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

Totals

Total Cost	$5,000,000.00
Construction Cost Total	$5,000,000.00
Transit Operating Cost Total	$0.00

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.

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

Goal: Transportation System Stewardship (58, 161, 172)

Objectives: (58, 161, 172)

-Efficiently preserve and maintain the regional transportation system
-Operate the regional transportation system efficiently and cost-effectively

Strategies: (161, 172-173)

-Regional transportation partners will...strategically preserving, maintaining, and operating the transportation system.

-Regional transportation partners should regularly review ... projects to identify cost-effective opportunities to incorporate improvements...

Goal: Competitive Economy (64, 166, 193)

Objectives: (64, 166, 193)

-Invest in a multimodal transportation system to attract and retain businesses and residents.

Strategies: (166, 194-195)

-The Council and its partners will invest in regional transit and bicycle systems that... attract and retain businesses and workers...

-The Council, MnDOT, and local governments will ... provides travel conditions that compete well with peer metropolitan areas.

Goal: Healthy Environment (66, 167, 197)

Objectives: (66, 167, 197)

-Reduce transportation-related air emissions.

-Reduce impacts of transportation ...on the natural, cultural, and developed environments.

-Increase the availability and attractiveness of transit...

-Provide a transportation system that promotes community cohesion and connectivity ... under represented populations.

Strategies: (167-168, 197-202)

-Regional transportation partners recognize the role of transportation choices in reducing emissions... reducing greenhouse gas and air pollutant emissions....measuring and reducing transportation-related emissions. (197)

-The Council and MnDOT will consider reductions in transportation-related emissions of air pollutants and greenhouse gases... (198)

-Regional transportation partners will plan... system that considers the needs of all potential users... promoting the environmental ...benefits of alternatives to single-occupancy vehicle travel. (199)

-Regional transportation partners will protect, enhance and mitigate impacts on natural resources... management of air and water quality ...

identification of priority natural resources... (199)

-Transportation partners will protect...the cultural and built environments... (200)

-Regional transportation partners will... mitigate ...impacts of transportation projects to ...historically underrepresented communities... (202)

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.

List the applicable documents and pages:

1. THRIVE MSP 2040
-Pg. 64 - Refers to fleet electrification

-Pg. 44 - Equity in terms of disproportionate transit impacts
-Pg. 61-63 - Climate change & air quality, GHG reductions, Next Generation Energy Act
-Pg. 129 - Carbon emissions & transit
-Pg. 134 - Transit's contribution to GHG emissions

2. Minneapolis Climate Action Plan
-Pg. 36 - Expresses interest in electric vehicles including charging infrastructure

-Pg. 37 - Discusses electric buses and support for improving fuel efficiency in public fleets. Includes benefits of electric buses such as reducing noise pollution and localized air pollutants like particulates in high-traffic areas.

3. City of Hilltop 2015 System Statement
-Pg. 21 - Discusses reducing energy use and air pollutant emissions

4. Blaine Zoning Ordinance (City of Blaine Official Website)

-Discusses health and welfare of Blaine inhabitants, maintaining high air and environmental quality standards, and minimizing pollution of all types, including toxic or noxious matter.

5. City of Fridley Active Transportation Plan

-Pg. 6 - Discusses reducing air pollution (also references City of Fridley 2030 Comprehensive Plan)

-Pg. 8 - Discusses reducing vehicle emissions

-Pg. 11 - Supports transit options including buses

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	185037
Post-Secondary Enrollment within 1/4 (bus stop) or 1/2 mile (transitway station) buffer	135266
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):	N/A
Upload Map	1468506655734_Electric Bus_Population Summary_Map.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, 17, 18, 19, 22, 25, 30, 32, 59, 61, 118, 141, 535, 675, 724, 801, 805, 824, 825, 831, 852, 854, 860, 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), Central Avenue Arterial BRT, Nicollet Avenue Arterial BRT, West Broadway Avenue BRT, Chicago Ave BRT, Emerson/Fremont Aves BRT, Penn Avenue Arterial BRT (C Line)
Upload Map	1468424178565_Electric Bus_Transit Connections_Map.pdf

Response

Met Council Staff Data Entry Only

Average number of weekday trips	0

Measure: Usage

Existing Transit Routes on the Project	10, 59, 118

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

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

Urban communities usually have higher air pollution levels than rural or suburban areas, and the Twin Cities is no exception. Diesel buses are large contributors to this problem, releasing a variety of pollutants like volatile organic compounds (VOC), total hydrocarbons (THC), carbon monoxide (CO), nitrogen oxides (NOx), and particulate matter (PM10/PM2.5) while operating (1), which are all known to harm human health (2,3,4,5). As Metro Transit attempts to serve low-income communities with frequent bus service, we inadvertently expose these people to higher levels of air pollutants than other parts of the metropolitan area (6). This has deep impacts on our community; a recent University of Minnesota study linked air pollution in neighborhoods inhabited primarily by people of color to an estimated 7,000 deaths each year from heart disease alone (6). The health of children, the elderly, and people with disabilities can also be disproportionately affected by elevated air pollution levels. With zero tailpipe emissions, electric buses help solve this problem by paving the way for a bus fleet powered by clean, renewable energy. Meanwhile, using electric buses shifts the pollution source from tailpipe emissions to power plants, which are easier and more efficient to regulate, monitor, and mitigate.

Since the electric buses purchased will simply replace diesel buses currently in Metro Transit's fleet, this project will positively impact low-income communities by eliminating tailpipe emissions. Specifically, this project will locally reduce criteria pollutants and emissions near the route by 180.96 tons/year for CO2, 81.12 kg/year for CO, 182.52 kg/year for NOx, 3.32 kg/year for PM2.5, 0.37 kg/year for N2O, and 7.51 kg/year for VOC(7). Since electric buses will create no additional negative impacts on low-income communities, no mitigation is required.

In addition, all electric buses are equipped with lifts and are ADA compliant, which provides further assistance to people with disabilities.

(1) https://www3.epa.gov/otaq/consumer/420f08026.pdf

(2) http://www.cdc.gov/air/particulate_matter.html

(3) http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=396&tid=69

(4) http://www.cdc.gov/co/faqs.htm

(5) http://www.health.state.mn.us/divs/eh/indoorair/voc/

(6) http://discover.umn.edu/news/science-technology/study-finds-people-color-live-neighborhoods-more-air-pollution-whites

(7) See attachment to this application, "Local Tailpipe Emissions Reduction Calculations"

Upload Map 1468499827890_Electric Bus_Socio Econ_Map.pdf

Measure B: Affordable Housing

City/Township	Number of Stops in City/Township
Minneapolis	122.0
Columbia Heights	31.0
Hilltop	8.0
Fridley	44.0
Spring Lake Park	27.0
Blaine	74.0
Coon Rapids	48.0

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	354.0
Total Housing Score	0

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

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

Metro Transit will use these grant funds exclusively for the capital improvement costs of electric buses and in-garage charging stations, not route changes or service expansion. Therefore, VMT, travel speeds, and SOV trips will remain constant. However, CO2, NOx, CO, VOC, and PM2.5 tailpipe emissions will be eliminated from 5 buses in service. Specifically, this project will reduce local annual tailpipe emissions by 181 tons CO2, 183 kg NOx, 81 kg CO, 7.5 kg VOC, and 3.3 kg PM2.5 (1). The new buses will be powered by electricity from in-garage charging stations, so emission sources will be shifted from diesel combustion to the electric grid. Even when the emissions from the electric power plant are considered, electric buses still produce fewer global annual emissions than diesel buses: 93.6 fewer tons of CO2, 64 kg NOx, 32.8 kg CO, 10.1 kg VOC, and 9.2 kg CH4 (3). As the power on the grid becomes cleaner, electric bus emissions will continue to decline. This shift in energy source will ensure that emissions are concentrated at a few point sources for capture instead of being distributed among the tailpipes of many SOV's. This is especially important on city routes like Central Avenue where buses often idle in traffic and at stop lights; idling diesel engines release high quantities of pollutants (2).

In addition, emissions will be saved through reduced bus garage heating costs. Idling diesel engines inside the garage creates indoor air quality concerns, making ventilation a necessity. In the winter this is especially true when cold outdoor air is heated and exchanged for contaminated indoor air. In this way, reducing the number of diesel vehicles inside the garage by replacing them with electric buses will reduce energy consumption required for ventilation, thus decreasing emissions due to garage heating.

(1) "Local Tailpipe Emissions Reduction

Calculations" (attached)

(2)https://www3.epa.gov/region1/eco/diesel/pdfs/Diesel_NH_truck_bus.pdf

(3)"Global Life Cycle Emissions Reduction Calculations" (attached)

Measure A: Travel Time

Current Passenger Travel Time (Minutes)	55.0
Proposed Passenger Travel Time (Minutes)	55.0
Reduction in Travel Time	0%

Measure B: Operating Costs

Current Annual Transit Operating Costs	1097330.0
Proposed Annual Transit Operating Costs	963830.0
Reduction in Operating Cost	12.0%
Description of how the proposed cost change was determined (Limit 2,800 characters: approximately 400 words).	The reduction in operating costs is two-fold and is based on 26,700 route miles per bus. The first element is an approximate $10,200 reduction in maintenance costs due to fewer moving parts. The second element is an estimated $16,500 fuel savings, which is based on the anticipated average costs of diesel fuel at $3.00/gallon and average electricity at $0.11/kWh.

Measure C: Improvements and Amenities

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

The overall customer experience on Metro Transit routes replaced by electric bus service will improve because electric buses offer a higher quality ride than diesel buses. The quieter, smooth propulsion of the electric bus allows the rider's experience to approach that of a light-rail vehicle. Another improvement customers will experience is higher air quality near the buses. Diesel buses release a variety of pollutants like volatile organic compounds (VOC), total hydrocarbons (THC), carbon monoxide (CO), nitrogen oxides (NOx), and particulate matter (PM10/PM2.5) while operating(1), which are all known to harm human health(2,3,4,5). By eliminating tailpipe emissions from buses, passengers will experience better air quality in and around buses.

In addition, the electric buses will enhance the customer experience by providing the sense that customers are doing something good for the environment. Many people like to feel that they are taking sustainable actions, and this aspect of the electric bus transit experience will improve the quality of the ride for many customers. This intangible improvement also supports Metro Transit's public image as a sustainable organization.

(1) https://www3.epa.gov/otaq/consumer/420f08026.pdf

(2) http://www.cdc.gov/air/particulate_matter.html

(3) http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=396&tid=69

(4) http://www.cdc.gov/co/faqs.htm

(5)
http://www.health.state.mn.us/divs/eh/indoorair/voc/

Measure A: Roadway, Bicycle, and Pedestrian Improvements

Metro Transit customers currently travel to and from bus stops primarily as pedestrians or bicyclists, where they board diesel buses operating alongside single-occupancy vehicles. Buses inherently accommodate pedestrians since many riders travel to bus stops on foot, and bicycle racks mounted on the front of each bus also help facilitate bicycle transportation options. Sidewalks, bike lanes, NiceRide bicycle sharing stations, and street infrastructure like roads and stop lights currently help bicyclists and pedestrians travel to and from bus stops.

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

Since this project will fund only the replacement of 5 diesel buses with 5 electric buses and not establish new routes, most pedestrian and bicycle elements of these bus routes will remain unaltered. Bicycle racks (double or triple bicycle capacity) will be mounted on the new electric buses, providing equal or greater capacity than current diesel buses. This will continue to improve the travel experience by offering convenient access to multimodal transportation. For example, bicycle racks expand transit access to customers who live farther away from transit routes and provide flexibility regardless of the weather. Northtown Transit Center and Columbia Heights Transit Center will also include additional bicycle support and maintenance stations.

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

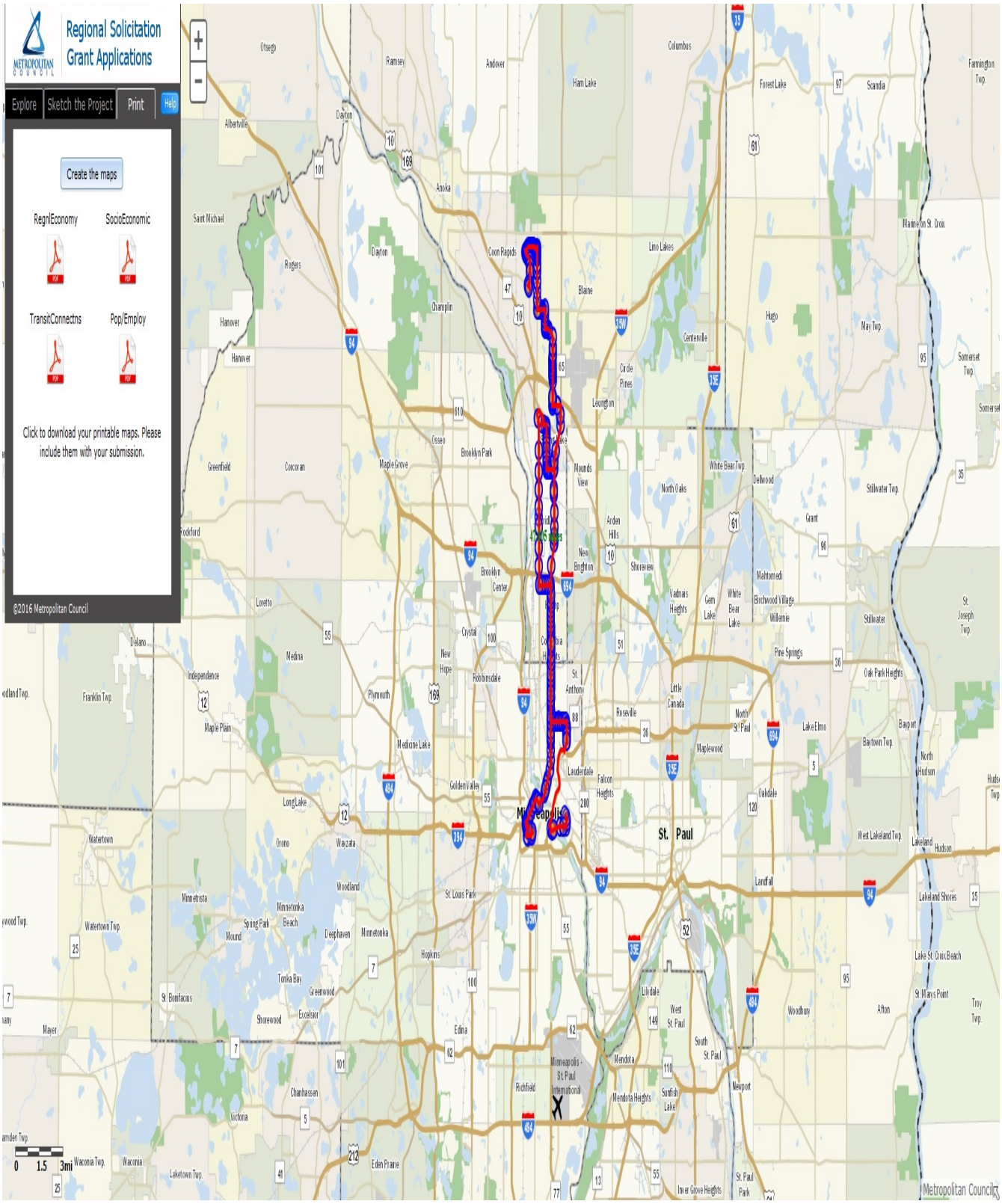
Total Annual Operating Cost:	$963,830.00
Total Annual Capital Cost of Project	$312,500.00
Total Annual Project Cost	$1,276,330.00
Assumption Used (Limit 1400 Characters; approximately 200 words):	Because electric vehicle engines have fewer moving parts than diesel vehicle engines, we have assumed a 16 year life expectancy for electric buses. This assumption can be made because diesel engine vehicles are susceptible to breaking down, resulting in catastrophically high replacement costs for damaged components. This is not the case for electric vehicles, so the life expectancy of their components is greater. For example, rebuilding a diesel engine transmission for almost $20,000 on an 11-year old-vehicle is a large expense that will be avoided with electric buses.

(Limit 1400 Characters; approximately 200 words)

Points Awarded in Previous Criteria

Cost Effectiveness	$0.00

Other Attachments



Map of Proposed Improvements

533 KB

File Name	Description	File Size
Brian Lamb_Letter_Match Funds_Electric Bus.pdf	Local Match Letter	30 KB
Electric Bus_Regional Economy_Map.pdf	Regional Economy Map	259 KB
Global Life Cycle Emissions Reductions.docx	Global Life Cycle Emissions Reduction Calculations	15 KB
Local Tailpipe Emission Reductions.docx	Local Tailpipe Emissions Reduction Calculations	14 KB

Population Summary

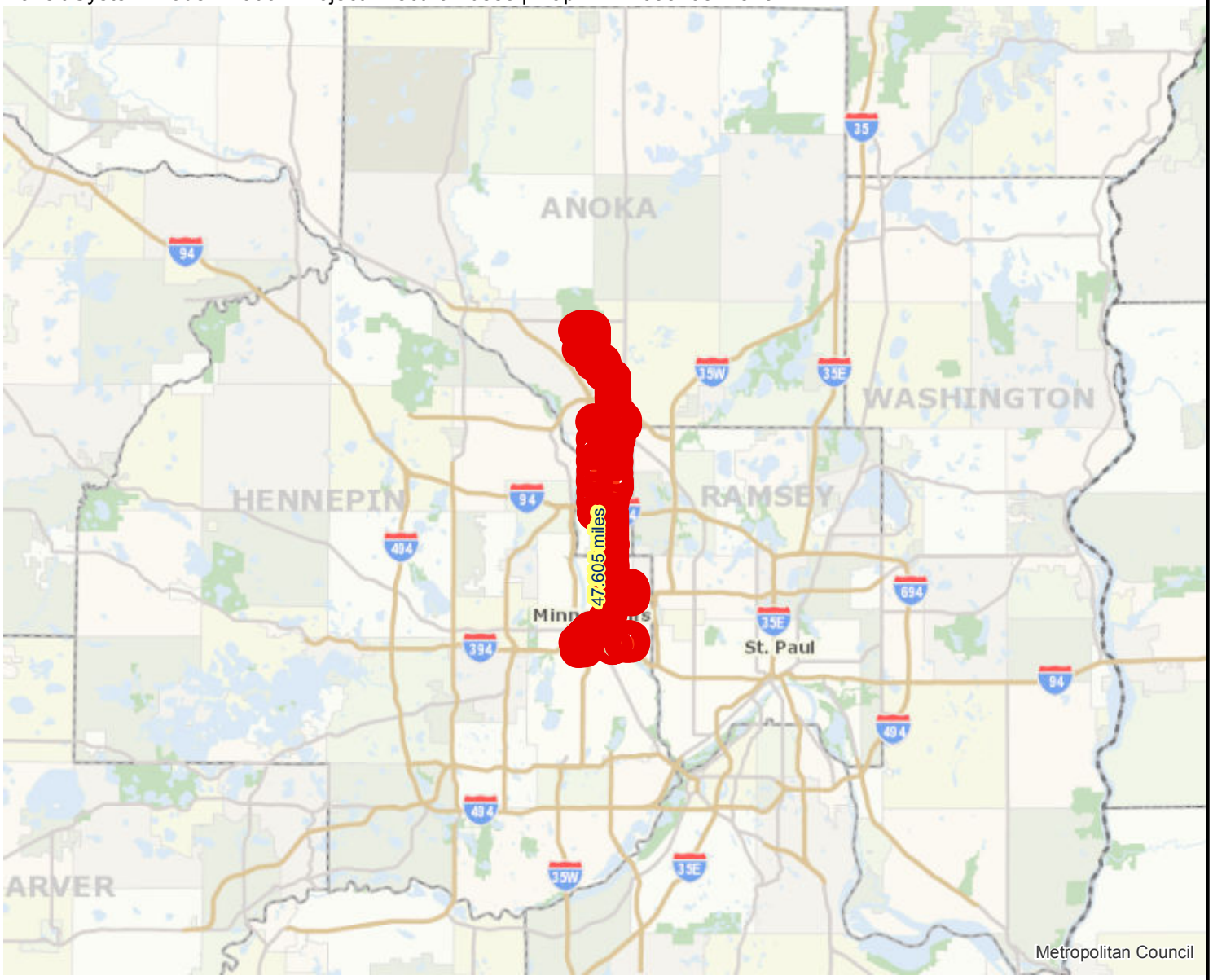
Transit System Modernization Project: Electric Buses | Map ID: 1468346877845

Results

Within QTR Mile of project:
Total Population: 161354
Total Employment: 185037

Within HALF Mile of project:
Total Population: 217311
Total Employment: 233095

Within ONE Mile of project:
Total Population: 281416
Total Employment: 275153



Project Points

Project

0 4.5 9 18 27 36 Miles

Created: 7/12/2016
LandscapeRSA4

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

METROPOLITAN COUNCIL

Transit Connections

Transit System Modernization Project: Electric Buses | Map ID: 1468346877845

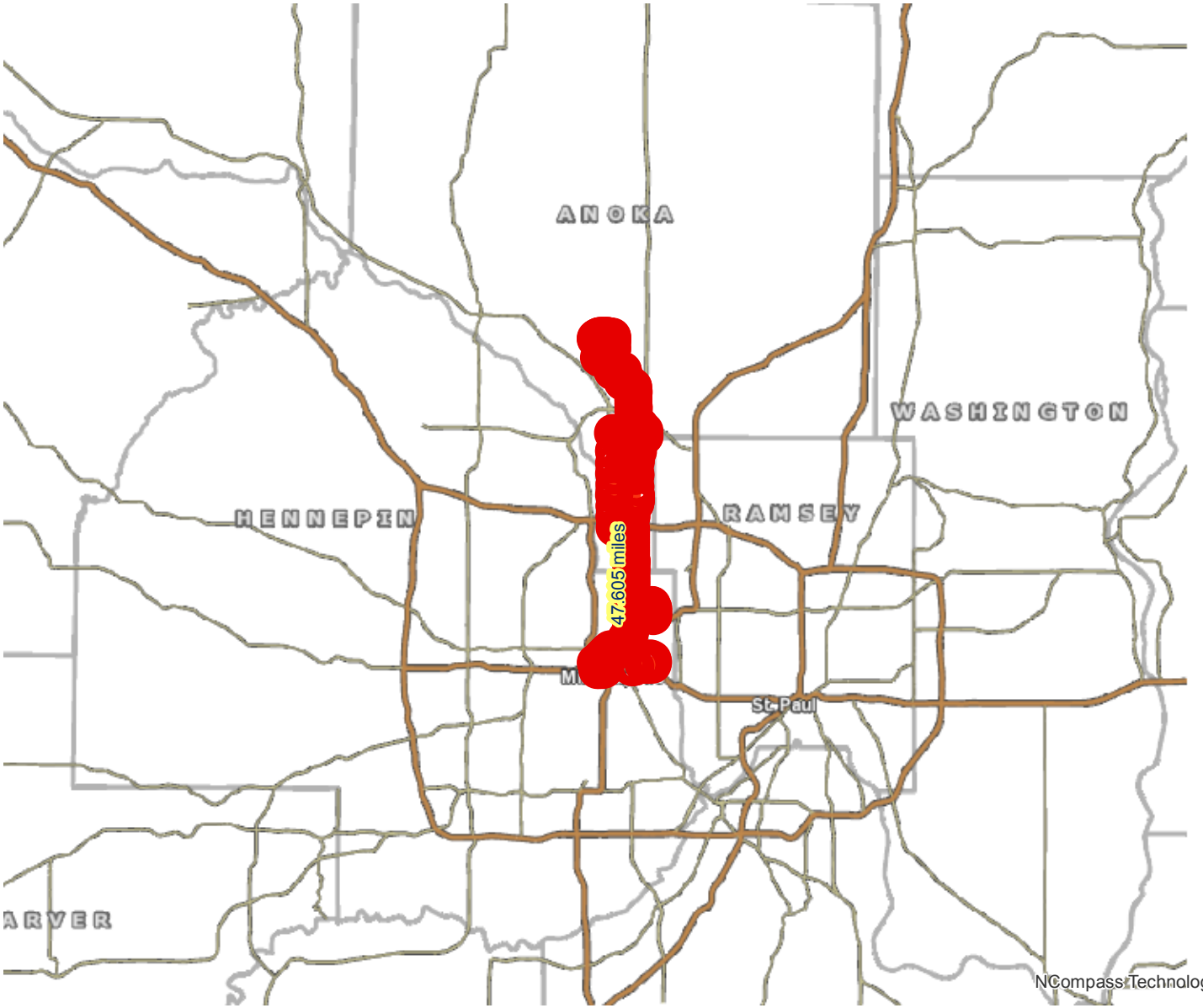
Results

Transit within QTR mile of project:

*West Broadway
*Central
*Chicago-Fremont
*Hennepin
*Nicollet
*Orange Line
*Orange Line
*C Line

Transit within HALF mile of project:
*West Broadway
*Central
*Chicago-Fremont
*Hennepin
*Nicollet
*Orange Line
*Orange Line
*Green Line Extension
*Blue Line Extension
*C Line

**indicates Planned Alignments*



Project Points

Project

0 4.5 9 18 27 36 Miles

Created: 7/12/2016
LandscapeRSA3

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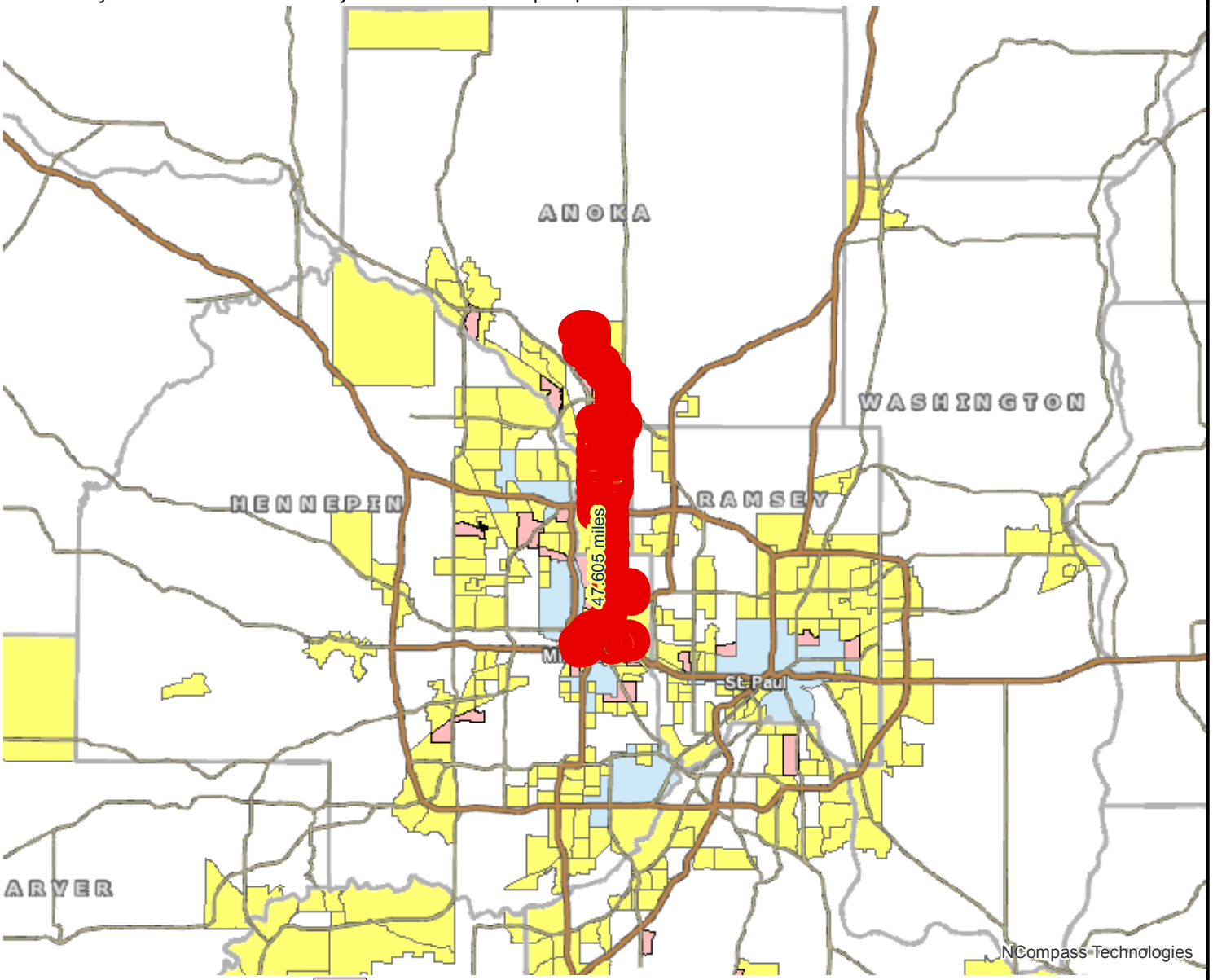
METROPOLITAN COUNCIL

Socio-Economic Conditions

Transit System Modernization Project: Electric Buses | Map ID: 1468346877845

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 Povertry > 50% residents of color
Area of Concentrated Poverty
Above reg'l avg conc of race/poverty

0 4.75 9.5 19 28.5 38 Miles

Created: 7/12/2016
LandscapeRSA2

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METROPOLITAN COUNCIL

Metro Transit

July 14, 2016

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

RE: Regional Solicitation Applications

Dear Ms. Koutsoukos;

Metro Transit is submitting a Transit System Modernization application to purchase five electric buses for Routes 10, 59, and 118. These routes operate primarily on Central Avenue between downtown Minneapolis and Coon Rapids. The project includes the purchase of five electric buses and the purchase and installation of charging stations.

This letter corresponds to general solicitation requirements in Section IV, required attachments:

- Metro Transit will have jurisdiction over the buses in the project. Metro Transit commits to operate and maintain these vehicles for their useful life.
- Metro Transit will provide the required minimum 20% local match through Metropolitan Council Regional Transit Capital, Motor Vehicle Sales Tax revenues or other eligible non-federal funds available to Metro Transit in the program year.
- The project includes Metro Transit commitment to provide the service and operate related TSM equipment and any related contracts.

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

Sincerely,

Brian J. Lamb
General Manager

CC: Adam Harrington, Director of Service Development
Mary Gustafson, Manager of Grants

Regional Economy

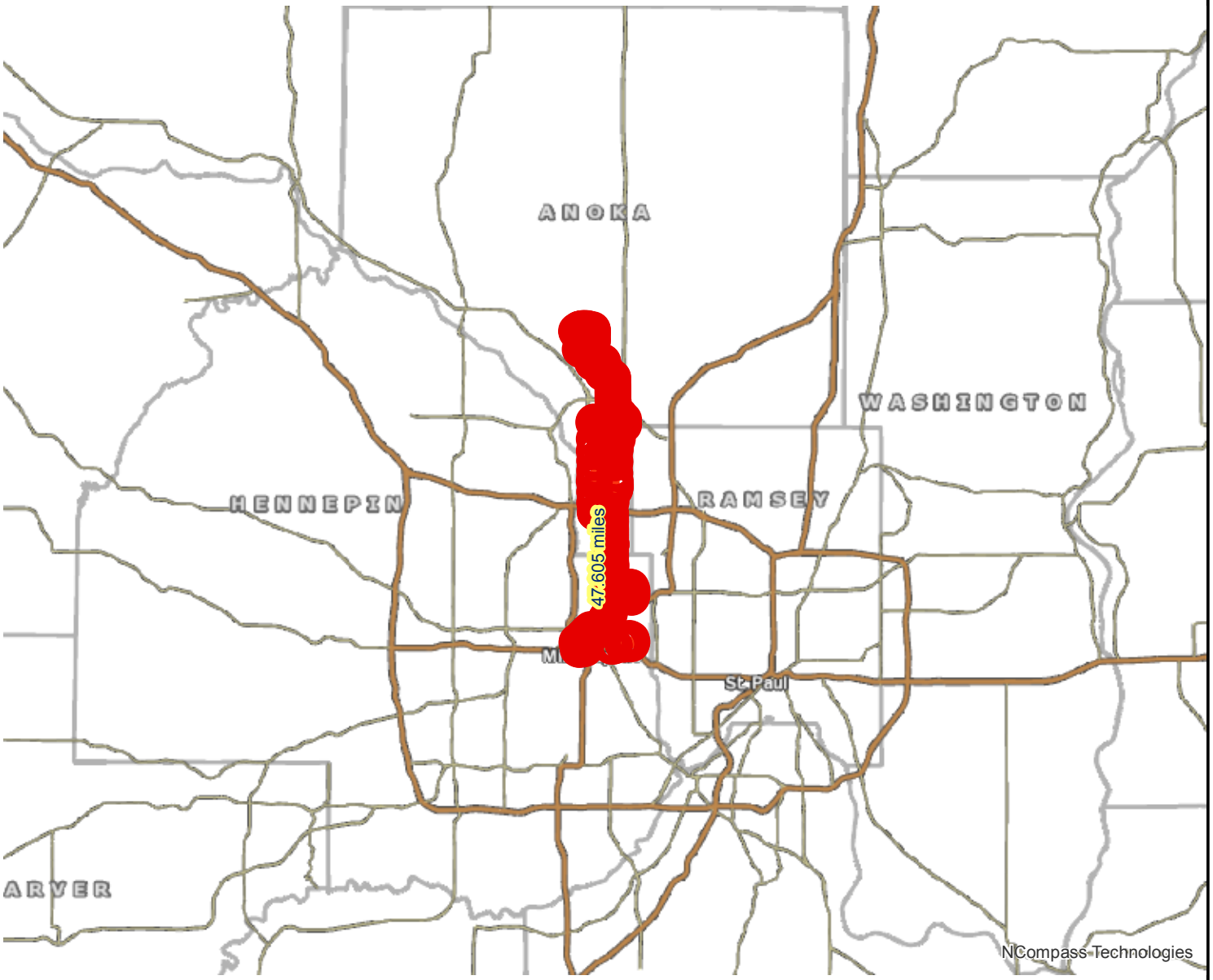
Transit System Modernization Project: Electric Buses | Map ID: 1468346877845

Results

WITHIN ONE MI of project:

Total Population: 279506
Total Employment: 330160
Mfg and Dist Employment: 43282

Postsecondary Students:
135266



Project Points

Project

0 4.5 9 18 27 36 Miles

Created: 7/12/2016
LandscapeRSA5

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METROPOLITAN COUNCIL