



Application

01968 - 2014 Roadway Reconstruction/Modernization

02186 - 8th Street South Reconstruction

Regional Solicitation - Roadways Including Multimodal Elements

Status: Submitted  
Submitted Date: 12/01/2014 3:51 PM

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## Primary Contact

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Salutation First Name Middle Name Last Name

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Room 300

**\*** Minneapolis Minnesota 55401  
City State/Province Postal Code/Zip

**Phone:\*** 612-673-3884  
Phone Ext.

**Fax:** 612-673-2048

**What Grant Programs are you most interested in?** Regional Solicitation - Bicycle and Pedestrian Facilities

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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** 8th Street South Reconstruction  
**Primary County where the Project is Located** Hennepin  
**Jurisdictional Agency (If Different than the Applicant):**

The project will reconstruct approximately 0.8 miles of 8th Street South in downtown Minneapolis from Hennepin Avenue to Chicago Avenue. The project consists of removal and replacement of pavement, curb and gutter, & driveways. The roadway will remain a one-way, three-lane corridor with some on-street parking. The project includes pedestrian enhancements such as curb ramps, countdown timers, and durable crosswalk markings. Sidewalks will be replaced and widened with curb extensions, particularly at bus stop locations (see Figures 1-1 to 1-3). The project also includes landscaping and pedestrian-level street lighting at various locations throughout the corridor.

Many important job and entertainment centers are located along the corridor, including State Theatre, IDS Tower, Midwest Plaza, and Foshay Tower. Eighth Street provides direct access to Hennepin County Medical Center; therefore, access for emergency vehicles and patients is critically important. Eighth Street also provides a connection to key destinations such as Target Field, Target Center, Nicollet Mall, & the new Vikings Stadium.

The existing pavement in the project area is deficient with a Pavement Condition Index that is as low as 24 in some areas. Portions of the roadway have not been reconstructed since its original construction in 1952. In general, the pavement is in poor condition with considerable cracking, patching, and severe potholes. Many sections of curb and gutter along the roadway are showing medium to high levels of deterioration. These poor pavement conditions make the roadway a difficult travel experience for all users including cars, trucks, buses, and bicycles.

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

The project is located in the heart of Minneapolis and 8th Street is identified as part of the Primary Pedestrian Network in the City's Downtown Action Plan, which is a network that provides pedestrian connections or corridors within downtown. The proposed project provides many pedestrian upgrades that will enhance walkability along the corridor.

Eighth Street is also a high volume transit corridor with over 115 bus routes that use or cross the road. It is identified in the Access Minneapolis: Downtown East-West Transit Spine Plan as a future transit corridor. Under this plan, 8th St. (eastbound) and 7th St. (westbound) will serve as high frequency transit corridors within downtown Minneapolis, with seven future transitways that utilize 8th Street. Both the "C Line" and "D Line" Arterial BRT transitways will utilize 8th Street for pickups and/or drop-offs. The project supports transit elements through the installation of curb extensions at bus stops and streetscape improvements. These enhancements will provide a safe and pleasant place for pedestrians to wait for transit vehicles.

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

**Project Length (Miles)**

0.79

**Connection to Local Planning:**

*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 MnDOT 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.*

City of Minneapolis 2014 Budget Mayors  
Recommended Capital Program (Page D20)

Connection to Local Planning

Access Minneapolis Downtown Action Plan (2007)  
(Pages 10, 19, 23, 49)

Access Minneapolis: Downtown East-West Transit  
Spine Plan (November 2010)

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## 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

\$6,445,000.00

Match Amount

\$2,520,000.00

*Minimum of 20% of project total*

Project Total

\$8,965,000.00

Match Percentage

28.11%

*Minimum of 20%*

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

Source of Match Funds

City of Minneapolis

Preferred Program Year

Select one:

2019

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## MnDOT State Aid Project Information: Roadway Projects

County, City, or Lead Agency

City of Minneapolis

Functional Class of Road

A Minor Reliever

Road System

MSAS

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

Name of Road

8th Street South

*Example; 1st ST., MAIN AVE*

Zip Code where Majority of Work is Being Performed

55402

(Approximate) Begin Construction Date

04/01/2019

**(Approximate) End Construction Date**

11/01/2019

**LOCATION**

**From:**

**(Intersection or Address)**

Hennepin Avenue

*Do not include legal description;*

*Include name of roadway if majority of facility runs adjacent to a single corridor.*

**To:**

**(Intersection or Address)**

Chicago Avenue

**Type of Work**

BIT BASE, BIT SURF, SIDEWALK, SIGNALS, LIGHTING, PED RAMPS, CURB AND GUTTER

*Examples: grading, aggregate base, bituminous base, bituminous surface, sidewalk, signals, lighting, guardrail, bicycle path, ped ramps, bridge, Park & Ride, etc.)*

**Old Bridge/Culvert?**

No

**New Bridge/Culvert?**

No

**Structure is Over/Under**

**(Bridge or culvert name):**

N/A

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## Specific Roadway Elements

**CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES**

**Cost**

Mobilization (approx. 5% of total cost)	\$400,000.00
Removals (approx. 5% of total cost)	\$425,000.00
Roadway (grading, borrow, etc.)	\$185,000.00
Roadway (aggregates and paving)	\$1,935,000.00
Subgrade Correction (muck)	\$0.00
Storm Sewer	\$40,000.00
Ponds	\$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	\$495,000.00
Traffic Control	\$150,000.00
Striping	\$25,000.00
Signing	\$65,000.00
Lighting	\$0.00
Turf - Erosion & Landscaping	\$400,000.00
Bridge	\$0.00
Retaining Walls	\$0.00
Noise Wall	\$0.00
Traffic Signals	\$2,500,000.00

Wetland Mitigation	\$0.00
Other Natural and Cultural Resource Protection	\$0.00
RR Crossing	\$0.00
Roadway Contingencies	\$525,000.00
Other Roadway Elements	\$245,000.00
<b>Totals</b>	<b>\$7,390,000.00</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	\$375,000.00
On-Street Bicycle Facility Construction	\$0.00
Right-of-Way	\$0.00
Pedestrian Curb Ramps (ADA)	\$75,000.00
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	\$0.00
Pedestrian-scale Lighting	\$850,000.00
Streetscaping	\$150,000.00
Wayfinding	\$25,000.00
Bicycle and Pedestrian Contingencies	\$100,000.00
Other Bicycle and Pedestrian Elements	\$0.00
<b>Totals</b>	<b>\$1,575,000.00</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
Transit and TDM Contingencies	\$0.00
Other Transit and TDM Elements	\$0.00
<b>Totals</b>	<b>\$0.00</b>

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## Transit Operating Costs

OPERATING COSTS	Cost
Transit Operating Costs	\$0.00
<b>Totals</b>	<b>\$0.00</b>

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## Totals

Total Cost	\$8,965,000.00
Construction Cost Total	\$8,965,000.00
Transit Operating Cost Total	\$0.00

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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 2030 Transportation Policy Plan (amended 2013), the 2030 Regional Parks Policy Plan (amended 2013), and the 2030 Water Resources Management Policy Plan (2005).

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

2. 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**

3. Applicants must not submit an application for the same project in more than one funding sub-category.

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

4. 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. Expansion, reconstruction/modernization, and bridges must be between \$1,000,000 and \$7,000,000. Roadway system management must be between \$250,000 and \$7,000,000.

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

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

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

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

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

7. 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**

8. 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**

*9. 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**

*10. The project applicant must send written notification regarding the proposed project to all affected communities and other levels and units of government prior to submitting the application.*

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

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## **Requirements - Roadways Including Multimodal Elements**

### **Expansion and Reconstruction/Modernization Projects Only**

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

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

*2. Federal funds are available for roadway construction and reconstruction on new alignments or within existing right-of-way, including associated construction and excavation, bridges, or installation of traffic signals, signs, utilities, bikeway or walkway components and transit components.*

*The project must exclude costs for right-of-way, studies, preliminary engineering, design, or construction engineering. Noise barriers, drainage projects, fences, landscaping, etc., are not eligible for funding unless included as part of a larger project, which is otherwise eligible.*

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

### **Bridge Projects Only**

*3. The bridge project 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.**

*4. Bridges selected in previous Bridge Improvement and Replacement solicitations (1994-2011) are not eligible. A previously selected project is not eligible unless it has been withdrawn or sunset prior to the deadline for proposals in this solicitation.*

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

*5. Projects requiring a grade-separated crossing of a Principal Arterial of freeway design 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.**

*6. 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 sub-categories. Rail-only bridges are ineligible for funding.*

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

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

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

*8. Project limits for bridge projects are limited from abutment to abutment.*

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

*9. The project must exclude costs for studies, preliminary engineering, design, construction engineering, and right-of-way.*

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

### Bridge Replacement Projects Only

10. The bridge must have a sufficiency rating less than 50. Additionally, it must also be classified as structurally deficient or functionally obsolete.

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

### Bridge Rehabilitation Projects Only

11. The bridge must have a sufficiency rating less than 80. Additionally, it must also be classified as structurally deficient or functionally obsolete.

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

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## Other Attachments

File Name	Description	File Size
8680 Figure 1-2.pdf	Figure 1 - Proposed Improvements	1.5 MB
Regional Solicitation Application Letter 2014.pdf	Letter of commitment of local match funds.	404 KB

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## Reliever: Freeway Facility or

Facility being relieved	I-94
Number of hours per day volume exceeds capacity (based on the Congestion Report)	7.0

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## Reliever: Non-Freeway Facility or

Facility being relieved	
Number of hours per day volume exceeds capacity (based on the table below)	0

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## Non-Freeway Facility Volume/Capacity Table

Hour	NB/EB Volume	SB/WB Volume	Capacity	Volume exceeds capacity
12:00am - 1:00am				
1:00am - 2:00am				
2:00am - 3:00am				
3:00am - 4:00am				
4:00am - 5:00am				
5:00am - 6:00am				
6:00am - 7:00am				
7:00am - 8:00am				

- 8:00am - 9:00am
- 9:00am - 10:00am
- 10:00am - 11:00am
- 11:00am - 12:00pm
- 12:00pm - 1:00pm
- 1:00pm - 2:00pm
- 2:00pm - 3:00pm
- 3:00pm - 4:00pm
- 4:00pm - 5:00pm
- 5:00pm - 6:00pm
- 6:00pm - 7:00pm
- 7:00pm - 8:00pm
- 8:00pm - 9:00pm
- 9:00pm - 10:00pm
- 10:00pm - 11:00pm
- 11:00pm - 12:00am

### Expander/Connector/Augmentor/Non-Freeway Principal Arterial

Select one:

Area	0
Project Length	0
Average Distance	0
Upload Map	RdwayAreaDef.pdf

### Measure B: Current Heavy Commercial Traffic

Location	8th Street South from Hennepin Avenue to Lasalle Avenue
Current daily heavy commercial traffic volume	1661.0

### Measure C: Project Location Relative to Jobs, Manufacturing, and Education

Select all that apply

Direct connection to or within a mile of a Job Concentration	Yes
Direct connection to or within a mile of a Manufacturing/Distribution Location	Yes
Direct connection to or within a mile of an Educational Institution	Yes

Project provides a direct connection to or within a mile of an existing local activity center identified in an adopted county or city plan

County or City Plan Reference (Limit 700 characters; approximately 100 words)

See Regional Economy map.

Upload Map

RegionalEconomy.pdf

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## Measure A: Current Daily Person Throughput

Location	8th Street South between 2nd Ave S and 4th Ave S
Current AADT Volume	10200.0
Existing Transit Routes on the Project	4, 5, 6, 9, 19, 22, 39, 755

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## Response: Current Daily Person Throughput

Average Annual Daily Transit Ridership	12054.0
Current Daily Person Throughput	25314.0

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## Measure B: 2030 Forecast ADT

Use Metropolitan Council model to determine forecast (2030) ADT volume	No
METC Staff - Forecast (2030) ADT volume	0
OR	
Approved county or city travel demand model to determine forecast (2030) ADT volume	Yes
Forecast (2030) ADT volume	11300.0

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## Measure A: Project Location and Impact to Disadvantaged Populations

Select one:

Project located in Racially Concentrated Area of Poverty	
Project located in Concentrated Area of Poverty	Yes
Projects census tracts are above the regional average for population in poverty or population of color	Yes
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.	Yes

The project is located within an area of concentrated poverty and within three blocks of an RCAP. Improving access to jobs is especially critical for these populations. The project will improve access to key destinations, including job concentrations and manufacturing/distribution centers and educational institutions in downtown Minneapolis (see Regional Economy map).

Eighth Street South is a high volume transit corridor. The proposed curb extension at transit stops and streetscape enhancements will provide benefits for all transit users. For low-income households without an automobile and people who may not drive (i.e., children, elderly, people with disabilities), transit is an essential public service that connects people to opportunities such as jobs, education, and social services.

The Hennepin County Medical Center is located at the east end of the project limits. The project will help provide safe and efficient access to the hospital. HCMC provides many social services that cater to low income and minority populations and people with disabilities.

The project will also improve safety and comfort for children, the elderly, and people with disabilities by widening sidewalks and improving all crossings to be ADA compliant. In addition, the project will improve pedestrian access to Elliot Park, located one block from the north end of the project.

SocioEconomic.pdf

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

Upload Map

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## Measure B: Affordable Housing

City/Township	Segment Length (Miles)
City of Minneapolis	0.791

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## Total Project Length

Total Project Length 0.79

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## Affordable Housing Scoring - To Be Completed By Metropolitan Council Staff

City/Township	Segment Length (Miles)	Total Length (Miles)	Score	Segment Length/Total Length	Housing Score Multiplied by Segment percent
City of Minneapolis	0.791	0.791	97.0	1.0	97.0
		<b>1</b>	<b>97</b>	<b>1</b>	<b>97</b>

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## Affordable Housing Scoring - To Be Completed By Metropolitan Council Staff

Total Project Length (Miles) 0.791

Total Housing Score 97.0

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## Measure A: Year of Roadway Construction

Year of Original Roadway Construction or Most Recent Reconstruction	Roadway Segment Length (Miles)	Calculation	Calculation 2
1955.0	0.17	332.35	420.696
1971.0	0.15	295.65	374.241
1952.0	0.16	312.32	395.342
1967.0	0.31	609.77	771.861
	<b>1</b>	<b>1550</b>	<b>1962</b>

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## Average Construction Year

Weighted Year 1962.14

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## Total Segment Length (Miles)

Total Segment Length 0.79

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## Measure B: Geometric, Structural, or Infrastructure Improvements

The pavement on 8th Street South between Hennepin Avenue to Chicago Avenue is deficient, with a Pavement Condition Index (PCI) that is as low as 24 in places. The pavement is generally in poor condition, with severe cracking, patching, and potholes, and has not been sealcoated since 1985. Many sections of curb and gutter are also showing medium to high levels of deterioration. The proposed project includes replacement of the pavement, curb and gutter, and driveways.

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

Many sidewalks in the project area do not meet the recommended minimum 12-foot pedestrian width that is identified in the City's Pedestrian Master Plan (2009). The project will widen and improve sidewalks within the project area. The current sidewalks and crosswalks are not in compliance with Americans with Disabilities standards. The project will improve all crossings to be ADA compliant by providing pedestrian ramps, countdown timers, and durable crosswalk markings.

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## Measure A: Cost Effectiveness of Vehicle Delay Reduction

Total Project Cost from Cost Sheet	\$8,965,000.00
Total Peak Hour Vehicle Delay Without The Project	32312.0
Total Peak Hour Vehicle Delay With The Project	32312.0
Total Peak Hour Vehicle Delay Reduced by Project	0
Cost Effectiveness	\$0.00
Synchro or HCM Reports	8th St -3rd Ave HCM.pdf

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## Measure B: Cost Effectiveness of Emissions Reduction

Total Project Cost from Cost Sheet	\$8,965,000.00
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Total Peak Hour Kilograms Reduced by Project	0
Cost Effectiveness	\$0.00
Synchro or HCM Reports	8th St -3rd Ave HCM.pdf

## Measure A: Benefit/Cost of Crash Reduction

Project Benefit/Cost Ratio	0.98
Worksheet Attachment	8th St Safety Complete.pdf

## Measure A: Transit Connections

Existing Routes Directly Connected to the Project	3, 4, 5, 6, 7, 9, 10, 11, 12, 14, 17, 18, 19, 20, 22, 25, 39, 59, 61, 94, 133, 134, 135, 141, 146, 156, 250, 261, 263, 264, 270, 288, 353, 355, 365, 375, 452, 460, 464, 465, 467, 470, 472, 475, 476, 477, 478, 479, 490, 491, 492, 535, 552, 553, 554, 558, 568, 578, 587, 588, 589, 597, 643, 649, 663, 664, 667, 668, 670, 671, 672, 673, 674, 675, 677, 684, 690, 691, 692, 695, 697, 698, 699, 721, 724, 742, 747, 755, 758, 760, 761, 762, 763, 764, 756, 765, 766, 767, 768, 772, 774, 776, 777, 780, 781, 782, 783, 785, 790, 793, 795, 824, 825, 850, 852, 854, 865
Planned Transitways directly connected to the project (alignment and mode determined and identified in the 2030 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
Upload Map	Transit.pdf

## Response

*Met Council Staff Data Entry Only*

Route Ridership	4.8463244E7
Transitway Ridership	2.28384E7

## Measure B: Bicycle and Pedestrian Connections



While 8th Street South is not designated as a bicycle route in the Minneapolis Bicycle Master Plan (June 2011), several of the streets that cross 8th Street South in the project area do have on-street bike facilities, including Hennepin Avenue, Nicollet Avenue, Park Avenue, and Portland Avenue. Replacing the pavement on 8th Street South will provide a smoother ride for bicyclists on these connecting bikeway corridors.

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

The project is located in the heart of Minneapolis, a high pedestrian-traffic area where many people bike and walk to their destinations. Eighth Street South is identified as part of the Primary Pedestrian Network in the City's Downtown Action Plan (June 2007), which is a network that provides pedestrian connections or corridors within downtown. Eighth Street South also provides important pedestrian connections to key destinations such as Target Field, Target Center, Nicollet Mall, and the new Vikings Stadium.

The project will improve pedestrian connections to Elliot Park, located one block from the north end of the project.

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## Measure C: Multimodal Facilities

## Existing Conditions

Many of the existing sidewalks in the project area do not meet the recommended 12-foot pedestrian width identified by the City or ADA accessibility requirements. There are no existing bicycle facilities along the corridor. However, 8th Street South is a high volume transit corridor with over 350 bus trips per day and is identified as a future transit corridor.

## Proposed Improvements

The project will provide streetscape improvements, widened sidewalks, landscaping, lighting, and upgraded signals/crossings. These enhancements will provide a safe and pleasant place for pedestrians to walk to destinations or wait for transit vehicles. Ninth Street South is identified in the Minneapolis Bicycle Master Plan as a lower-volume parallel bikeway route; therefore, the project does not include any bicycle facilities. However, the projects pavement replacement will provide a smoother and safer route for bicyclists who do choose to use the roadway

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

## Modal Integration

The project will provide multimodal transportation benefits: smoother travel experience for cars, trucks, buses, and bicyclists on 8th Street South and enhanced pedestrian facilities which also benefit transit users. The corridor enhancements improve livability by balancing traffic and transit needs with a comfortable pedestrian environment and set the stage for future transitway improvements.

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## Transit Projects Not Requiring Construction

If the applicant is completing a transit or TDM application, only Park-and-Ride and other construction projects require completion of the Risk Assessment below. Check the box below if the project does not require the Risk Assessment fields, and do not complete the remainder of the form. These projects will receive full points for the Risk Assessment.

[Check Here if Your Transit Project Does Not Require Construction](#)

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### Measure A: Risk Assessment

#### 1) Project Scope (5 Percent of Points)

Meetings or contacts with stakeholders have occurred Yes

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 Yes

50%

Layout or Preliminary Plan has not been started

0%

Anticipated date or date of completion 10/01/2017

#### 3) Environmental Documentation (10 Percent of Points)

EIS

EA

PM Yes

Document Status:

Document approved (include copy of signed cover sheet) 100%

Document submitted to State Aid for review 75%

Document in progress; environmental impacts identified 50%

Document not started Yes 0%

Anticipated date or date of completion/approval 03/01/2018

**4)Review of Section 106 Historic Resources (15 Percent of Points)**

No known potential for archaeological resources, no historic resources known to be eligible for/listed on the National Register of Historic Places located in the project area, and project is not located on an identified historic bridge Yes

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%

Unknown impacts to historic/archaeological resources

0%

Anticipated date or date of completion of historic/archeological review: 03/01/2018

Project is located on an identified historic bridge

**5)Review of Section 4f/6f Resources (15 Percent of Points)**

*(4f is publicly owned parks, recreation areas, historic sites, wildlife or waterfowl refuges; 6f is outdoor recreation lands where Land and Water Conservation Funds were used for planning, acquisition, or development of the property)*

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

100%

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%

Adverse effects (land conversion) to Section 4f/6f resources likely

30%

Unknown impacts to Section 4f/6f resources in the project area

0%

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

Right-of-way or easements not required Yes

100%

Right-of-way or easements has/have been acquired

100%

Right-of-way or easements required, offers made

75%

Right-of-way or easements required, appraisals made

50%

**Right-of-way or easements required, parcels identified**

25%

**Right-of-way or easements required, parcels not identified**

0%

**Right-of-way or 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**

Yes

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)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**

Yes

0%

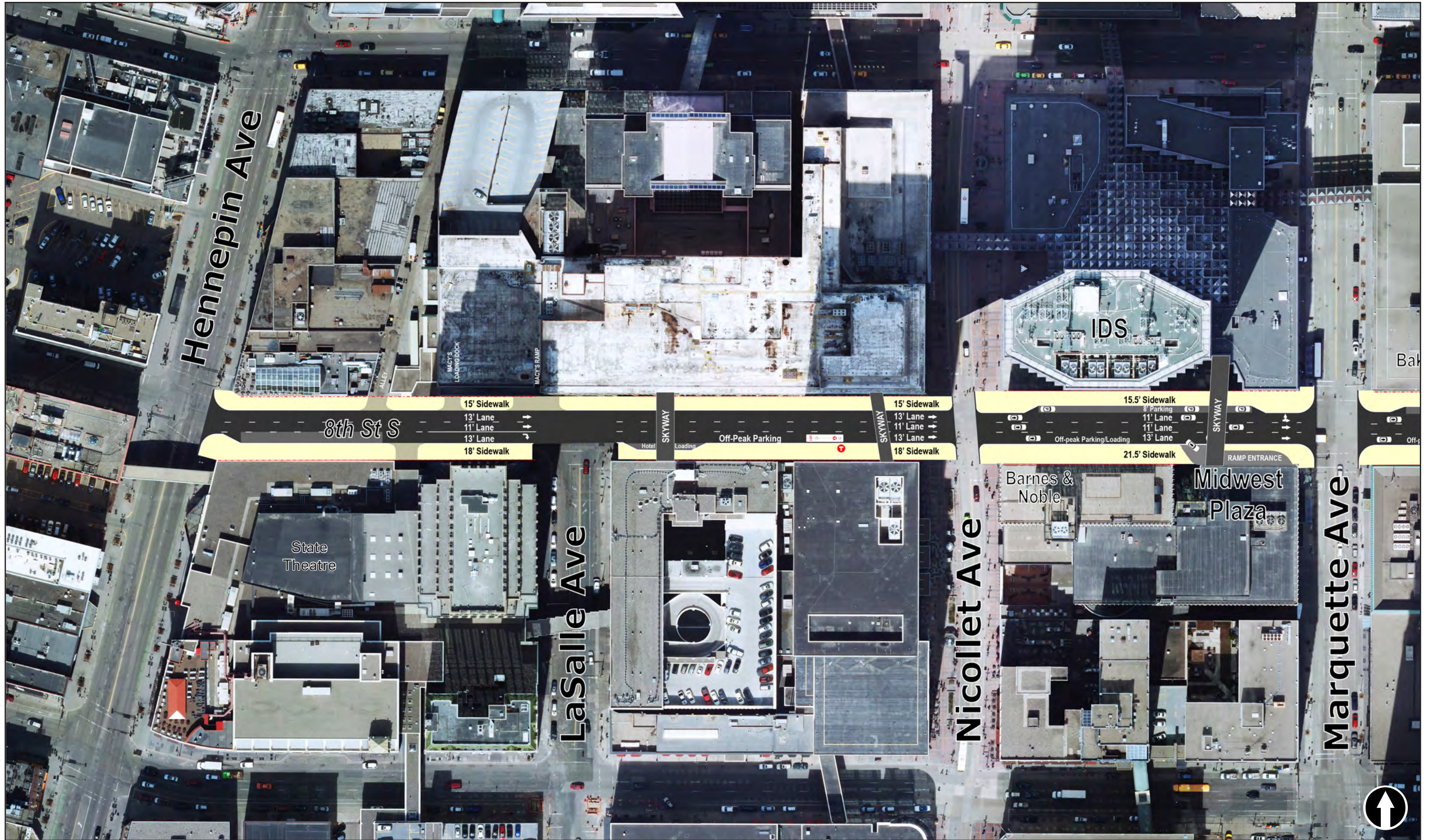
**Anticipated date or date of completion**

12/01/2018

### **9)Letting**

**Anticipated Letting Date**

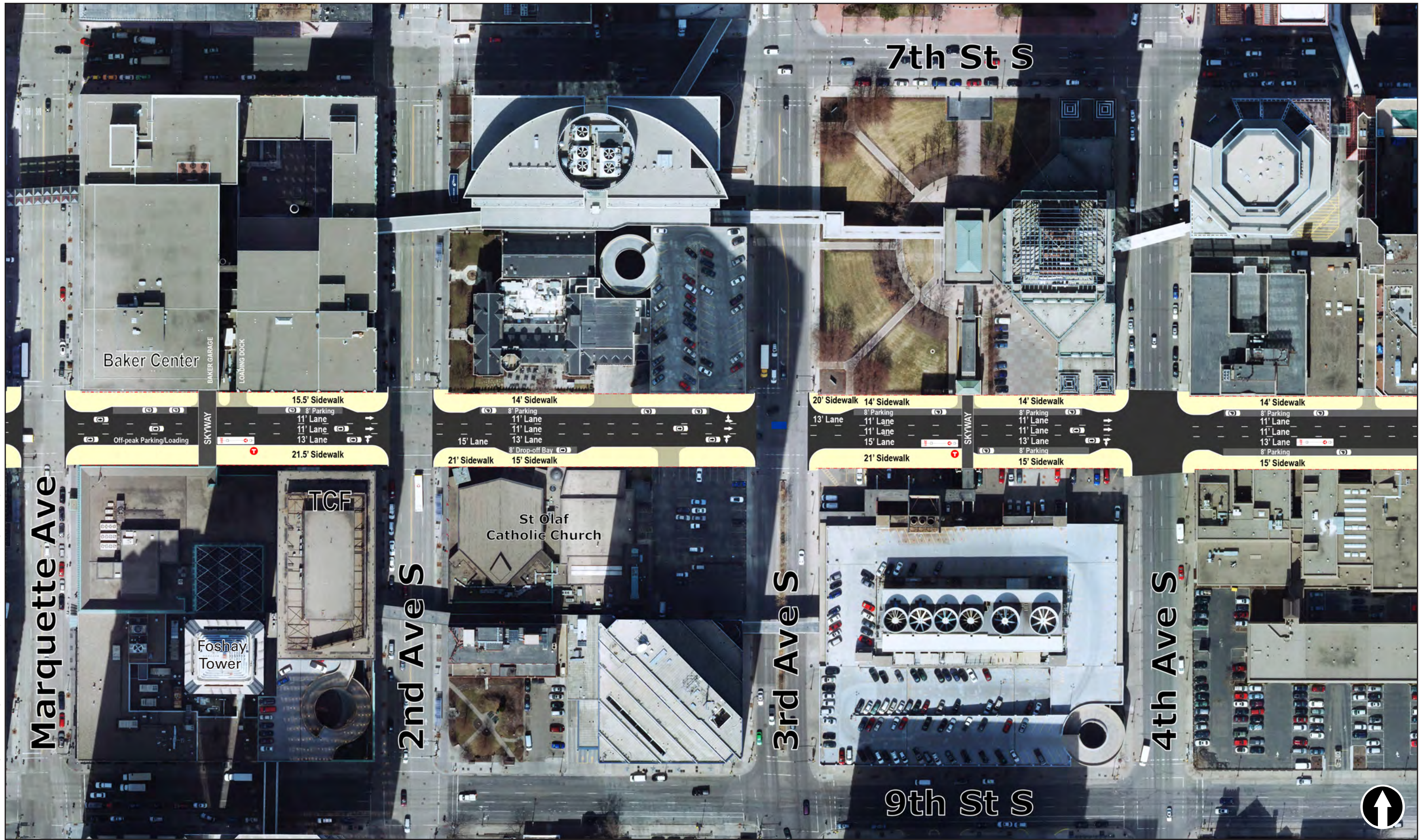
03/01/2019



**Proposed Improvements**

8th Street South Regional Solicitation Roadway Reconstruction/Modernization  
City of Minneapolis, MN

Figure 1-1



**Proposed Improvements**

8th Street South Regional Solicitation Roadway Reconstruction/Modernization  
City of Minneapolis, MN

Figure 1-2



**Proposed Improvements**

8th Street South Regional Solicitation Roadway Reconstruction/Modernization  
City of Minneapolis, MN

Figure 1-3





**Minneapolis**  
City of Lakes

**Department of  
Public Works**

Steven A Kotke, P.E.  
City Engineer  
Director

350 South 5th Street - Room 203  
Minneapolis MN 55415

Office 612 673-3000  
Fax 612 673-3565  
TTY 612 673-2157

December 1, 2014

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

**RE: 2014 Regional Solicitation Applications**

Dear Ms. Koutsoukos,

The City of Minneapolis Department of Public Works is submitting a series of applications for the 2014 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 of November 14, 2014. The relevant action is excerpted below:

*The TRANSPORTATION & PUBLIC WORKS and WAYS & MEANS Committees submitted the following reports:  
T&PW & W&M - Your Committee, having under consideration the 2014 Regional Solicitation for Federal Transportation Funds, now recommends:*

- a) That the proper City officers be authorized to submit a series of applications for federal transportation funds through the Metropolitan Council's Regional Solicitation Program, as set forth in Petn. No. 277734; and*
- b) That the proper City officers be authorized to commit local funds per federal requirement to support the approved projects.*

*On roll call, the result was:*

*Ayes: Reich, Frey, Gordon, Yang, Warsame, Goodman, Cano, Bender, Quincy, A. Johnson, Palmisano, President Johnson (12)*

*Noes: (0)*

*Absent: Glidden (1)*

*The report was adopted.*

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

Thank you for the opportunity to submit these applications.

Sincerely,

Steven A. Kotke, P.E.  
City Engineer, Director of Public Works





## Request for City Council Committee Action from the Department of Public Works

**Date:** November 10, 2014

**To:** Honorable Kevin Reich, Chair Transportation & Public Works Committee

**Referral to:** Honorable John Quincy, Chair Ways and Means/Budget Committee

**Subject:** **City of Minneapolis Submission for 2014 Regional Solicitation for Federal Transportation Funds**

### Recommendation:

- A. Authorize proper city officers to submit a series of applications for federal transportation funds through the Metropolitan Council's Regional Solicitation Program.
- B. Authorize proper city officers to commit local funds per federal requirement to support the approved projects.

### Previous Directives:

- None

### Department Information:

Prepared by: Steven Hay, P.E., Transportation Planner, Transp. Planning & Programming, 673-3884  
Don Elwood, P.E., Director, Transportation Planning & Engineering, 673-3622

Approved by: \_\_\_\_\_

Steven A. Kotke, P.E., Director of Public Works

Presenter in Committee: Steven Hay, P.E., Transportation Planner, Transportation Planning & Programming

### Reviews

Permanent Review Committee (PRC):	Approval N/A
Civil Rights Approval	Approval N/A
Policy Review Group (PRG):	Approval N/A

## Financial Impact

Action is within the Business Plan

## Community Impact

Living Well: Minneapolis is safe and livable and has an active and connected way of life.

Great Places: Natural and built spaces work together and our environment is protected.

A City that Works: City government runs well and connects to the community it serves.

## Supporting Information

The City will prepare a series of applications for the 2014 Regional Solicitation for Federal Transportation Funds in response to the current Metropolitan Council solicitation. Below is a summary of the eligible project areas along with a brief description of eligible city projects. Each submission will require 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. The available funding is for construction in 2018 and 2019.

The Regional Solicitation for federal transportation project funding is part of the 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).

The following list of projects will be submitted in each program area.

Project Name	Program	Requested Amount	Minimum Local Match Required
8 <sup>th</sup> Street South	Roadways	\$7,000,000	\$1,750,000
Broadway Street NE	Roadways	\$7,000,000	\$1,750,000
10 <sup>th</sup> Avenue SE Bridge Rehabilitation	Roadways	\$7,000,000	\$1,750,000
40 <sup>th</sup> Street Bicycle & Pedestrian Bridge over I-35@	Bicycle & Pedestrian Facilities	\$1,600,000	\$400,000
U of M Protected Bikeways	Bicycle & Pedestrian Facilities	\$1,000,000	\$250,000
High Quality Connection between Orange Line Transit Station at Lake Street and the Midtown Greenway	Bicycle & Pedestrian Facilities	\$2,880,000	\$720,000
North Loop Pedestrian Improvements	Bicycle & Pedestrian Facilities	\$1,000,000	\$250,000
Emerson & Fremont Avenues North Pedestrian Improvements	Bicycle & Pedestrian Facilities	\$1,000,000	\$250,000
High School Transit Connections	Bicycle & Pedestrian Facilities	\$1,000,000	\$250,000
Totals		\$29,480,000	\$7,370,000

## Regional Solicitation Programs

Recently, the Metropolitan Council and the Transportation Advisory Board (TAB) carried out an extensive evaluation and redesign of the Regional Solicitation. Projects will now be submitted and evaluated based on mode rather than federal funding program (i.e., STP, CMAQ, and TAP). The application process has been streamlined and the modal approach provides TAB with more flexibility to match federal funding to the highest performing projects that are submitted.

Applications are now grouped into three primary modal evaluation categories with each category including several sub-categories as detailed below:

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

The City will submit 9 funding applications in the following program categories:

1. Roadways including Multimodal Elements
  - Roadway Reconstruction
    - 8th Street S (Hennepin to Chicago)
    - Broadway Street NE (Stinson to Industrial Boulevard)
  - Bridges
    - 10th Avenue SE Bridge Rehabilitation
2. Bicycle & Pedestrian Facilities
  - Multiuse Trails & Bicycle Facilities
    - 40th Street Pedestrian & Bicycle Bridge over I-35W
    - U of M Protected Bikeways (19<sup>th</sup> Ave SE/15<sup>th</sup> Ave SE – Riverside Ave to NE Diagonal)
    - High Quality Connection between Orange Line Transit Station at Lake Street and the Midtown Greenway
  - Pedestrian Facilities
    - North Loop Pedestrian Improvements
    - Emerson & Fremont Avenues North
  - Safe Routes to School Infrastructure
    - High School Transit Connections

Details of the 9 proposed projects are described below.

### **Roadways including Multimodal Elements**

#### **8th Street South**

This project will reconstruct 0.72 miles of 8th Street in downtown from Hennepin Avenue to Chicago Avenue. The project will consist of complete removal and replacement of the pavement, curb and gutter, and driveways. The project will also include landscaping, pedestrian level street lighting, and upgraded signals where warranted. Sidewalks may also be replaced and widened, particularly at bus stop locations.

#### **Broadway Street NE**

This project will reconstruct approximately 0.8 miles of Broadway Street NE from Stinson Boulevard to Industrial Boulevard. A major component of this project is the construction of multimodal elements including the filling of sidewalk gaps and the construction of some type of bicycle facility. The bicycle facility could be on-street bike lanes or an off-street multiuse trail.

### 10<sup>th</sup> Avenue SE Bridge Rehabilitation

This project proposes to rehabilitate the reinforced concrete 10<sup>th</sup> Avenue Bridge over the Mississippi River. This will address the ongoing deterioration of concrete areas on the bridge's spandrel columns, floor beams, arches, and deck. The total construction cost for the bridge rehabilitation is approximately \$13 Million to \$28 Million, depending on specific elements of the project. A previous federal allocation of \$3.3 Million must be turned back in order to be eligible to apply for funds through this Regional Solicitation.

### **Bicycle and Pedestrian Facilities**

#### 40<sup>th</sup> Street Pedestrian Bridge Over 35W

This project is the renovation of the 40<sup>th</sup> Street Pedestrian Bridge over 35W to include trail widening, structural improvements, and aesthetic enhancements. This project is part of the RiverLake Greenway Corridor from the Chain of Lakes to the Mississippi River. The bridge is functionally obsolete and marginally serves its current purpose. As a primary bicycle artery for Minneapolis, the bridge should meet current geometric standards for a shared-use facility to safely convey pedestrians and bicyclists over I-35W. The proposed project would widen the deck of the bridge to accommodate bicycle users, raise the bridge, and improve its aesthetics.

#### U of M Protected Bikeways

Protected bikeways would be installed on 19<sup>th</sup> Avenue SE from Riverside Avenue, across the 10<sup>th</sup> Avenue Bridge to University Avenue, and on 15<sup>th</sup> Avenue SE from University Avenue to Como Avenue, then continuing north to the NE Diagonal Trail, the exact alignment north of Como Avenue is still to be determined.

#### High Quality Connection between Orange Line Transit Station at Lake Street and the Midtown Greenway

This is one of the key project elements of the Transit Access Project at 35W and Lake Street. This will be an important connection linking transit users at the proposed Bus Rapid Transit station to the Midtown Greenway, which today is an important east-west pedestrian and bicycle facility and in the future will contain additional fixed rail transit service. The connection will accommodate both pedestrians and bicyclists, with enhancements in the form of public art, landscaping and place-making.

#### North Loop Pedestrian Improvements

This project would include the implementation of a variety of pedestrian-related improvements to the North Loop Neighborhood. These improvements would likely include signal upgrades, ADA-compliant curb ramps, enhanced crosswalks, pedestrian level street lighting, and landscaping.

#### Emerson and Freemont Avenues North

Enhancements to the pedestrian realm would be implemented on Emerson Avenue North from Plymouth Avenue to 33<sup>rd</sup> Avenue North and on Freemont Avenue North from Plymouth Avenue to 44<sup>th</sup> Avenue North. These improvements would likely include pedestrian bumpouts at select locations, ADA-compliant curb ramps, signal enhancements, improved crosswalks, and landscaping. These improvements will be coordinated with the development and implementation of Metro Transit's Arterial BRT D-Line.

#### High School Transit Connections

This project will prioritize pedestrian safety improvements near high schools, focusing on access to nearby transit stops. Minneapolis high school students currently receive free or discounted Go-To Cards in lieu of yellow school bus service, making these transit connections vital. High schools are only recently eligible for federal Safe Routes funding, while they represent a large proportion of student walkers and bikers in the city.

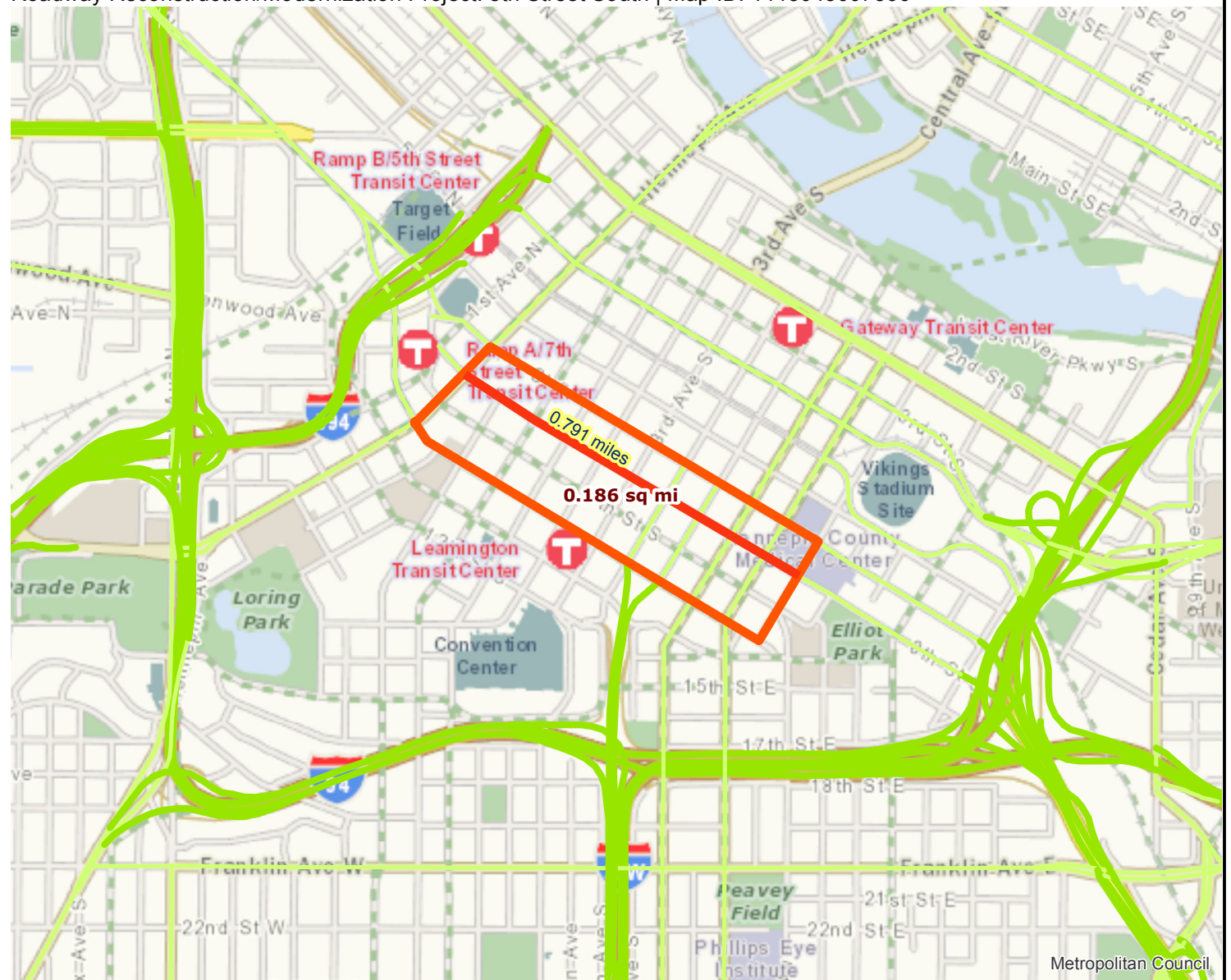
# Roadway Area Definition

Roadway Reconstruction/Modernization Project: 8th Street South | Map ID: 1415045007566

## Results

Project Length: 0.791 miles

Project Area: 0.186 sq mi



- Project
- Project Area
- Principal Arterials
- A Minor Arterials
- Principal Arterials Planned
- A Minor Arterials Planned

0 0.2 0.4 0.8 1.2 1.6 Miles

Created: 11/3/2014  
LandscapeRSA1



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



# Regional Economy

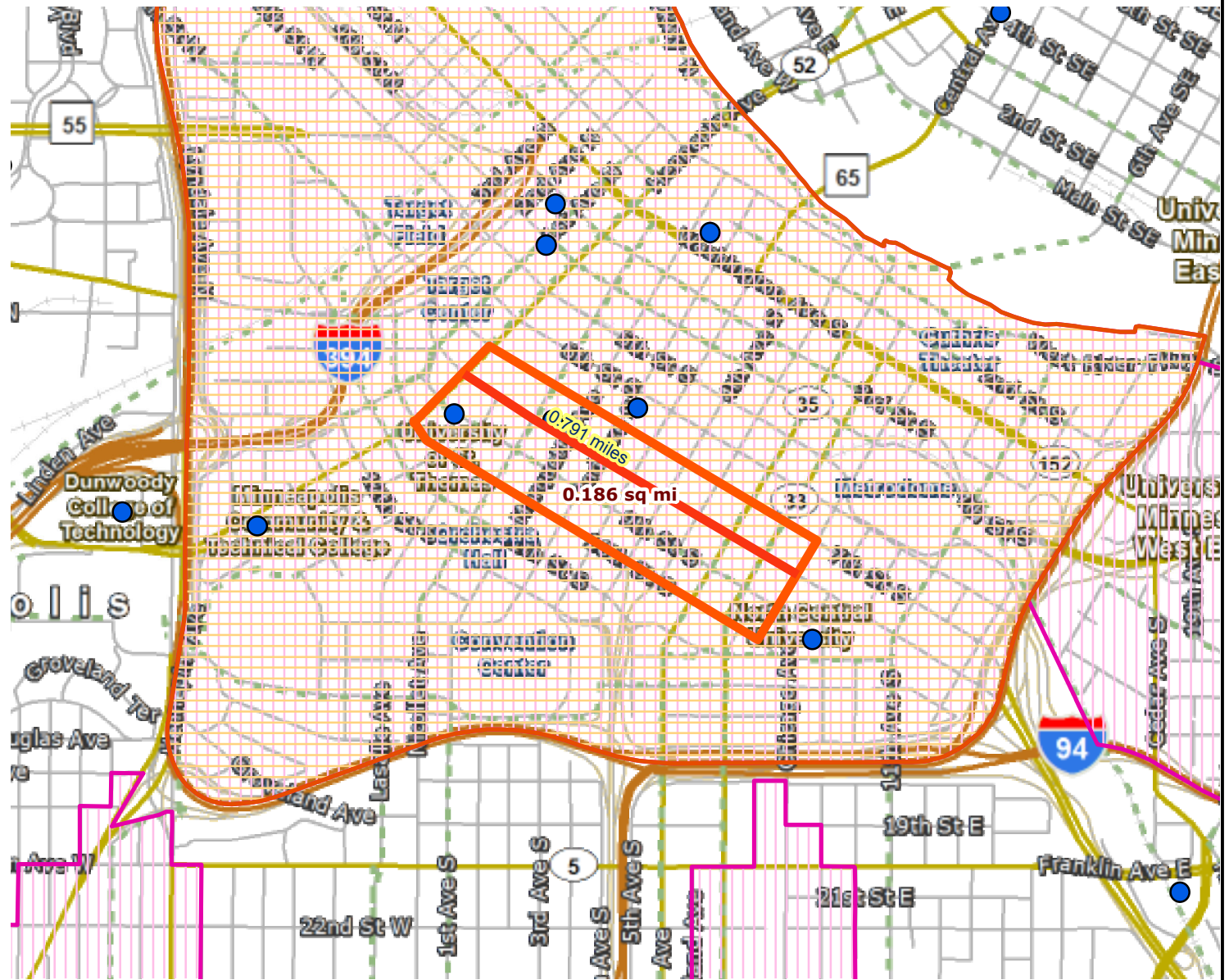
Roadway Reconstruction/Modernization Project: 8th Street South | Map ID: 1415045007566

## Results

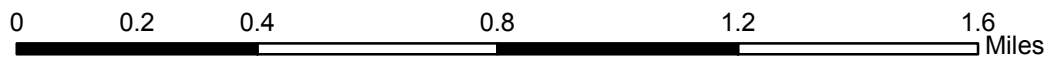
Project **IN** area of Job Concentration.

Project **IN** area of Manufacturing and Distribution.

Project **CONNECTED** to area of Education Institutions.



- Project
- PostSecondary Education Centers
- Job Concentration Centers
- Project Area
- Manufacturing/Distribution Centers



Created: 11/3/2014  
LandscapeRSA5



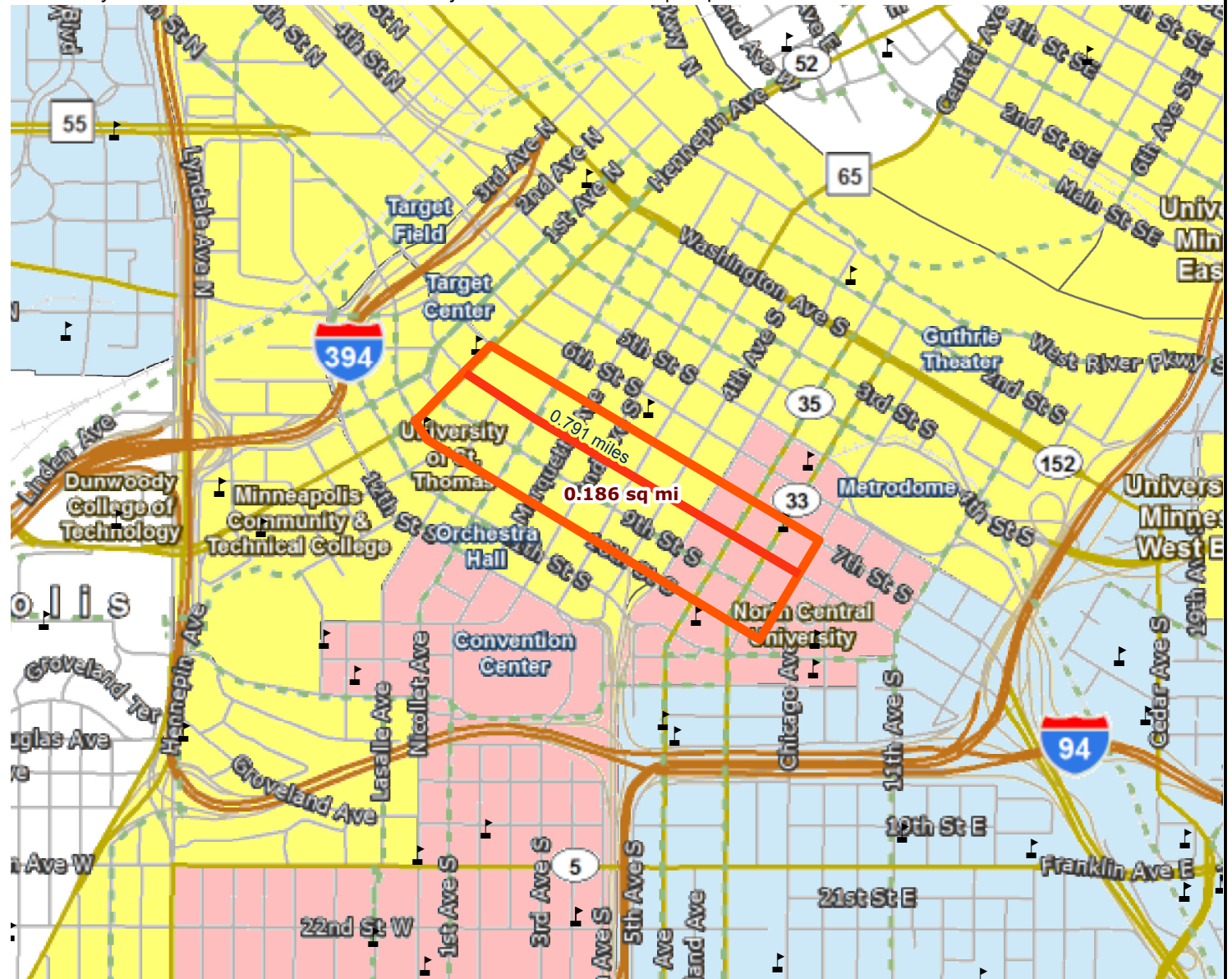
For complete disclaimer of accuracy, please visit <http://giswebsite.metc.state.mn.us/gissitenew/notice.aspx>



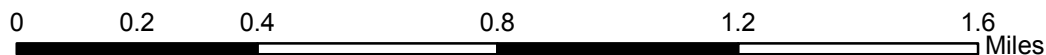
Socio-Economic Conditions Roadway Reconstruction/Modernization Project: 8th Street South | Map ID: 1415045007566

Results

Project IN a concentrated area of poverty.



- Project
- Project Area
- Racially concentrated area of poverty
- Concentrated area of poverty
- Above reg'l avg conc of race/poverty
- School



Created: 11/3/2014  
LandscapeRSA2



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





9: 8th St S & 3rd Ave S

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Direction	All
Volume (vph)	2308
Total Delay / Veh (s/v)	14
CO Emissions (kg)	1.61
NOx Emissions (kg)	0.31
VOC Emissions (kg)	0.37

9: 8th St S & 3rd Ave S

---

Direction	All
Volume (vph)	2308
Total Delay / Veh (s/v)	14
CO Emissions (kg)	1.61
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9: 8th St S & 3rd Ave S

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Direction	All
Volume (vph)	2308
Total Delay / Veh (s/v)	14
CO Emissions (kg)	1.61
NOx Emissions (kg)	0.31
VOC Emissions (kg)	0.37

9: 8th St S & 3rd Ave S





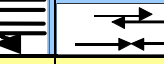

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Direction	All
Volume (vph)	2308
Total Delay / Veh (s/v)	14
CO Emissions (kg)	1.61
NOx Emissions (kg)	0.31
VOC Emissions (kg)	0.37

# HSIP worksheet

Control Section		T.H. / Roadway	Location				Beginning Ref. Pt.	Ending Ref. Pt.	State, County, City or Township	Study Period Begins	Study Period Ends
		8th Street	Hennepin Ave to Chicago Ave						Minneapolis	1/1/2011	12/31/2013
Description of Proposed Work		Reconstruct Roadway									
Accident Diagram Codes	1 Rear End		2 Sideswipe Same Direction		3 Left Turn Main Line	5 Right Angle	4,7 Ran off Road	8, 9 Head On/ Sideswipe - Opposite Direction		6, 90, 99	
										Pedestrian	Other
Study Period: Number of Crashes	Fatal	F									
	Personal Injury (PI)	A						1			1
		B				1			3		4
		C	3	2		5			4		14
Property Damage	PD	5	10	2	18	1	5	1	8	50	
% Change in Crashes	Fatal	F									
	PI	A						-41%			
		B				-21%			-41%		
		C	-70%	-41%		-21%			-41%		
Property Damage	PD	-70%	-41%	-21%	-21%	-41%	-41%	-41%	-41%		
Change in Crashes <small>= No. of crashes X % change in crashes</small>	Fatal	F									
	PI	A						-0.41			-0.41
		B				-0.21			-1.23		-1.44
		C	-2.10	-0.82		-1.05			-1.64		-5.61
Property Damage	PD	-3.50	-4.10	-0.42	-3.78	-0.41	-2.05	-0.41	-3.28	-17.95	
Year (Safety Improvement Construction)		2019									
Project Cost (exclude Right of Way)		\$ 8,965,000	Type of Crash	Study Period: Change in Crashes	Annual Change in Crashes	Cost per Crash	Annual Benefit	<b>B/C= 0.68</b>			
Right of Way Costs (optional)			F			\$ 1,100,000					
Traffic Growth Factor		3%	A	-0.41	-0.14	\$ 550,000	\$ 75,167	Using present worth values, <b>B= \$ 6,082,869</b>			
Capital Recovery			B	-1.44	-0.48	\$ 160,000	\$ 76,800	<b>C= \$ 8,965,000</b>			
1. Discount Rate		4.5%	C	-5.61	-1.87	\$ 81,000	\$ 151,470	See "Calculations" sheet for amortization.			
2. Project Service Life (n)		20	PD	-17.95	-5.98	\$ 7,400	\$ 44,277				
			Total				\$ 347,713	Office of Traffic, Safety and Technology September 2014			

# HSIP worksheet

Control Section		T.H. / Roadway	Location				Beginning Ref. Pt.	Ending Ref. Pt.	State, County, City or Township	Study Period Begins	Study Period Ends
		8th Street	Hennepin Ave to Chicago Ave						Minneapolis	1/1/2011	12/31/2013
Description of Proposed Work		Pedestrian Lighting and countdown timers at signals for intersections along 8th St									
Accident Diagram Codes	1 Rear End	2 Sideswipe Same Direction	3 Left Turn Main Line	5 Right Angle	4,7 Ran off Road	8, 9 Head On/ Sideswipe - Opposite Direction			6, 90, 99		
									Pedestrian	Other	Total
Study Period: Number of Crashes	Fatal	F									
	Personal Injury (PI)	A									
		B							3		3
		C							4		4
Property Damage	PD							1		1	
% Change in Crashes <small>*Use Crash Modification Factors Clearinghouse</small>	Fatal	F									
	PI	A									
		B							-57%		
		C							-57%		
Property Damage	PD							-30%			
Change in Crashes <small>= No. of crashes X % change in crashes</small>	Fatal	F									
	PI	A									
		B							-1.71		-1.71
		C							-2.28		-2.28
Property Damage	PD							-0.30		-0.30	
Year (Safety Improvement Construction)		2019									
Project Cost (exclude Right of Way)		\$ 8,965,000	Type of Crash	Study Period: Change in Crashes	Annual Change in Crashes	Cost per Crash	Annual Benefit	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>B/C= 0.30</b> </div> <p>Using present worth values,  <b>B= \$ 2,685,316</b>  <b>C= \$ 8,965,000</b></p> <p>See "Calculations" sheet for amortization.</p>			
Right of Way Costs (optional)			F			\$ 1,100,000					
Traffic Growth Factor		3%	A			\$ 550,000					
Capital Recovery			B	-1.71	-0.57	\$ 160,000	\$ 91,200				
1. Discount Rate		4.5%	C	-2.28	-0.76	\$ 81,000	\$ 61,560				
2. Project Service Life (n)		20	PD	-0.30	-0.10	\$ 7,400	\$ 740				
			Total				\$ 153,500	Office of Traffic, Safety and Technology September 2014			

**8th Street (MSAS 434) from Hennepin Avenue to Chicago Ave (2011 - 2013) - created on 11-17-**

Crash data is managed by the Mn/DOT Office of Traffic, Safety, and Operations.

SYS	NUM	REF_POINT	GIS_ROUTE	GIS_TM	RD_DIR	ELEM	RELY	INV	R_U
<del>05</del>	<del>25850434</del>	<del>000+00.075</del>	<del>0525850434</del>	<del>0.075</del>	<del>E</del>	<del>—</del>	<del>1</del>	<del>90</del>	<del>U</del>
05	25850434	000+00.080	0525850434	0.080	Z		1	90	U
05	25850434	000+00.080	0525850434	0.080	Z		1	3	U
05	25850434	000+00.080	0525850434	0.080	Z		1	0	U
05	25850434	000+00.080	0525850434	0.080	Z		1	0	U
05	25850434	000+00.081	0525850434	0.081	Z		1	3	U
05	25850434	000+00.090	0525850434	0.090	E		1	3	U
05	25850434	000+00.100	0525850434	0.100	Z		1	0	U
05	25850434	000+00.101	0525850434	0.101	Z		1	98	U
05	25850434	000+00.130	0525850434	0.130	Z		1	0	U
05	25850434	000+00.159	0525850434	0.159	Z		1	0	U
05	25850434	000+00.163	0525850434	0.163	Z		1	3	U
05	25850434	000+00.163	0525850434	0.163	E		1	3	U
05	25850434	000+00.163	0525850434	0.163	Z		1	3	U
05	25850434	000+00.239	0525850434	0.239	Z		1	0	U
05	25850434	000+00.242	0525850434	0.242	Z		1	90	U
05	25850434	000+00.242	0525850434	0.242	Z		2	3	U
05	25850434	000+00.243	0525850434	0.243	E		1	3	U
05	25850434	000+00.322	0525850434	0.322	Z		1	3	U
05	25850434	000+00.322	0525850434	0.322	Z		1	0	U
05	25850434	000+00.365	0525850434	0.365	Z		1	0	U
05	25850434	000+00.400	0525850434	0.400	Z		1	90	U
05	25850434	000+00.400	0525850434	0.400	S		1	3	U
05	25850434	000+00.467	0525850434	0.467	Z		1	3	U
05	25850434	000+00.478	0525850434	0.478	N		1	3	U
05	25850434	000+00.478	0525850434	0.478	S		1	3	U
05	25850434	000+00.478	0525850434	0.478	Z		1	3	U
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05	25850434	000+00.478	0525850434	0.478	Z		1	3	U
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05	25850434	000+00.478	0525850434	0.478	Z		1	3	U
05	25850434	000+00.478	0525850434	0.478	Z		1	3	U
05	25850434	000+00.478	0525850434	0.478	Z		1	3	U
05	25850434	000+00.478	0525850434	0.478	Z		1	3	U
05	25850434	000+00.478	0525850434	0.478	Z		1	3	U
05	25850434	000+00.515	0525850434	0.515	Z		2	3	U
05	25850434	000+00.557	0525850434	0.557	Z		1	3	U
05	25850434	000+00.557	0525850434	0.557	Z		1	3	U
05	25850434	000+00.557	0525850434	0.557	Z		1	3	U
05	25850434	000+00.557	0525850434	0.557	Z		1	3	U
05	25850434	000+00.557	0525850434	0.557	S		1	3	U
05	25850434	000+00.557	0525850434	0.557	Z		1	3	U

05	25850434	000+00.557	0525850434	0.557	Z	1	3	U
05	25850434	000+00.557	0525850434	0.557	Z	1	3	U
05	25850434	000+00.557	0525850434	0.557	Z	1	3	U
05	25850434	000+00.601	0525850434	0.601	S	3	3	U
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05	25850434	000+00.634	0525850434	0.634	Z	1	3	U
05	25850434	000+00.634	0525850434	0.634	Z	1	3	U
05	25850434	000+00.634	0525850434	0.634	Z	1	3	U
05	25850434	000+00.634	0525850434	0.634	Z	1	3	U
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05	25850434	000+00.634	0525850434	0.634	S	1	3	U
05	25850434	000+00.634	0525850434	0.634	S	1	3	U
05	25850434	000+00.693	0525850434	0.693	E	1	3	U
05	25850434	000+00.696	0525850434	0.696	Z	1	0	U
05	25850434	000+00.706	0525850434	0.706	Z	1	3	U
05	25850434	000+00.779	0525850434	0.779	S	1	3	U
05	25850434	000+00.795	0525850434	0.795	S	1	3	U
05	25850434	000+00.828	0525850434	0.828	Z	1	3	U
05	25850434	000+00.855	0525850434	0.855	Z	1	0	U
05	25850434	000+00.863	0525850434	0.863	E	1	3	U
05	25850434	000+00.867	0525850434	0.867	Z	1	3	U
05	25850434	000+00.867	0525850434	0.867	Z	1	3	U
05	25850434	000+00.867	0525850434	0.867	Z	1	3	U
05	25850434	000+00.867	0525850434	0.867	Z	1	3	U
05	25850434	000+00.867	0525850434	0.867	Z	1	3	U
05	25850434	000+00.867	0525850434	0.867	S	1	3	U
05	25850434	000+00.867	0525850434	0.867	Z	1	3	U
<del>05</del>	<del>25850313</del>	<del>000+00.914</del>	<del>0525850313</del>	<del>0.914</del>	<del>Z</del>	<del>1</del>	<del>0</del>	<del>U</del>
<del>05</del>	<del>25850313</del>	<del>000+00.914</del>	<del>0525850313</del>	<del>0.914</del>	<del>Z</del>	<del>1</del>	<del>3</del>	<del>U</del>
<del>05</del>	<del>25850313</del>	<del>000+00.918</del>	<del>0525850313</del>	<del>0.918</del>	<del>Z</del>	<del>1</del>	<del>3</del>	<del>U</del>
<del>05</del>	<del>25850313</del>	<del>000+00.919</del>	<del>0525850313</del>	<del>0.919</del>	<del>Z</del>	<del>1</del>	<del>3</del>	<del>U</del>
<del>05</del>	<del>25850313</del>	<del>000+00.924</del>	<del>0525850313</del>	<del>0.924</del>	<del>Z</del>	<del>1</del>	<del>3</del>	<del>U</del>
<del>05</del>	<del>25850313</del>	<del>000+00.933</del>	<del>0525850313</del>	<del>0.933</del>	<del>W</del>	<del>1</del>	<del>3</del>	<del>U</del>
<del>05</del>	<del>25850165</del>	<del>005+00.340</del>	<del>0525850165</del>	<del>5.340</del>	<del>Z</del>	<del>1</del>	<del>3</del>	<del>U</del>
<del>05</del>	<del>25850165</del>	<del>005+00.340</del>	<del>0525850165</del>	<del>5.340</del>	<del>Z</del>	<del>1</del>	<del>90</del>	<del>U</del>
<del>05</del>	<del>25850165</del>	<del>005+00.340</del>	<del>0525850165</del>	<del>5.340</del>	<del>Z</del>	<del>1</del>	<del>3</del>	<del>U</del>
<del>05</del>	<del>25850165</del>	<del>005+00.340</del>	<del>0525850165</del>	<del>5.340</del>	<del>Z</del>	<del>1</del>	<del>0</del>	<del>U</del>
<del>05</del>	<del>25850165</del>	<del>005+00.340</del>	<del>0525850165</del>	<del>5.340</del>	<del>S</del>	<del>1</del>	<del>3</del>	<del>U</del>
<del>05</del>	<del>25850165</del>	<del>005+00.340</del>	<del>0525850165</del>	<del>5.340</del>	<del>Z</del>	<del>1</del>	<del>3</del>	<del>U</del>
<del>05</del>	<del>25850165</del>	<del>005+00.340</del>	<del>0525850165</del>	<del>5.340</del>	<del>Z</del>	<del>1</del>	<del>0</del>	<del>U</del>



-2014 by rile1che

ATP	CO	CITY	DOW	MONTH	DAY	YEAR	TIME	SEV
<del>V#2 WAS STOPPED AT THE STOP LIGHT ON 8TH ST. S. AND HENNEPIN AVE. S. V#1 WAS BEHIND V#2 AND ATTEMP</del>	<del>27</del>	<del>2585</del>	<del>3-Tue</del>	<del>12</del>	<del>11</del>	<del>2012</del>	<del>2032</del>	<del>N</del>
VEH 1 EB ON 8TH STREET. VEH 2 SB ON HENNEPIN AV. VEH 1 FAILED TO STOP FOR RED LIGHT AND STRUCK VE	27	2585	3-Tue	2	1	2011	1329	N
VEHICLE #1 WAS TARVELING NB ON HENNEPIN AVE S APPROACHING 8TH ST S ON GREEN LIGHT. VEHICLE #2 WAS	27	2585	1-Sun	4	15	2012	1114	N
	27	2585	3-Tue	12	20	2011	1310	C
	27	2585	6-Fri	5	31	2013	2350	N
V1 STRUCK V2 WHILE V2 WAS MAKING A RIGHT TURN ONTO HENNEPIN AVENUE. V1 WAS STOPPED AT THE BUS STOP	27	2585	2-Mon	6	20	2011	1317	N
VEHICLE 1 WAS ATTEMPTING TO MAKE A RIGHT TURN AND FAILED TO OBSERVED VEHICLE #2. VEHICLE #1 THEN S	27	2585	3-Tue	5	7	2013	1645	N
ACCIDENT WAS HIT AND RUN. I WAS TRAVELING EAST ON 8TH STREET IN THE FAR RIGHT LANE IN DOWNTOWN MIN	27	2585	6-Fri	4	15	2011	0743	N
THE OFFICER ASKED THE TWO MEN TO GET AWAY FROM MY CAR. THE DRIVER TOLD THE OFFICER HE HIT MY CAR,	27	2585	4-Wed	8	17	2011	1727	N
	27	2585	6-Fri	12	21	2012	1800	N
	27	2585	5-Thu	12	15	2011	1630	N
BOTH VEHICLES TRAVELING E/B ON 8TH ST APPROACHING LASALLE AV S. THE LIGHT TURNED RED FOR THE E/B TR	27	2585	3-Tue	9	27	2011	1715	C
OFFICERS WERE DISPATCHED TO 8TH AND LASALLE ON A REPORT OF A BUS INVOLVED IN A ACCIDENT. VEHICLE 1	27	2585	1-Sun	12	22	2013	1800	N
VEHICLE #2 FAILED TO YIELD TO VEHICLE #1 WHILE MAKING A RIGHT TURN ON RED, AGAINST A NO TURN ON RED	27	2585	6-Fri	12	16	2011	0955	N
	27	2585	5-Thu	9	6	2012	1700	N
V1 WAS PULLING INTO THE BUS STOP AT 8TH ST S AND NICOLLET MALL TO DROP OFF PASSANGERS. V2 THE SCRAP	27	2585	3-Tue	5	1	2012	1255	N
VEHICLE1 MN 748AXX WAS SEEN BY MPLS DID EMBASSADOR WITNESS 1. VEHICLE1 WAS NORTHBOUND ON NICOLLET A	27	2585	2-Mon	2	13	2012	2155	N
BICYCLIST WAS STRUCK BY UNIT 1S VEHICLE AS HE WAS RIDING HIS BIKE SOUTHBOUND ON NICOLLET MALL AND '	27	2585	1-Sun	11	4	2012	0100	N
PEDESTRIAN WAS ATTEMPTING TO CROSS MARQUETTE AVE. S GOING WB WHEN DRIVER OF UNIT 1 MADE A LEFT TURN	27	2585	6-Fri	4	12	2013	1715	C
	27	2585	5-Thu	6	28	2012	1630	N
	27	2585	7-Sat	12	29	2012	2345	N
VEHICLE #1 WAS NORTHBOUND ON 2ND AVE. N IN THE LEFT LANE. VEHICILE #2 WAS ALSO NORTHBOUND, BUT IN TH	27	2585	3-Tue	1	29	2013	0930	N
DRIVER OF VEHICLE 2 SAID SHE WAS FOLLOWING ROADWAY WHEN VEHICLE 1 WAS IN CENTER LANE SUDDENLY DECID	27	2585	1-Sun	2	10	2013	0313	N
UNIT 2 WAS STOPPED FOR A RED LIGHT FACING EASTBOUND AT 8TH ST S AND 3RD AVE S. UNIT 1 REAR ENDED U	27	2585	1-Sun	11	24	2013	0230	C
UNIT 2 WAS TRAVELING NB ON 3RD AVE S, APPROACHING 8TH ST ON A GREEN LIGHT, WHEN HIS VEHICLE WAS STR	27	2585	6-Fri	10	28	2011	0222	N
UNIT 1 WAS N/B ON 3RD AVE SOUTH IN THE INTERSECTION OF SOUTH 8TH STREET. UNIT 2 WAS E/B ON SOUTH 8	27	2585	1-Sun	2	5	2012	1545	N
PEDESTRIAN JONES WAS WALKING WB ACROSS 3RD AV S ON 8TH ST S WHEN SHE WAS STRUCK BY VEHICLE 1. DRIVE	27	2585	4-Wed	8	7	2013	1013	B
V2 WAS TRAVELLING NB ON 3RD AVE S AND WAS CROSSING THE INTERSECTION WITH 8TH ST S WITH THE GREEN LI	27	2585	1-Sun	2	6	2011	0005	N
VEHICLE 1 WAS SB ON 3RD AV S AT S 8TH ST, MAKING A LEFT TURN ONTO EB 8TH ST. VEHICLE 2 WAS NB ON 3R	27	2585	7-Sat	7	2	2011	2028	N
VEHICLE 1 EB ON 8TH STREET WENT THROUGH RED LIGHT AND COLLIDED WITH VEHICLE 2 WHICH WAS SB ON 3RD A	27	2585	2-Mon	5	28	2012	1353	N
DRIVER OF VEHICLE 1 STATED HE WAS DRIVING EB ON 8TH ST S. DRIVER OF VEHICLE 1 STATED HE WAS TEXTING	27	2585	7-Sat	10	27	2012	0600	N
VEHICLE 2 WAS NORTHBOUND ON 3RD AVE S AT S 8TH ST. VEHICLE 2 ENTERED THE INTERSECTION ON THE GREEN	27	2585	7-Sat	7	27	2013	2228	N
UNIT #1 WAS EB ON 8TH ST S UNIT #2 WAS SB ON 3RD AV S THERE WAS ARGUMENT AS TO WHO ENTERED INTERS	27	2585	5-Thu	10	31	2013	0557	B
UNIT 1 VEHICLE WAS TRAVELLING NORTHBOUND ON 3RD AVE CROSSING THE 8TH STREET INTERSECTION IN DOWNTOW	27	2585	1-Sun	9	16	2012	1000	C
THE DRIVER OF VEHICLE #1 STRUCK A CONSTRUCTION BARRIER. AFTER THE COLLISON, THE DRIVER OF VEHICLE	27	2585	7-Sat	7	6	2013	0243	N
UNIT ONE WAS TRAVELING EB ON 8TH ST S WHEN UNIT 1 CRASHED INTO A BARRICADED FENCE OF A CONTRUCTION	27	2585	7-Sat	12	8	2012	0236	A
VEHICLE #1 WAS EASTBOUND ON 8TH ST.S..VEHICLE #2 WAS SOUTHBOUND ON 4TH AVE. S.. ACCORDING TO WITNES	27	2585	3-Tue	2	1	2011	1038	N
SEE MPLS CCN: 11-036684. BOTH PARTIES WERE GIVEN BLUE CARDS AND ADVISED.	27	2585	3-Tue	2	8	2011	2247	C
V1 WAS A MPLS FIRE TRUCK, E1, P#71402, AND WAS SOUTH ON 4TH AVE S. V2 WAS EAST ON 8 STREET S IN TH	27	2585	6-Fri	11	2	2012	0914	C
VEH#1 WAS TRAVELLING EB ON 8TH ST.S S. VEH#2 WAS TRAVELLING NB ON 4TH AVE.S. VEH#1 STRUCK VEH#2.	27	2585	2-Mon	11	12	2012	1057	N
VEH 1 WAS EAST ON S. 8 ST., CROSSING 4 AV S. VEH 2 WAS SOUTH ON 4 AV S., CROSSING S. 8 ST. VEH 1	27	2585	5-Thu	11	22	2012	1441	N

DRIVER 1 SAID HE WAS SB ON 4TH AVENUE AND HAD TEMPORARILY LOOKED DOWN. HE LOOKED UP TO SEE THE LIGHT	27	2585	2-Mon	12	10	2012	1050	N
VEH 1 WAS SOUTH ON 4 AV S., CROSSING S. 8 ST. VEH 1 DRIVER STATED HE RAN THE RED LIGHT. VEH 2 WAS	27	2585	3-Tue	12	11	2012	1135	N
VEHICLE 1 WAS SOUTH ON 4TH AVE S IN THE RIGHT LANE. SHE ENTERED THE INTERSECTION ON A GREEN AND WAS	27	2585	6-Fri	11	29	2013	1907	N
UNIT 1 EXITED FROM RAMP AND RAN INTO CONSTRUCTION FENCE. UNIT 1 FLED THE SCENE.	27	2585	1-Sun	9	1	2013	0445	N
VEHICLE 1 IS A MOPED AND WAS TRAVELLING EASTBOUND ON 8TH STREET JUST WEST OF THE 5TH AV S INTERSECT	27	2585	5-Thu	4	5	2012	1620	C
ON THE ABOVE DATE AND TIME I WAS DISPATCHED TO THE ABOVE LOCATION ON A POSSIBLE PERSONAL INJURY ACC	27	2585	1-Sun	11	6	2011	0946	N
UNIT 1 WAS TRAVELING EB AND WENT THROUGH A RED LIGHT COLLIDING WITH UNIT 2 WHO WAS TRAVELING NB THRU	27	2585	6-Fri	5	4	2012	1907	N
VEH 1 WAS EAST ON S. 8 ST, CROSSING 5 AV S. VEH 2 WAS NORTH ON 5 AV S., CROSSING S. 8 ST. VEH 1 S	27	2585	7-Sat	3	12	2011	1458	C
V1 WAS EB ON 8TH ST AND WENT THROUGH A RED LIGHT STRIKING V2 WHICH WAS NB ON 5TH AV S, THROUGH A GR	27	2585	7-Sat	9	24	2011	1617	N
DRIVER #1 WAS DRIVING EAST BOUND ON SOUTH 8TH STREET PASSING THROUGH THE INTERSECTION WITH 5TH AVE	27	2585	3-Tue	6	12	2012	2240	C
V1 WAS EB ON 8TH ST IN THE MIDDLE LANE, HE WAS TURNING NB ON 5TH AV S WHEN HE SAW A PEDESTRIAN CROSS	27	2585	4-Wed	6	27	2012	0827	B
I WAS DISPATCHED TO THE ABOVE LOCATION FOR A PPI ACCIDENT. IT WAS LATER DETERMINED TO BE A PD ACCID	27	2585	1-Sun	3	10	2013	1617	N
UNIT 1 IS A UNITED TAXI #5196 GOING E/B ON SOUTH 8TH STREET ENTERING THE INTERSECTION AT SOUTH 5TH	27	2585	4-Wed	5	8	2013	0955	N
ON THE ABOVE DATE AND TIME I WAS DISPATCHED TO THE ABOVE LOCATION ON A PROPERTY DAMAGE ACCIDENT.	27	2585	7-Sat	7	27	2013	1105	C
UNIT/1 WAS GOING EB ON 8TH ST. S. WHEN UNIT/2 WAS WALKING EB CROSSING 8TH ST AT APPROXIMATELY MIDBL	27	2585	1-Sun	3	17	2013	0022	B
	27	2585	3-Tue	1	1	2013	0245	N
MARTIN SAID NO AND THE DRIVER DROVE AWAY ON 8TH STREET. PLATE OF THE VEHICLE IS GIVEN AS 183MER W	27	2585	4-Wed	11	27	2013	0745	C
ON THE ABOVE DATE AND TIME I SELF-ASSIGNED TO A PROPERTY DAMAGE HIT AND RUN. THE REMARKS IN THE CA	27	2585	3-Tue	3	19	2013	1331	N
ON THE ABOVE DATE AND TIME I WAS DISPATCHED TO A PROPERTY DAMAGE ACCIDENT. THE DRIVER IN VEH #1	27	2585	3-Tue	11	27	2012	1326	N
VEHICLE #1 WAS TRAVELING EB ON 8TH ST S, IN THE MIDDLE LANE, APPROACHING CHICAGO AVE S. VEHICLE #1	27	2585	6-Fri	11	1	2013	1439	N
	27	2585	6-Fri	9	6	2013	0900	N
WHILE WORKING SQUAD 160 ABLE, I WAS DISPATCHED TO THE INCIDENT ADDRESS ON AN ACCIDENT. UPON ARRIVAL	27	2585	7-Sat	1	14	2012	1800	N
VEHICLE #1 WAS TRAVELING SB ON CHICAGO AVE S APPROACHING GREEN LIGHT AT 8TH ST S. VEHICLE #2 WAS TR	27	2585	6-Fri	5	24	2013	0904	N
UNIT 1 WAS TRAVELING NORTH ON CHICAGO AV WHEN IT STRUCK UNIT 2 TRAVELING EAST ON 8TH STREET. THE DRIV	27	2585	2-Mon	4	30	2012	1246	N
THE PEDESTRIAN WAS WALKING NB ACROSS 8TH ST S ON THE EAST SIDE OF CHICAGO AVE S. VEHICLE #1 WAS TR	27	2585	2-Mon	12	31	2012	1151	C
UNIT 1 WAS TURNING SOUTHBOUND ONTO CHICAGO AVE. FROM 8TH ST. DRIVER 1 CUT THE CORNER TOO SHORT AND	27	2585	6-Fri	4	1	2011	1814	N
DRIVER UNIT 1 STATED HE TURNED RIGHT FROM 8TH ST S ONTO CHICAGO AV S AND THE SUN WAS IN HIS EYES AN	27	2585	4-Wed	1	23	2013	1039	C
VEHICLE #1 WAS TRAVELING EASTBOUND ON 8TH ST S. VEHICLE #1 MADE A RIGHT TURN ON CHICAGO AVE S AND	27	2585	3-Tue	10	15	2013	1621	N
THE DRIVER OF UNIT 1 WAS DRIVING SOUTHBOUND ON CHICAGO AVE S WHEN SHE RAN THE RED LIGHT. DRIVER OF	27	2585	2-Mon	3	18	2013	2011	N
	<del>27</del>	<del>2585</del>	<del>2-Mon</del>	<del>5</del>	<del>2</del>	<del>2011</del>	<del>0440</del>	<del>C</del>
<del>UNIT 1 WAS TRAVELING WB ON E HENNEPIN AV GOING THROUGH THE INTERSECTION OF 8TH ST SE MAKING A RIGHT</del>	<del>27</del>	<del>2585</del>	<del>7-Sat</del>	<del>12</del>	<del>3</del>	<del>2011</del>	<del>2115</del>	<del>N</del>
<del>VEHICLE #2 METRO TRANSIT BUS #850 WAS STOPPING SB AT HENNEPIN AVE AND 8TH ST BUS STOP LOADING PASS</del>	<del>27</del>	<del>2585</del>	<del>1-Sun</del>	<del>8</del>	<del>5</del>	<del>2012</del>	<del>1801</del>	<del>N</del>
<del>SEVERAL WITNESSES ON SCENE STATED THE PEDESTRIAN VICTIM ENTERED TRAFFIC AGAINST THE RED LIGHT AND W</del>	<del>27</del>	<del>2585</del>	<del>7-Sat</del>	<del>11</del>	<del>23</del>	<del>2013</del>	<del>0200</del>	<del>B</del>
<del>DRIVER OF UNIT 1 STATED SHE WAS TRAVELLING NORTH BOUND ON HENNEPIN AVE AND ON THE LEFT LANE. OT1 STA</del>	<del>27</del>	<del>2585</del>	<del>7-Sat</del>	<del>8</del>	<del>18</del>	<del>2012</del>	<del>0010</del>	<del>N</del>
<del>V1 AND V2 WERE TRAVELING SOUTH ON HENNEPIN AVE S. V1 WAS IN THE LEFT HAND LANE. V2 WAS IN THE RIGHT</del>	<del>27</del>	<del>2585</del>	<del>1-Sun</del>	<del>8</del>	<del>11</del>	<del>2013</del>	<del>1535</del>	<del>N</del>
<del>UNIT 2 NB ON CHICAGO AV S WITH A GREEN LIGHT. UNIT 1 SB MAKING A LEFT TURN TO EB 8TH ST S. UNIT 1</del>	<del>27</del>	<del>2585</del>	<del>2-Mon</del>	<del>1</del>	<del>3</del>	<del>2011</del>	<del>1720</del>	<del>C</del>
<del>UNIT 2 WAS STOPPED SOUTHBOUND ON CHICAGO AVE AT RED LIGHT NORTH OF 8TH ST S. WHEN LIGHT TURNED GRE</del>	<del>27</del>	<del>2585</del>	<del>3-Tue</del>	<del>10</del>	<del>4</del>	<del>2011</del>	<del>2126</del>	<del>C</del>
<del>VEH1 WAS EAST ON 8TH ST. VEH2 WAS SOUTH ON CHICAGO. DRIVER IN VEH1 LEFT REQUIRED INFORMATION WITH</del>	<del>27</del>	<del>2585</del>	<del>6-Fri</del>	<del>6</del>	<del>29</del>	<del>2012</del>	<del>1415</del>	<del>N</del>
	<del>27</del>	<del>2585</del>	<del>2-Mon</del>	<del>4</del>	<del>8</del>	<del>2013</del>	<del>1330</del>	<del>N</del>
<del>UNIT 1 WAS S/B ON CHICAGO AVE AND ENTERING THE INTERSECTION AT SOUTH 8TH STREET. UNIT 2 WAS E/B ON</del>	<del>27</del>	<del>2585</del>	<del>2-Mon</del>	<del>5</del>	<del>20</del>	<del>2013</del>	<del>1014</del>	<del>C</del>
<del>UNIT 2 WAS TRAVELLING NORTH ON CHICAGO AFTER CROSSING THE 8TH STREET INTERSECTION. UNIT 1 WAS TRAVELL</del>	<del>27</del>	<del>2585</del>	<del>6-Fri</del>	<del>8</del>	<del>30</del>	<del>2013</del>	<del>1247</del>	<del>N</del>
	<del>27</del>	<del>2585</del>	<del>3-Tue</del>	<del>12</del>	<del>31</del>	<del>2013</del>	<del>1912</del>	<del>C</del>

NUM_KILLED	NUM_VEH	JUNC	SL	TYPE	DIAG	LOC1	TCD	LIT	WTHR1	WTHR2	SURF	CHAR	DESGN	ACC_NUM	PERSON1		
															VTYPE	DIR	ACT
<del>0</del>	<del>2</del>	<del>4</del>	<del>30</del>	<del>2</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>4</del>	<del>2</del>	<del>2</del>	<del>5</del>	<del>1</del>	<del>5</del>	<del>123470018</del>	<del>8</del>	<del>3</del>	<del>10</del>
0	2	7	30	1	5	1	1	1	2	0	2	1	5	110320477	3	3	1
0	2	4	30	1	5	1	1	1	2	3	2	1	5	121060061	1	1	1
0	2	0	25	1	2	0	1	1	1	0	1	0	0	120370113	1	4	8
0	2	0	0	1	2	0	1	4	2	0	1	0	0	131830074	1	2	0
0	2	4	30	1	6	1	1	1	1	0	1	1	6	111710148	35	3	5
0	2	1	35	1	2	1	98	1	1	0	1	1	4	131270117	38	3	5
0	1	0	0	1	2	0	98	1	2	0	1	0	0	111150141	1	3	1
0	1	0	25	2	90	0	98	1	1	0	1	0	0	112350075	3	7	17
0	2	0	30	1	2	0	98	4	1	0	1	0	0	130230178	8	5	1
0	2	0	30	1	3	0	1	3	2	0	1	0	0	120460100	1	6	6
0	2	2	30	1	1	1	1	1	1	0	1	1	4	112700253	1	3	1
0	2	7	25	1	1	1	98	4	4	90	3	1	90	133560150	8	3	1
0	2	2	30	1	2	1	1	1	2	0	1	1	5	113500154	1	7	3
0	2	0	0	1	1	0	1	1	2	0	1	0	0	122830117	1	4	14
0	1	90	30	13	90	4	98	1	1	2	1	1	90	121220110	8	3	1
0	1	4	30	24	7	2	1	4	1	0	4	1	8	120440191	1	1	1
0	1	4	30	6	90	90	1	4	3	3	2	1	4	123100004	1	3	1
0	1	4	30	7	3	1	1	1	4	4	2	1	5	131020238	1	2	6
0	2	0	30	1	1	0	1	1	1	0	1	0	0	122300065	3	2	1
0	2	0	30	1	2	0	98	7	1	0	1	0	0	130310041	3	4	14
0	2	4	30	1	2	1	1	1	2	0	2	1	5	130290242	8	1	1
0	2	7	30	1	2	1	1	4	1	0	1	1	4	130410022	1	5	1
0	2	4	30	1	1	1	1	4	1	0	1	1	4	133280015	4	3	1
0	2	4	30	1	90	1	1	4	1	0	1	1	5	113010052	6	1	1
0	3	4	30	1	90	1	1	1	2	0	1	1	90	120360068	1	1	1
0	1	4	30	7	90	1	1	1	1	0	1	1	5	132190072	2	1	6
0	2	4	30	1	5	1	1	4	2	0	3	1	5	110370010	1	3	1
0	2	4	30	1	5	1	1	1	1	0	1	1	5	111830126	3	5	6
0	2	4	30	1	5	1	1	1	2	0	1	1	4	121490070	1	5	1
0	2	4	30	1	5	1	1	4	1	0	1	1	4	123010030	1	3	1
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▪ Countermeasure: Improve pavement friction (increase skid resistance)

CMF	CRF(%)	Quality	Crash Type	Crash Severity	Area Type	Reference	Comments
0.799	20.1	★★★★★	All	All	All	Lyon and Persaud, 2008	

▪

0.667	33.3	★★★★★	All	All	All	Lyon and Persaud, 2008	
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▪

0.819	18.1	★★★★★	All	All	All	Lyon and Persaud, 2008	
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▪

0.797	20.3	★★★★★	All	All	All	Lyon and Persaud, 2008	
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▪

1.271	- 27.1	★★★★★	All	All	All	Lyon and Persaud, 2008	
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▪

0.426	57.4	★★★★★	Wet road	All	All	Lyon and Persaud, 2008	
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▪

0.372	62.8	★★★★★	Wet road	All	All	Lyon and Persaud,	
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0.575

42.5



Rear end, Wet road

All

Lyon and Persaud, 2008

0.59

41



All

All

All

Lyon and Persaud, 2008

0.589

41.1



All

All

All

Lyon and Persaud, 2008

0.361

63.9



Wet road

All

All

Lyon and Persaud, 2008

0.304

69.6



Rear end

All

All

Lyon and Persaud, 2008

0.943

5.7



Rear end

All

All

Lyon and Persaud, 2008

0.504

49.6



Rear end

All

All

Lyon and Persaud, 2008



0.221

77.9



Rear end,Wet road

All

All

Lyon and Persaud, 2008

0.787

21.3



Angle

All

All

Lyon and Persaud, 2008

0.828

17.2



Angle

All

All

Lyon and Persaud, 2008

0.898

10.2



Angle

All

All

Lyon and Persaud, 2008

0.799

20.1



Angle,Wet road

All

All

Lyon and Persaud, 2008

0.47

53



Angle,Wet road

All

All

Lyon and Persaud, 2008

0.828

17.2



Angle,Wet road

All

All

Lyon and Persaud, 2008

Desktop Reference for Crash Reduction Factors

Intersection Crashes

Countermeasure(s)	Crash Type	Crash Severity	Area Type	Config	Control	Major Daily Traffic Volume (veh/day)		Ref	Obs	Effectiveness			Study Type
						Major	Minor			Crash Reduction Factor / Function	Std Error	Range Low	
Prohibit right-turn-on-red (cont'd)	Right-angle	All			Signal			15		30		Cross-section	
	Sideswipe	All			Signal			15		20		Cross-section	
	All turns	All	All					1		45	40 90		
Restrict parking near intersections (to off-street)	All	All						28		49	8 90		
	Ped	All						15		30			
Vary speed	All	All	Rural					6		100(1-EXP(0.019(V-55))); V=major-road speed limit (or design speed) (mph)			
	All	All	Urban					6		100(1-EXP(0.005(V-40))); V=major-road speed limit (or design speed) (mph)			
LIGHTING													
Improve lighting at intersection	Ped	Fatal						5		78	87		
	Ped	Injury						5		42	18		
	All	All			Signal			51		30			
	All	Fatal/Injury			Signal			51		17			
	Night	All			Signal			51		50			
Install lighting	All	All			No Signal			28		47			
	OPERATIONAL												
Convert STOP control (2-way) to signal control	All	All			Stop			15		28		Cross-section	
	All	Injury			Stop			15		43		Cross-section	
	Right-angle	All			Stop			15		74		Cross-section	
	All	All			Stop			15		36		Cross-section	
Convert STOP control (2-way) to signal control and install left-turn lane	All	Injury			Stop			15		53		Cross-section	
	Rear-end	All			Stop			15		8		Cross-section	
	Right-angle	All			Stop			15		74		Cross-section	

Countermeasures	Crash Type	Crash Severity	Area Type	Ref	Obs	Crash Reduction Factor / Function	Effectiveness			Study Type
							Std Error	Range Low	Range High	
<b>SIGNALIZATION COUNTERMEASURES</b>										
Add exclusive pedestrian phasing	Pedestrian	All		28		34		7	60	
Improve signal timing [to intervals specified by the ITE <i>Determining Vehicle Change Intervals: A Proposed Recommended Practice (1985)</i>	All	Fatal/Injury		49		12	9			Experimental Design (Case-Control Study)
	Pedestrian	Fatal/Injury		49		37				Experimental Design (Case-Control Study)
Install pedestrian countdown signal heads	Pedestrian	Fatal/Injury	Urban (San Francisco)	32		25				
Install pedestrian signal	All	All		15		20				
	Pedestrian	All		15		53				
	Pedestrian	All		5		0				
	All	All		15		25				
	All	All		15		15				
	Pedestrian	All		15		55				
	Pedestrian	All		15		50				
Modify signal phasing (implement a leading pedestrian interval)	Pedestrian	All		28		5				
Remove unwarranted signals (one-way street)	Pedestrian	All		46		17				Comparison Group Before-After

## Dual CRF for 8th Street Pedestrian injury Crashes

Improvements include installing pedestrian level lighting and installing countdown timers for the pedestrian signals.

CR1=Improve Lighting

CR2=Install Countdown Timers

$$CR = 1 - (1 - CR1) * (1 - CR2)$$

$$\text{Ped Crashes} = 1 - (1 - .42) * (1 - .25) = .57$$

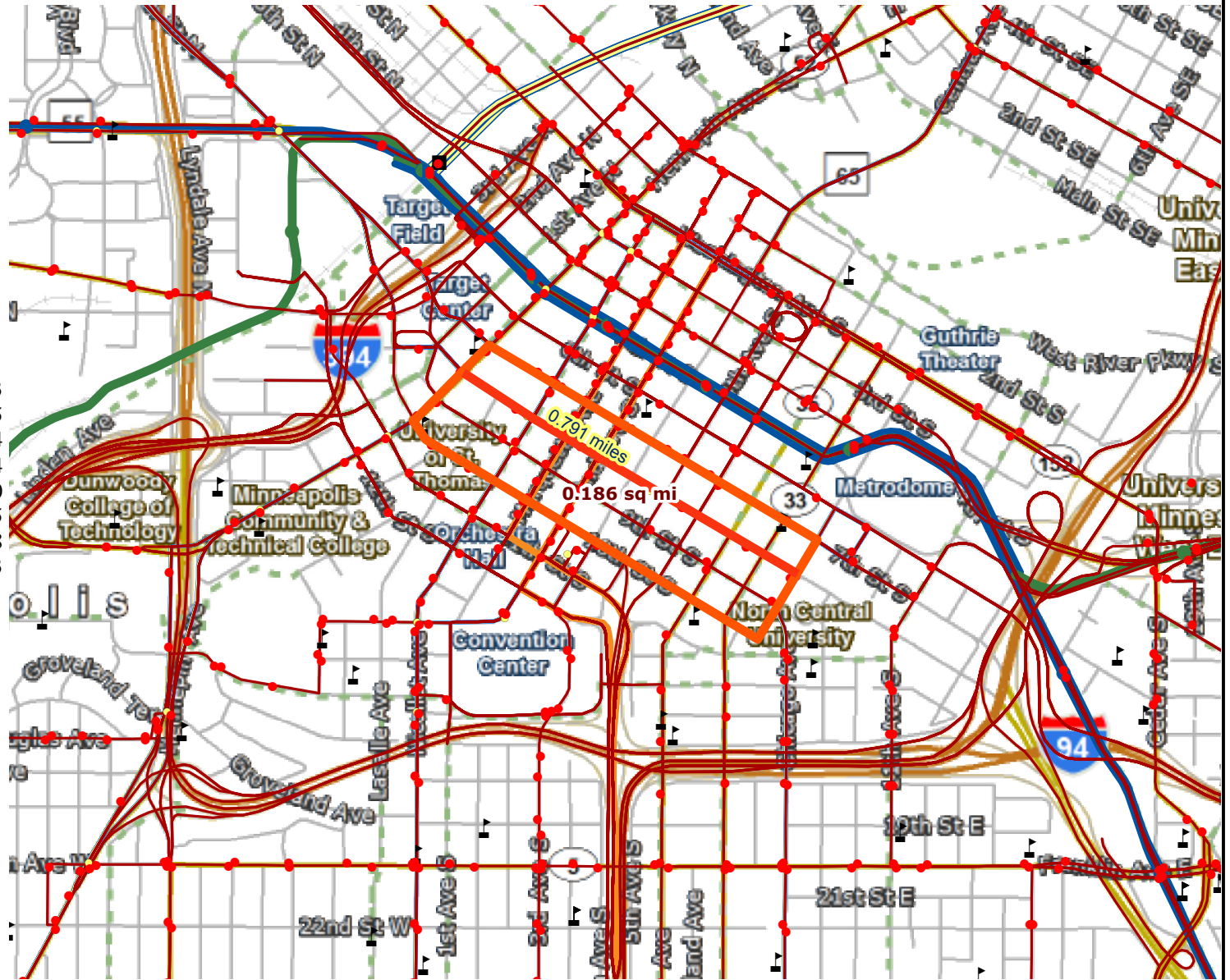
Results

Transit with a Direct Connection to project:

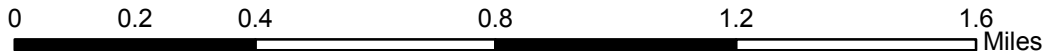
- 3 4 5 6 7 9 10 11 12 14 17
- 18 19 20 22 25 39 59 61 94 133 134
- 135 141 146 156 250 261 263 264 270 288 353
- 355 365 375 452 460 464 465 467 470 472 475
- 476 477 478 479 490 491 492 535 552 553 554
- 558 568 578 587 588 589 597 643 649 663 664
- 667 668 670 671 672 673 674 675 677 684 690
- 691 692 695 697 698 699 721 724 742 747 755
- 756 758 760 761 762 763 764 765 766 767 768
- 772 774 776 777 780 781 782 783 785 790 793
- 795 824 825 850 852 854 865

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

\*indicates Planned Alignments



Project	Light Rail, Blue / Green Line	Light Rail, Green Line Extension	Green Line	Light Rail, Blue Line Extension
Project Area	Light Rail, Blue Line	Transit Routes	Northstar Line	Light Rail, Green Line Extension
Active Stop	Light Rail, Green Line	<b>Transitway</b>	<b>Planned Alignments</b>	
School	Arterial BRT	Blue / Green Line	Arterial BRT	
Commuter Rail, Northstar Line	Light Rail, Blue Line Extension	Blue Line	BRT, Orange Line	



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

