



Application

10355 - 2018 Roadway System Management

10907 - City of Minneapolis ITS Upgrades and Enhancements

Regional Solicitation - Roadways Including Multimodal Elements

Status: Submitted

Submitted Date: 07/13/2018 9:36 AM

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## Primary Contact

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Phone Ext.

**Fax:**

**What Grant Programs are you most interested in?** Regional Solicitation - Roadways Including Multimodal Elements

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## Organization Information

**Name:** MINNEAPOLIS,CITY OF

**Jurisdictional Agency (if different):**

**Organization Type:**

City

**Organization Website:**

<http://www.ci.minneapolis.mn.us/>

**Address:**

DEPT OF PUBLIC WORKS  
309 2ND AVE S #300

\*

MINNEAPOLIS

Minnesota

55401

City

State/Province

Postal Code/Zip

**County:**

Hennepin

**Phone:\***

612-673-3884

Ext.

**Fax:**

**PeopleSoft Vendor Number**

0000020971A2

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## Project Information

**Project Name**

Minneapolis ITS Upgrades and Enhancements

**Primary County where the Project is Located**

Hennepin

**Cities or Townships where the Project is Located:**

Minneapolis

**Jurisdictional Agency (If Different than the Applicant):**

City of Minneapolis

**Brief Project Description (Include location, road name/functional class, type of improvement, etc.)**

The proposed project will upgrade and enhance existing traffic management and intelligent transportation systems (ITS) in areas throughout the city of Minneapolis. The City of Minneapolis is collaborating with Hennepin County, MnDOT, and Metro Transit to enhance the city's traffic control system, with a focus on West Broadway Avenue. The City's ITS currently serves roadway users throughout the metro area, providing services such as arterial dynamic message signs (DMS), real-time surveillance cameras (CCTV), and transit signal priority (TSP) capabilities. Upgrades to ITS, such as expanded remote access and operations, installing new traffic signal controllers and cabinets, conflict monitors, video detection system, additional CCTV devices, vehicle-to-infrastructure (V2I) devices, improvements to the Traffic Management Center (video server, video wall), dedicated short range communications (DSRC) radio (high-volume wireless data transmission), and investing in fiber optic cable to increase bandwidth and reliability, will result in a nimble traffic control system that supports Minneapolis' Smart Cities initiatives and has the ability to adapt to daily and non-recurring traffic events. Once implemented, ITS enhancements will improve interfacing among the Police, Public Works, and Public Safety officials, integrating traffic monitoring with safety. In this way, upgrades will help keep the city's street and highway network functioning efficiently and with more flexibility and multipurpose use. The focus on West Broadway Avenue will improve operations on a key multimodal arterial connecting north and northeast Minneapolis, increasing safety and efficiency for transit, freight, bicycle, pedestrian, and general traffic.

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

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

Upgrade traffic management systems citywide with a focus on W Broadway Ave and city's intelligent transportation system (ITS) capabilities. Includes traffic signal controllers/cabinets, advanced detection systems, CCTV devices, and fiber optic cable.

**Project Length (Miles)** 2.3

*to the nearest one-tenth of a mile*

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## Project Funding

**Are you applying for competitive funds from another source(s) to implement this project?** No

**If yes, please identify the source(s)**

**Federal Amount** \$3,000,000.00

**Match Amount** \$750,000.00

*Minimum of 20% of project total*

**Project Total** \$3,750,000.00

**Match Percentage** 20.0%

*Minimum of 20%*

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

**Source of Match Funds** City of Minneapolis

*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:** 2022

*Select 2020 or 2021 for TDM projects only. For all other applications, select 2022 or 2023.*

**Additional Program Years:** 2020, 2021

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

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## Project Information: Roadway Projects

**County, City, or Lead Agency** City of Minneapolis

**Functional Class of Road** A-MINOR AUGMENTOR

**Road System** CSAH

*TH, CSAH, MSAS, CO. RD., TWP. RD., CITY STREET*

**Road/Route No.** 81

*i.e., 53 for CSAH 53*

**Name of Road** W BROADWAY AVE; BROADWAY ST NE

*Example; 1st ST., MAIN AVE*

**Zip Code where Majority of Work is Being Performed** 55413

**(Approximate) Begin Construction Date** 03/15/2022

**(Approximate) End Construction Date** 11/30/2022

**TERMINI:(Termini listed must be within 0.3 miles of any work)**

**From:**  
**(Intersection or Address)**

**To:**  
**(Intersection or Address)**

*DO NOT INCLUDE LEGAL DESCRIPTION*

**Or At**

**Primary Types of Work**

*Examples: GRADE, AGG BASE, BIT BASE, BIT SURF,  
SIDEWALK, CURB AND GUTTER, STORM SEWER,  
SIGNALS, LIGHTING, GUARDRAIL, BIKE PATH, PED RAMPS,  
BRIDGE, PARK AND RIDE, ETC.*

**BRIDGE/CULVERT PROJECTS (IF APPLICABLE)**

**Old Bridge/Culvert No.:**

**New Bridge/Culvert No.:**

**Structure is Over/Under**  
**(Bridge or culvert name):**

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## **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 (2015), 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 goals, objectives, and strategies that relate to the project.*

Goal: Transportation System Stewardship; Objectives A. Efficiently preserve and maintain..., B. Operate... efficiently and cost-effectively connect people and freight...; Strategies A1 ...strategically preserving, maintaining, and operating the transportation system, A2 ...incorporate improvements for safety, lower-cost congestion management and mitigation, transit, bicycle, and pedestrian facilities; pg 2.6

Goal: Safety and Security; Objectives A. Reduce crashes and improve safety and security for all modes... B. Reduce ...vulnerability to natural and manmade incidents...; Strategies B2 ...protect and strengthen the role of the regional transportation system in providing security and effective emergency response..., B3 ...monitor and routinely analyze safety and security data...; pg 2.7

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

Goal: Access to Destinations; Objectives A. Increase ...multimodal travel options, B. Increase travel time reliability and predictability for travel on highway and transit systems; Strategies C7 ...optimize the performance of the principal arterial system..., C11 ...expand and modernize transit service, facilities, systems, and technology..., C17 provide or encourage... transportation choices that provide and enhance access... for pedestrians and people with disabilities; pg 2.8

Goal: Competitive Economy; Objectives A. Improve multimodal access to regional job concentrations..., B. Invest in a multimodal transportation system to attract and retain businesses and residents, C. Support... competitiveness through the efficient movement of freight; Strategies D1 ...pursue the level of increased funding needed to create a multimodal transportation system that is..., D4

...invest in a transportation system that provides travel conditions that compete well with peer metropolitan areas; pg 2.11

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:

Access Minneapolis Ten-Year Action Plan (Transportation element of the City's Comprehensive Plan), Objective 2 (pg 43), Objective 4 (pg 45), Objective 6 (pg 55), Objective 7 (pg 60); City of Minneapolis Vision Zero Resolution (soon to be Action Plan), pg 1-3

4. The project must exclude costs for studies, preliminary engineering, design, or construction engineering. Right-of-way costs are only eligible as part of 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.

**Roadway Expansion:** \$1,000,000 to \$7,000,000

**Roadway Reconstruction/ Modernization Modernization and Spot Mobility:** \$1,000,000 to \$7,000,000

**Traffic Management Technologies (Roadway System Management):** \$250,000 to \$7,000,000

**Bridges Rehabilitation/ Replacement:** \$1,000,000 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 (ADA).

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

9. In order for a selected project to be included in the Transportation Improvement Program (TIP) and approved by USDOT, the public agency sponsor must either have, or be substantially working towards, completing a current Americans with Disabilities Act (ADA) self-evaluation or transition plan that covers the public right of way/transportation, as required under Title II of the ADA.

The applicant is a public agency that employs 50 or more people and has an adopted ADA transition plan that covers the public right of way/transportation.

Date plan adopted by governing body

The applicant is a public agency that employs 50 or more people and is currently working towards completing an ADA transition plan that covers the public rights of way/transportation.

Yes

11/01/2017

11/01/2018

Date process started

Date of anticipated plan completion/adoption

The applicant is a public agency that employs fewer than 50 people and has a completed ADA self-evaluation that covers the public rights of way/transportation.

Date self-evaluation completed

The applicant is a public agency that employs fewer than 50 people and is working towards completing an ADA self-evaluation that covers the public rights of way/transportation.

Date process started

Date of anticipated plan completion/adoption

**(TDM Applicants Only) The applicant is not a public agency subject to the self-evaluation requirements in Title II of the ADA.**

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

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

11. The owner/operator of the facility must operate and maintain the project year-round for the useful life of the improvement, per FHWA direction established 8/27/2008 and updated 6/27/2017.

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

12. 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**

13. 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**

14. 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**

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## Roadways Including Multimodal Elements

1. All roadway and bridge projects must be identified as a principal arterial (non-freeway facilities only) or A-minor arterial as shown on the latest TAB approved roadway functional classification map.

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

### Roadway Expansion and Reconstruction/Modernization and Spot Mobility projects only:

2. The project must be designed to meet 10-ton load limit standards.

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

### Bridge Rehabilitation/Replacement projects only:

3. Projects requiring a grade-separated crossing of a principal arterial freeway must be limited to the federal share of those project costs identified as local (non-MnDOT) cost responsibility using MnDOT's Cost Participation for Cooperative Construction Projects and Maintenance Responsibilities manual. In the case of a federally funded trunk highway project, the policy guidelines should be read as if the funded trunk highway route is under local jurisdiction.

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

4. The bridge must carry vehicular traffic. Bridges can carry traffic from multiple modes. However, bridges that are exclusively for bicycle or pedestrian traffic must apply under one of the Bicycle and Pedestrian Facilities application categories. Rail-only bridges are ineligible for funding.

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

5. The length of the bridge must equal or exceed 20 feet.

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

6. The bridge must have a sufficiency rating less than 80 for rehabilitation projects and less than 50 for replacement projects. Additionally, the bridge must also be classified as structurally deficient or functionally obsolete.

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

**Roadway Expansion, Reconstruction/Modernization and Spot Mobility, and Bridge Rehabilitation/Replacement projects only:**

7. All roadway projects that involve the construction of a new/expanded interchange or new interchange ramps must have approval by the Metropolitan Council/MnDOT Interchange Planning Review Committee prior to application submittal. Please contact Michael Corbett at MnDOT ( Michael.J.Corbett@state.mn.us or 651-234-7793) to determine whether your project needs to go through this process.

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

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## Requirements - Roadways Including Multimodal Elements

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### Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	\$187,500.00
Removals (approx. 5% of total cost)	\$187,500.00
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	\$187,500.00
Striping	\$0.00
Signing	\$0.00
Lighting	\$0.00
Turf - Erosion & Landscaping	\$0.00
Bridge	\$0.00
Retaining Walls	\$0.00
Noise Wall (not calculated in cost effectiveness measure)	\$0.00
Traffic Signals	\$3,000,000.00
Wetland Mitigation	\$0.00

Other Natural and Cultural Resource Protection	\$0.00
RR Crossing	\$0.00
Roadway Contingencies	\$187,500.00
Other Roadway Elements	\$0.00
<b>Totals</b>	<b>\$3,750,000.00</b>

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## Specific Bicycle and Pedestrian Elements

<b>CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES</b>	<b>Cost</b>
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
<b>Totals</b>	<b>\$0.00</b>

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## Specific Transit and TDM Elements

<b>CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES</b>	<b>Cost</b>
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
<b>Totals</b>	<b>\$0.00</b>

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## 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.	\$0.00

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## Totals

Total Cost	\$3,750,000.00
Construction Cost Total	\$3,750,000.00
Transit Operating Cost Total	\$0.00

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## Measure A: Functional Classification of Project

The majority of the project funds will be invested on the principal arterial system:

*(50 points)*

The majority of the project funds will be invested on the A-minor arterial system: Yes

*(25 points)*

The majority of the project funds will be invested on the collector or local system with some investment either on the principal arterial or A-minor arterial system:

*(0 points)*

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## Measure 1B: Regional Truck Corridor Tiers

*RESPONSE (Select one for your project, based on the Regional Truck Corridor Study):*

The majority of the project funds will be invested on either a Tier 1, Tier 2, or Tier 3 corridor: Yes

*(50 Points)*

A majority of the project funds will NOT be invested on a Tier 1, Tier 2, or Tier 3 corridor, but at least 10 percent of the funds will be invested on these corridors:

*(25 Points)*

No project funds will be invested on a Tier 1, Tier 2, or Tier 3 corridor:

*(0 Points)*

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## Measure C: Integration within existing traffic management systems

The City of Minneapolis currently operates and maintains 810 traffic signals. Most of these are connected to the city's Traffic Management Center (TMC). The City has a long history of updating the traffic control devices and communication network so it can support advancements in technology.

Prior grants successfully awarded to the City supported the City in building the framework for a new, fiber-based traffic control system. As part of this project, the City will build on past investments and continue to deploy new fiber communication where obsolete copper interconnect exists today. The fiber has higher bandwidth, which allows for more CCTV deployments and is more reliable than the copper connections.

### Response:

City staff actively manage a majority of signal controllers remotely at the TMC using central traffic control system software. Traffic signal controller technology has rapidly evolved over the past ten years and this project will replace obsolete controllers with new ones meeting the Advanced Transportation Controller (ATC) standard. The City is in the process of converting inductive loops to video detection, which can detect bicyclists and requires less maintenance.

By increasing the city's bandwidth and installing new CCTV cameras, city staff will be better prepared to identify and efficiently and effectively respond to incidents on the roadways and will be better able to respond to events that may change typical existing traffic patterns.

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## Measure D: Coordination with other agencies

Response:

The project enhances coordination among City, County, MnDOT, and Transit operations and operating units. The City of Minneapolis will reinvest in parts of its existing traffic management system, and enhance the system improving information sharing and coordination among City departments (Public Works, Police, and Public Safety) and with stakeholder partners (County, MnDOT, and Metro Transit).

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

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## Measure A: Current Daily Person Throughput

Location	W Broadway Ave & Washington Ave N
Current AADT Volume	20800.0
Existing transit routes at the location noted above	4, 5, 10, 11, 14, 17, 19, 22, 25, 30, 32, 59, 118, 141, 250, 252, 261, 263, 264, 270, 288, 721, 724, 760, 761, 762, 763, 765, 766, 767, 768, 780, 781, 782, 783, 785, 789, 824, 825, 850, 852, 854, 865, 887, 888-Northstar Commuter Rail
Upload "Transit Connections" map	1531411764734_TransitConnections_map.pdf

*Please upload attachment in PDF form.*

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## Response - Daily Person Throughput

Average Annual Daily Transit Ridership	10861.0
Current Daily Person Throughput	37901.0

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## Measure B: 2040 Forecast ADT

Use Metropolitan Council model to determine forecast (2040) ADT volume	Yes
If checked, METC Staff will provide Forecast (2040) ADT volume	27800

OR

Identify the approved county or city travel demand model to determine forecast (2040) ADT volume

Forecast (2040) ADT volume

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## Measure A: Connection to disadvantaged populations and projects benefits, impacts, and mitigation

Select one:

**Project located in Area of Concentrated Poverty with 50% or more of residents are people of color (ACP50):** Yes

*(up to 100% of maximum score)*

**Project located in Area of Concentrated Poverty:**

*(up to 80% of maximum score )*

**Projects census tracts are above the regional average for population in poverty or population of color:**

*(up to 60% of maximum score )*

**Project located in 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:**

*(up to 40% of maximum score )*

*1.(0 to 3 points) A successful project is one that has actively engaged low-income populations, people of color, children, persons with disabilities, and the elderly during the project's development with the intent to limit negative impacts on them and, at the same time, provide the most benefits.*

*Describe how the project has encouraged or will engage the full cross-section of community in decision-making. Identify the communities to be engaged and where in the project development process engagement has occurred or will occur. Elements of quality engagement include: outreach to specific communities and populations that are likely to be directly impacted by the project; techniques to reach out to populations traditionally not involved in the community engagement related to transportation projects; residents or users identifying potential positive and negative elements of the project; and surveys, study recommendations, or plans that provide feedback from populations that may be impacted by the proposed project. If relevant, describe how NEPA or Title VI regulations will guide engagement activities.*

This project includes traffic signal technology equipment to both replace outdated equipment and supplement the Minneapolis Traffic Management Center. Once City staff perform the technical work of selecting the equipment, the City will deliver an inclusive and effective communication and engagement program, like previous traffic management equipment upgrade projects. This communication and engagement program has been used on similar projects in the past and has been judged by Minneapolis policy makers to be the appropriate level of engagement for this type of technology-based infrastructure project. The program will consist of:

**Response:**

- Project Web site with detailed information about the project, project benefits, and implementation schedule;
- Public Works notifying each affected ward office and neighborhood organization and directing them to the Web site; and
- Public Works staff making tailored presentations to neighborhood organizations upon request.

*(Limit 1,400 characters; approximately 200 words)*

*2.(0 to 7 points) Describe the projects benefits to low-income populations, people of color, children, people with disabilities, and the elderly. Benefits could relate to safety; public health; access to destinations; travel time; gap closure; leveraging of other beneficial projects and investments; and/or community cohesion. Note that this is not an exhaustive list.*

Proposed improvements improve mobility on and accessibility along major transportation corridors in Minneapolis, benefitting people with low-incomes, of color, children, persons with disabilities, the elderly, and the general public. Upgrades along the West Broadway corridor directly benefit areas of concentrated poverty (ACPs) and ACPs where 50 percent or more of the population are people of color (ACP50s). West Broadway was identified in the 2017 City of Minneapolis Pedestrian Crash Study as part of the High Injury Network, or part of the five percent of Minneapolis streets that contain nearly 75 percent of all severe injury and fatal pedestrian crashes. It is also a major regional transit corridor.

**Response:**

Emissions, traffic congestion affecting transit, and infrastructure reinvestment priorities affecting safe travel have historically disproportionately negatively affected residents in these and other ACP and ACP50 areas within the City. These proposed improvements reduce transit travel delays, which disproportionately affect people who rely on transit in and traveling through Minneapolis. Providing better traffic flow results in more reliable arrival times and transit connections, enhancing the strength of the regional transit system. Reducing congestion also reduces the risk of transit and general traffic crashes resulting from stop-and-go traffic.

Improved inter-agency coordination also benefits residents across the city. Better collaboration between traffic management staff and emergency responders means faster response times. It also means the city is better able to handle large volumes of event traffic that congest local streets and are a burden to local residents and workers.

(Limit 2,800 characters; approximately 400 words)

3.(-3 to 0 points) Describe any negative externalities created by the project along with measures that will be taken to mitigate them. Negative externalities can result in a reduction in points, but mitigation of externalities can offset reductions.

Below is a list of negative impacts. Note that this is not an exhaustive list.

Increased difficulty in street crossing caused by increased roadway width, increased traffic speed, wider turning radii, or other elements that negatively impact pedestrian access.

Increased noise.

Decreased pedestrian access through sidewalk removal / narrowing, placement of barriers along the walking path, increase in auto-oriented curb cuts, etc.

Project elements that are detrimental to location-based air quality by increasing stop/start activity at intersections, creating vehicle idling areas, directing an increased number of vehicles to a particular point, etc.

Increased speed and/or cut-through traffic.

Removed or diminished safe bicycle access.

Inclusion of some other barrier to access to jobs and other destinations.

Displacement of residents and businesses.

Construction/implementation impacts such as dust; noise; reduced access for travelers and to businesses; disruption of utilities; and eliminated street crossings. These tend to be temporary.

Other

Anticipated negative externalities with these improvements are temporary inconveniences related to construction. While infrastructure is being reconstructed, the City and partners will ensure that fully accessible, alternative routes are provided for residents connecting to local and regional destinations. Any lane restrictions will be in off-peak hours. Staff will monitor traffic operations and make signal timing adjustments as needed to avoid or minimize impacts on travelers.

Response:

(Limit 2,800 characters; approximately 400 words)

Upload Map

1531412000031\_SocioEconomicConditions\_map.pdf

## Measure B: Affordable Housing

City	Funds to be spent within each City	Score	Funds/Total Funds	Percent of total funds to be spent within City
Minneapolis	3750000.0	100.0	1.0	100.0
	<b>3750000</b>			<b>100</b>

## Affordable Housing Scoring

Total funds to be spent \$3,750,000.00

Verify that this amount is the same as the total project cost on the Project Information form.

Total Housing Score 100.0

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## Measure A: Upgrades to obsolete equipment

### RESPONSE:

Within the project area obsolete controllers will be replaced with updated models that will provide better functionality. The average age of the controllers being replaced is approximately 10 years; these controllers have obsolete operating systems with firmware that is no longer supported with software updates. Much of the existing communication system is over 40-year old copper within asbestos conduits. The City has begun upgrade to a fiber communication system in new conduits, which has higher bandwidth and is more reliable than the old copper-based system. New technologies relying on video and deployment of more CCTV cameras makes upgrading to fiber very important to attain necessary bandwidth. In addition to upgrading controllers, video detection at signalized intersections will replace existing inductive loop detection. Video detection is more reliable and requires less downtime when replacement is needed.

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

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## Measure A: Congested Roadway

### RESPONSE:

<b>Corridor:</b>	West Broadway Ave - Broadway St NE
<b>Corridor Start and End Points:</b>	
<b>Start Point:</b>	Victory Memorial Drive
<b>End Point:</b>	NE Stinson Blvd
<b>Free-Flow Travel Speed:</b>	23
<i>Free-Flow Travel Speed is black number.</i>	
<b>Peak Hour Travel Speed:</b>	17.0
<i>Peak Hour Travel Speed is red number.</i>	
<b>Percentage Decrease in Travel Speed in Peak Hour Compared to Free-Flow (online calculation):</b>	26.09%

## Measure 5B: Emissions and congestion benefits of project

Improved traffic management strategies reduce congestion and related greenhouse gas emissions. With better real-time data and operations control, the City can better progress traffic through traffic signals to yield more fuel-efficient travel speeds and efficient use of existing street capacity. More sophisticated traffic management technologies allow the City to better respond to stresses on the roadway system, such as those created by large one-time events and crashes or other incidents.

**Response:**

This greater control improves travel time and travel time reliability for local residents, regional commuters, transit, and freight. Real-time data provides better traveler information updates, which local travelers and commuters can use to make informed decisions about route and mode choice. As a result, reduced congestion means fewer idling vehicles stuck in traffic, as well as regional economic benefits resulting from improved freight travel time and increased access to industrial, commercial, and employment centers.

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

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## Measure A: Benefit of Crash Reduction

**Crash Modification Factor Used:**

N/A

*(Limit 700 Characters; approximately 100 words)*

**Rationale for Crash Modification Selected:**

Implementing these improvements will position the City to be more responsive and adaptable when unplanned events disrupt the traffic management system. Incidents involving malfunctioning signals or detectors are caused by a number of triggers, and can occur without warning on any corridor. These conditions make improvements to the traffic management system challenging to model with crash modification factors.

*(Limit 1400 Characters; approximately 200 words)*

**Project Benefit (\$) from B/C Ratio**

\$0.00

**Worksheet Attachment**

1531412851437\_CrashModificationFactors\_BCWorksheet.pdf

*Upload Crash Modification Factors and B/C Worksheet in PDF form.*

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**Measure 6B: Safety issues in project area**

The project will improve safety in the project area, including the city's major crash concentration corridors like West Broadway Avenue, Penn Avenue North, Lowry Avenue North, Central Avenue, Hennepin Avenue South, West 36th Street, and West 38th Street, as shown in Attachment B, and identified through the City of Minneapolis Vision Zero planning and project prioritizing process (<http://www.minneapolismn.gov/publicworks/TransportationPlanning/visionzero>).

**Response:**

Updated controllers and CCTV cameras at critical intersections through the City will yield safety improvements resulting from fewer unanticipated disruptions to the traffic signal and control system. A malfunctioning signal, for example, will default to a red flash condition. This unexpected red flash/all-way stop condition increases congestion and crash risk for all modes due to reduced predictability and coordination for multi-modal traffic flows. When an all-way stop condition occurs unexpectedly at high volume intersections, crash risk increases because many lanes of traffic reach and try to navigate the intersection simultaneously, especially in areas with high pedestrian and bicycle volumes. When vehicle detectors malfunction and pedestrian walk indications unexpectedly turn off, pedestrians are forced to cross without a designated signal phase, increasing the risk for crashes for the system's most vulnerable travelers. Bicyclists are forced to compete for priority with motorized traffic.

Updated controllers will also help minimize signal timing disruptions. When signal timing is disrupted at an intersection on a major regional corridor, such as West Broadway, vehicles face increased congestion and are more likely to cut through surrounding neighborhoods. This cut-through

behavior increases crash risk for motorists and local residents as drivers navigate unfamiliar neighborhood streets and residents experience higher than normal traffic volumes on their neighborhood streets.

New controllers will result in less variability in signal timing and will include new features like peer-to-peer communications, which yields improved signal coordination that is more easily and consistently anticipated by travelers.

Improved traffic signal communication capabilities will result in faster response to signal failure, improved signal coordination, and traffic signal systems that are more easily anticipated by travelers. Improving remote access allows city staff to address these issues in real-time during all hours of the day, minimizing safety hazards and inefficiencies at the problematic site. New communication technologies also provide more responsive capabilities during inevitable, unplanned disruptions. Easy and consistent travel conditions result in fewer and less severe crashes.

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

---

## **Measure A: Multimodal Elements and Existing Connections**

The project includes elements benefiting bicyclists, pedestrians, and transit. Existing inductive loops typically cannot detect bicyclists; the project's video detection elements will consistently detect bicyclists. The project's new controllers will have additional features to assist bicycle- and pedestrian-supportive traffic signal programming. The CCTV cameras will improve safety for all modes by integrating bicycle and pedestrian monitoring capabilities with improved general traffic flow. Improvements will target key intersections used by pedestrians, bicyclists, and motorists, improving safety at high-traffic crossings.

The project's new controllers will also be capable of transit signal priority. Minneapolis City Council and Public Works Department have partnered with Metro Transit to deploy TSP to support bus transit along four corridors to-date and will continue to partner on future projects. Transit Signal Priority improves the performance of specific bus routes, the overall regional transit system, and reduces delay for individuals using transit.

Finally, the project will result in better coordination among Public Works, Police, and Public Safety, resulting in improved security for pedestrians, cyclists, and people using transit.

Pedestrian, Regional Bicycle Transportation Network (RBTN) Alignments and Corridors, Regional Trails, and transit routes within the study area are too numerous to list comprehensively in this application, and are illustrated in Attachment B. Examples include the City's sidewalk network, many of the RBTN alignments and corridors in Minneapolis, much of the high-frequency bus network within Minneapolis, the C Line (arterial BRT), the D Line, the West Broadway arterial BRT

**Response:**

and/or streetcar, the Central Avenue arterial BRT and/or streetcar, and the Nicollet Avenue arterial BRT and/or streetcar.

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

---

## Transit Projects Not Requiring Construction

*If the applicant is completing a transit 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**

---

## Measure A: Risk Assessment - Construction Projects

### 1)Layout (30 Percent of Points)

*Layout should include proposed geometrics and existing and proposed right-of-way boundaries.*

**Layout approved by the applicant and all impacted jurisdictions (i.e., cities/counties that the project goes through or agencies that maintain the roadway(s)). A PDF of the layout must be attached along with letters from each jurisdiction to receive points.**

100%

#### Attach Layout

*Please upload attachment in PDF form.*

**Layout completed but not approved by all jurisdictions. A PDF of the layout must be attached to receive points.**

50%

#### Attach Layout

*Please upload attachment in PDF form.*

**Layout has not been started**

Yes

0%

**Anticipated date or date of completion**

### 2)Review of Section 106 Historic Resources (20 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%

**There are historical/archeological properties present but determination of no historic properties affected is anticipated.**

Yes

100%

**Historic/archeological property impacted; determination of no adverse effect anticipated**

80%

Historic/archeological property impacted; determination of adverse effect anticipated

40%

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

0%

Project is located on an identified historic bridge

### 3)Right-of-Way (30 Percent of Points)

Right-of-way, permanent or temporary easements either not required or all have been acquired

Yes

100%

Right-of-way, permanent or temporary easements required, plat, legal descriptions, or official map complete

50%

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

25%

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

0%

Anticipated date or date of acquisition

### 4)Railroad Involvement (20 Percent of Points)

No railroad involvement on project or railroad Right-of-Way agreement is executed (include signature page, if applicable)

Yes

100%

#### Signature Page

Please upload attachment in PDF form.

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

50%

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

0%

Anticipated date or date of executed Agreement

---

## Measure A: Cost Effectiveness

Total Project Cost (entered in Project Cost Form): \$3,750,000.00

Enter Amount of the Noise Walls: \$0.00

Total Project Cost subtract the amount of the noise walls: \$3,750,000.00

**Points Awarded in Previous Criteria**

**Cost Effectiveness**

\$0.00

---

**Other Attachments**

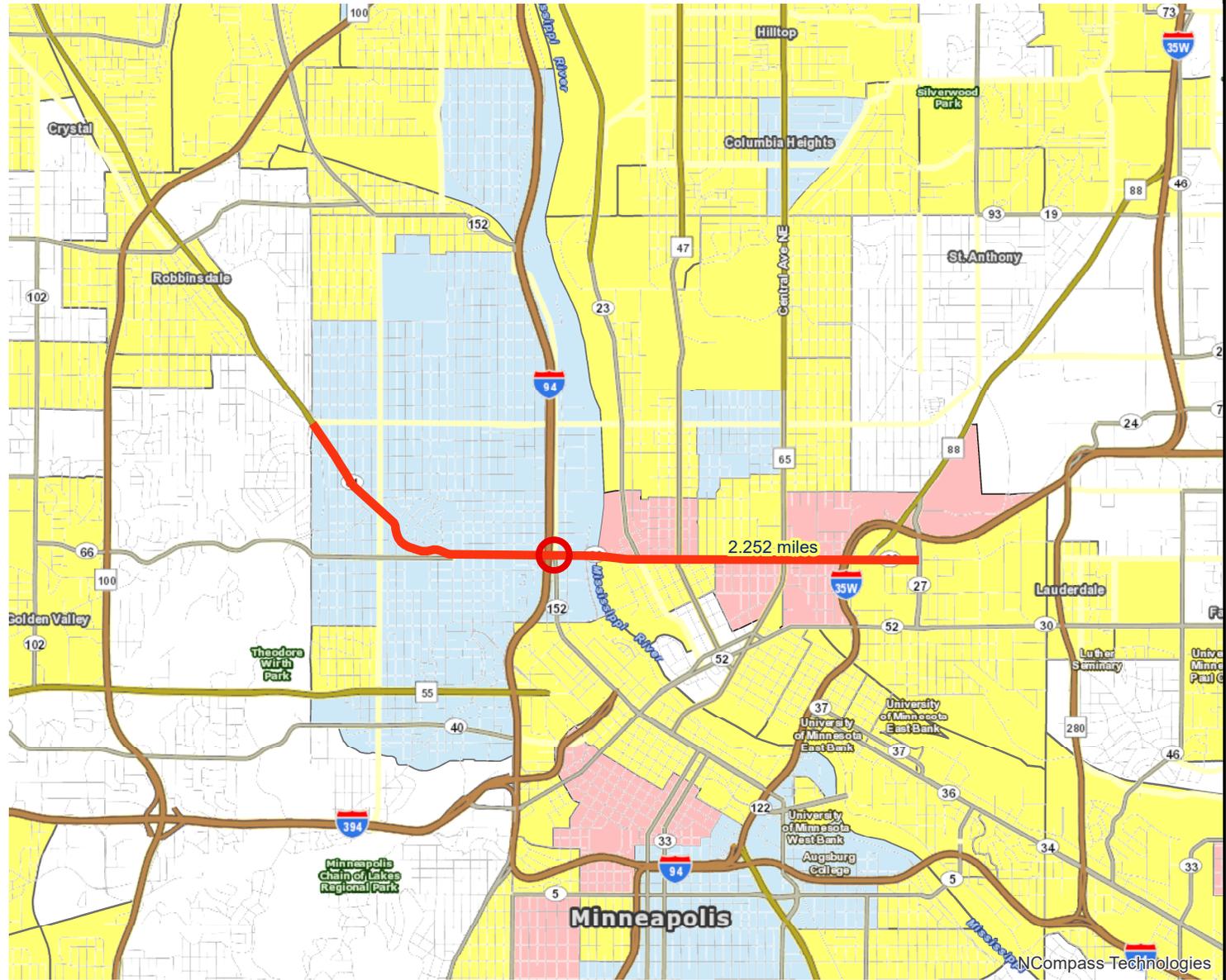
<b>File Name</b>	<b>Description</b>	<b>File Size</b>
AttachmentB_ContextMap.pdf	Attachment B - Project Context Map	1.3 MB
LevelofCongestion_map.pdf	Level of Congestion Map	2.7 MB
MPLS_LetterSupport_Formatted.pdf	City of Minneapolis Letter of Support	547 KB
ProjectSheets_Minneapolis_v5.pdf	One Page Project Summary	741 KB
SocioEconomicConditions_map.pdf	Socio-Economic Conditions Map	7.2 MB
TransitConnections_map.pdf	Transit Connections Map	4.2 MB
_SIGNED - Letter of Support - TMC & ITS Upgrades Project - Minneapolis - 2018.06.25.pdf	Hennepin County Letter of Support	115 KB



# Socio-Economic Conditions

## Results

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



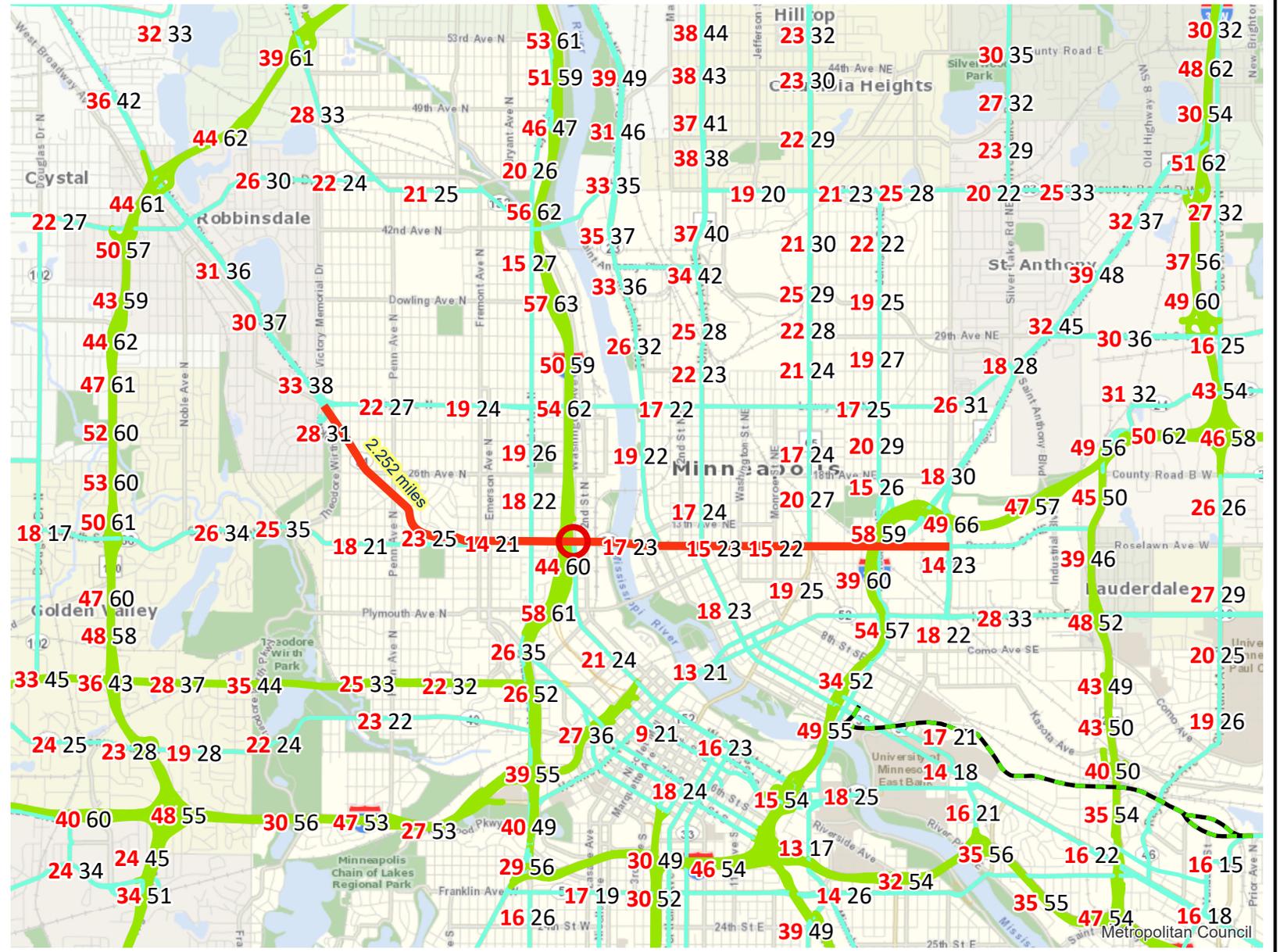
-  Project Points
-  Project
-  Area of Concentrated Poverty > 50% residents of color

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



# Level of Congestion

Roadway System Management Project: Minneapolis ITS Upgrades and Enhancements | Map ID: 1530224060406



- Project Points
- Principal Arterials
- - - Principal Arterials Planned
- Project
- A Minor Arterials
- - - A Minor Arterials Planned



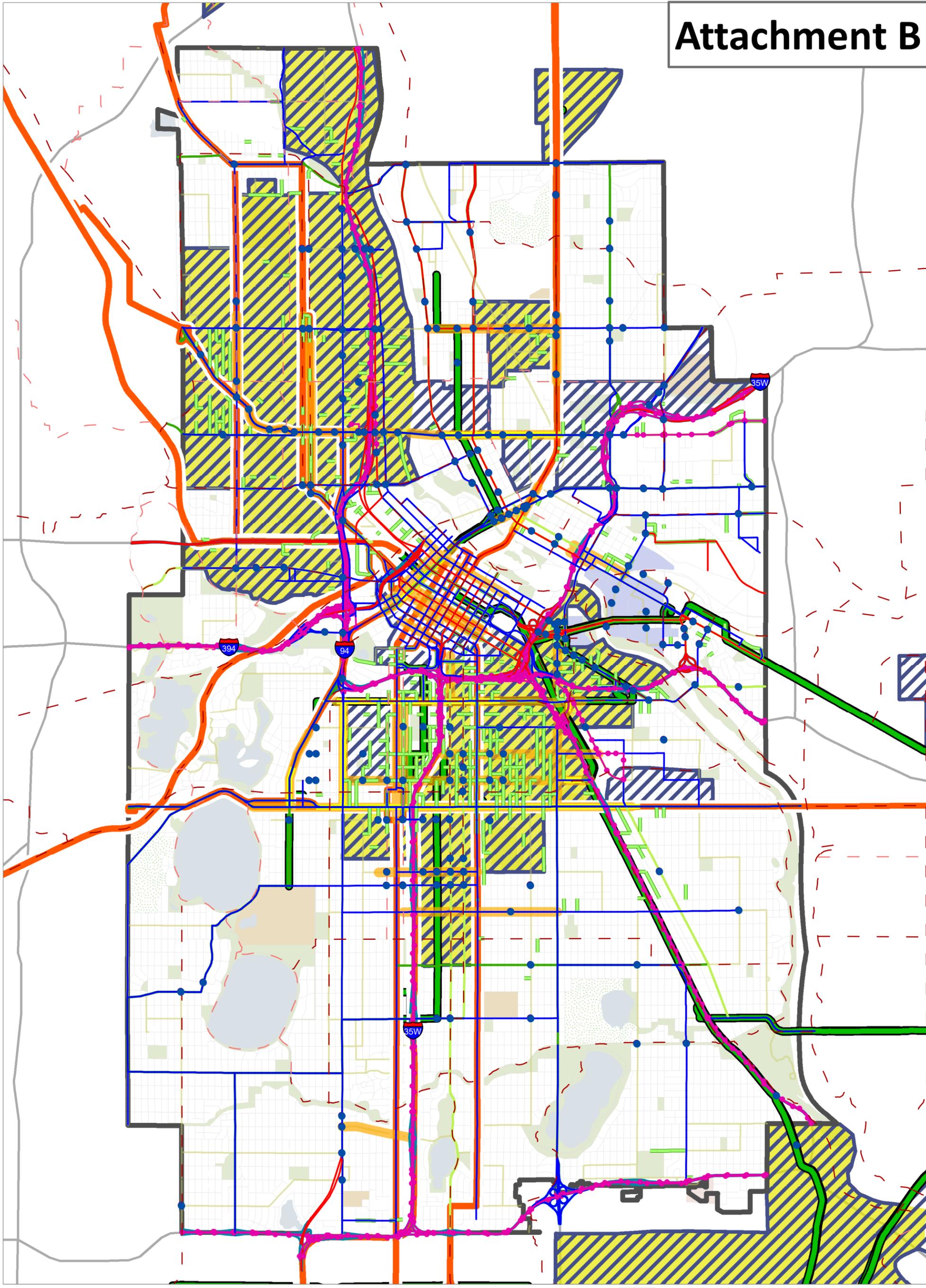
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LandscapeRSA1



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Implementing these improvements will position the City to be more responsive and adaptable when unplanned events disrupt the traffic management system. Incidents involving malfunctioning signals or detectors are caused by a number of triggers, and can occur without warning on any corridor. These conditions make improvements to the traffic management system challenging to model with crash modification factors.

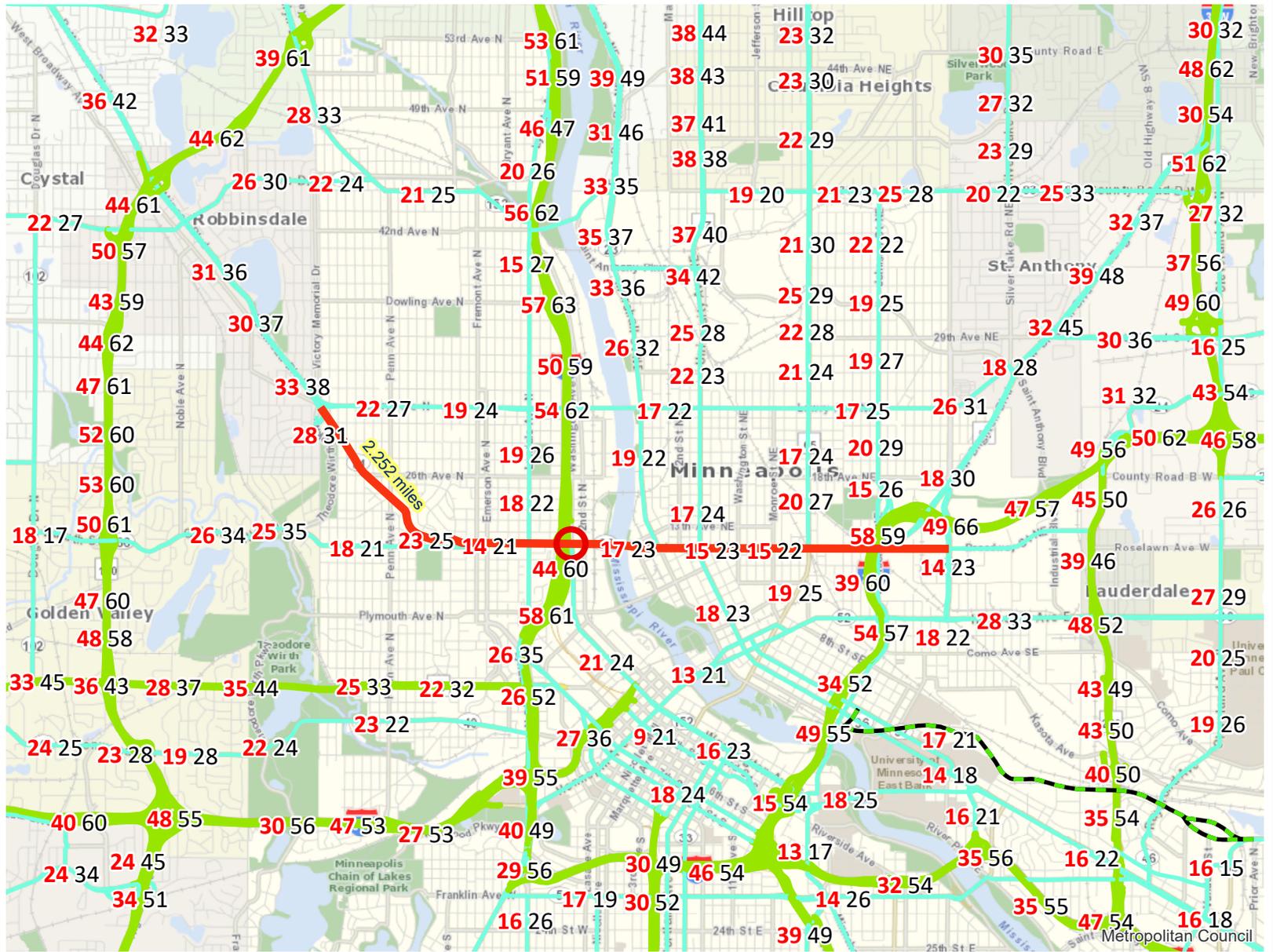


<b>Application Eligible? RBTN Alignments</b>		<ul style="list-style-type: none"> <li><span style="color: green;">—</span> 20 Year Streets Funding Plan Scores (2017) &gt; 80 Pts</li> <li><span style="color: yellow;">—</span> Major High Injury Network: All Modes</li> <li><span style="color: orange;">—</span> Major Crash Concentration Corridor: All Modes</li> <li><span style="color: red;">—</span> Planned Transitway Alignments</li> <li><span style="color: green;">—</span> High Frequency Bus Network</li> </ul>	<ul style="list-style-type: none"> <li><span style="border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Project Extent</li> <li><span style="color: yellow;">—</span> Bus Routes</li> <li><span style="background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> ACP (2012-2016 5-year ACS estimates)</li> <li><span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> ACP50 (2012-2016 5-year ACS estimates)</li> </ul>
<ul style="list-style-type: none"> <li>• Other</li> <li>• No</li> <li>• Yes</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: red;">- -</span> Tier 1</li> <li><span style="color: orange;">- -</span> Tier 2</li> </ul> <p><b>Truck Routes</b></p> <ul style="list-style-type: none"> <li><span style="color: red;">—</span> 10 Ton</li> <li><span style="color: blue;">—</span> General</li> <li><span style="color: magenta;">—</span> Twin Trailer And 10 Ton</li> </ul>		

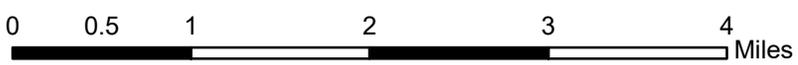
**City of Minneapolis - Project Context ITS Upgrades & Enhancements**

# Level of Congestion

Roadway System Management Project: Minneapolis ITS Upgrades and Enhancements | Map ID: 1530224060406



- Project Points
- Principal Arterials
- - - Principal Arterials Planned
- Project
- A Minor Arterials
- - - A Minor Arterials Planned



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LandscapeRSA1



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Public Works  
350 S. Fifth St. - Room 203  
Minneapolis, MN 55415  
TEL 612.673.2352  
[www.minneapolismn.gov](http://www.minneapolismn.gov)

July 5, 2018

Ms. Elaine Koutsoukos  
Metropolitan Council  
390 North Robert Street  
St. Paul, Minnesota 55101

**RE: 2018 Regional Solicitation Applications**

Dear Ms. Koutsoukos,

The City of Minneapolis Department of Public Works is submitting a series of applications for the 2018 Regional Solicitation for Federal Transportation Funds. The applications and the required matching funds have been authorized by the Minneapolis City Council as described in the Official Proceedings of the Council meeting on June 15, 2018.

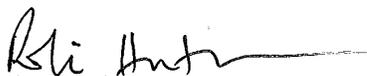
The City is submitting applications for seven projects, as listed in the table below, and commits to operate and maintain these facilities through their design life.

Project Name	Regional Solicitation Category
Hennepin Avenue S - Douglas Avenue to Lake Street	Roadway Reconstruction/ Modernization
37th Avenue NE - Central Avenue to Stinson Boulevard	Roadway Reconstruction/ Modernization
Nicollet Avenue Bridge over Minnehaha Creek	Bridge Rehabilitation/ Replacement
Intelligent Transportation System Upgrades and Enhancements	Traffic Management Technologies
36th Street West Bicycle and Pedestrian Enhancements	Bicycle and Pedestrian Facilities
Lyndale Avenue N Pedestrian Safety Improvements	Pedestrian Facilities
Near North - Safe Routes to School	Safe Routes to School

The specific applications are described in the attached "Request for City Council Committee Action."

Thank you for the opportunity to submit these applications.

Sincerely,

  
Robin Hutcheson  
Director of Public Works



Council Action No. 2018A-0448

City of Minneapolis

File No. 2018-00649

Committee: TPW, WM

Public Hearing: None

Passage: Jun 15, 2018

Publication: JUN 23 2018

RECORD OF COUNCIL VOTE				
COUNCIL MEMBER	AYE	NAY	ABSTAIN	ABSENT
Bender	✖			
Jenkins	✖			
Johnson	✖			
Gordon	✖			
Reich	✖			
Fletcher	✖			
Cunningham	✖			
Ellison	✖			
Warsame				✖
Goodman	✖			
Cano	✖			
Schroeder	✖			
Palmisano	✖			

MAYOR ACTION

APPROVED

VETOED

  
MAYOR

JUN 19 2018

DATE

*Certified an official action of the City Council*

ATTEST:

  
CITY CLERK

Presented to Mayor: JUN 15 2018

Received from Mayor: JUN 20 2018

The Minneapolis City Council hereby:

1. Authorizes the submittal of a series of applications for federal transportation funds through the 2018 Metropolitan Council's Regional Solicitation Program, as further set forth in Legislative File No. 2018-00649.
2. Authorizes the commitment of local funds to provide the required local match for the federal funding.

## Grant applications through the 2018 Metropolitan Council Regional Solicitation Program for federal transportation funds (RCA-2018-00568)

### ORIGINATING DEPARTMENT

Public Works Department

### To Committee(s)

#	Committee Name	Meeting Date
1	Transportation & Public Works Committee	Jun 5, 2018
2	Ways & Means Committee	Jun 12, 2018

**LEAD STAFF:** Liz Heyman, Transportation Planner,  
Transportation Planning and Programming  
Division

**PRESENTED BY:** Liz Heyman, Transportation Planner,  
Transportation Planning and Programming  
Division

### Action Item(s)

#	File Type	Subcategory	Item Description
1	Action	Grant	Authorizing the submittal of a series of applications for federal transportation funds through the 2018 Metropolitan Council's Regional Solicitation Program.
2	Action	Grant	Authorizing the commitment of local funds to provide the required local match for the federal funding.

### Previous Actions

None

### Ward / Neighborhood / Address

#	Ward	Neighborhood	Address
1.	All Wards		

### Background Analysis

The City will prepare a series of applications for the 2018 Regional Solicitation for Federal Transportation Funds in response to the current Metropolitan Council solicitation. This request includes a summary of the eligible project areas, a brief description of city projects, estimated costs, and the requested amounts. Each project requires a minimum local match for construction in addition to the costs for design, engineering, administration and any additional construction costs to fully fund the project. These applications will maximize the use of federal funding. The funding to be awarded is for projects to be constructed in 2022 and 2023.

Over the course of several months, Public Works identifies projects that meet the eligibility requirements for federal funding and closely evaluates which applications are submitted in a manner that is consistent with the equity-based approach used to select and prioritize as a part of the Capital Improvement Program (CIP). Additional consideration is given to identify which projects align with the criteria upon which the applications are scored, such as: role in the regional transportation system and economy, equity, affordable housing, asset condition, safety, connectivity, cost-benefit, operational benefits, number of users, multimodal elements, etc. Public Works also takes into account project readiness, cost, deliverability, and alignment with adopted plans, policies and initiatives (e.g., *Access Minneapolis, 20 Year Street Funding Plan*, Complete Streets Policy, Vision Zero, etc.).

The 2018 Regional Solicitation for federal transportation funding is part of Metropolitan Council's federally-required continuing, comprehensive, and cooperative transportation planning process for the Twin Cities Metropolitan Area. The funding program and related rules and requirements are established by the U.S. Department of Transportation (USDOT) and administered locally through collaboration with the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), and the Minnesota Department of Transportation (MnDOT).

Applications are grouped into three primary modal evaluation categories; each category includes several sub-categories as detailed below.

1. Roadways Including Multimodal Elements
  - o Roadway Expansion
  - o Roadway Reconstruction/Modernization and Spot Mobility
  - o Traffic Management Technologies (Roadway System Management)
  - o Bridges Rehabilitation/Replacement
2. Transit and Travel Demand Management (TDM) Projects
  - o Transit Expansion
  - o Transit System Modernization
  - o Travel Demand Management
3. Bicycle and Pedestrian Facilities
  - o Multiuse Trails and Bicycle Facilities
  - o Pedestrian Facilities
  - o Safe Routes to School (Infrastructure Projects)

The City is recommending the submittal of up to seven applications, which are summarized below:

Project Name	Category	Requested Federal Amount	Minimum Local Match Required
Hennepin Avenue S - Douglas Avenue to Lake Street	Roadway Reconstruction/Modernization	\$7,000,000	\$1,750,000
37th Avenue NE - Central Avenue to Stinson Boulevard	Roadway Reconstruction/Modernization	\$7,000,000	\$1,750,000*
Nicollet Avenue Bridge over Minnehaha Creek	Bridge Rehabilitation/ Replacement	\$7,000,000	\$1,750,000
Intelligent Transportation System Upgrades and Enhancements	Traffic Management Technologies	\$3,000,000	\$750,000
36th Street West Bicycle and Pedestrian Enhancements	Bicycle and Pedestrian Facilities	\$2,000,000	\$500,000
Lyndale Avenue N Pedestrian Safety Improvements	Pedestrian Facilities	\$1,000,000	\$250,000
Near North - Safe Routes to School	Safe Routes to School	\$1,000,000	\$250,000
Totals		\$27,000,000	\$6,750,000

\* Local expenditures on this project will be shared between Minneapolis and Columbia Heights, as the two cities share the right-of-way along this section of 37th Avenue NE.

Details of the proposed applications are described below.

#### Hennepin Avenue S – Douglas Avenue to W Lake Street

The proposed project is a complete reconstruction of Hennepin Avenue South from Douglas Avenue to West Lake Street, a distance of approximately 1.3 miles. Hennepin Avenue has been identified as a future reconstruction candidate, driven primarily by pavement condition, multimodal connections, number of daily users, as well as an opportunity to better plan for Metro Transit's future E-Line Rapid Bus service. Hennepin Avenue serves an estimated 3,400 people walking, 280 people biking, 6,600 transit users, 400 buses, and 31,500 people driving per day. This segment is programmed in the City's Capital Improvement Program (CIP) for reconstruction in 2023. Hennepin Avenue South is identified as a Pedestrian Crash Concentration Corridor and High Injury Network in the *Minneapolis Pedestrian Crash Study* (2017). The prioritization of this project supports the City's commitment to Vision Zero to eliminate serious and fatal crashes within 10 years. The proposed project will reconstruct the pavement surface, curb and gutter, signage, storm drains,

driveway approaches, traffic signals, striping, lighting, street trees, sidewalks, ADA ramps, and implement shelters/platforms for the future Metro Transit E-Line. This is the last remaining segment of Hennepin Avenue under the City's jurisdiction to be reconstructed between 36th Street West and Washington Avenue South.

*Program Category: Roadway Reconstruction/Modernization*

#### 37th Avenue NE – Central Avenue to Stinson Boulevard

The proposed project is a complete reconstruction of 37th Avenue NE from Central Avenue to Stinson Avenue, a distance of approximately 1 mile. This section of 37th Avenue NE is along the border between Minneapolis and Columbia Heights and is programmed in the City's Capital Improvement Program (CIP) for reconstruction in 2023. The application and proposed project will be done in collaboration with the City of Columbia Heights. The proposed project will reconstruct the pavement surface, curb and gutter, traffic signals, lighting, ADA ramps, some sidewalks, as well as construction of a bicycle facility.

*Program Category: Roadway Reconstruction/Modernization*

#### Nicollet Avenue Bridge over Minnehaha Creek

This project proposes the major repair and renovation of the Nicollet Avenue Bridge over Minnehaha Parkway and Minnehaha Creek and is programmed in the City's Capital Improvement Program (CIP) for reconstruction in 2022. The existing bridge is a 16-span open-spandrel concrete arch bridge, 818 feet long and 63 feet wide. The original bridge was built in 1923 and renovated in 1974. Numerous bridge components are significantly deteriorated, in poor condition and should be repaired or replaced in order to extend the useful life of the structure.

*Program Category: Bridge Rehabilitation/Replacement*

#### Intelligent Transportation System Upgrades & Enhancements

The purpose of the project is to upgrade the City's traffic management systems. Key features of the project include installing fiber optic cable to create a higher bandwidth and more reliable traffic communication network, deploying additional CCTV cameras, upgrading detection systems, and installing infrastructure for advancements in connected vehicle V2I technology in locations throughout the City. The City is collaborating with Hennepin County on the project.

*Program Category: Traffic Management Technologies*

#### 36th Street W Bicycle and Pedestrian Enhancements

The proposed project involves ADA upgrades, sidewalk gap infill, transit accommodations, and construction of a protected bikeway to replace the interim bollard protected pedestrian and bicycle path between Richfield Road and Dupont Avenue S.

*Program Category: Bicycle and Pedestrian Facilities*

#### Lyndale Ave N Pedestrian Safety Improvements

The proposed project would include the implementation of pedestrian-related safety improvements at select intersection along Lyndale Avenue North between 18th Avenue North and 40th Avenue North. Lyndale Avenue North has been identified as part of the Pedestrian Crash Concentration Corridor and High Injury Network in the *Minneapolis Pedestrian Crash Study* (2017). The prioritization of this project supports the City's commitment to Vision Zero to eliminate serious and fatal crashes within 10 years. Intersection improvements may include signal upgrades, ADA-compliant curb ramps, bump outs, medians, signage, traffic control devices, and pavement markings at select locations.

*Program Category: Pedestrian Facilities*

#### Near North - Safe Routes to School

The proposed project would include pedestrian and bicycle-related improvements along 16th Avenue North between Penn Avenue North and Aldrich Avenue North, which connects North High School and Franklin Middle School. This portion of 16th Avenue North is identified in the Minneapolis Bicycle Master Plan as a future bicycle boulevard and has also been identified as a Pedestrian Crash Concentration Corridor in the *Minneapolis Pedestrian Crash Study* (2017). The prioritization of this project supports the City's commitment to Vision Zero to eliminate serious and fatal crashes within 10 years. Bicycle and pedestrian improvements may include ADA-compliant curb ramps, traffic circles, speed bumps, speed tables, bump outs, medians, signage, traffic control devices, and pavement markings at select locations.

*Program Category: Safe Routes to School*

The proposed projects were presented to the Pedestrian Advisory Committee on May 2nd, 2018, and to the Bicycle Advisory Committee on May 23rd, 2018.

## **FISCAL IMPACT STATEMENT**

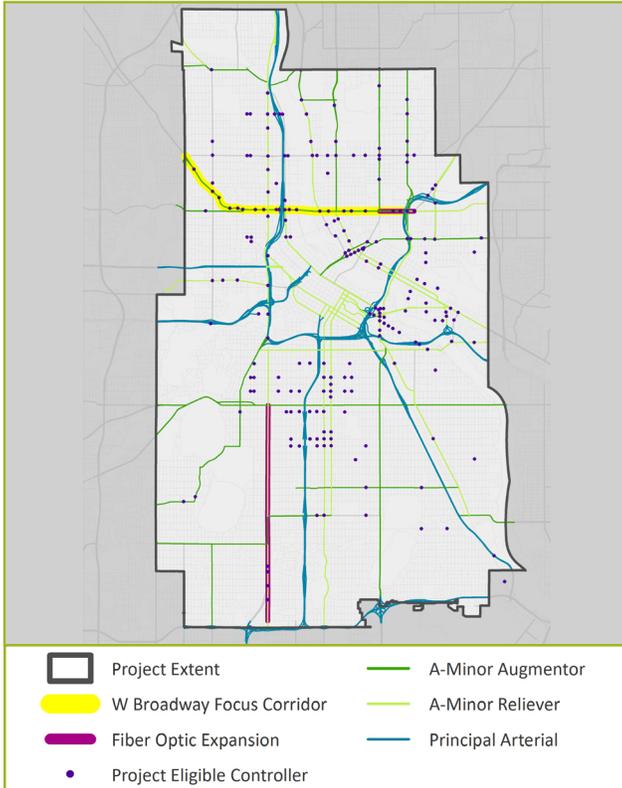
- No fiscal impact anticipated

## Attachments

Regional Solicitation Map

# MINNEAPOLIS ITS UPGRADES AND ENHANCEMENTS

## PROJECT MAP:



## BEFORE PHOTO:



## PREPARED BY:



## APPLICANT:

City of Minneapolis

## PROJECT AREA:

- City of Minneapolis
- Focus Corridor: W Broadway Avenue

## CITY WHERE PROJECT IS LOCATED:

Minneapolis

## COUNTY WHERE PROJECT IS LOCATED:

Hennepin

## REQUESTED AWARD AMOUNT:

\$3,000,000

## TOTAL PROJECT COST:

\$3,750,000

## PROJECT DESCRIPTION:

The proposed project will upgrade and enhance existing traffic management and intelligent transportation systems (ITS) in areas throughout the city of Minneapolis. The City of Minneapolis is collaborating with Hennepin County, MnDOT, and Metro Transit to enhance the city's traffic control system, with a focus on West Broadway Avenue. The City's ITS currently serves roadway users throughout the metro area, providing services such as arterial dynamic message signs (DMS), real-time surveillance cameras (CCTV), and transit signal priority (TSP) capabilities. Upgrades to ITS, such as expanded remote access and operations, installing new traffic signal controllers and cabinets, conflict monitors, video detection system, additional CCTV devices, vehicle-to-infrastructure (V2I) devices, improvements to the Traffic Management Center (video server, video wall), dedicated short range communications (DSRC) radio (high-volume wireless data transmission), and investing in fiber optic cable to increase bandwidth and reliability, will result in a nimble traffic control system with the ability to adapt to daily and non-recurring traffic events. Once implemented, ITS enhancements will improve interfacing among the Police, Public Works, and Public Safety officials – integrating traffic monitoring with safety. In this way, upgrades will help keep the city's street and highway network functioning efficiently and with more flexibility and multipurpose use. The focus on West Broadway Avenue will improve operations on a key multimodal arterial connecting north and northeast Minneapolis – increasing safety and efficiency for transit, freight, bicycle, pedestrian, and general traffic.

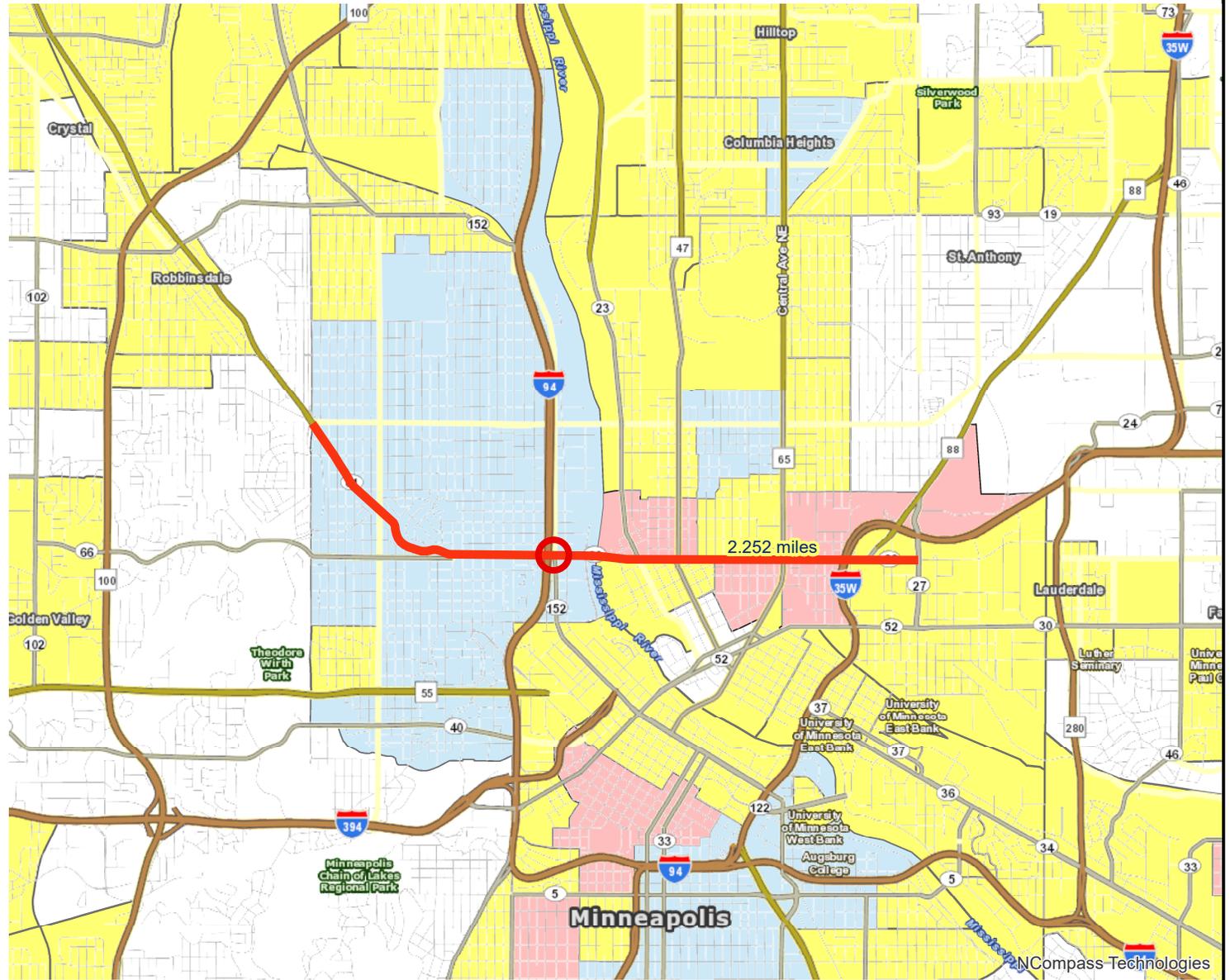
## PROJECT BENEFITS:

- Improves operational efficiency for all modes of travel on the city's streets
- Improves safety for all users of the city's streets
- Improves functionality and flexibility of the city's existing ITS network
- Prepares the city for near-future connected vehicle technology

# Socio-Economic Conditions

## Results

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

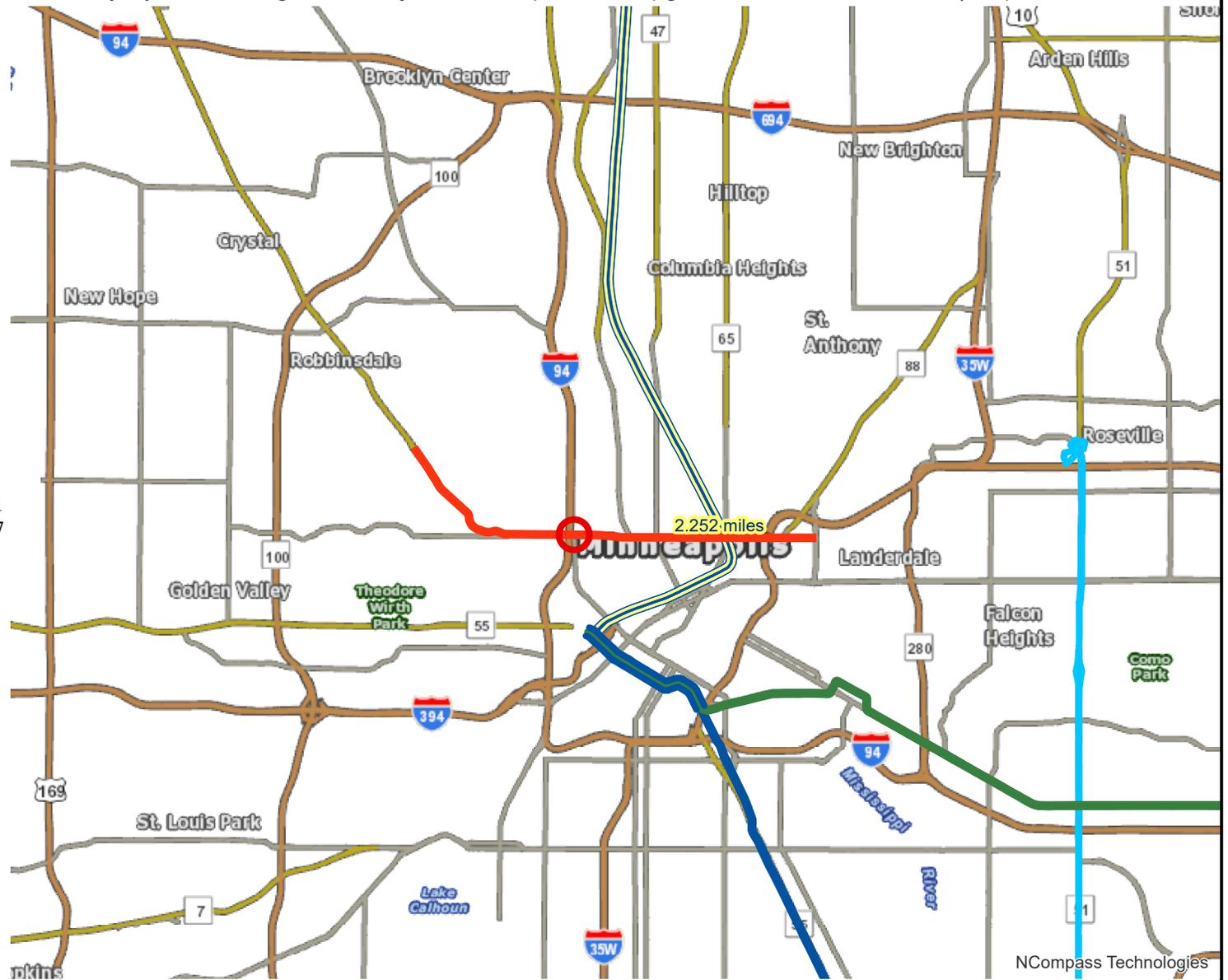


-  Project Points
-  Project
-  Area of Concentrated Poverty > 50% residents of color

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



# Transit Connections



## Results

Transit with a Direct Connection to project:

- 10 11 118 14 141 17 19 22 25 250 252
- 261 263 264 270 288 30 32 4 5 59 721
- 724 760 761 762 763 765 766 767 768 780 781
- 782 783 785 789 824 825 850 852 854 865 887
- 888

- \*Chicago-Fremont
- \*West Broadway
- \*Central
- \*C Line

\*indicates Planned Alignments

○ Project Points  
 **Transitway**  
 — Blue / Green Line  
 — Green Line  
 — A Line  
 — Blue Line  
 — Northstar Line



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LandscapeRSA3



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NCompass Technologies

HENNEPIN COUNTY  
MINNESOTA

June 25, 2018

Elaine Koutsoukos, TAB Coordinator  
Metropolitan Council  
390 North Robert Street  
St. Paul, MN 55101

Re: Support for Regional Solicitation Application  
Traffic Management Center and Intelligent Transportation System Upgrade Project  
At various locations throughout Minneapolis

Dear Ms. Koutsoukos,

Hennepin County has been notified that the City of Minneapolis is submitting an application for funding as part of the Regional Solicitation through the Metropolitan Council. The project is the Traffic Management Center (TMC) and Intelligent Transportation System (ITS) Upgrade Project as identified in the Minneapolis Draft 2040 Comprehensive Plan.

The project will upgrade various traffic signal components, signal communications, and video monitoring systems in an effort to reduce emissions and delay; especially during events that cause unique traffic patterns. Hennepin County supports this funding application and acknowledges the project aligns with the 2014 Hennepin County Intelligent Information Management Plan. At this time, Hennepin County has no funding programmed in its 2018-2022 Transportation Capital Improvement Program (CIP) for this project.

Hennepin County looks forward to working with the City of Minneapolis on this project, if the city is successful in securing funds.

Sincerely,



Carla Stueve, P.E., P.T.O.E.  
County Engineer  
Hennepin County Transportation Project Delivery

cc: Chad Ellos, Transportation Planning Division Manger

