Application

10354 - 2018 Roadway Modernization

10615 - CSAH 5 (Minnetonka Blvd) Reconstruction Project

Regional Solicitation - Roadways Including Multimodal Elements

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

Organization Information

Name:	HENNEPIN COUNTY

Jurisdictional Agency (if different):	
Organization Type:	County Government
Organization Website:	
Address:	DPT OF PUBLIC WORKS 1600 PRAIRIE DR

*	MEDINA	Minnesota	55340
	City	State/Province	Postal Code/Zip

County:	Hennepin
Phone:*	763-745-7600 Ext.
Fax:	
PeopleSoft Vendor Number	0000028004A9

Project Information

Project Name	CSAH 5 (Minnetonka Blvd) Reconstruction Project
Primary County where the Project is Located	Hennepin
Cities or Townships where the Project is Located:	St. Louis Park
Jurisdictional Agency (If Different than the Applicant):	Hennepin County

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

This project includes the reconstruction of the CSAH 5 (Minnetonka Blvd) corridor within the City of St. Louis Park. CSAH 5 (Minnetonka Blvd) is classified as an A-Minor Arterial that functions as an augmentor. Attachment 2 provides an illustration of the project location.

The project objectives include: improving safety and operations, along with facilitating vehicle, freight, transit, bicycle, and pedestrian movements through the area. Photos illustrating the roadway's current condition are included in Attachment 3. The proposed cross-section of the project (from TH 100 to France Ave) will convert a 4-lane configuration to a 3-lane roadway with a continuous center left-turn lane, bicycle accommodations, and improved pedestrian facilities outside the roadway.

Although the existing traffic volumes along CSAH 5 (Minnetonka Blvd) are relatively high for consideration of a 3-lane section, staff does not anticipate that traffic operations will be degraded to unacceptable levels based on the following characteristics:

- Limited number of signalized intersections along CSAH 5 (Minnetonka Blvd) east of TH 100

- Benefits gained with the introduction of a shared center turn lane to remove left-turning vehicles from through lanes

- Expected number of vehicles who will choose to travel on CSAH 25 (parallel east/west route) instead of CSAH 5 (Minnetonka Blvd) which was estimated at 1500 vehicles per day based on the

route location and surrounding land use

The project will include, but is not limited to, the following elements:

- Roadway improvements; such as the replacement of deteriorated curb and gutter, storm sewer structures, and pavement substructure.

- Safety improvements; such as the upgrading of traffic signal systems to include dedicated left-turn phasing and adaptive signal timing, enhancing of pedestrian crossings to increase visibility, and re-configuring of the roadway to a 3-lane to reduce left-turn and rear-end crashes.

- Pedestrian improvements; such as ADA compliant ramps and sidewalk, Accessible Pedestrian Signals (APS), durable crosswalk markings, curb extensions, and countdown timers.

- Bicycle improvements; such as a dedicated bicycle facility, bicycle pavement markings, and wayfinding signage.

- Streetscaping enhancements; such as the introduction of a boulevard, trees, and lighting. As part of the planning and design phases of the project, staff will evaluate the potential for burying overhead utilities that would be delivered as a supplemental activity to this project.

(Limit 2,800 characters; approximately 400 words)

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

CSAH 5 (Minnetonka Blvd) from TH 100 to France Ave

Project Length (Miles) 0.9

to the nearest one-tenth of a mile

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 $7,000,000.00

Match Amount $1,913,000.00

Minimum of 20% of project total

Project Total $8,913,000.00

Match Percentage 21.46%

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

Source of Match Funds Hennepin County

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:

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

Project Information-Roadways

County, City, or Lead Agency Hennepin County

Functional Class of Road A-Minor Augmentor

Road System CSAH

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

Road/Route No. 5

i.e., 53 for CSAH 53

Name of Road Minnetonka Blvd

Example; 1st ST., MAIN AVE

Zip Code where Majority of Work is Being Performed 55416

(Approximate) Begin Construction Date 04/01/2022

(Approximate) End Construction Date 11/17/2023

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

From:
(Intersection or Address)

TH 100 SB Ramps

To:
(Intersection or Address)

France Ave

DO NOT INCLUDE LEGAL DESCRIPTION

Or At

Primary Types of Work

Grading, aggregate base, bituminous base & surface, storm water, sidewalk, ADA, traffic signals, streetscaping, bicycle, and curb

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):

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.

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

A) Transportation System Stewardship (P 2.17-2.19)

The reconstruction of Minnetonka Blvd provides a new and structurally adequate roadway that accommodates 2040 forecasted traffic volumes and meets multi-modal transportation goals. The project provides a new pavement surface, curb and gutter, sidewalk, bike facility and stormwater systems.

B) Safety/Security (P 2.20-2.23)

Improvements such as ADA compliant facilities, Accessible Pedestrian Signals, high-visibility crosswalk markings, and countdown timers improve pedestrian safety and comfort. Lighting and signal upgrades will improve safety and comfort for all users. Improvements are anticipated to result in an overall crash reduction of 19%.

C) Access to Destinations (P 2.24-2.37)

This roadway section serves eight Metro Transit routes and is a direct connection to the planned West Lake St and Beltline Blvd Southwest Light Rail Transit (SWLRT) stations. Additionally, Minnetonka Blvd serves the growing business community and residential communities of St. Louis Park and Southwest Minneapolis. The east end of the project offers diverse local commercial businesses that generate regular trips.

D) Competitive Economy (P 2.38-2.41)

With 12,700 employees within 1 mile, including nearly 1,300 manufacturing and distribution employees, this route is essential to the regional economy. Commuters rely heavily on Minnetonka

Blvd since it provides a direct connection to the West Lake/Uptown areas and offers full access to TH 100.

E) Healthy Environment (P 2.42-2.45)

The bike/pedestrian enhancements along the corridor provide first/last mile connections. These features aim to provide more choices in modes of transportation, including use of the planned SWLRT stations that are within biking and walking distance. With the current roadway drainage deficiencies, modernizing the stormwater infrastructure will minimize erosion and sediment infiltration.

F) Leveraging Transportation Investments to Guide Land Use (P 2.46-2.55)

The multi-modal enhancements made through this project optimize existing and planned infrastructure. Currently, two sites are experiencing redevelopment in the area. The Parkway 25 Apartments are currently under construction near Glenhurst Ave, while a hotel is currently proposed at the Lake St/Excelsior Blvd intersection.

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.

2018-2022 Hennepin County Transportation CIP (Attachment 6)

List the applicable documents and pages:

Hennepin County Board Resolution - 2018 Regional Solicitation (Attachment 7)

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	05/02/2011 Date process started	04/06/2020 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

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. Yes

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. Yes

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 MnDOTs 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. Yes

Requirements - Roadways Including Multimodal Elements

Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	$275,000.00
Removals (approx. 5% of total cost)	$275,000.00
Roadway (grading, borrow, etc.)	$600,000.00
Roadway (aggregates and paving)	$980,000.00
Subgrade Correction (muck)	$95,000.00
Storm Sewer	$1,060,000.00
Ponds	$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	$85,000.00
Traffic Control	$280,000.00
Striping	$100,000.00
Signing	$45,000.00
Lighting	$0.00
Turf - Erosion & Landscaping	$360,000.00
Bridge	$0.00
Retaining Walls	$140,000.00
Noise Wall (not calculated in cost effectiveness measure)	$0.00
Traffic Signals	$840,000.00
Wetland Mitigation	$0.00
Other Natural and Cultural Resource Protection	$0.00
RR Crossing	$0.00
Roadway Contingencies	$1,530,000.00
Other Roadway Elements	$0.00
Totals	**$6,665,000.00**

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Path/Trail Construction	$20,000.00
Sidewalk Construction	$153,000.00
On-Street Bicycle Facility Construction	$380,000.00
Right-of-Way	$0.00
Pedestrian Curb Ramps (ADA)	$360,000.00

Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	$75,000.00
Pedestrian-scale Lighting	$440,000.00
Streetscaping	$300,000.00
Wayfinding	$0.00
Bicycle and Pedestrian Contingencies	$520,000.00
Other Bicycle and Pedestrian Elements	$0.00
Totals	**$2,248,000.00**

Specific Transit and TDM Elements

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

Transit Operating Costs

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

Totals

Total Cost	$0.00
Construction Cost Total	$0.00
Transit Operating Cost Total	$0.00

Congestion on adjacent Parallel Routes:

Adjacent Parallel Corridor	CSAH 25
Adjacent Parallel Corridor Start and End Points:	
Start Point:	TH 100
End Point:	France Ave
Free-Flow Travel Speed:	37
The Free-Flow Travel Speed is black number.	
Peak Hour Travel Speed:	26
The Peak-Hour Travel Speed is red number.	
Percentage Decrease in Travel Speed in Peak Hour Compared to Free-Flow (calculation):	29.73%
Upload the "Level of Congestion" map:	1528128364796_2018 RS Map 01 - CSAH 5 (Minnetonka Blvd) Reconstruction Project - Level of Congestion.pdf

Principal Arterial Intersection Conversion Study:

Proposed at-grade project that reduces delay at a High Priority Intersection:	
(65 Points)	
Proposed at-grade project that reduces delay at a Medium Priority Intersection:	
(55 Points)	
Proposed at-grade project that reduces delay at a Low Priority Intersection:	
(45 Points)	
Not listed as a priority in the study:	Yes
(0 Points)	

Congestion Management and Safety Plan IV:

Proposed at-grade project that reduces delay at a CMSP opportunity area:	
(65 Points)	
Not listed as a CMSP priority location:	Yes
(0 Points)	

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

Existing Employment within 1 Mile:	12733
Existing Manufacturing/Distribution-Related Employment within 1 Mile:	1299
Existing Post-Secondary Students within 1 Mile:	82

Upload Map	1528130989843_2018 RS Map 02 - CSAH 5 (Minnetonka Blvd) Reconstruction Project - Regional Economy.pdf

Please upload attachment in PDF form.

Measure C: Current Heavy Commercial Traffic

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

Along Tier 1:	
Along Tier 2:	
Along Tier 3:	
The project provides a direct and immediate connection (i.e., intersects) with either a Tier 1, Tier 2, or Tier 3 corridor:	Yes
None of the tiers:	

Measure A: Current Daily Person Throughput

Location	East of TH 100
Current AADT Volume	17900
Existing Transit Routes on the Project	17, 587, 588, 589, 600, 664, 667, 668

For New Roadways only, list transit routes that will likely be diverted to the new proposed roadway (if applicable).

Upload Transit Connections Map	1528135670374_2018 RS Map 04 - CSAH 5 (Minnetonka Blvd) Reconstruction Project - Transit Connections.pdf

Please upload attachment in PDF form.

Response: Current Daily Person Throughput

Average Annual Daily Transit Ridership	4931.0
Current Daily Person Throughput	28201.0

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	18700
OR	
Identify the approved county or city travel demand model to determine forecast (2040) ADT volume	
Forecast (2040) ADT volume	

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):

(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: Yes

(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.

Response:

The CSAH 5 (Minnetonka Blvd) Reconstruction Project seeks to engage and gather input from the community through an inclusive and accessible process. This dialogue will deliver a successful project with a community-focused solution.

The engagement process will continue off the successes experienced from Hennepin County's 2018 Minnetonka Boulevard Bikeway Project (for the segment between TH 169 and TH 100) and from the City of St. Louis Park's Connect the Park Plan. County and city staff encouraged an inclusive community process that actively listened and responded to residents. A summary of these engagement efforts are included in Attachments 9 and 10, respectively.

Hennepin County will partner with local residents, employers, business associations, neighborhood associations (specifically Fern Hill and Triangle), property and business owners, transit riders, local students and youth, City of St. Louis Park, Metro Transit, and others.

Given the anticipated impacts to local residents and businesses along the Minnetonka Blvd corridor, county staff will rely heavily on city staff to ensure the character and use of the roadway are not overlooked.

(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.

The CSAH 5 (Minnetonka Blvd) Reconstruction Project is located in a census tract that has above the regional average for population in poverty or population of color.

This project will enhance pedestrian facilities through the introduction of a boulevard and addition of streetscaping elements to benefit users who rely on walking for transportation. Utility poles are currently located within the sidewalk on both sides of the roadway on the east end of the project. The relocation of these poles, along with the upgrading of pedestrian ramps to current ADA standards, is key to adequately serve users with limited mobility. Furthermore, enhanced pedestrian crossings will be a theme in this project to ensure that Minnetonka Blvd is not viewed as a barrier for individuals desiring to cross the county roadway.

Response:

The introduction of bicycle accommodations offer choices in transportation to users of Minnetonka Blvd. This project will provide an east/west connection that will provide a continuous facility between Minnetonka to Minneapolis when completed.

The conversion of the 4-lane roadway to a 3-lane configuration will offer a significant safety benefit (by reducing rear-end and left-turn conflicts) and improve service to the various local neighborhood streets that intersect Minnetonka Blvd. This new roadway environment eliminates the potential for a dual-threat situation and will be more inviting for pedestrians desiring to cross.

The St. Louis Park City Hall and Police Station are located within the project area. Improvements to

Minnetonka Blvd are critical to ensure that city services, especially those involving emergencies, maintain acceptable response times.

Minnetonka Blvd currently serves eight transit routes that include stops at various locations along the corridor. Pedestrian and bicycle improvements will ensure that users can access these stops, while roadway improvements will provide safe and reliable transit services. County staff will engage Metro Transit early on in the design process to identify potential bus stop locations to modify based on their knowledge of current transit usage and operations.

There are a number of commercial destinations located on the east end of the project. On-street parking will not only be preserved but also enhanced (through the introduction of curb extensions to better define parking areas) as part of the project.

When complete, this project will achieve a safe and inviting corridor for all ages, physical abilities, and mode choices. The project greatly enhances connectivity, safety, and accessibility by providing adequate non-motorized facilities that encourages choices in transportation.

(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

Response:

The CSAH 5 (Minnetonka Blvd) Reconstruction Project will cause temporary construction disturbances such as: construction noise, dust, and disruption to utilities. However, Hennepin County will follow the allowed working hours as required by the St. Louis Park Permits Office. Additionally, staff will work with St. Louis Park staff to assign logical detours, discourage cut-through traffic on local neighborhood streets, and manage driveway access for local residents and businesses. The relationship formed in the planning and design stages will allow for effective communication during construction activities to minimize response times whenever concerns are raised.

This project is anticipated to have minimal to moderate right of way impacts to private properties along the north side of Minnetonka Blvd corridor. City staff has already been notified of this and has agreed to share this with members of City Council. Permanent easements and acquisitions will not occur until consent is gained from the city and a formal layout has been approved. Additionally, minor disturbances to private landscaping, trees, driveways, and alleyways are expected to occur during construction activities. Property owners will be informed of these impacts prior to construction and will be recompensed for any significant alternations (such as damaging a private retaining wall).

Additionally, the 4-lane configuration will be modified to a 3-lane configuration that includes a shared left-turn lane along with bicycle accommodations. This revised configuration eliminates the ability for vehicles to bypass a slow moving vehicle (such as a garbage truck). However, the new striping configuration will provide a safer roadway in comparison to the existing 4-

lane undivided configuration (which generally experience the highest crash rates among all roadway configurations). The potential for rear-end and left-turn related crashes will be decreased, and the challenge for pedestrians desiring to cross the roadway is greatly reduced. Furthermore, as reported in the Congestion Reduction Criteria, the proposed 3-lane configuration does not result in traffic operations decreasing to unacceptable levels in terms of vehicle delay and queue lengths.

(Limit 2,800 characters; approximately 400 words)

Upload Map

1528134083593_2018 RS Map 03 - CSAH 5 (Minnetonka Blvd) Reconstruction Project - Socio Economic Conditions.pdf

Measure B: Affordable Housing

City	Segment Length (For stand-alone projects, enter population from Regional Economy map) within each City/Township	Segment Length/Total Project Length	Score	Housing Score Multiplied by Segment percent
St. Louis Park	0.9	1.0	96.0	96.0

Total Project Length

Total Project Length (as entered in the "Project Information" form) 0.9

Affordable Housing Scoring

Total Project Length (Miles) or Population 0.9

Total Housing Score 96.0

Affordable Housing Scoring

Measure A: Year of Roadway Construction

Year of Original Roadway Construction or Most Recent Reconstruction	Segment Length	Calculation	Calculation 2
2015	0.08	161.2	179.111
1976	0.37	731.12	812.356
1952	0.45	878.4	976.0
	1	**1771**	**1967**

Total Project Length

Total Project Length (as entered in "Project Information" form) 0.9

Average Construction Year

Weighted Year 1967

Total Segment Length (Miles)

Total Segment Length 0.9

Measure B: Geometric, Structural, or Infrastructure Improvements

Improved roadway to better accommodate freight movements: Yes

This project will better facilitate heavy commercial traffic through the introduction of a shared left-turn lane along the corridor that enhances delivery services in a dense residential area. The introduction of exclusive left-turn phasing at Ottawa Ave will better accommodate commercial vehicles who may have challenges finding available gaps in traffic.

Response:

Driveway aprons will be designed to adequately serve local businesses while avoiding disruptions to the travelling public. Curb radii will be designed to accommodate either truck turns (at an intersection with an existing truck route) or pedestrian crossings (near a commercial node) to leverage opportunities to benefit all modes.

(Limit 700 characters; approximately 100 words)

Improved clear zones or sight lines: Yes

The roadway network near Minnetonka Blvd follows a grid system that includes straight streets, therefore, sight distance is generally adequate. The presence of overhead utilities currently restrict sight lines at intersections, however, the burial or relocation of these utilities is being considered as a supplemental activity. The proposed locations of fencing, signs, and landscaping features will not obstruct sight lines. The 3-lane section with a shared left-turn lane will improve sight lines for turning vehicles and crossing pedestrians.

Response:

Parking will remain on the east end of the project, however, these parking areas will be protected with curb extensions to avoid impacting sight lines.

(Limit 700 characters; approximately 100 words)

Improved roadway geometrics: Yes

The 4-lane environment will be modified to a 3-lane configuration to improve access and safety along the corridor. Significant revisions will occur at Ottawa Ave that include dedicated turn lanes and improved pedestrian waiting areas.

A bituminous median exists on the east of the project that will be significantly upgraded to better separate opposing vehicles, manage local access, and improve pedestrian crossings.

Response:

Minnetonka Blvd has experienced numerous overlays that have extended over the gutter pan; therefore, a full reconstruction is necessary to re-establish the roadway environment, manage drainage needs, and define the roadway extents.

(Limit 700 characters; approximately 100 words)

Access management enhancements: Yes

Minnetonka Blvd includes residential areas, local businesses, and the St. Louis Park Police Department within the project area. The 3-lane conversion will better accommodate vehicle turning movements along the corridor, reducing the number of rear-end and left-turn conflicts. An opportunity exists on the east end of the project to upgrade the raised median and restrict access wherever warranted.

Response:

The introduction of a bicycle facility and implementation of sidewalk improvements will provide better accommodations for non-motorized users along the corridor. This is key in offering residents new ways to access destinations in lieu of restricted vehicle access.

(Limit 700 characters; approximately 100 words)

Vertical/horizontal alignment improvements: Yes

Response:

The east end of the project includes the unique divergence of the Lake Street alignment that separates into CSAH 25 and CSAH 5 (Minnetonka Blvd). The current number of through lanes provided for westbound vehicles increase from two lanes at France Ave to four lanes near Glenhurst Ave, causing driver confusion and encouraging poor behavior. This project presents an opportunity to provide improved lane definition and improve wayfinding.

This project will allow for adequate lane transition lengths and vehicle lane alignments to ensure safety and offer consistent roadway design to promote driver expectation.

(Limit 700 characters; approximately 100 words)

Improved stormwater mitigation:

Yes

Response:

Hennepin County Environment and Energy staff will be involved during the design phase of the project to investigate the feasibility of incorporating various strategies and project elements to minimize storm water runoff. Trees were planted on Minnetonka Blvd (along the section west of TH 100) that were provided from the Hennepin County Gravel Bed Nursery and Planting Program. Similar trees may be utilized to minimize costs and promote canopy diversity.

Minnetonka Blvd currently lacks storm water structures as the roadway drains towards the local street system. Staff will work with the city to ensure that the local storm water system is sufficient to continue this water collection strategy.

(Limit 700 characters; approximately 100 words)

Signals/lighting upgrades:

Yes

The project will replace and/or upgrade existing signal systems by including the following improvements (but not limited to): exclusive left-turn phasing, signal communications, Pan/Tilt/Zoom cameras, and other ITS components. Ottawa Ave will experience significant upgrades as the existing system is outdated.

Response:

Pedestrian crossing locations will be evaluated during the design process to identify locations to enhance (via improvements such as medians, crossing beacons, and curb extensions) to provide safe and comfortable crossings.

The existing lighting is outdated and offers poor illumination. The new lighting will offer benefit to all users and ensure high comfort levels during nighttime.

(Limit 700 characters; approximately 100 words)

Other Improvements

Yes

Staff has identified the segment between Lynn Ave to France Ave as one that warrants significant improvements. The segment includes a modest (4' wide) raised bituminous median that provides openings at major intersections. A new roadway design will be incorporated to balance the needs of all modes.

Response:

Additionally, the settlement of the existing curb has reduced the separation provided between the sidewalk and roadway. The proposed pedestrian environment will offer a separated area to encourage walking along the corridor.

(Limit 700 characters; approximately 100 words)

Measure A: Congestion Reduction/Air Quality

Total Peak Hour Delay Per Vehicle Without The Project (Seconds/Vehicle)	Total Peak Hour Delay Per Vehicle With The Project (Seconds/Vehicle)	Total Peak Hour Delay Per Vehicle Reduced by Project (Seconds/Vehicle)	Volume (Vehicles per hour)	Total Peak Hour Delay Reduced by the Project:	EXPLANATION of methodology used to calculate railroad crossing delay, if applicable.	Synchro or HCM Reports
8.0	9.0	-1	1126	-1126	At Inglewood Ave	1531065744795_CSAH 005 - CP 1681 - Inglewood.pdf

Vehicle Delay Reduced

Total Peak Hour Delay Reduced -1126

Measure B:Roadway projects that do not include new roadway segments or railroad grade-separation elements

Total (CO, NOX, and VOC) Peak Hour Emissions without the Project (Kilograms):	Total (CO, NOX, and VOC) Peak Hour Emissions with the Project (Kilograms):	Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):
1.85	1.68	0.17
2	**2**	**0**

Total

Total Emissions Reduced: 0.17

Upload Synchro Report 1530636780998_CSAH 005 - CP 1681 - Inglewood.pdf

Please upload attachment in PDF form. (Save Form, then click 'Edit' in top right to upload file.)

Measure B: Roadway projects that are constructing new roadway segments, but do not include railroad grade-separation elements (for Roadway Expansion applications only):

Total (CO, NOX, and VOC) Peak Hour Emissions without the Project (Kilograms):	Total (CO, NOX, and VOC) Peak Hour Emissions with the Project (Kilograms):	Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):

0	**0**	**0**

Total Parallel Roadway

Emissions Reduced on Parallel Roadways	0

Upload Synchro Report

Please upload attachment in PDF form. (Save Form, then click 'Edit' in top right to upload file.)

New Roadway Portion:

Cruise speed in miles per hour with the project:	0
Vehicle miles traveled with the project:	0
Total delay in hours with the project:	0
Total stops in vehicles per hour with the project:	0
Fuel consumption in gallons:	0
Total (CO, NOX, and VOC) Peak Hour Emissions Reduced or Produced on New Roadway (Kilograms):	0
EXPLANATION of methodology and assumptions used:(Limit 1,400 characters; approximately 200 words)	
Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):	0.0

Measure B:Roadway projects that include railroad grade-separation elements

Cruise speed in miles per hour without the project:	0
Vehicle miles traveled without the project:	0
Total delay in hours without the project:	0
Total stops in vehicles per hour without the project:	0
Cruise speed in miles per hour with the project:	0
Vehicle miles traveled with the project:	0
Total delay in hours with the project:	0
Total stops in vehicles per hour with the project:	0
Fuel consumption in gallons (F1)	0
Fuel consumption in gallons (F2)	0
Fuel consumption in gallons (F3)	0
Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):	0
EXPLANATION of methodology and assumptions used:(Limit 1,400 characters; approximately 200 words)	

Measure A: Roadway Projects that do not Include Railroad Grade-Separation Elements

Crash Modification Factor Used:

(Limit 700 Characters; approximately 100 words)

The following are CMFs accessed from the CMF Clearinghouse database (Attachment 11).

XX - Improvement (CMF ID, % reduction)

01) Convert to 3-lane roadway: All (2841, 47%)

02) Resurface pavement: All Crashes (9298, 10%)

03) Bike lanes: Bike (1719, 35%)

04) Provide two-way LT lane along CSAH 5: LT crashes on CSAH 5 (3017, 34%)

05) Reduce cross section from four-lane to three-lane with LT lane: RA crashes (879, 37%)

06) Improve street lighting illuminance uniformity - Nighttime Crashes (8797, 2%)

07) LT lanes on CSAH 5/Inglewood Ave: Crashes on CSAH 5/Inglewood Ave (7998, 12%)

08) FYA prot/perm phasing: LT crashes on CSAH 5 (7684, 40%)

Rationale for Crash Modification Selected:

The Benefit/Cost Analysis evaluated the project corridor in six separate sections (comprised of major intersections and segments) in an effort to target crash themes. Up to two (of the eight selected) CMFs were applied to each crash based on the reported crash type along with the anticipated benefit provided by each safety countermeasure. A maximum of three CMFs were applied to each individual segment or intersection since the project corridor experiences diverse crash types (vehicle, bicycle and pedestrian related).

The expected service life for each improvement ranged from 10 years to 20 years (primarily 20 years), therefore, staff assumed an average value to enter into the Benefit/Cost Worksheets. If a service life value was not stated within the guidelines of the 2018 Highway Safety Improvement Program Criteria, then staff identified an expected service life value based on information provided in the 2015 MnDOT Traffic Engineering Manual.

The overall average crash reduction expected from the project is 19% (Based on a 81% crash modification factor). Approximately 19% (13) of the total number of reported crashes from the years 2013 to 2015 (66) will be reduced through the implementation of various safety countermeasures as part of this project. A detailed listing of the crashes included in the Benefit/Cost Analysis is provided in Attachment 12.

(Limit 1400 Characters; approximately 200 words)

Project Benefit ($) from B/C Ratio

$4,596,204.00

Worksheet Attachment

Please upload attachment in PDF form.

1531331331718_CSAH 5 (Minnetonka Blvd) Reconstruction Project - BC Analysis Worksheets.pdf

Roadway projects that include railroad grade-separation elements:

Current AADT volume:	0
Average daily trains:	0
Crash Risk Exposure eliminated:	0

Measure A: Multimodal Elements and Existing Connections

This project will transform the corridor into one that benefits all users by reallocating space within the existing cross section.

All Users

The project will provide provide traffic calming benefits through the conversion of the 4-lane undivided configuration to a 3-lane configuration that offers more space for other modes along the corridor. Revisions to the existing raised median along the east side of the project will present an opportunity to increase pedestrian crossing comfort and better separate opposing vehicles.

Pedestrian Improvements

Response:

Staff identified various defects and obstructions within the sidewalk as part of its ADA self-evaluation that was conducted in 2014/2015. A screen capture of an obstruction along Minnetonka Blvd is included in Attachment 13 that may be found on the county's ADA website. Sidewalks, pedestrian ramps, and driveways will meet current ADA standards to ensure accessibility for all. Additionally, APS will be installed at signalized intersections to assist users with visual impairments.

A boulevard will be provided whenever feasible to provide physical separation between pedestrians and vehicles. This improvement will yield a safety and comfort benefit to pedestrians. Pedestrian crossing activity will be evaluated as part of the planning and design processes to identify locations to provide crossing enhancements such as curb extensions, medians, and/or crossing beacons. These treatments will be effective in providing high

yielding rates and pedestrian visibility.

Bicycle Improvements

Bicycle accommodations will be introduced with this project as recommended by the 2040 Hennepin County Bicycle Transportation Plan (Attachment 14) and the Draft 2040 St. Louis Park Comprehensive Plan (Attachment 15). These facilities will extend the existing east/west route along Minnetonka Blvd to Minneapolis and provide an indirect connection to the Cedar Lake Regional Trail (Tier 1 alignment in the RBTN). Staff will evaluate the potential to implement the bicycle facilities as part of an extended concrete gutter pan to provide a visual contrast between the bikeway (gray) and the roadway surface (black). This method has proved effective in similar applications throughout Hennepin County.

Transit Improvements

Enhanced pedestrian and bicycle facilities will provide safe, accessible, and direct walking and biking routes to existing transit services. These non-motorized connections are especially critical in anticipation for the planned Southwest Light Rail Transit (SWLRT) service that includes two stations (West Lake and Beltline) within walking/biking distance of this project. Additionally, pedestrian crossing improvements will be key in ensuring riders feel comfortable walking to/from transit stops.

(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. Yes

50%

Attach Layout 1531335450437_Attachment 05 - Proposed Concept.pdf

Please upload attachment in PDF form.

Layout has not been started Yes

0%

Anticipated date or date of completion 06/01/2020

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 Yes

100%

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

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

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 Yes

25%

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

0%

Anticipated date or date of acquisition 12/31/2021

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

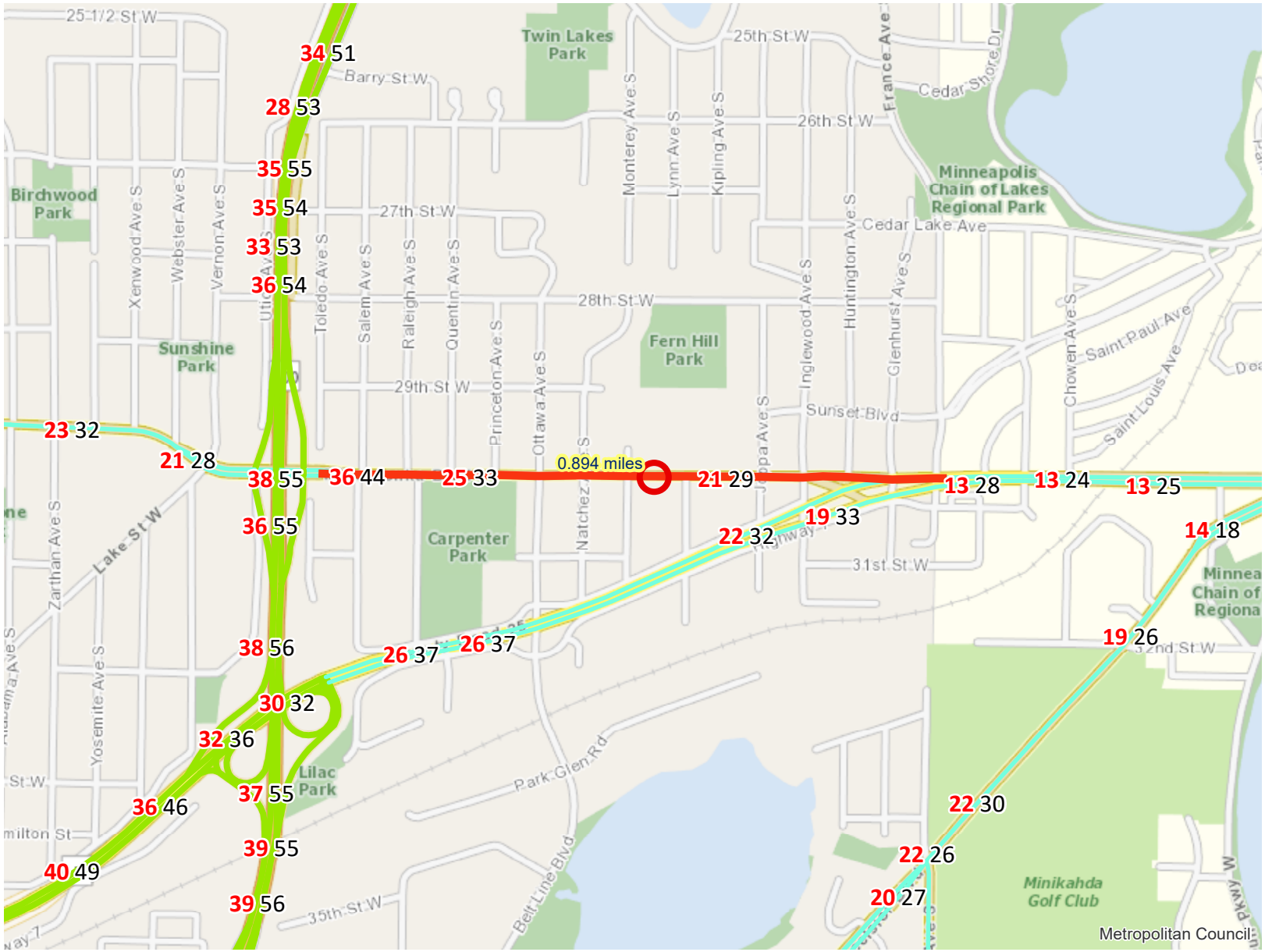
Total Project Cost (entered in Project Cost Form):	$8,913,000.00
Enter Amount of the Noise Walls:	$0.00
Total Project Cost subtract the amount of the noise walls:	$8,913,000.00
Points Awarded in Previous Criteria	
Cost Effectiveness	$0.00

Other Attachments

File Name	Description	File Size
Attachment 00 - List of Attachments.pdf	List of Attachments	47 KB
Attachment 01 - Project Narrative.pdf	Project Narrative	719 KB
Attachment 02 - Project Location Map.pdf	Project Location Map	231 KB
Attachment 03 - Existing Roadway Deficiencies.pdf	Existing Roadway Deficiencies	791 KB
Attachment 04 - Proposed Typical Section.pdf	Proposed Typical Section	777 KB
Attachment 05 - Proposed Concept.pdf	Proposed Concept	1.6 MB
Attachment 06 - Hennepin County 2018-2022 Transportation Capital Improvement Program.pdf	Hennepin County 2018-2022 Transportation CIP	709 KB
Attachment 07 - Hennepin County Board Resolution - 2018 Regional Solicitation.pdf	Hennepin County Board Resolution	1.2 MB
Attachment 08 - MnDOT 50 Series Map.pdf	MnDOT 50 Series Map	2.0 MB
Attachment 09 - 2018 Minnetonka Blvd Bikeway Project.pdf	2018 Minnetonka Blvd Bikeway Project	1.2 MB
Attachment 10 - St. Louis Park - Connect the Park Plan.pdf	St. Louis Park Connect the Park Plan	737 KB
Attachment 11 - Crash Modification Factors.pdf	Crash Modification Factors	1.3 MB
Attachment 12 - Crash Detail Listing (2013-2015).pdf	Crash Detail Listing	705 KB
Attachment 13 - Hennepin County ADA Self-Evaluation.pdf	Hennepin County ADA Self Evaluation	681 KB
Attachment 14 - 2040 Hennepin County Bicycle Transportation Plan.pdf	2040 Hennepin County Bicycle Transportation Plan	1.3 MB
Attachment 15 - Draft 2040 St Louis Park Comphrensive Plan.pdf	Draft 2040 St. Louis Park Comprehensive Plan	1.9 MB
Attachment 16 - City of St. Louis Park Support Letter.pdf	City of St. Louis Park Support Letter	666 KB

Level of Congestion

Roadway Reconstruction/Modernization Project: CSAH 5 (Minnetonka Blvd) Reconstruction Project | Map ID: 1527856373637



Project Points — Principal Arterials — Principal Arterials Planned

Project — A Minor Arterials — A Minor Arterials Planned

0 0.125 0.25 0.5 0.75 1 Miles

Created: 6/1/2018
LandscapeRSA1

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

METROPOLITAN COUNCIL

Regional Economy

Roadway Reconstruction/Modernization Project: CSAH 5 (Minnetonka Blvd) Reconstruction Project | Map ID: 152785

Results

WITHIN ONE MI of project:
Postsecondary Students: 82

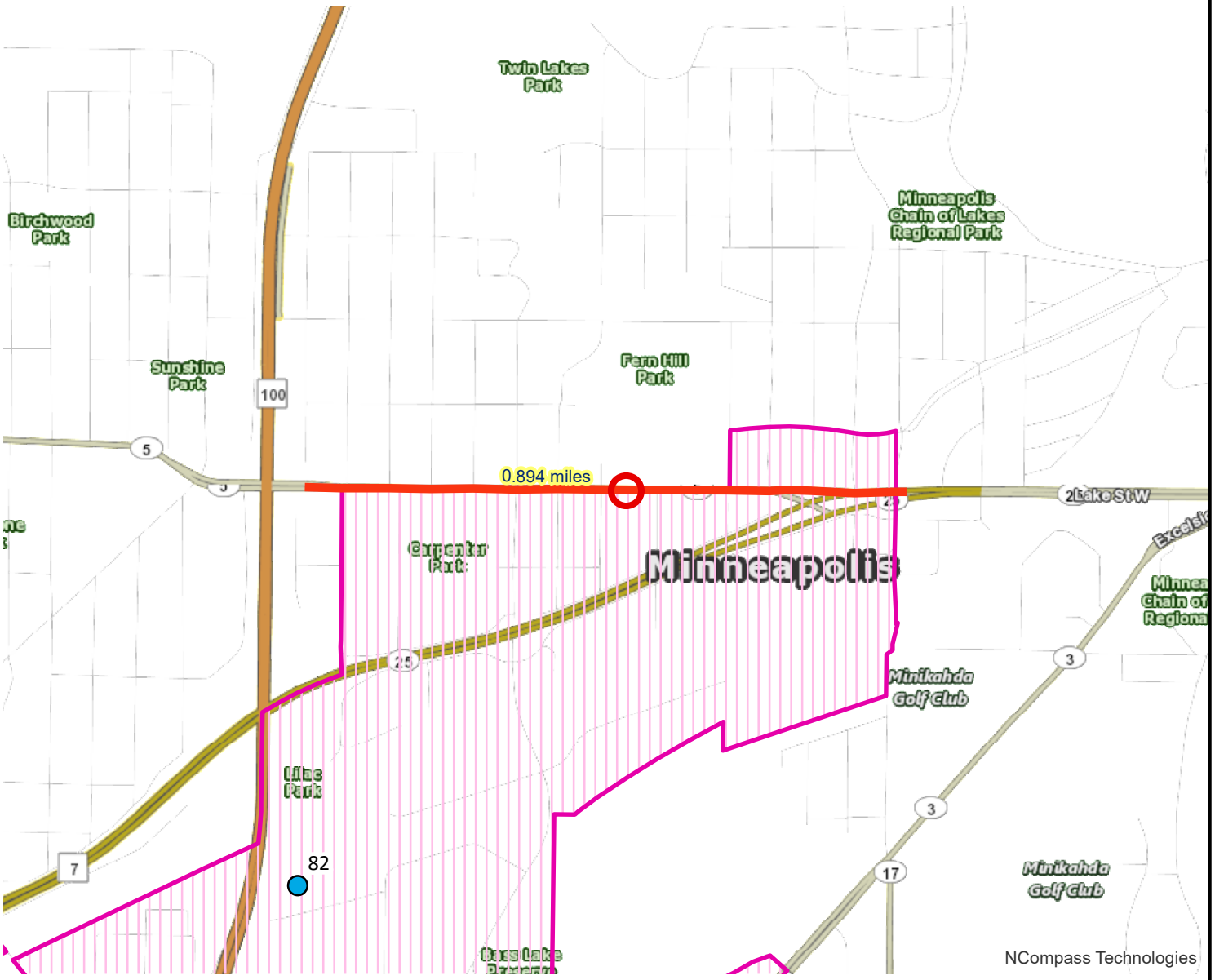
Totals by City:

Edina
Population: 3211
Employment: 536
Mfg and Dist Employment: 45

Golden Valley
Population: 1109
Employment: 97
Mfg and Dist Employment: 8

Minneapolis
Population: 5758
Employment: 2640
Mfg and Dist Employment: 68

St. Louis Park
Population: 14118
Employment: 9460
Mfg and Dist Employment: 1178



Project Points
Postsecondary Education Centers
Job Concentration Centers
Project
Manfacturing/Distribution Centers

0 0.125 0.25 0.5 0.75 1 Miles

Created: 6/1/2018
LandscapeRSA5

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

METROPOLITAN COUNCIL

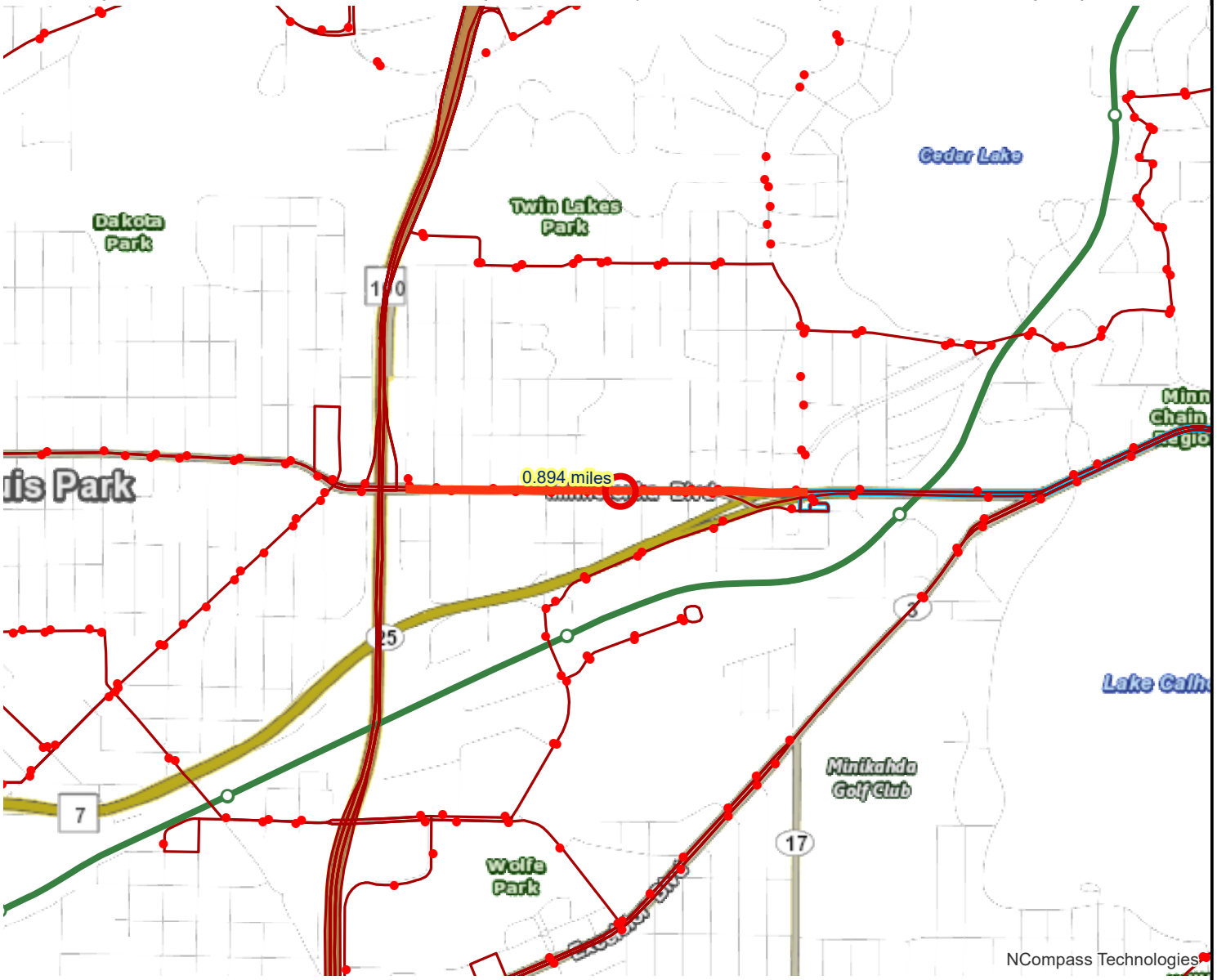
Transit Connections

Roadway Reconstruction/Modernization Project: CSAH 5 (Minnetonka Blvd) Reconstruction Project | Map ID: 152785

Results

Transit with a Direct Connection to project:
17 587 588 589 600 664 667 668
*Hennepin
*Lake

**indicates Planned Alignments*



Project Points
Project
Active Stop

Planned Transitway Stations
Green Line Extension
Transit Routes

Planned Transitway Alignments
Green Line Extension
Arterial BRT

0 0.2 0.4 0.8 1.2 1.6 Miles

Created: 6/1/2018
LandscapeRSA3

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

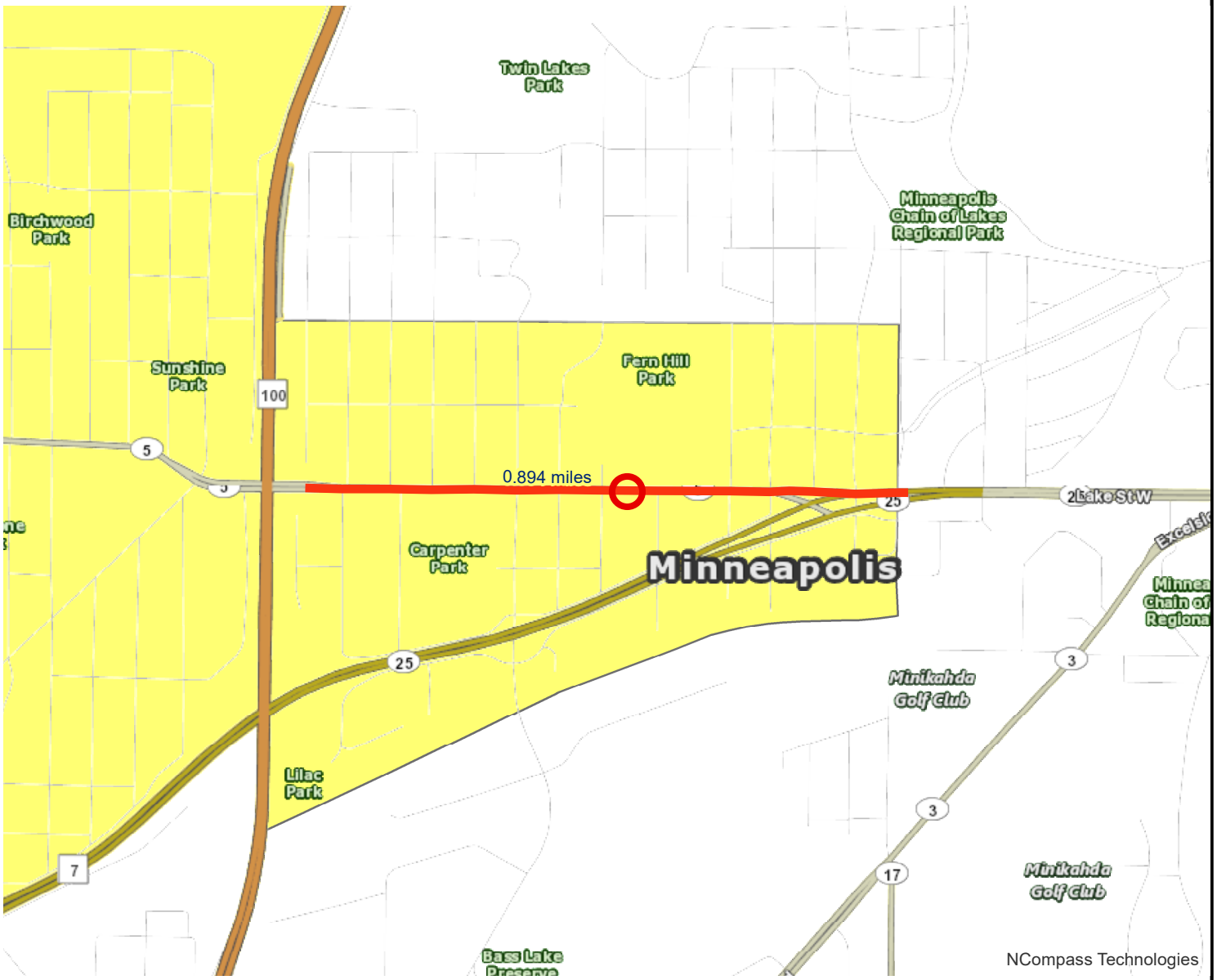
METROPOLITAN COUNCIL

Socio-Economic Conditions

Roadway Reconstruction/Modernization Project: CSAH 5 (Minnetonka Blvd) Reconstruction Project | Map ID: 1527856373637

Results

Project census tracts are above the regional average for population in poverty or population of color:
(0 to 18 Points)



Project Points

Project

Area of Concentrated Povertry > 50% residents of color

Area of Concentrated Poverty

Above reg'l avg conc of race/poverty

0 0.125 0.25 0.5 0.75 1 Miles

Created: 6/1/2018
LandscapeRSA2

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

METROPOLITAN COUNCIL

Existing Conditions

Minnetonka Blvd

2017 PM - Existing

CSAH 5 & Inglewood Rd

Direction	All
Future Volume (vph)	1277
Total Delay / Veh (s/v)	8
CO Emissions (kg)	1.30
NOx Emissions (kg)	0.25
VOC Emissions (kg)	0.30

Proposed Conditions

2017 PM - 3 Lane

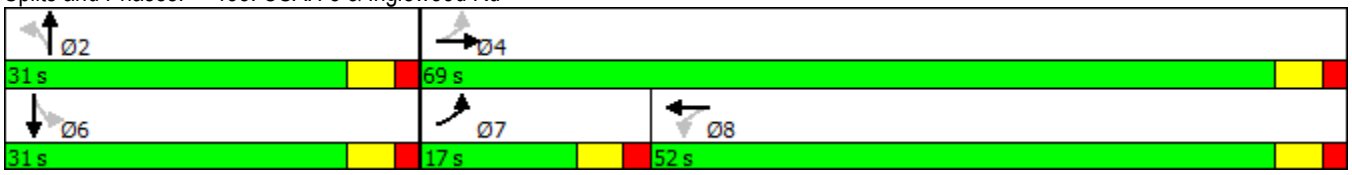
CSAH 5 & Inglewood Rd

Direction	All
Future Volume (vph)	1126
Total Delay / Veh (s/v)	9
CO Emissions (kg)	1.18
NOx Emissions (kg)	0.23
VOC Emissions (kg)	0.27

Phase Number	2	4	6	7	8
Movement	NBTL	EBTL	SBTL	EBL	WBTL
Lead/Lag				Lead	Lag
Lead-Lag Optimize				Yes	Yes
Recall Mode	None	None	None	None	None
Maximum Split (s)	31	69	31	17	52
Maximum Split (%)	31.0%	69.0%	31.0%	17.0%	52.0%
Minimum Split (s)	23.5	23.5	23.5	13	23.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2	2	2	2	2
Minimum Initial (s)	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)		7	7		
Flash Dont Walk (s)		11	11		
Dual Entry	Yes	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	31	0	31	48
End Time (s)	31	0	31	48	0
Yield/Force Off (s)	25.5	94.5	25.5	42.5	94.5
Yield/Force Off 170(s)	25.5	83.5	14.5	42.5	94.5
Local Start Time (s)	0	31	0	31	48
Local Yield (s)	25.5	94.5	25.5	42.5	94.5
Local Yield 170(s)	25.5	83.5	14.5	42.5	94.5

Intersection Summary	
Cycle Length	100
Control Type	Actuated-Uncoordinated
Natural Cycle	60

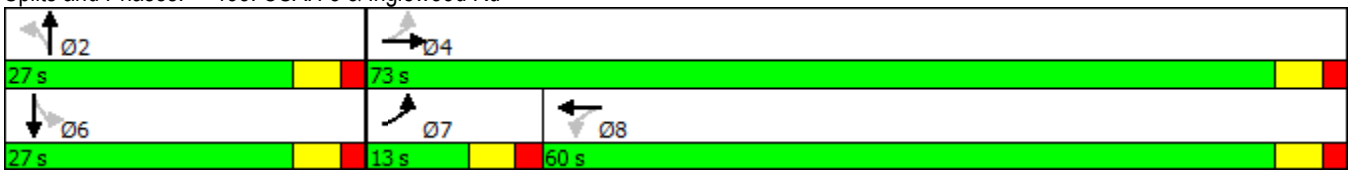
Splits and Phases: 438: CSAH 5 & Inglewood Rd



Phase Number	2	4	6	7	8
Movement	NBTL	EBTL	SBTL	EBL	WBTL
Lead/Lag				Lead	Lag
Lead-Lag Optimize				Yes	Yes
Recall Mode	None	None	None	None	None
Maximum Split (s)	27	73	27	13	60
Maximum Split (%)	27.0%	73.0%	27.0%	13.0%	60.0%
Minimum Split (s)	23.5	23.5	23.5	13	23.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2	2	2	2	2
Minimum Initial (s)	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)		7	7		
Flash Dont Walk (s)		11	11		
Dual Entry	Yes	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	27	0	27	40
End Time (s)	27	0	27	40	0
Yield/Force Off (s)	21.5	94.5	21.5	34.5	94.5
Yield/Force Off 170(s)	21.5	83.5	10.5	34.5	94.5
Local Start Time (s)	0	27	0	27	40
Local Yield (s)	21.5	94.5	21.5	34.5	94.5
Local Yield 170(s)	21.5	83.5	10.5	34.5	94.5

Intersection Summary	
Cycle Length	100
Control Type	Actuated-Uncoordinated
Natural Cycle	70

Splits and Phases: 438: CSAH 5 & Inglewood Rd



CSAH 5 & Inglewood Rd

Direction	All
Future Volume (vph)	1277
Total Delay / Veh (s/v)	8
CO Emissions (kg)	1.30
NOx Emissions (kg)	0.25
VOC Emissions (kg)	0.30

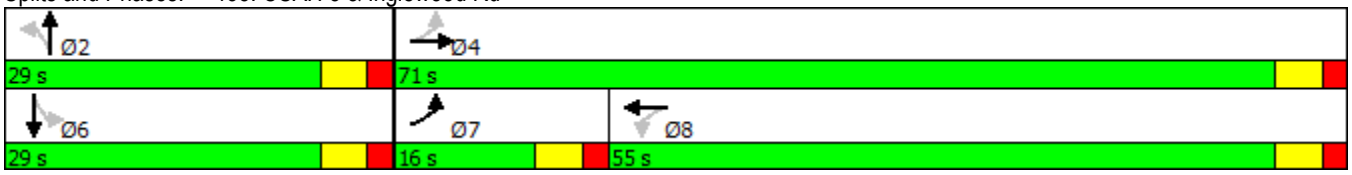
2017 PM - 3 Lane
CSAH 5 & Inglewood Rd

Direction	All
Future Volume (vph)	1126
Total Delay / Veh (s/v)	9
CO Emissions (kg)	1.18
NOx Emissions (kg)	0.23
VOC Emissions (kg)	0.27

Phase Number	2	4	6	7	8
Movement	NBTL	EBTL	SBTL	EBL	WBTL
Lead/Lag				Lead	Lag
Lead-Lag Optimize				Yes	Yes
Recall Mode	None	None	None	None	None
Maximum Split (s)	29	71	29	16	55
Maximum Split (%)	29.0%	71.0%	29.0%	16.0%	55.0%
Minimum Split (s)	23.5	23.5	23.5	13	23.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2	2	2	2	2
Minimum Initial (s)	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)		7	7		
Flash Dont Walk (s)		11	11		
Dual Entry	Yes	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	29	0	29	45
End Time (s)	29	0	29	45	0
Yield/Force Off (s)	23.5	94.5	23.5	39.5	94.5
Yield/Force Off 170(s)	23.5	83.5	12.5	39.5	94.5
Local Start Time (s)	0	29	0	29	45
Local Yield (s)	23.5	94.5	23.5	39.5	94.5
Local Yield 170(s)	23.5	83.5	12.5	39.5	94.5

Intersection Summary	
Cycle Length	100
Control Type	Actuated-Uncoordinated
Natural Cycle	60

Splits and Phases: 438: CSAH 5 & Inglewood Rd



Phase Number	2	4	6	7	8
Movement	NBTL	EBTL	SBTL	EBL	WBTL
Lead/Lag				Lead	Lag
Lead-Lag Optimize				Yes	Yes
Recall Mode	Min	None	Min	None	None
Maximum Split (s)	24	76	24	13	63
Maximum Split (%)	24.0%	76.0%	24.0%	13.0%	63.0%
Minimum Split (s)	22.5	22.5	22.5	13	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)	7	7	7		7
Flash Dont Walk (s)	11	11	11		11
Dual Entry	Yes	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	24	0	24	37
End Time (s)	24	0	24	37	0
Yield/Force Off (s)	19.5	95.5	19.5	32.5	95.5
Yield/Force Off 170(s)	19.5	84.5	19.5	32.5	84.5
Local Start Time (s)	0	24	0	24	37
Local Yield (s)	19.5	95.5	19.5	32.5	95.5
Local Yield 170(s)	19.5	84.5	19.5	32.5	84.5

Intersection Summary	
Cycle Length	100
Control Type	Actuated-Uncoordinated
Natural Cycle	70

Splits and Phases: 438: CSAH 5 & Inglewood Rd

B/C worksheet

Control Section	T.H. / Roadway	Location	Beginning Ref. Pt.	Ending Ref. Pt.	State, County, City or Township	Study Period Begins	Study Period Ends
A	CSAH 5	At TH 100 Southbound Ramps	7.86	7.93	Hennepin County	1/1/2013	12/31/2015

Description of Proposed Work: Resurface Pavement - All Crashes (CMF ID 9298)
*CMF only applied to crashes involving vehicles on east approach based on anticipated project limits

Accident Diagram Codes		1. Rear End	2. Sideswipe Same Direction	3. Left-Turn	5. Right Angle	4, 7 Run Off Road	8, 9 Head-On Sideswipe Opp	Pedestrian	6, 90, 98, 99 Other	Total
Study Period: Number of Crashes	Fatal **F**									
	Personal Injury (PI) **A**									
	Personal Injury (PI) **B**	1						1		**2**
	Personal Injury (PI) **C**	1								**1**
	Property Damage **PD**	6	2	6						**14**
% Change in Crashes *Use FHWA cmfclearinghouse for Crash Reduction Factors	Fatal **F**									
	PI **A**									
	PI **B**	0%						-10%		
	PI **C**	-10%								
	Property Damage **PD**	-5%	-5%	-10%						
Change in Crashes = No. of crashes **X** % change in crashes	Fatal **F**									
	PI **A**									
	PI **B**	**0.00**						**-0.10**		**-0.10**
	PI **C**	**-0.10**								**-0.10**
	Property Damage **PD**	**-0.29**	**-0.10**	**-0.59**						**-0.99**

Year (Safety Improvement Construction): **2022**

		Type of Crash	Study Period: Change in Crashes	Annual Change in Crashes	Cost per Crash	Annual Benefit
Project Cost (exclude Right of Way)	**$ 8,913,000**					
Right of Way Costs (optional)		**F**			**$ 1,180,000**	
Traffic Growth Factor	**3%**	**A**			**$ 590,000**	
Capital Recovery		**B**	**-0.10**	**-0.03**	**$ 170,000**	**$ 5,615**
1. Discount Rate	**1.3%**	**C**	**-0.10**	**-0.03**	**$ 87,000**	**$ 2,874**
2. Project Service Life (n) See Appx F	**10**	**PD**	**-0.99**	**-0.33**	**$ 7,800**	**$ 2,566**
		Total				**$ 11,055**

B/C= 0.01

Using present worth values,

B= $ 119,280

C= $ 8,913,000

See "Calculations" sheet for amortization.

Updated 3-02-2018

B/C worksheet

Control Section	T.H. / Roadway	Location	Beginning Ref. Pt.	Ending Ref. Pt.	State, County, City or Township	Study Period Begins	Study Period Ends
B	CSAH 5	From TH 100 Southbound Ramps to Ottawa Ave	7.94	8.18	Hennepin County	1/1/2013	12/31/2015

Description of Proposed Work: Convert 4-lane roadway to 3-lane roadway with shared center left-turn lane - All Crashes (CMF ID 2841)
Improve street lighting illuminance uniformity - Nighttime Crashes (CMF ID 8797)

Accident Diagram Codes			1. Rear End	2. Sideswipe Same Direction	3. Left-Turn	5. Right Angle	4, 7 Run Off Road	8, 9 Head-On Sideswipe Opp	Pedestrian	6, 90, 98, 99 Other	Total
Study Period: Number of Crashes	Fatal	F									
	Personal Injury (PI)	A									
		B		1							1
		C	3								3
	Property Damage	PD	2	1				1		1	5
% Change in Crashes *Use FHWA cmfclearinghouse for Crash Reduction Factors	Fatal	F									
	PI	A									
		B		-48%							
		C	-47%								
	Property Damage	PD	-47%	-47%				-47%		-47%	
Change in Crashes = No. of crashes **X** % change in crashes	Fatal	F									
	PI	A									
		B		**-0.48**							**-0.48**
		C	**-1.42**								**-1.42**
	Property Damage	PD	**-0.94**	**-0.47**				**-0.47**		**-0.47**	**-2.35**

Year (Safety Improvement Construction): **2022**

		Type of Crash	Study Period: Change in Crashes	Annual Change in Crashes	Cost per Crash	Annual Benefit
Project Cost (exclude Right of Way)	**$ 8,913,000**	F			**$ 1,180,000**	
Right of Way Costs (optional)		A			**$ 590,000**	
Traffic Growth Factor	**3%**	B	**-0.48**	**-0.16**	**$ 170,000**	**$ 27,338**
Capital Recovery		C	**-1.42**	**-0.47**	**$ 87,000**	**$ 41,276**
1. Discount Rate	**1.3%**	PD	**-2.35**	**-0.78**	**$ 7,800**	**$ 6,116**
2. Project Service Life (n) See Appx F	**20**	**Total**				**$ 74,730**

B/C= 0.20

Using present worth values,

B= $ 1,758,670

C= $ 8,913,000

See "Calculations" sheet for amortization.

Updated 3-02-2018

B/C worksheet

Control Section	T.H. / Roadway	Location	Beginning Ref. Pt.	Ending Ref. Pt.	State, County, City or Township	Study Period Begins	Study Period Ends
C	CSAH 5	At Ottawa Ave	8.19	8.25	Hennepin County	1/1/2013	12/31/2015

Description of Proposed Work: Install left-turn lanes on major roadway approaches - All Crashes on CSAH 5 (CMF ID 7998)
Convert signal phasing from permissive only to FYA protected/permissive - Left Turn Crashes on CSAH 5 (CMF 7684)

Accident Diagram Codes			1. Rear End	2. Sideswipe Same Direction	3. Left-Turn	5. Right Angle	4, 7 Run Off Road	8, 9 Head-On Sideswipe Opp	Pedestrian	6, 90, 98, 99 Other	Total
Study Period: Number of Crashes	Fatal	**F**									
	Personal Injury (PI)	**A**									
		B			1						**1**
		C		1	2						**3**
	Property Damage	**PD**	3	3	2			1		2	**11**
% Change in Crashes *Use FHWA cmfclearinghouse for Crash Reduction Factors	Fatal	**F**									
	PI	**A**									
		B			-48%						
		C		0%	-24%						
	Property Damage	**PD**	-12%	-12%	-24%			0%		0%	
Change in Crashes = No. of crashes **X** % change in crashes	Fatal	**F**									
	PI	**A**									
		B			**-0.48**						**-0.48**
		C		**0.00**	**-0.48**						**-0.48**
	Property Damage	**PD**	**-0.37**	**-0.37**	**-0.48**			**0.00**		**0.00**	**-1.22**

Year (Safety Improvement Construction): **2022**

Project Cost (exclude Right of Way): **$ 10,490,000**

Right of Way Costs (optional):

Traffic Growth Factor: **3%**

Capital Recovery

1. **Discount Rate:** **1.3%**
2. **Project Service Life (n) See Appx F:** **20**

Type of Crash	Study Period: Change in Crashes	Annual Change in Crashes	Cost per Crash	Annual Benefit
F			**$ 1,180,000**	
A			**$ 590,000**	
B	**-0.48**	**-0.16**	**$ 170,000**	**$ 27,055**
C	**-0.48**	**-0.16**	**$ 87,000**	**$ 13,817**
PD	**-1.22**	**-0.41**	**$ 7,800**	**$ 3,175**
Total				**$ 44,046**

B/C= 0.10

Using present worth values,

B= $ 1,036,575

C= $ 10,490,000

See "Calculations" sheet for amortization.

Updated 3-02-2018

B/C worksheet

Control Section	T.H. / Roadway	Location	Beginning Ref. Pt.	Ending Ref. Pt.	State, County, City or Township	Study Period Begins	Study Period Ends
D	CSAH 5	From Ottawa Ave to Inglewood Ave	8.26	8.56	Hennepin County	1/1/2013	12/31/2015

Description of Proposed Work: Provide two-way-left-turn-lane along CSAH 5 - Left-Turn Crashes on CSAH 5 (CMF ID 3017)
Reduce cross section from four-lane to three-lane with two-way-left-turn-lane - Right Angle Crashes (CMF ID 879)
Provide on-road bicycle lanes - Bicycle Crashes (CMF ID 1719)

Accident Diagram Codes			1. Rear End	2. Sideswipe Same Direction	3. Left-Turn	5. Right Angle	4, 7 Run Off Road	8, 9 Head-On Sideswipe Opp	Pedestrian	6, 90, 98, 99 Other	Total
Study Period: Number of Crashes	Fatal	**F**									
	Personal Injury (PI)	**A**									
		B			1		1			1	**3**
		C			1	1					**2**
	Property Damage	**PD**	3		3	5				2	**13**
% Change in Crashes *Use FHWA cmfclearinghouse for Crash Reduction Factors	Fatal	**F**									
	PI	**A**									
		B			-34%		0%			-35%	
		C			-34%	-37%					
	Property Damage	**PD**	0%		-34%	-37%				0%	
Change in Crashes = No. of crashes **X** % change in crashes	Fatal	**F**									
	PI	**A**									
		B			**-0.34**		**0.00**			**-0.35**	**-0.69**
		C			**-0.34**	**-0.37**					**-0.71**
	Property Damage	**PD**	**0.00**		**-1.02**	**-1.85**				**0.00**	**-2.87**

Year (Safety Improvement Construction): **2022**

Project Cost (exclude Right of Way)	**$ 10,490,000**
Right of Way Costs (optional)	
Traffic Growth Factor	**3%**
Capital Recovery	
1. Discount Rate	**1.3%**
2. Project Service Life (n) See Appx F	**20**

Type of Crash	Study Period: Change in Crashes	Annual Change in Crashes	Cost per Crash	Annual Benefit
F			**$ 1,180,000**	
A			**$ 590,000**	
B	**-0.69**	**-0.23**	**$ 170,000**	**$ 39,136**
C	**-0.71**	**-0.24**	**$ 87,000**	**$ 20,609**
PD	**-2.87**	**-0.96**	**$ 7,800**	**$ 7,469**
Total				**$ 67,213**

B/C= 0.15

Using present worth values,

B= $ 1,581,786

C= $ 10,490,000

See "Calculations" sheet for amortization.

Updated 3-02-2018

B/C worksheet

Control Section	T.H. / Roadway	Location	Beginning Ref. Pt.	Ending Ref. Pt.	State, County, City or Township	Study Period Begins	Study Period Ends
E	CSAH 5	At Inglewood Ave	8.57	8.63	Hennepin County	1/1/2013	12/31/2015

Description of Proposed Work: Install left-turn lanes on Inglewood Ave - Crashes involving vehicles on Inglewood Ave (CMF ID 7998)

Accident Diagram Codes		1. Rear End	2. Sideswipe Same Direction	3. Left-Turn	5. Right Angle	4, 7 Run Off Road	8, 9 Head-On Sideswipe Opp	Pedestrian	6, 90, 98, 99 Other	Total
Study Period: Number of Crashes	Fatal **F**									
	Personal Injury (PI) **A**									
	Personal Injury (PI) **B**									
	Personal Injury (PI) **C**				1					**1**
	Property Damage **PD**		2	1	2				1	**6**
% Change in Crashes *Use FHWA cmfclearinghouse for Crash Reduction Factors	Fatal **F**									
	PI **A**									
	PI **B**									
	PI **C**				-12%					
	Property Damage **PD**				-12%					
Change in Crashes = No. of crashes **X** % change in crashes	Fatal **F**									
	PI **A**									
	PI **B**									
	PI **C**				**-0.12**					**-0.12**
	Property Damage **PD**		**0.00**	**0.00**	**-0.25**				**0.00**	**-0.25**

Year (Safety Improvement Construction): **2022**

Project Cost (exclude Right of Way): **$ 8,913,000**

Right of Way Costs (optional):

Traffic Growth Factor: **3%**

Capital Recovery

1. **Discount Rate:** **1.3%**
2. **Project Service Life (n) See Appx F:** **20**

Type of Crash	Study Period: Change in Crashes	Annual Change in Crashes	Cost per Crash	Annual Benefit
F			**$ 1,180,000**	
A			**$ 590,000**	
B			**$ 170,000**	
C	**-0.12**	**-0.04**	**$ 87,000**	**$ 3,599**
PD	**-0.25**	**-0.08**	**$ 7,800**	**$ 645**
Total				**$ 4,245**

B/C= 0.01

Using present worth values,

B= $ 99,893

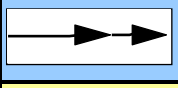
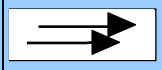
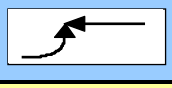
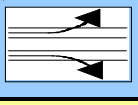
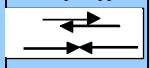
C= $ 8,913,000

See "Calculations" sheet for amortization.

Updated 3-02-2018

B/C worksheet

Control Section	T.H. / Roadway	Location	Beginning Ref. Pt.	Ending Ref. Pt.	State, County, City or Township	Study Period Begins	Study Period Ends
F	CSAH 5	From Inglewood Ave to France Ave	8.63	8.69	Hennepin County	1/1/2013	12/31/2015
Description of Proposed Work		No CMFs applied - Project not expected to have significant impact on this segment					

Accident Diagram Codes			1. Rear End 	2. Sideswipe Same Direction 	3. Left-Turn 	5. Right Angle 	4, 7 Run Off Road 	8, 9 Head-On Sideswipe Opp 	Pedestrian	6, 90, 98, 99 Other	Total
Study Period: Number of Crashes	Fatal	**F**									
	Personal Injury (PI)	**A**									
		B									
		C									
	Property Damage	**PD**									
% Change in Crashes *Use FHWA cmfclearinghouse for Crash Reduction Factors	Fatal	**F**									
	PI	**A**									
		B									
		C									
	Property Damage	**PD**									
Change in Crashes = No. of crashes **X** % change in crashes	Fatal	**F**									
	PI	**A**									
		B									
		C									
	Property Damage	**PD**									

Year (Safety Improvement Construction) **2022**

		Type of Crash	Study Period: Change in Crashes	Annual Change in Crashes	Cost per Crash	Annual Benefit
Project Cost (exclude Right of Way)	**$ 8,913,000**					
Right of Way Costs (optional)		**F**			**$ 1,180,000**	
Traffic Growth Factor	**3%**	**A**			**$ 590,000**	
Capital Recovery		**B**			**$ 170,000**	
1. Discount Rate	**1.3%**	**C**			**$ 87,000**	
2. Project Service Life (n) See Appx F	**20**	**PD**			**$ 7,800**	
		Total				**$ -**

B/C= 0.00

Using present worth values,

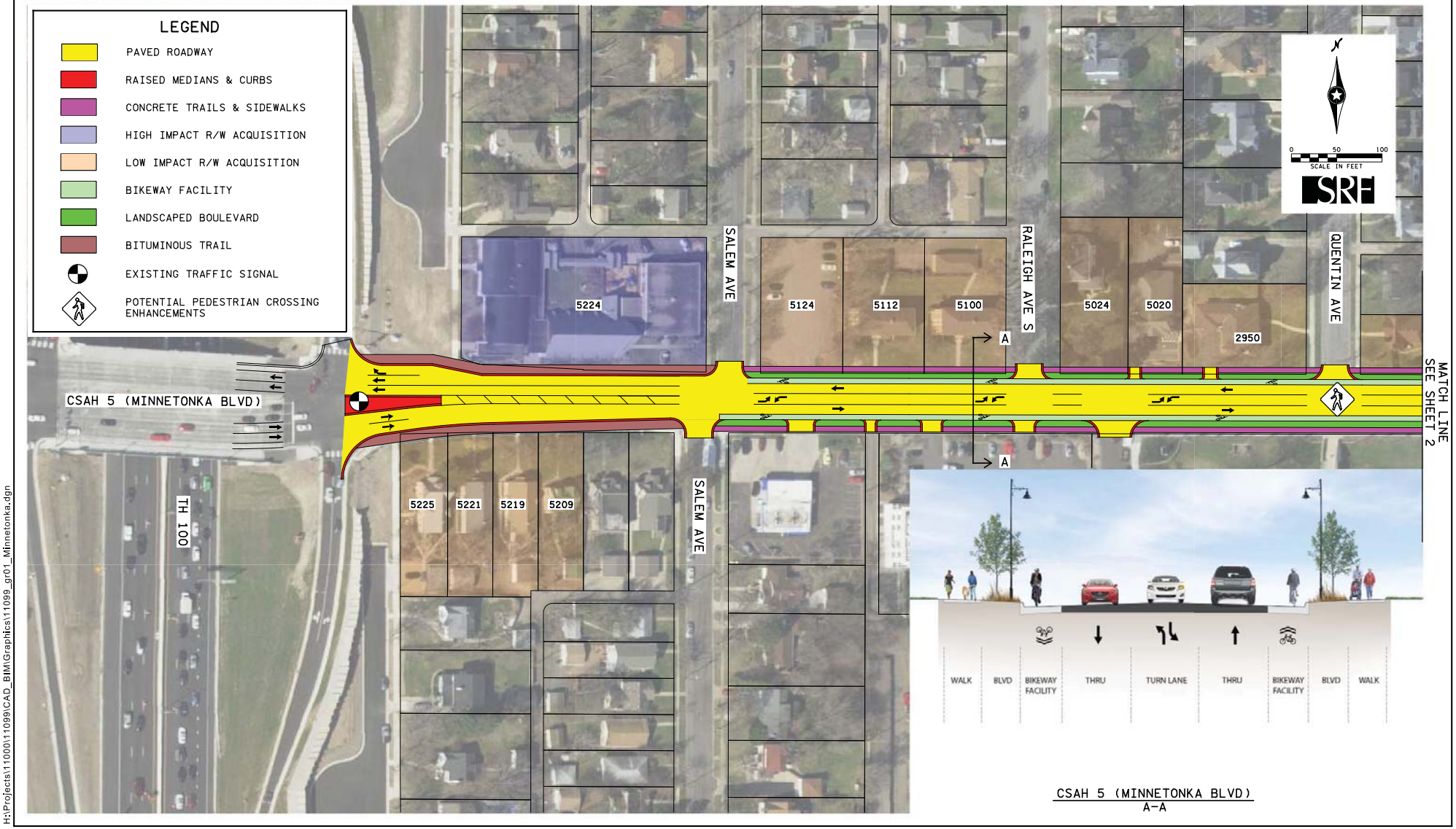
B= $ -

C= $ 8,913,000

See "Calculations" sheet for amortization.

Updated 3-02-2018

Attachment 5 - Proposed Concept



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Hennepin

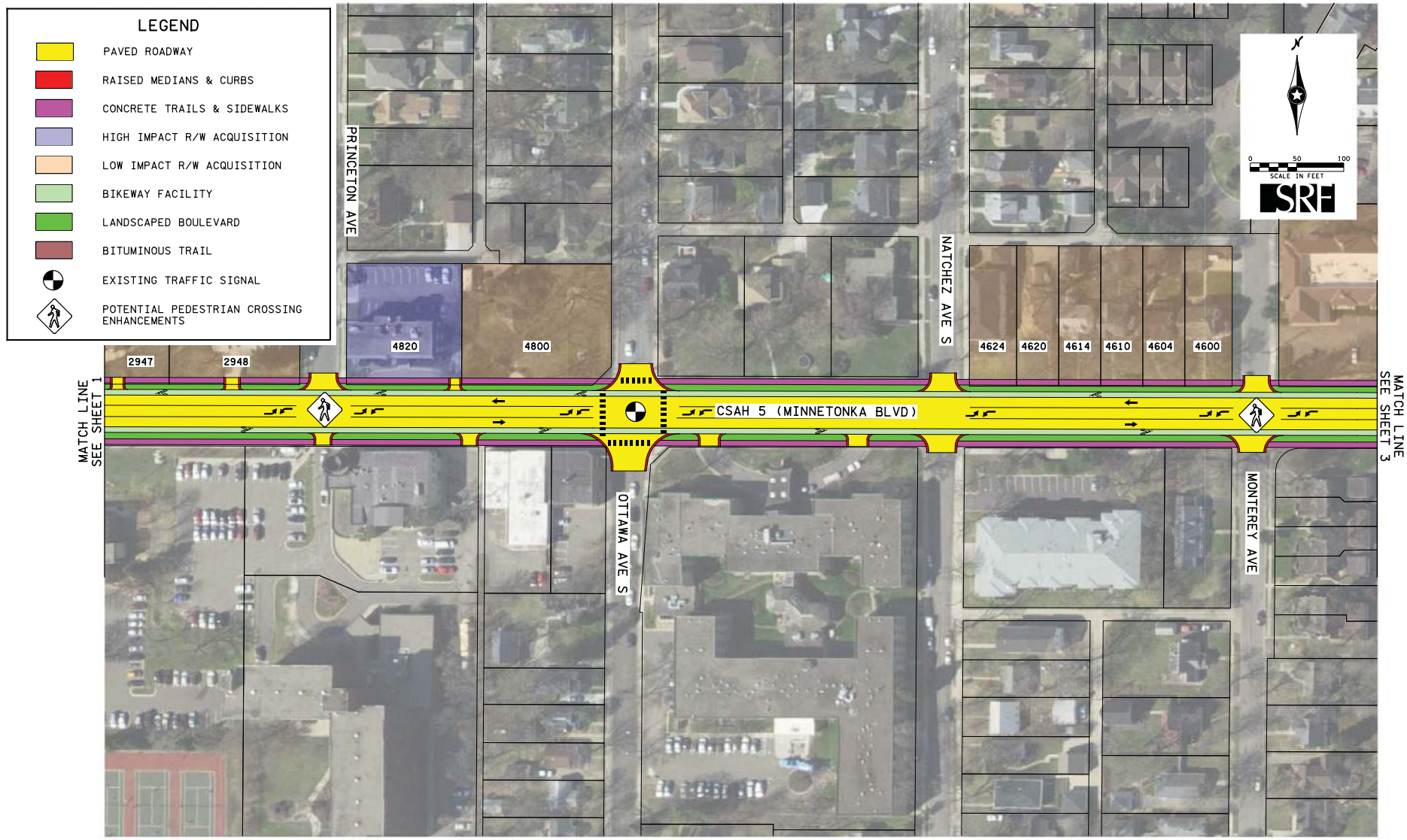
Job #11099
7/3/2018

Hennepin County Improvements

CSAH 5 (Minnetonka Boulevard) from TH 100 to CSAH 25
St. Louis Park, MN

Figure 1

Attachment 5 - Proposed Concept



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Hennepin

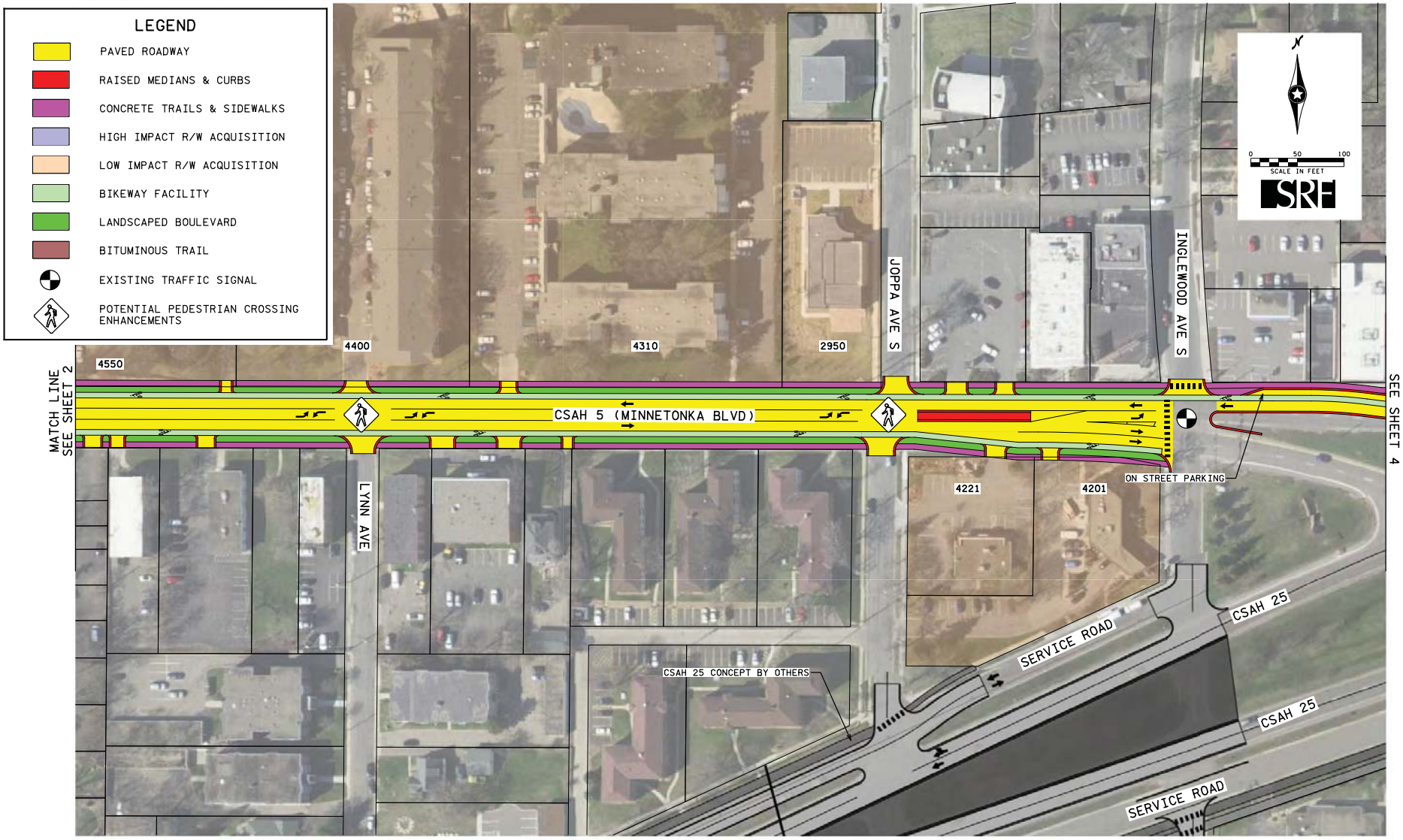
Job #11099
7/3/2018

Hennepin County Improvements

CSAH 5 (Minnetonka Boulevard) from TH 100 to CSAH 25
St. Louis Park, MN

Figure 2

Attachment 5 - Proposed Concept



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Hennepin

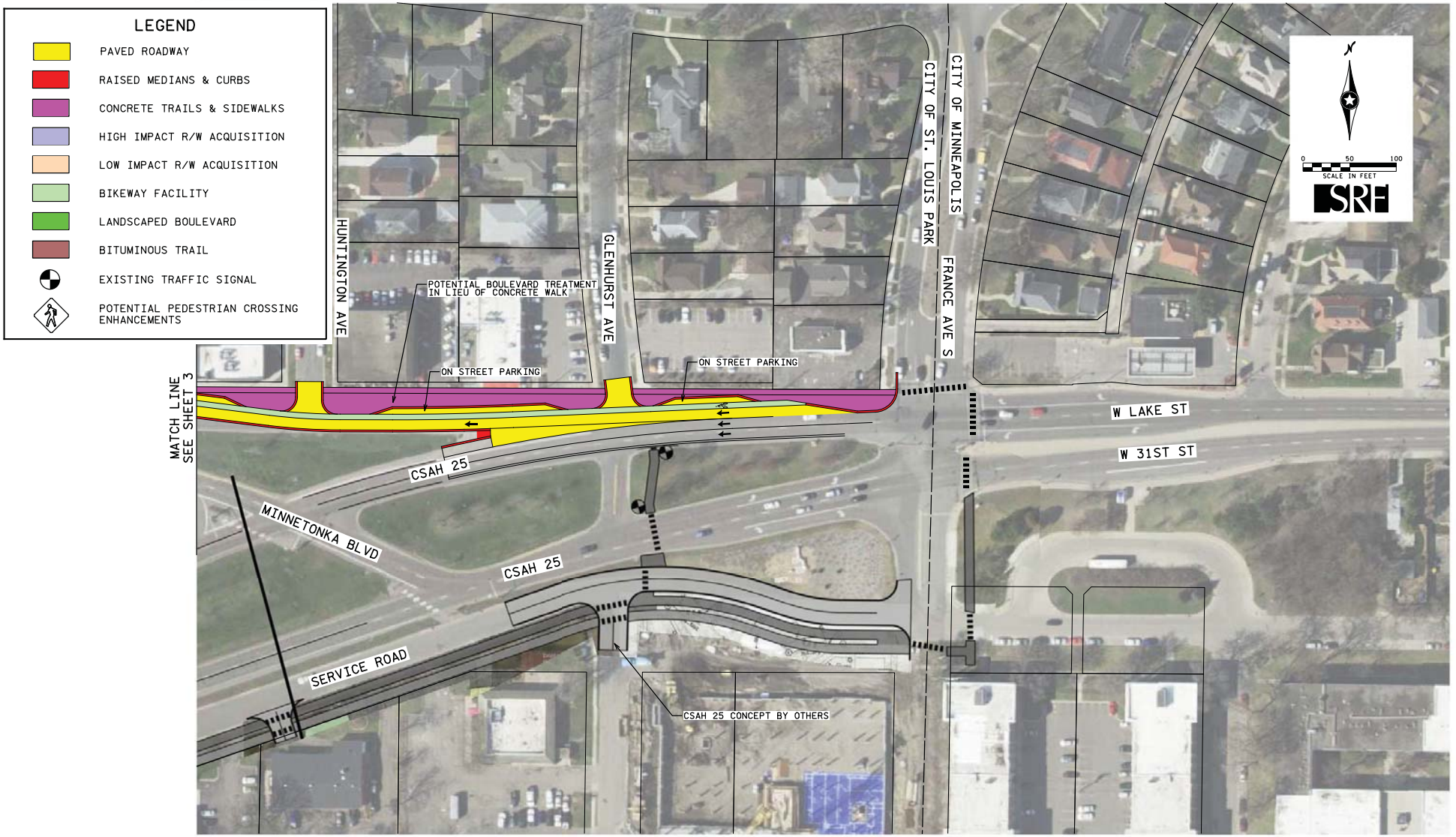
Job #11099
7/3/2018

Hennepin County Improvements

CSAH 5 (Minnetonka Boulevard) from TH 100 to CSAH 25
St. Louis Park, MN

Figure 3

Attachment 5 - Proposed Concept



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Hennepin

Job #11099
7/3/2018

Hennepin County Improvements

CSAH 5 (Minnetonka Boulevard) from TH 100 to CSAH 25
St. Louis Park, MN

Figure 4

CSAH 5 (Minnetonka Blvd) Reconstruction Project

List of Attachments

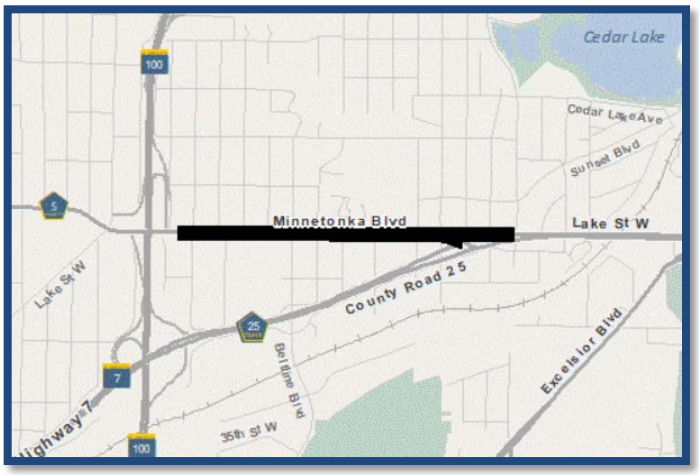
1. Project Narrative
2. Project Location Map
3. Existing Roadway Deficiencies
4. Proposed Typical Section
5. Proposed Concept
6. Hennepin County 2018-2022 Transportation Capital Improvement Program
7. Hennepin County Board Resolution – 2018 Regional Solicitation
8. MnDOT 50 Series Map
9. 2018 Minnetonka Boulevard Bikeway Project
10. St. Louis Park Connect the Park Plan
11. Crash Modification Factors
12. Crash Detail Listing (2013-2015)
13. Hennepin County ADA Self-Evaluation
14. 2040 Hennepin County Bicycle Transportation Plan
15. Draft 2040 St. Louis Park Comprehensive Plan
16. City of St. Louis Park Support Letter

Attachment 1 - Project Narrative

2018 REGIONAL SOLICIATION

HENNEPIN COUNTY, MINNESOTA

Project Location



Existing Conditions

Project Overview	
Project Name:	CSAH 5 (Minnetonka Blvd) Reconstruction Project
Roadway:	CSAH 5 (Minnetonka Blvd)
Project Termini:	From TH 100 SB Ramps to France Ave
Project Location:	City of St. Louis Park

Solicitation Information	
Applicant:	Hennepin County
Funding Requested:	$7,000,000
Total Project Cost:	$8,913,000

Project Information

The proposed project will reconstruct CSAH 5 (Minnetonka Boulevard) to extend its service life. Improvements will include (but are not limited to): new pavement, sidewalk, bikeway, streetscaping, curb, drainage structures, and traffic signals. The existing four-lane configuration will be converted to a three-lane configuration to improve safety along the corridor. The intersection at Ottawa Avenue will experience significant benefits in terms of traffic operations (through the introduction of dedicated left-turn lanes and Flashing Yellow Arrows) and pedestrian accessibility (through the upgrading of pedestrian ramps and installation of Accessible Pedestrian Signals).

Project Benefits

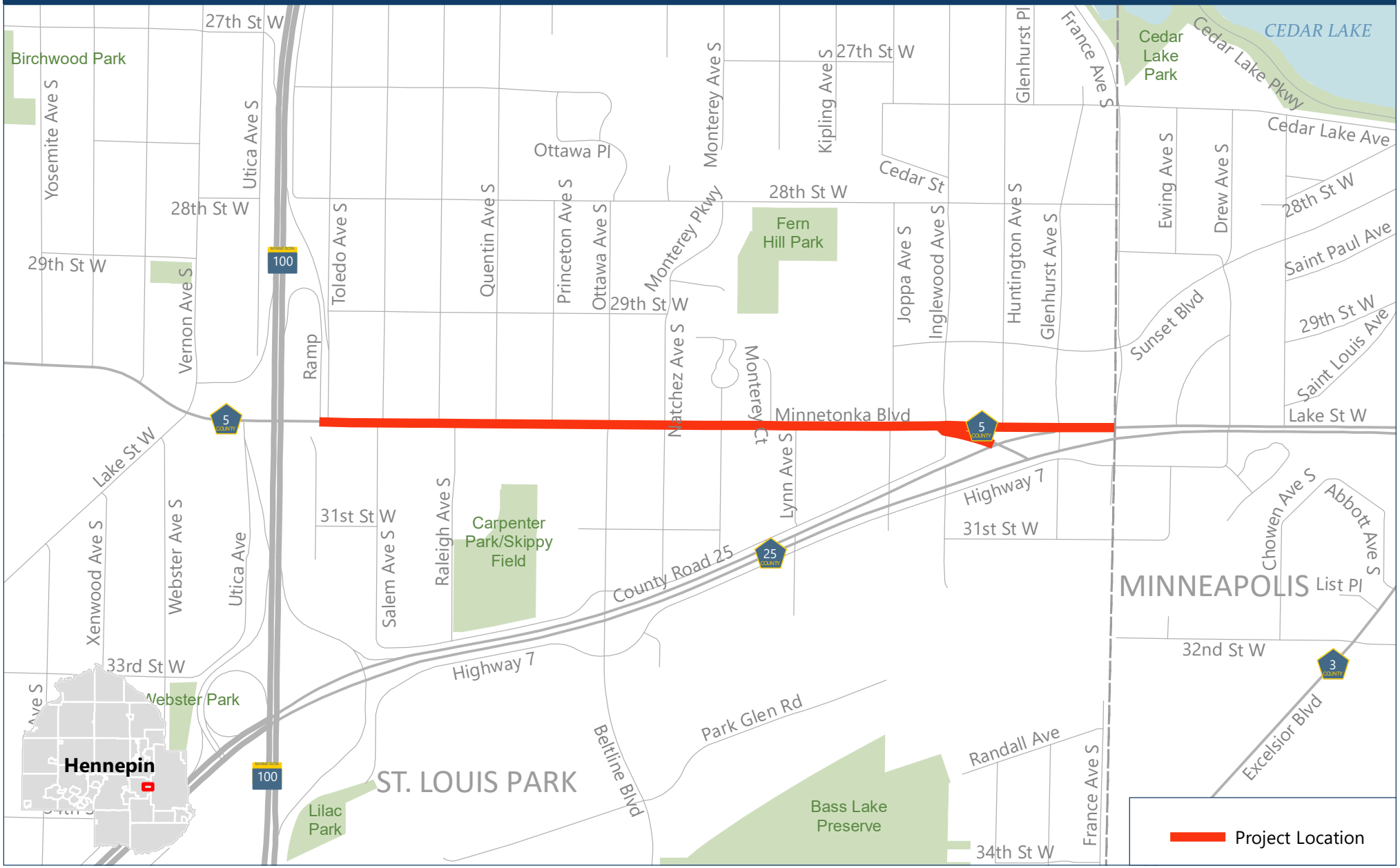
The existing CSAH 5 (Minnetonka Boulevard) roadway has reached the end of its useful life and warrants a full reconstruction. Routine maintenance activities (such as a pavement overlay) are no longer effective in preserving critical roadway assets. Previous overlays extend of the existing gutter, reducing the benefits provided by the curb in terms of drainage and safety.

Additionally, various defects (cracking, discontinuities, and settlement) and obstructions (utility poles, signs, and signal equipment) are present within the sidewalk. This project will address these issues and improve mobility and accessibility for pedestrians.

2018 Regional Solicitation

Attachment 2 - Project Location Map | CSAH 5 (Minnetonka Blvd) Reconstruction Project

HENNEPIN COUNTY
MINNESOTA



Disclaimer: This map (i) is furnished "AS IS" with no representation as to completeness or accuracy; (ii) is furnished with no warranty of any kind; and (iii) is not suitable for legal, engineering or surveying purposes. Hennepin County shall not be liable for any damage, injury or loss resulting from this map.

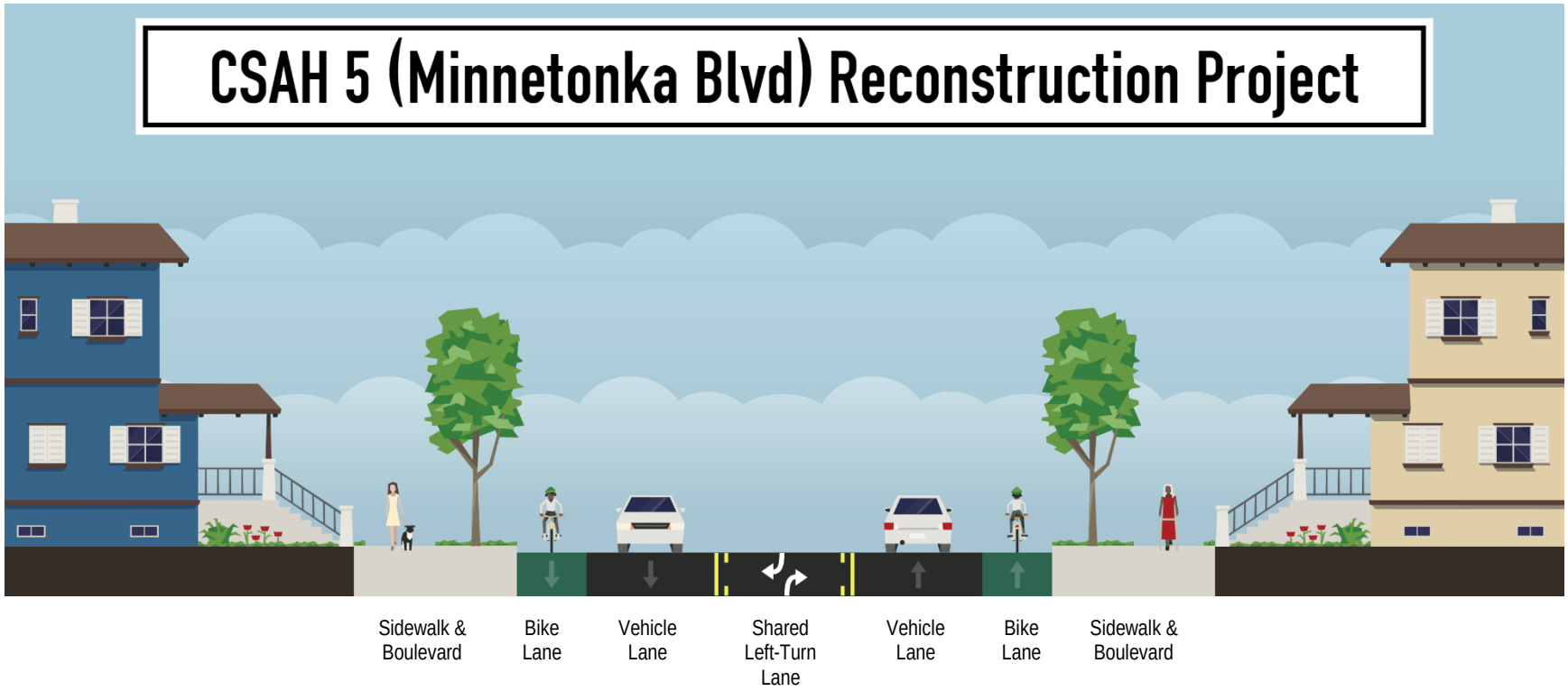
Publication date: 5/10/2018

N

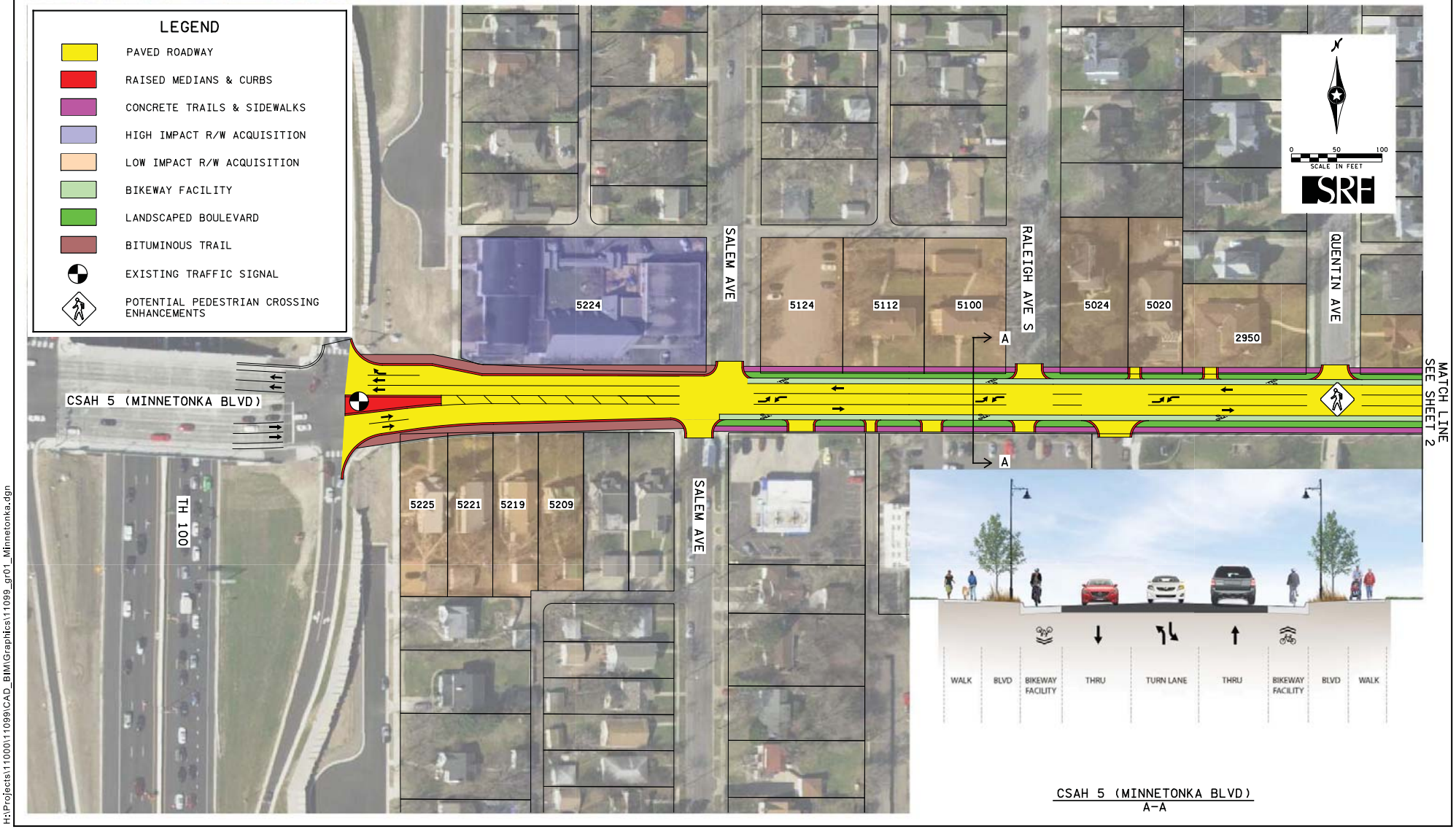
0 0.25 0.5 Miles

Attachment 3 - Existing Roadway Deficiencies

Attachment 4 - Proposed Typical Section



Attachment 5 - Proposed Concept



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Hennepin

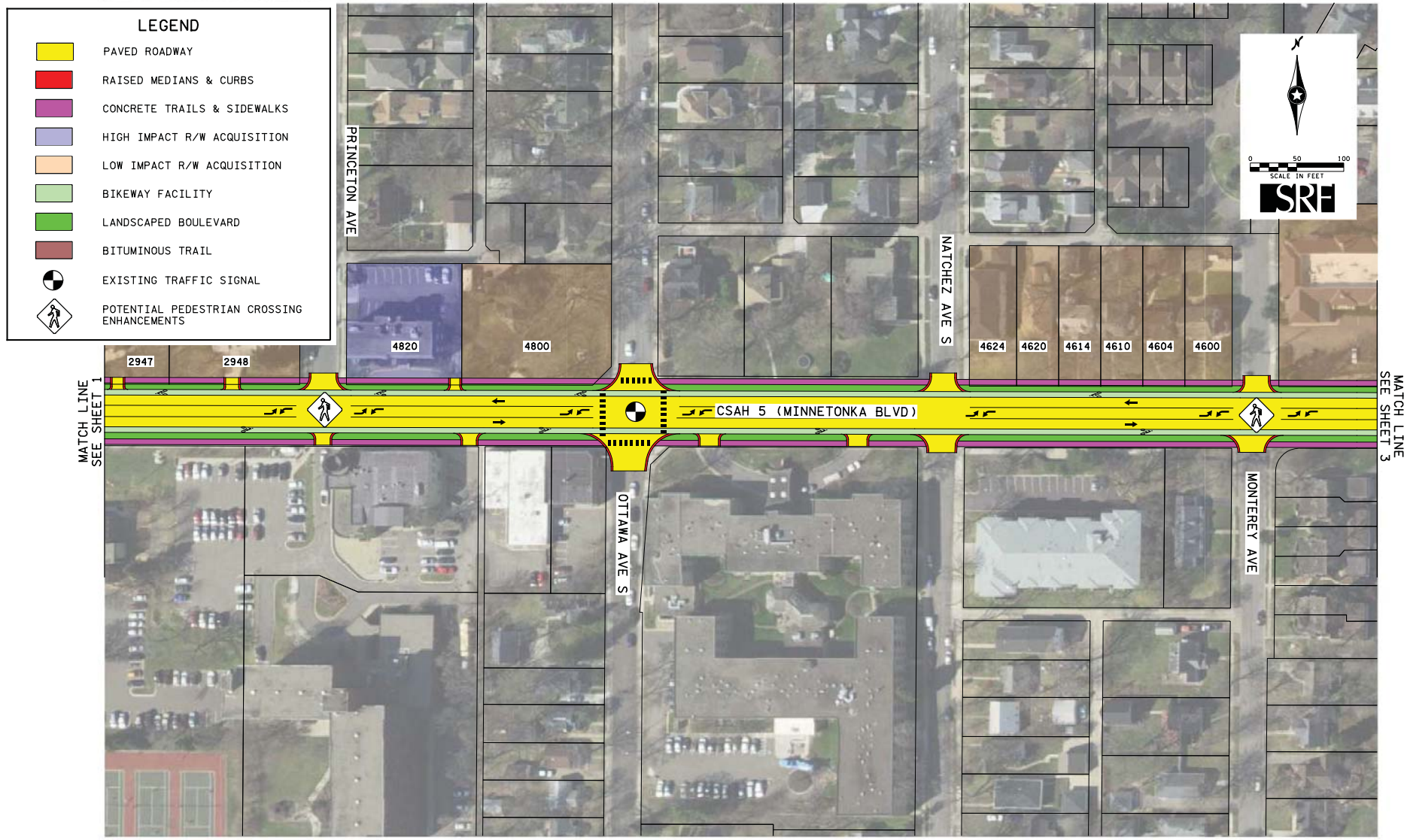
Job #11099
7/3/2018

Hennepin County Improvements

CSAH 5 (Minnetonka Boulevard) from TH 100 to CSAH 25
St. Louis Park, MN

Figure 1

Attachment 5 - Proposed Concept



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Hennepin

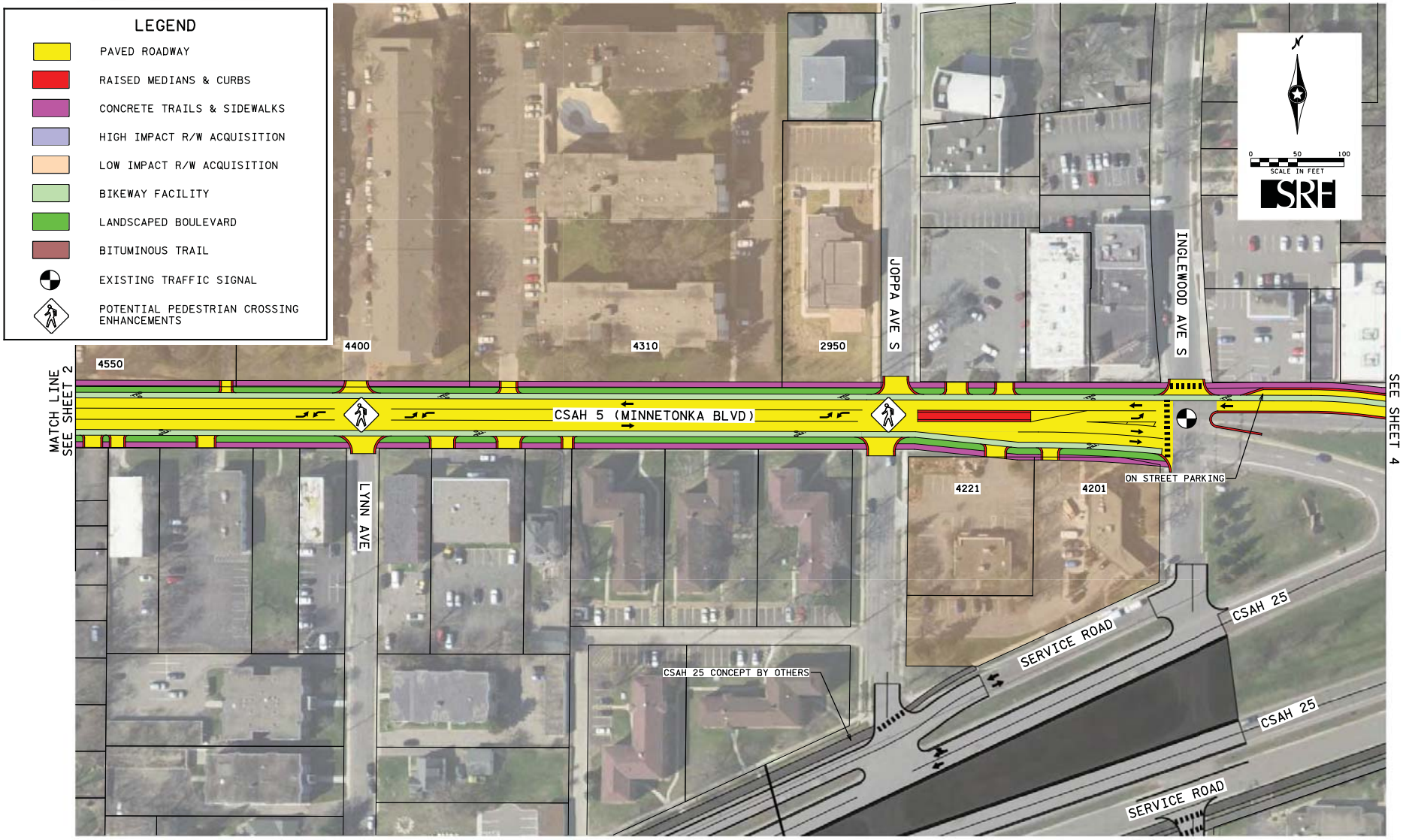
Job #11099
7/3/2018

Hennepin County Improvements

CSAH 5 (Minnetonka Boulevard) from TH 100 to CSAH 25
St. Louis Park, MN

Figure 2

Attachment 5 - Proposed Concept



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Hennepin

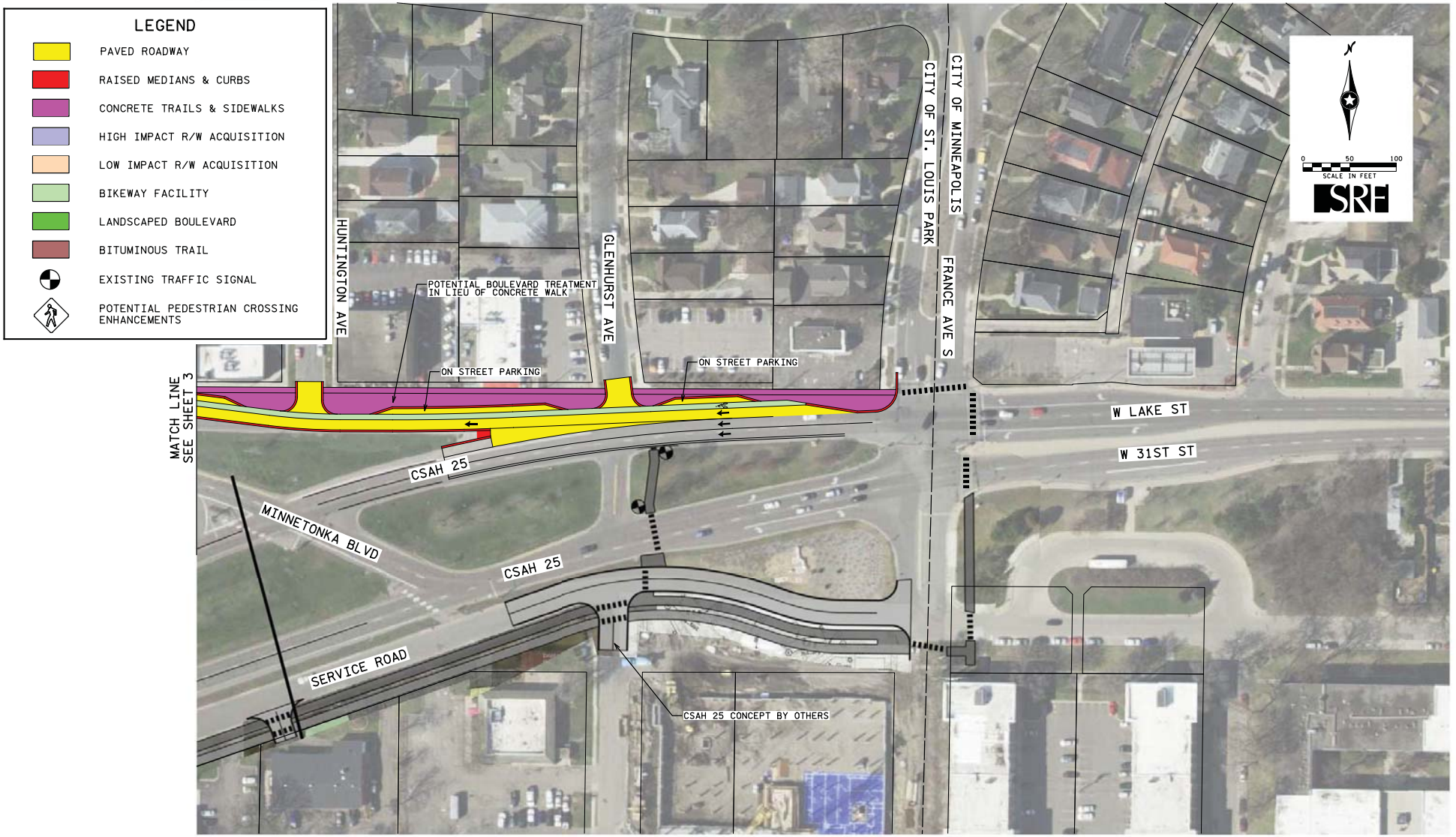
Job #11099
7/3/2018

Hennepin County Improvements

CSAH 5 (Minnetonka Boulevard) from TH 100 to CSAH 25
St. Louis Park, MN

Figure 3

Attachment 5 - Proposed Concept



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Hennepin

Job #11099
7/3/2018

Hennepin County Improvements

CSAH 5 (Minnetonka Boulevard) from TH 100 to CSAH 25
St. Louis Park, MN

Figure 4

Attachment 5 - Proposed Concept

CSAH 5 (Minnetonka Blvd) Reconstruction Project – Impacted Properties

Parcels with High Impact:

- 5224 Minnetonka Blvd St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk. Proposed sidewalk impacts steps and will cause grading issues. Potential to minimize impacts by moving the proposed walk to the back of curb.
- 4820 Minnetonka Blvd St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk. Turn around drive access would be eliminated by the proposed sidewalk. Potential to minimize impacts by moving the proposed walk to the back of curb.

Parcels with Low Impact:

- 5124 Minnetonka Blvd St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk. Potential for parking lot impacts.
- 5112 Minnetonka Blvd St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk.
- 5100 Minnetonka Blvd St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk.
- 5024 Minnetonka Blvd St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk. Minor fencing impacts.
- 5020 Minnetonka Blvd St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk. Planting bed / landscaping impacts for dentist office.
- 2950 Quentin Ave S St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk.
- 2947 Quentin Ave S St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk. Retaining wall and fencing impacts.
- 2948 Princeton Ave S St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk. Retaining wall and fencing impacts.
- 4800 Minnetonka Blvd St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk.
- 4624 Minnetonka Blvd St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk.
- 4620 Minnetonka Blvd St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk.
- 4614 Minnetonka Blvd St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk.
- 4610 Minnetonka Blvd St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk. Retaining wall and landscaping impacts.
- 4604 Minnetonka Blvd St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk.

Attachment 5 - Proposed Concept

Parcels with Low Impact (Continued):

- 4600 Minnetonka Blvd St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk.
- 4550 Minnetonka Blvd St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk. Existing sidewalk appears to be on private property.
- 4400 Minnetonka Blvd St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk.
- 4310 Minnetonka Blvd St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk.
- 2950 Joppa Ave S St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk.
- 5225 Minnetonka Blvd St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk.
- 5221 Minnetonka Blvd St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk.
- 5219 Minnetonka Blvd St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk.
- 5209 Minnetonka Blvd St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk.
- 4221 Minnetonka Blvd St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk.
- 4201 Minnetonka Blvd St. Louis Park, MN 55416 – Permanent R/W acquisition for proposed sidewalk.

Parcels of Note:

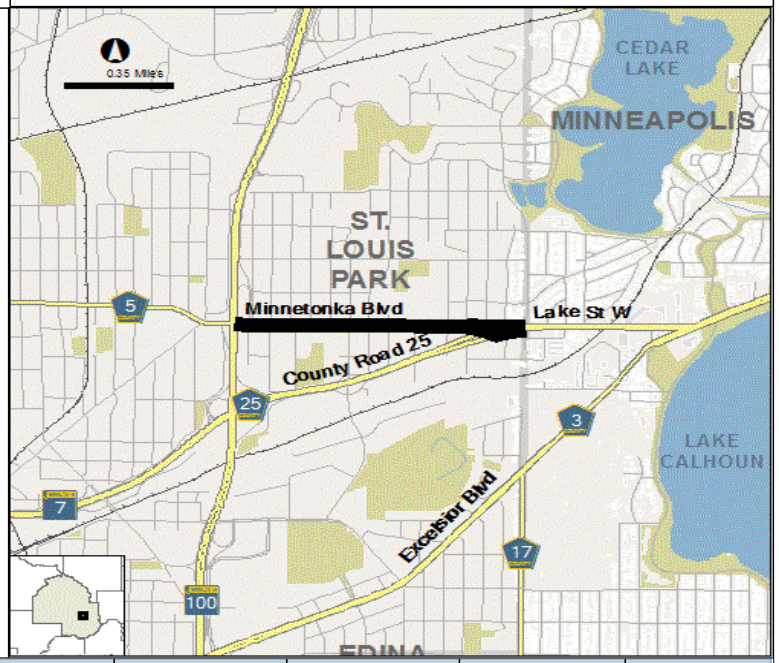
- 4724 Minnetonka Blvd St. Louis Park, MN 55416 – Not shown as impact but retaining wall for property appears to be within public right of way.
- 4716 Minnetonka Blvd St. Louis Park, MN 55416 – Not shown as impact but retaining wall for property appears to be within public right of way.
- 4700 Minnetonka Blvd St. Louis Park, MN 55416 – Not shown as impact but retaining wall for property appears to be within public right of way.

Attachment 6 - Hennepin County 2018-2022 Transportation Capital Improvement Program

Project Name: 2168100 CSAH 5 - Reconst Mntka Blvd fr TH 100 to France Ave
Major Program: Public Works
Department: Transportation Roads & Bridges

Funding Start: 2022
Funding Completion: Beyond 2022

Summary:
Reconstruct Minnetonka Boulevard (CSAH 5) from TH 100 to France Avenue in the City of St. Louis Park.



Purpose & Description:
The proposed project will reconstruct Minnetonka Boulevard (CSAH 5) to extend its service life. The existing roadway has reached a state of disrepair where routine maintenance activities are no longer effective in preserving assets. The existing sidewalk facilities are in poor condition and are located immediately adjacent to the roadway, providing a feeling of discomfort for pedestrians. Additionally, county staff has received numerous complaints from residents regarding safety due to the 4-lane undivided nature of the roadway. This project will provide a significant opportunity to improve pedestrian crossings and provide dedicated turn lanes at major intersections to facilitate vehicle turning movements. Upon commencement of project design, further consideration will be given to the appropriate typical section of the roadway.

In 2016 the City of St. Louis Park hired a consultant to perform a crash evaluation along Minnetonka Boulevard (CSAH 5) between TH 169 and France Avenue. This project would provide an opportunity to address the high crash areas identified within the study.

Additionally, this project will complement the proposed Southwest Light Rail Transit (SWLRT) project; specifically the Beltline Boulevard and West Lake Street Stations.

REVENUES	Budget to Date	12/31/17 Act & Enc	Balance	2018 Budget	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	Beyond 2022	Total
Mn/DOT State Aid - Regular	-	-	-	-	-	-	-	1,843,000	12,288,000	14,131,000
Total	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1,843,000**	**12,288,000**	**14,131,000**

EXPENDITURES	Budget to Date	12/31/17 Act & Enc	Balance	2018 Budget	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	Beyond 2022	Total
Land	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	12,288,000	12,288,000
Consulting	-	-	-	-	-	-	-	1,843,000	-	1,843,000
Equipment	-	-	-	-	-	-	-	-	-	-
Furnishings	-	-	-	-	-	-	-	-	-	-
Other Costs	-	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-	-
Total	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1,843,000**	**12,288,000**	**14,131,000**

Project Name: 2168100 CSAH 5 - Reconst Mntka Blvd fr TH 100 to France Ave
Major Program: Public Works
Department: Transportation Roads & Bridges

Funding Start: 2022
Funding Completion: Beyond 2022

Current Year's CIP Process Summary	Budget to Date	2018 Budget	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	Beyond 2022	Total
Department Requested	-	-	-	-	-	1,843,000	12,288,000	14,131,000
Administrator Proposed	-	-	-	-	-	1,843,000	12,288,000	14,131,000
CBTF Recommended	-	-	-	-	-	1,843,000	12,288,000	14,131,000
Board Approved Final	-	-	-	-	-	1,843,000	12,288,000	14,131,000

Scheduling Milestones (major phases only):

Scoping:	2016-2019
Design:	2020-TBD
Procurement:	TBD
Construction:	TBD
Completion:	TBD

Board Resolutions / Supplemental Information:

Project's Effect on Annual Operating Budget:
Additional planning and design work is required to determine impact to department staff or annual operating costs are anticipated by this project.

Annual Impact for Requesting Department:	0
Annual Impact for all other Depts:	0
Total	**0**

Changes from Prior CIP:

- This is a new project introduced in the 2018-2022 Transportation CIP

Last Year's CIP Process Summary	Budget to Date	2017	2018	2019	2020	2021	Beyond	Total
Department Requested	-	-	-	-	-	-	-	-
Administrator Proposed	-	-	-	-	-	-	-	-
CBTF Recommended	-	-	-	-	-	-	-	-
Board Approved Final	-	-	-	-	-	-	-	-

Attachment 7 - Hennepin County Board Resolution - 2018 Regional Solicitation

HENNEPIN COUNTY
MINNESOTA

Hennepin County, Board of Commissioners

RESOLUTION 18-0258

2018

The following resolution was moved by Commissioner Mike Opat and seconded by Commissioner Debbie Goettel:

WHEREAS, the Metropolitan Council has given notice that funding through the Regional Solicitation is available; and

WHEREAS, a board resolution must be submitted with the application for Regional Solicitation funding;

BE IT RESOLVED, that Hennepin County be authorized to apply for funding grants through the Regional Solicitation and recognize its role as the public agency sponsor for the following projects (separated by category), if funding is awarded:

Roadway reconstruction/modernization

- Programmed in 2018-2022 CIP

1. County State Aid Highway 5 (CSAH 5) (Minnetonka Boulevard) from Trunk Highway 100 to France Avenue in Saint Louis Park - CP 2168100

2. CSAH 152 (Osseo Rd) from CSAH 2 (Penn Avenue) to 49th Avenue in Minneapolis - CP 2174100

3. CSAH 153 (Lowry Avenue) from Washington Street NE to Johnson Street NE in Minneapolis - CP 1001648 & 2140900

- Project Not Programmed in 2018-2022 CIP

4. CSAH 23 (Marshall St NE) from 16th Avenue NE to 27th Avenue NE in Minneapolis - CP 2984500

Roadway expansion

- Programmed in 2018-2022 CIP

5. CSAH 109 (85th Avenue) at TH 252 in Brooklyn Park - CP 2167700

Bridges

- Programmed in 2018-2022 CIP

6. CSAH 15 (Shoreline Drive) Bridge #27592 over Tanager Channel in Orono - CP 2163400

- Projects Not Programmed in 2018-2022 CIP

7. CSAH 152 (Washington Avenue) Bridge #91333 at Bassett Creek in Minneapolis - CP 2176400
8. CSAH 158 (Vernon Avenue) Bridge #4510 over CP Rail in Edina - CP 2176600

Multi-use trails and bicycle facilities

- Programmed in 2018-2022 CIP

9. Midtown Greenway ramp access between Garfield Avenue and Harriet Avenue in Minneapolis - CP 0031547
10. CSAH 10 (Bass Lake Road) from CSAH 8 (West Broadway Avenue) to Xenia Avenue in Crystal - CP 2172800
11. CSAH 52 (Hennepin Avenue/First Avenue) from CSAH 23 (Main Street NE) to Eighth Street SE in Minneapolis - CP 2182100
12. CSAH 36 (University Avenue)/CSAH 37 (Fourth Street) from I-35W to Oak Street SE in Minneapolis - CP 2167301
13. CSAH 81 (Bottineau Boulevard) from CSAH 109 (85th Avenue) to First Avenue NW in Brooklyn Park and Osseo - CP 2182200

Pedestrian facilities

- Programmed in 2018-2022 CIP

14. Americans with Disabilities Act retrofits at various locations to complement bus rapid transit and light rail transit services - CP 2999965

The question was on the adoption of the resolution and there were 7 YEAS and 0 NAYS, as follows:

County of Hennepin
Board of County Commissioners

YEAS	NAYS	ABSTAIN	ABSENT
Mike Opat			
Linda Higgins			
Marion Greene			
Peter McLaughlin			
Debbie Goettel			
Jan Callison			
Jeff Johnson			

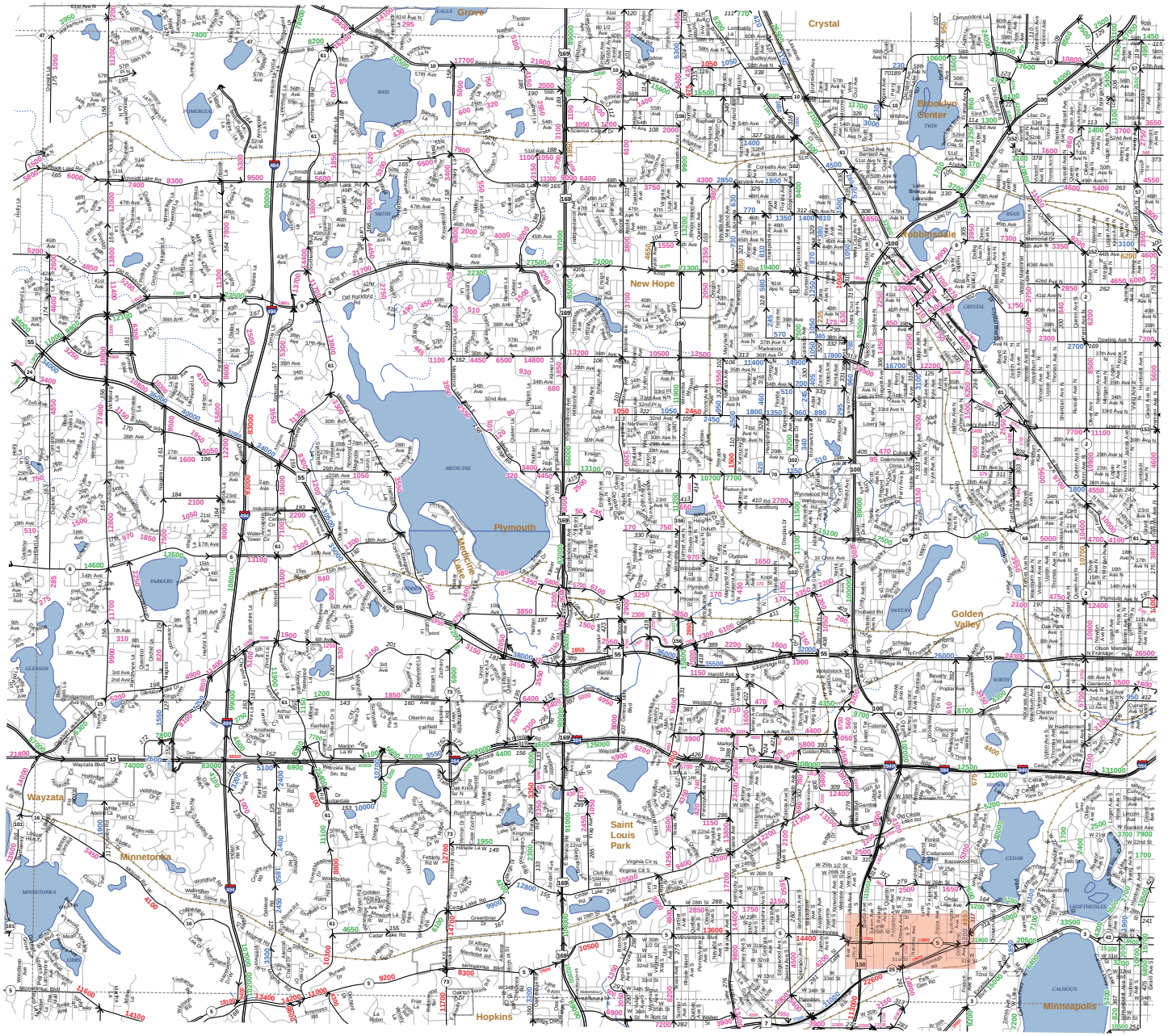
RESOLUTION ADOPTED ON **6/26/2018**

ATTEST: M. Rose

Deputy/Clerk to the County Board

Attachment 8 - MnDOT 50 Series Map

2015 Publication Traffic Volumes Metro Street Series - 4E



N

0 0.25 0.5 0.75 1 Mi.

Numerals Indicate Average Annual Daily Traffic (AADT) Volumes on Designated Roads

Traffic Volumes are Subject to Variability and Construction Effects
For More Info Visit:
http://www.dot.state.mn.us/traffic/data/coll-methods.html#cp

Minnesota Department of Transportation
Office of Transportation Data and Analysis
Traffic Volume Program
http://www.dot.state.mn.us/traffic/data/index.html

MAP LEGEND

AADT Year
- 2015 2014
- 2013 2012
- 2011 and older

- Interstate 94
- US Highway 169
- MN Highway 55
- CSAH 55
- MSAS 101
- County Road 55
- Other Roads
- Railroads
- Street Series Grid
- Cities
- COUNTIES
- Lakes
- Rivers
- Perennial Streams
- Ditches
- National Forests
- National Parks
- Tribal Gov'ts
- State Forests
- State Parks

Map Source:
Minnesota Department of Transportation
Office of Transportation Data and Analysis
Traffic Volume Program
2015 AADT Product
http://www.dot.state.mn.us/traffic/data/data-products.html

To view this data using an online interactive map please visit: http://www.dot.state.mn.us/traffic/data/tma.html

Attachment 9 - 2018 Minnetonka Boulevard Bikeway Project

Minnetonka Boulevard improvements

County Road 5 in St. Louis Park

Hennepin County and the City of St. Louis Park will be making improvements along Minnetonka Boulevard (County Road 5) between Highway 169 and County Road 25 in St. Louis Park.

Bike lane improvement inquiries

kristine.stehly@hennepin.us
Phone: 612-348-6370

Expand all information

2018 bike lane project

Work to begin 2018

Starting summer 2018, Hennepin County crews will be making improvements along Minnetonka Boulevard, roughly between highways 100 and 169.

Improvements will include:

- replacing catch basin grates with bike friendly grates
- restriping to include bike lane signage
- reconfiguring the Dakota Avenue and Minnetonka Boulevard intersection
- repaving Minnetonka Boulevard between Edgewood and Vernon avenues

Features of projects

When complete these improvements will:

- enhance existing on-street facilities between highways 100 and 169
- fill important links for Hennepin County and St. Louis Park bike routes
- provide an alternate east-west route during the anticipated Southwest Light Rail Transit construction along Cedar Lake Trail

Timeline

Weather permitting, this work is expected to be complete by late summer/early fall 2018.

Upcoming projects near the corridor

Visit the links below to learn more about other projects in the area:

Hennepin County 2040 Bicycle Transportation Plan (PDF)

St. Louis Park's Connect the Park

Project leadership and partners

Hennepin County

- Kristine Stehly
  Community Works project manager
  kristine.stehly@hennepin.us
  612-348-6370
- Jason Pieper, P.E.
  Transportation engineer
  jason.pieper@hennepin.us
  612-596-0241
- Nate Hood
  Transportation project manager
  nathaniel.hood@hennepin.us
  612-596-9876

City of St. Louis Park

- Jack Sullivan
  Engineering project manager
  jsullivan@stlouispark.org
  952-924-2691
- Ben Maniblog
  Transportation engineer
  bmaniblog@stlouispark.org
  952-924-2669

Collapse all information

Connect the Park

Connect the Park is the city's 10-year plan to add more sidewalks, trails, bike lanes and bikeways throughout the community. The plan was developed with community input through a process that took several years. City council approved the plan in 2013, and work began in 2015.

Each year, a number of Connect the Park projects are completed. Engineering staff use community feedback to help guide the designs of each project. Open house meetings are held to listen to resident feedback and keep residents informed.

Project overview

As part of Vision St. Louis Park in 2007, the city worked with community members to create an Active Living: Sidewalks and Trails Plan. The Connect the Park initiative will work toward implementing many of the elements of the plan over the next 10 years. The estimated cost for the plan is $24 million.

- Connect the Park map – Sidewalks, trails and bikeways
- Connect the Park map – Sidewalks
- Connect the Park map – Trails
- Connect the Park map – Bikeways

Purpose

To develop a comprehensive, citywide system of trails and sidewalks that provides local and regional connectivity, improves safety and accessibility, and enhances overall community livability.

Goals and objectives

- Develop an interconnected network of pedestrian and bicycle routes throughout the city and linked to transit systems, providing options to automobile dependence.
  - Establish a citywide grid-system of sidewalks approximately every ¼-mile.
  - Establish a citywide grid-system of bicycle facilities approximately every ½-mile.
  - Close gaps in neighborhoods' existing sidewalk networks.
- Anticipate increases in the use of mass transit, including the possibility of a much improved multi-modal system comprising buses, light rail, heavy commuter rail, local circulators, etc.
- Establish safe crossings of highways, arterial roads and rail corridors using innovative traffic calming strategies, improved traffic control systems, grade separations, etc.
- Develop safe links to schools, commercial hubs, employment centers, institutions and transit facilities.
- Develop recreational pathways that link neighborhoods to parks and natural areas, providing opportunities to improve the health and well-being of community residents and workers.
- Make connections to regional and recreational trails to link St. Louis Park to larger metropolitan open space systems and destinations.
- Provide safe and easily accessible routes for residents and workers in the community, including children, seniors and the disabled.
- Provide for walks along high traffic pedestrian and street use areas.
- Create a cohesive, well-designed system that includes a coordinated approach for signs and orientation, standard designs for street crossings and additional "user-friendly" amenities such as rest areas, information kiosks and upgraded landscaping.
- Incorporate strategies for funding, maintenance and snow removal into the overall plan.
- Develop a Capital Improvement Plan based on priorities, needs and available resources.

Project prioritization

In general, the system plan provides sidewalks approximately every quarter-mile and bikeways every half-mile in order to improve pedestrian and bicycle connectivity throughout the community. Both the system plan and the set of general criteria for prioritizing the pedestrian and bike improvements was generated through community input from a St. Louis Park Citizen Advisory Committee, community meeting, 205 online survey responses, and meetings with planning commission, parks and recreation advisory commission and city council. In addition, general support for the goals has been vetted through the subsequent plan-by-neighborhood process, community survey, and community recreation survey. Plan development and prioritization was tied directly to public health, safety and well-being. The system plan and goals were adopted in the comprehensive plan in 2009.

Rating factors or criteria

The logic behind prioritization and plan implementation is based on the following objectives:

- **Focus on key destinations**: segments that serve multiple community gathering centers in the community (schools, parks, transit stops, commercial nodes) rate higher.
- **Focus on transportation**: routes that provide north-south connections through the community, into adjacent communities, and to key transit stops rate higher.

- **Focus on bicycling and walking**: the ultimate goal is to provide a quarter-mile "city" grid of sidewalks and half-mile grid of bike routes. Improvements that fill gaps in the city pedestrian and bicycle networks, improve safety at certain intersections, and provide crossings (bridges or tunnels) of major railroad and highway barriers rate higher.

Timeline

Detailed design of the sidewalks, trails and bikeways is completed the year before proposed construction. The design process begins with field data collection the summer before proposed construction. This data is then analyzed and a preliminary design is created to be presented to the public at a meeting in the fall. Follow up meetings are held as needed to gather input. Once a final design is ready, the individual project segments are brought to the city council for final approval at a public hearing before the project is advanced to construction. Usually, these public hearings are in February or March of the proposed construction year. For example, if a project is proposed for construction in 2020, the design process will begin June 2019, with meetings in the fall and winter, followed up by city council approval in February or March 2020.

When possible, these sidewalk, trail and bikeway projects are scheduled to occur with city street rehabilitation work. If the Connect the Park segment is on a street scheduled for rehabilitation, the public process will occur concurrent to the street public meetings.

Email alerts

City staff are committed to keeping residents informed about Connect the Park projects. Sign up for weekly email updates.

Contact

Jack Sullivan, Sr. Engineering Project Manager
952.924.2691
jsullivan@stlouispark.org

Attachment 11 - Crash Modification Factors

CRASH MODIFICATION FACTORS CLEARINGHOUSE

CMF / CRF Details

CMF ID: 879

Narrow cross section (4 to 3 lanes with two way left-turn lane)

Description:

Prior Condition: Four-lane cross-section, two in each direction.

Category: Roadway

Study: *The Safety and Operational Effects of Road Diet Conversion in Minnesota*, Gates et al., 2007

Star Quality Rating:	★★★☆☆ [View score details]

Crash Modification Factor (CMF)	
Value:	0.63
Adjusted Standard Error:	
Unadjusted Standard Error:	0.00948683298051

Crash Reduction Factor (CRF)	
Value:	37 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	
Unadjusted Standard Error:	0.948683298051

Applicability	
Crash Type:	Angle
Crash Severity:	All
Roadway Types:	Not specified
Number of Lanes:	4
Road Division Type:	
Speed Limit:	
Area Type:	Urban
Traffic Volume:	

Attachment 11 - Crash Modification Factors

CRASH MODIFICATION FACTORS CLEARINGHOUSE

CMF / CRF Details

CMF ID: 1719

Provide bike lanes

Description:

Prior Condition: ***No Prior Condition(s)***

Category: Bicyclists

Study: ***Signalized Intersections: Informational Guide,*** **Rodegerdts et al., 2004**

Star Quality Rating:	[View score details]

Crash Modification Factor (CMF)	
Value:	0.65
Adjusted Standard Error:	
Unadjusted Standard Error:	0.2

Crash Reduction Factor (CRF)	
Value:	35 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	
Unadjusted Standard Error:	20.3

Applicability	
Crash Type:	Vehicle/bicycle
Crash Severity:	K (fatal),A (serious injury),B (minor injury),C (possible injury)
Roadway Types:	Not specified
Number of Lanes:	
Road Division Type:	
Speed Limit:	
Area Type:	
Traffic Volume:	

Attachment 11 - Crash Modification Factors

CRASH MODIFICATION FACTORS CLEARINGHOUSE

CMF / CRF Details

CMF ID: 2841

Converting four-lane roadways to three-lane roadways with center turn lane (road diet)

Description: Conversion of road segments from a four-lane to a three-lane cross-section with two-way left-turn lanes (also known as road diets).

Prior Condition: Four-lane undivided roadway

Category: Roadway

Study: *Comparison of empirical Bayes and full Bayes approaches for before-after road safety evaluations*, Persaud et. al, 2010

Star Quality Rating:	★★★★☆ [View score details]

Crash Modification Factor (CMF)	
Value:	0.53
Adjusted Standard Error:	
Unadjusted Standard Error:	0.02

Crash Reduction Factor (CRF)	
Value:	47 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	
Unadjusted Standard Error:	2

Applicability	
Crash Type:	All
Crash Severity:	All
Roadway Types:	Not Specified
Number of Lanes:	4
Road Division Type:	Undivided
Speed Limit:	

Attachment 11 - Crash Modification Factors

CRASH MODIFICATION FACTORS CLEARINGHOUSE

CMF / CRF Details

CMF ID: 3017

Add Two-Way-Left-Turn-Lane (TWLTL) to the major approach of an unsignalized 4-leg intersection

Description: Add Two-Way-Left-Turn-Lane (TWLTL) to the major approach of an unsignalized 4-leg intersection

Prior Condition: unsignalized 4-leg intersection with no two-way left-turn lane on major road

Category: Access management

Study: ***The Group Least Absolute Shrinkage and Selection Operator "GLASSO" Technique: Application in Variable Selection and Crash Prediction at Unsignalized Intersections*****, Haleem and Abdel-Aty, 2010**

Star Quality Rating:	★★★☆☆ [View score details]

Crash Modification Factor (CMF)	
Value:	0.66
Adjusted Standard Error:	
Unadjusted Standard Error:	

Crash Reduction Factor (CRF)	
Value:	34 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	
Unadjusted Standard Error:	

Applicability	
Crash Type:	All
Crash Severity:	All
Roadway Types:	Not Specified
Number of Lanes:	2 to 8
Road Division Type:	
Speed Limit:	
Area Type:	All

Attachment 11 - Crash Modification Factors

CRASH MODIFICATION FACTORS CLEARINGHOUSE

CMF / CRF Details

CMF ID: 7684

Change from permissive only to flashing yellow arrow protected/permissive left turn

Description: Change from permissive only to FYA - protected/permissive left turn

Prior Condition: Permissive phasing

Category: Intersection traffic control

Study: *Safety Effectiveness of Flashing Yellow Arrow: Evaluation of 222 Signalized Intersections in North Carolina*, Simpson and Troy, 2015

Star Quality Rating:	★★☆☆☆ [View score details]

Crash Modification Factor (CMF)	
Value:	0.598
Adjusted Standard Error:	
Unadjusted Standard Error:	0.105

Crash Reduction Factor (CRF)	
Value:	40.2 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	
Unadjusted Standard Error:	10.5

Applicability	
Crash Type:	Left turn
Crash Severity:	All
Roadway Types:	Not specified
Number of Lanes:	
Road Division Type:	
Speed Limit:	35-55
Area Type:	Not specified

Attachment 11 - Crash Modification Factors

CRASH MODIFICATION FACTORS CLEARINGHOUSE

CMF / CRF Details

CMF ID: 7998

Install left-turn lane

Description:

Prior Condition: Intersections without left turn lanes

Category: Intersection geometry

Study: ***Safety Evaluation of Signal Installation With and Without Left Turn Lanes on Two Lane Roads in Rural and Suburban Areas*, Srinivasan et al., 2014**

Star Quality Rating:	★★★★☆ [View score details]

Crash Modification Factor (CMF)	
Value:	0.876
Adjusted Standard Error:	
Unadjusted Standard Error:	0.066

Crash Reduction Factor (CRF)	
Value:	12.4 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	
Unadjusted Standard Error:	6.6

Applicability	
Crash Type:	All
Crash Severity:	All
Roadway Types:	Not specified
Number of Lanes:	2
Road Division Type:	
Speed Limit:	
Area Type:	All

Attachment 11 - Crash Modification Factors

CRASH MODIFICATION FACTORS CLEARINGHOUSE

CMF / CRF Details

CMF ID: 8797

Improve street lighting illuminance uniformity

Description:

Prior Condition: ***No Prior Condition(s)***

Category: Highway lighting

Study: ***Safety Effects of Street Illiuminance on Roadway Segments in Florida, , 2017***

Star Quality Rating:	[View score details]

Crash Modification Factor (CMF)	
Value:	0.977
Adjusted Standard Error:	
Unadjusted Standard Error:	

Crash Reduction Factor (CRF)	
Value:	2.3 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	
Unadjusted Standard Error:	

Applicability	
Crash Type:	Day time,Nighttime
Crash Severity:	All
Roadway Types:	Not specified
Number of Lanes:	
Road Division Type:	
Speed Limit:	
Area Type:	
Traffic Volume:	Minimum of 4350 to Maximum of 84750 Annual Average Daily Traffic (AADT)

Attachment 11 - Crash Modification Factors

CRASH MODIFICATION FACTORS CLEARINGHOUSE

CMF / CRF Details

CMF ID: 9298

Resurface pavement

Description:

Prior Condition: ***No Prior Condition(s)***

Category: Roadway

Study: *Time series trends of the safety effects of pavement resurfacing,* Park et al., 2017

Star Quality Rating:	[View score details]

Crash Modification Factor (CMF)	
Value:	0.901
Adjusted Standard Error:	
Unadjusted Standard Error:	0.05

Crash Reduction Factor (CRF)	
Value:	9.9 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	
Unadjusted Standard Error:	5

Applicability	
Crash Type:	All
Crash Severity:	All
Roadway Types:	Principal Arterial Other
Number of Lanes:	1-4
Road Division Type:	
Speed Limit:	25mph to 65mph
Area Type:	Urban
Traffic Volume:	Minimum of 2100 to Maximum of 40500 Annual Average Daily Traffic (AADT)

Attachment 12 - Crash Detail Listing (2013-2015)

RD NO	MILE PT	LEFT DIST	RIGHT DIST	ROAD TYPE	INTER TYPE	CRSH YR	CRSH MONTH	CRSH DAY	CRSH HOUR	CRSH D O WK	CRSH NO	MUN	CITY CODE	MAX SEV	CRSH DIAG	CRSH TYPE	NO VEH	CRSH LIGHING	CRSH PRI WEATHER	RD SUR	CRSH WKZO TYPE
Intersection - CSAH 5 (Minnetonka Blvd) at TH 100 E Ramp/Toledo Ave																					
5	7.89	0	0	0	2	2013	5	18	16	7	131710031	42	3405	N	1	1	2	1	1	1	98
5	7.88	0	0	0	2	2013	10	1	12	3	132740118	42	3405	B	1	1	2	1	1	1	98
5	7.88	0	0	0	2	2013	12	4	16	4	133390191	42	3405	N	1	1	2	1	4	5	98
5	7.91	0	0	0	2	2014	1	28	6	3	140280313	42	3405	N	1	1	2	2	2	3	98
5	7.86	0	0	0	2	2014	1	29	7	4	140290069	42	3405	N	1	1	2	1	1	5	98
5	7.88	0	0	0	2	2014	3	3	14	2	140630106	42	3405	N	1	1	2	1	2	5	98
5	7.88	0	0	0	2	2015	3	12	16	5	150720124	42	3405	N	1	1	2	1	1	1	90
5	7.90	0	0	0	2	2015	11	26	21	5	153300117	42	3405	C	1	1	2	4	1	1	98
5	7.87	0	0	0	2	2013	3	21	15	5	130800145	42	3405	N	2	1	2	1	1	1	98
5	7.88	0	0	0	2	2013	7	31	16	4	132120115	42	3405	N	2	1	2	1	1	1	98
5	7.89	0	0	0	2	2013	1	31	14	5	130310100	42	3405	N	3	1	2	1	1	1	98
5	7.89	0	0	0	2	2014	5	14	22	4	141340157	42	3405	N	3	1	2	4	1	1	98
5	7.90	0	0	0	2	2015	1	14	9	4	150140148	42	3405	N	3	1	2	1	1	3	98
5	7.90	0	0	0	2	2015	11	6	18	6	153100208	42	3405	N	3	1	2	4	1	1	98
5	7.88	0	0	0	2	2015	11	9	16	2	153130163	42	3405	N	3	1	2	1	1	1	98
5	7.90	0	0	0	2	2015	12	4	6	6	153380104	42	3405	N	3	1	2	4	1	1	98
5	7.90	0	0	0	2	2015	11	24	17	3	153290039	42	3405	B	90	7	1	4	1	1	98
Segment - CSAH 5 (Minnetonka Blvd) - E of Toledo Ave to W of Ottawa																					
5	8.05	0	0	53	0	2013	8	7	7	4	132190085	42	3405	C	1	1	2	1	1	1	98
5	7.97	0	0	53	0	2014	8	13	21	4	142260023	42	3405	C	1	1	2	4	1	1	98
5	8.11	0	0	53	0	2014	10	4	16	7	142770093	42	3405	N	1	1	2	1	1	1	98

Attachment 12 - Crash Detail Listing (2013-2015)

RD NO	MILE PT	LEFT DIST	RIGHT DIST	ROAD TYPE	INTER TYPE	CRSH YR	CRSH MONTH	CRSH DAY	CRSH HOUR	CRSH DO WK	CRSH NO	MUN	CITY CODE	MAX SEV	CRSH DIAG	CRSH TYPE	NO VEH	CRSH LIGHING	CRSH PRI WEATHER	RD SUR	CRSH WKZO TYPE
5	8.03	0	0	53	0	2015	8	4	19	3	152600040	42	3405	C	1	1	2	1	1	1	98
5	7.96	0	0	53	0	2015	10	6	10	3	152790108	42	3405	N	1	1	2	1	2	1	4
5	7.94	0	0	53	0	2013	4	14	16	1	131040113	42	3405	B	2	1	2	4	5	2	98
5	8.05	0	0	53	0	2013	6	25	12	3	131760155	42	3405	N	2	1	2	1	1	1	98
5	8.05	0	0	53	0	2014	1	30	8	5	140300080	42	3405	N	9	1	2	1	4	3	98
5	7.96	0	0	53	0	2015	8	24	10	2	152360118	42	3405	N	90	41	1	1	1	1	1
Intersection - CSAH 5 (Minneatonka Blvd) at Ottawa Ave																					
5	8.21	0	0	0	12	2014	1	27	14	2	140280236	42	3405	N	1	1	2	1	2	3	98
5	8.23	0	0	0	12	2014	9	11	9	5	142540094	42	3405	N	1	1	2	1	1	1	98
5	8.19	0	0	0	12	2015	3	1	13	1	150600057	42	3405	N	1	1	2	1	1	1	98
5	8.24	0	0	0	12	2013	12	22	12	1	133560103	42	3405	N	2	2	1	99	1	2	98
5	8.21	0	0	0	12	2014	1	31	16	6	140310310	42	3405	N	2	1	2	1	1	5	98
5	8.23	0	0	0	12	2014	2	8	16	7	140390148	42	3405	N	2	1	2	1	1	1	98
5	8.24	0	0	0	12	2014	7	26	19	7	142080023	42	3405	N	2	2	2	1	1	1	98
5	8.21	0	0	0	12	2014	8	29	13	6	142410062	42	3405	C	2	1	2	1	1	1	98
5	8.24	0	0	0	12	2013	10	30	17	4	133030175	42	3405	N	3	1	2	3	1	2	98
5	8.24	0	0	0	12	2013	12	23	14	2	133570189	42	3405	C	3	1	2	1	2	2	98
5	8.24	0	0	0	12	2014	5	4	11	1	141250073	42	3405	N	3	1	2	1	1	1	98
5	8.22	0	0	0	12	2015	10	21	16	4	152940270	42	3405	C	3	1	2	1	1	1	98
5	8.22	0	0	0	12	2015	11	22	17	1	153260091	42	3405	B	3	1	2	4	2	1	98
5	8.24	0	0	0	12	2014	4	11	17	6	141330094	42	3405	N	6	1	2	1	1	1	98
5	8.21	0	0	0	12	2014	1	14	7	3	140150127	42	3405	N	9	1	2	1	4	3	98
Segment - CSAH 5 (Minnetonka Blvd) - E of Ottawa Ave to W of Lynn Ave																					

Attachment 12 - Crash Detail Listing (2013-2015)

RD NO	MILE PT	LEFT DIST	RIGHT DIST	ROAD TYPE	INTER TYPE	CRSH YR	CRSH MONTH	CRSH DAY	CRSH HOUR	CRSH DO WK	CRSH NO	MUN	CITY CODE	MAX SEV	CRSH DIAG	CRSH TYPE	NO VEH	CRSH LIGHING	CRSH PRI WEATHER	RD SUR	CRSH WKZO TYPE
5	8.40	0	0	53	0	2013	1	27	11	1	130330170	42	3405	N	1	1	2	1	2	3	98
5	8.43	0	0	53	0	2013	10	3	8	5	132760073	42	3405	N	1	1	2	1	3	2	98
5	8.43	0	0	53	0	2013	10	27	22	1	133010016	42	3405	N	2	2	2	4	1	1	98
5	8.29	0	0	53	0	2014	11	27	23	5	143320138	42	3405	N	2	2	1	99	99	99	98
5	8.43	0	0	53	0	2013	11	26	15	3	133310046	42	3405	N	5	1	2	1	2	1	98
5	8.35	0	0	53	0	2013	8	16	10	6	132280065	42	3405	B	7	25	1	1	1	1	98
5	8.43	0	0	53	0	2013	9	11	6	4	132540096	42	3405	B	90	6	1	1	1	1	98
Segment - CSAH 5 (Minnetonka Blvd) - E of Lynn Ave to W of Inglewood Ave																					
5	8.53	0	0	54	0	2014	9	20	19	7	142650020	42	3405	N	1	1	2	3	1	1	98
5	8.53	0	0	54	0	2013	4	29	8	2	131190082	42	3405	B	3	1	2	1	1	1	98
5	8.53	0	0	54	0	2013	5	27	14	2	131470061	42	3405	N	3	1	2	1	2	1	98
5	8.53	0	0	54	0	2014	4	29	20	3	141190225	42	3405	N	3	1	2	1	3	2	98
5	8.53	0	0	54	0	2014	7	17	18	5	141980185	42	3405	C	3	1	2	1	1	1	98
5	8.53	0	0	54	0	2014	11	7	11	6	143110086	42	3405	N	3	1	2	1	3	2	98
5	8.53	0	0	54	0	2013	1	28	18	2	130290343	42	3405	N	5	1	2	6	5	2	98
5	8.53	0	0	54	0	2013	2	9	19	7	130410004	42	3405	N	5	1	2	4	2	2	98
5	8.53	0	0	54	0	2013	7	1	15	2	131830120	42	3405	N	5	1	2	1	1	1	98
5	8.53	0	0	54	0	2013	10	25	18	6	133000129	42	3405	N	5	1	2	3	1	1	98
5	8.53	0	0	54	0	2015	11	29	18	1	153330093	42	3405	C	5	1	2	4	2	1	98
Intersection - CSAH 5 (Minneatonka Blvd) at CSAH 905 (W Lake St)/Inglewood Ave																					
5	8.60	0	0	0	13	2013	5	10	9	6	131300066	42	3405	N	2	1	2	1	1	1	98
5	8.61	0	0	0	13	2013	6	11	17	3	131620169	42	3405	N	2	2	2	1	1	1	98
5	8.61	0	0	0	13	2015	10	31	18	7	153050002	42	3405	N	2	1	2	1	1	1	98

Attachment 12 - Crash Detail Listing (2013-2015)

RD NO	MILE PT	LEFT DIST	RIGHT DIST	ROAD TYPE	INTER TYPE	CRSH YR	CRSH MONTH	CRSH DAY	CRSH HOUR	CRSH DO WK	CRSH NO	MUN	CITY CODE	MAX SEV	CRSH DIAG	CRSH TYPE	NO VEH	CRSH LIGHING	CRSH PRI WEATHER	RD SUR	CRSH WKZO TYPE
5	8.60	0	0	0	13	2013	7	10	17	4	131910201	42	3405	N	3	1	3	1	1	1	98
5	8.60	0	0	0	13	2013	5	29	22	4	131500009	42	3405	N	5	1	2	4	3	2	98
5	8.57	0	0	0	13	2014	4	18	11	6	141080067	42	3405	N	5	1	2	1	1	1	98
5	8.60	0	0	0	13	2014	6	29	18	1	141800108	42	3405	C	5	1	2	1	1	1	98
Total				66																	

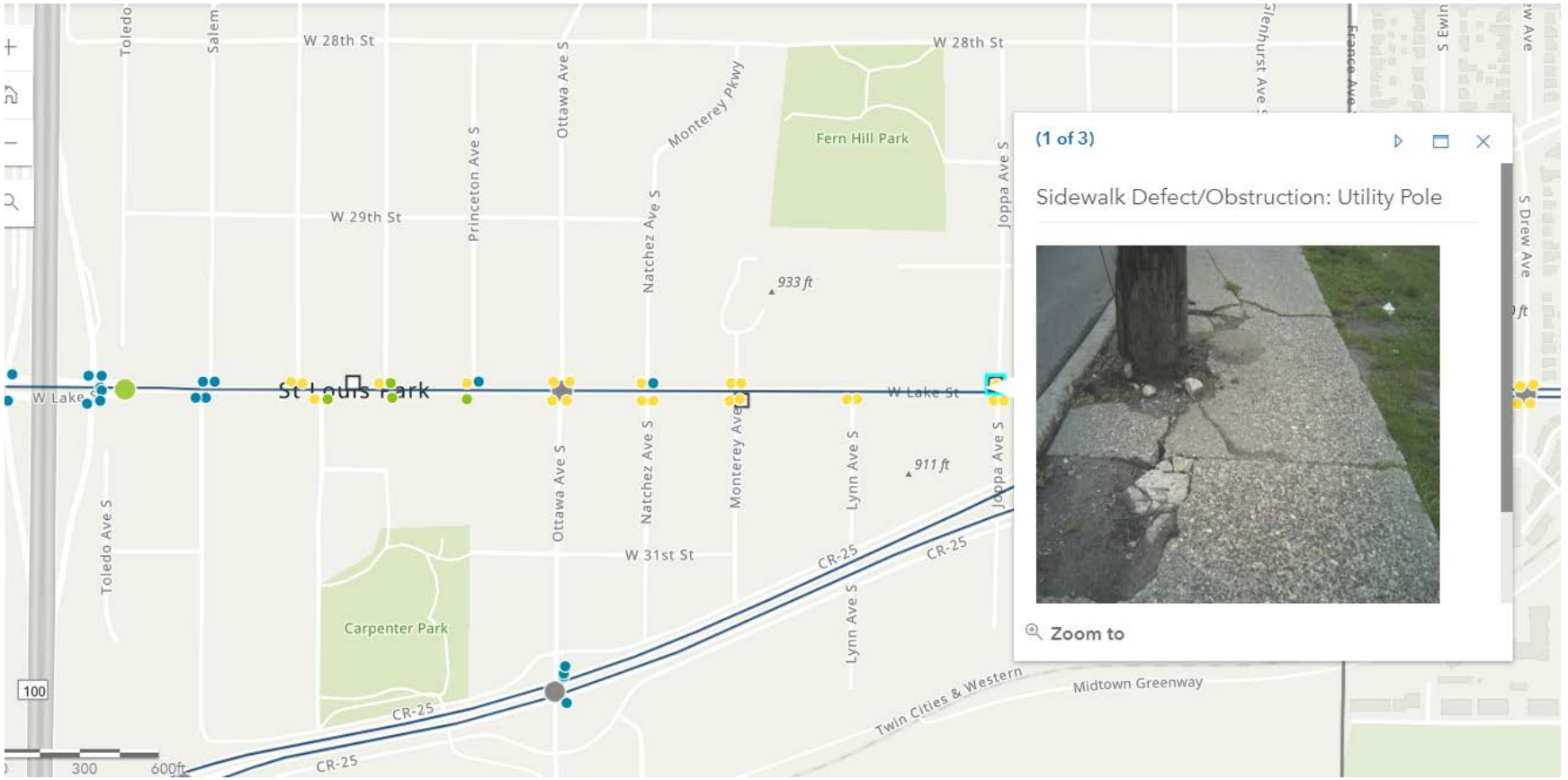
Attachment 12 - Crash Detail Listing (2013-2015)

RD NO	MILE PT	LEFT DIST	RIGHT DIST	ROAD TYPE	INTER TYPE	CRSH YR	CRSH MONTH	CRSH DAY	CRSH HOUR	CRSH DO WK	CRSH NO	MUN	CITY CODE	MAX SEV	CRSH DIAG	CRSH TYPE	NO VEH	CRSH LIGHING	CRSH PRI WEATHER	RD SUR	CRSH WKZO TYPE
Intersection - Glenhurst Ave																					
Total						0															
Intersection - CSAH 25 at France Ave *																					
25	**0.85**	**0**	**0**	**0**	**15**	**2014**	**2**	**4**	**19**	**3**	**140350240**	**42**	**3405**	**N**	**1**	**1**	**2**	**4**	**2**	**1**	**98**
25	**0.84**	**0**	**0**	**0**	**15**	**2014**	**1**	**28**	**15**	**3**	**140630182**	**42**	**3405**	**C**	**1**	**1**	**2**	**1**	**1**	**2**	**98**
25	**0.86**	**0**	**0**	**0**	**15**	**2015**	**3**	**3**	**11**	**3**	**150620116**	**42**	**3405**	**N**	**1**	**1**	**2**	**1**	**4**	**3**	**98**
25	**0.86**	**0**	**0**	**0**	**15**	**2015**	**12**	**14**	**14**	**2**	**153480155**	**42**	**2585**	**N**	**1**	**1**	**2**	**1**	**2**	**2**	**98**
25	**0.84**	**0**	**0**	**0**	**15**	**2014**	**5**	**10**	**14**	**7**	**141300055**	**42**	**3405**	**N**	**2**	**1**	**2**	**1**	**1**	**1**	**98**
25	**0.89**	**0**	**0**	**0**	**15**	**2013**	**3**	**5**	**5**	**3**	**130640235**	**42**	**3405**	**B**	**90**	**7**	**1**	**4**	**2**	**2**	**98**
Total						**6**															
	*Note: Crashes omitted due to engineering judgement																				

Attachment 13 - Hennepin County ADA Self Evaluation

Hennepin County ADA Transition Plan Map

The following map shows data associated with the Americans with Disabilities Act (ADA) and can be used to review the county's infrastructure and identify areas of needed improvement. Data is maintained by Hennepin County Department of Transportation and includes sidewalk barriers, pedestrian ramps, and accessible pedestrian signals (APS). For more information, visit www.hennepin.us/adaplan



Attachment 14 - 2040 Hennepin County Bicycle Transportation Plan

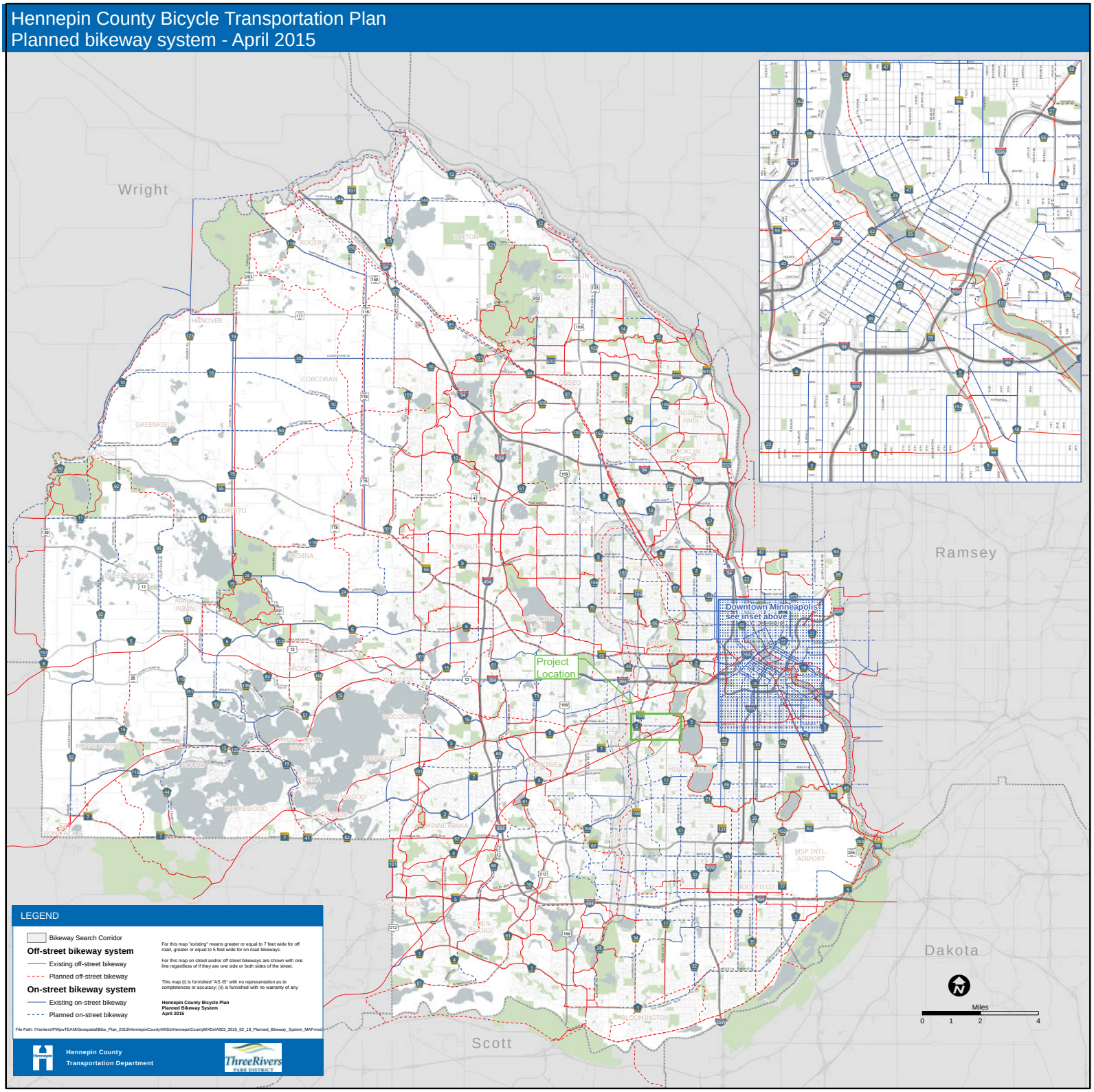
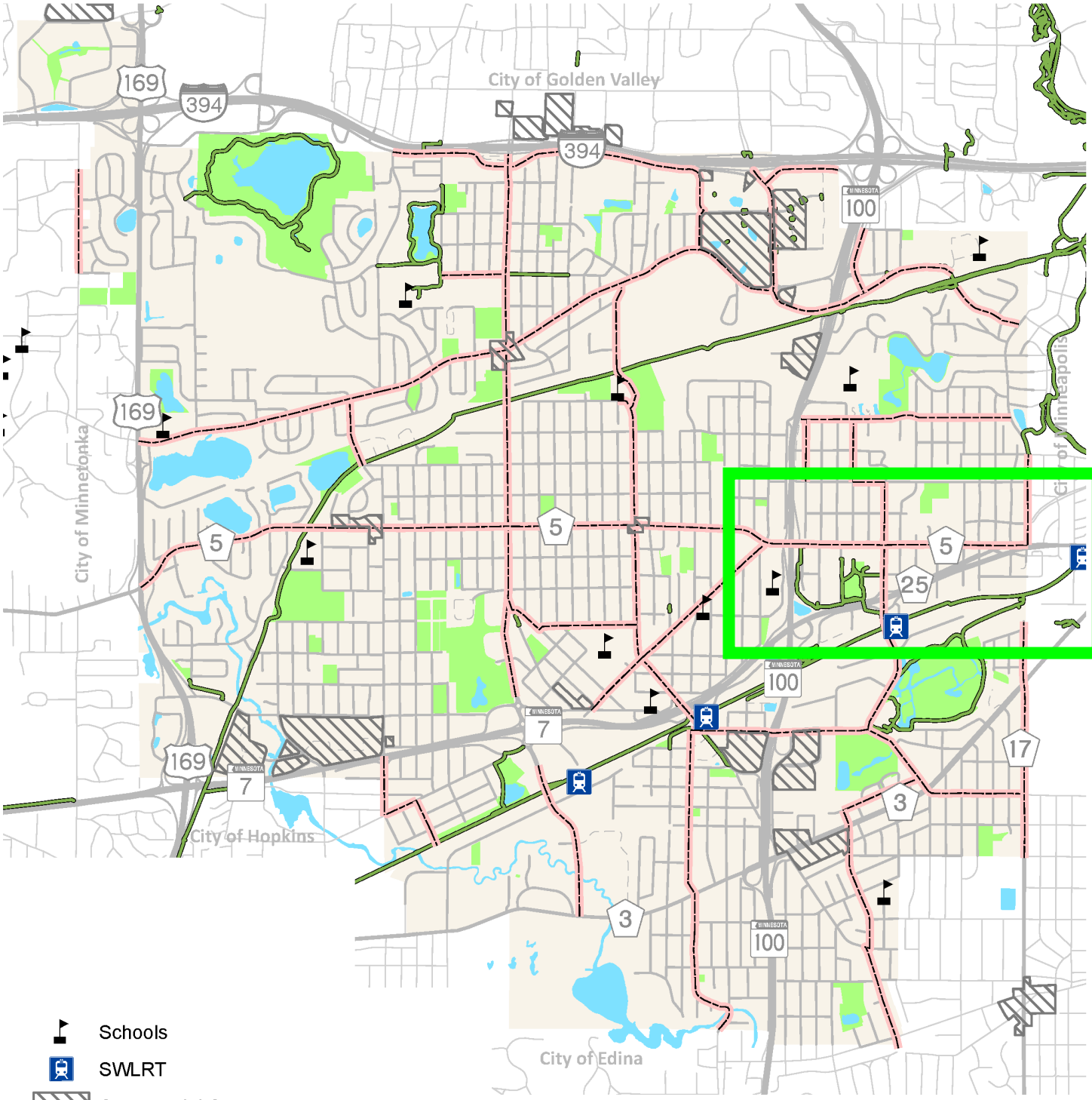


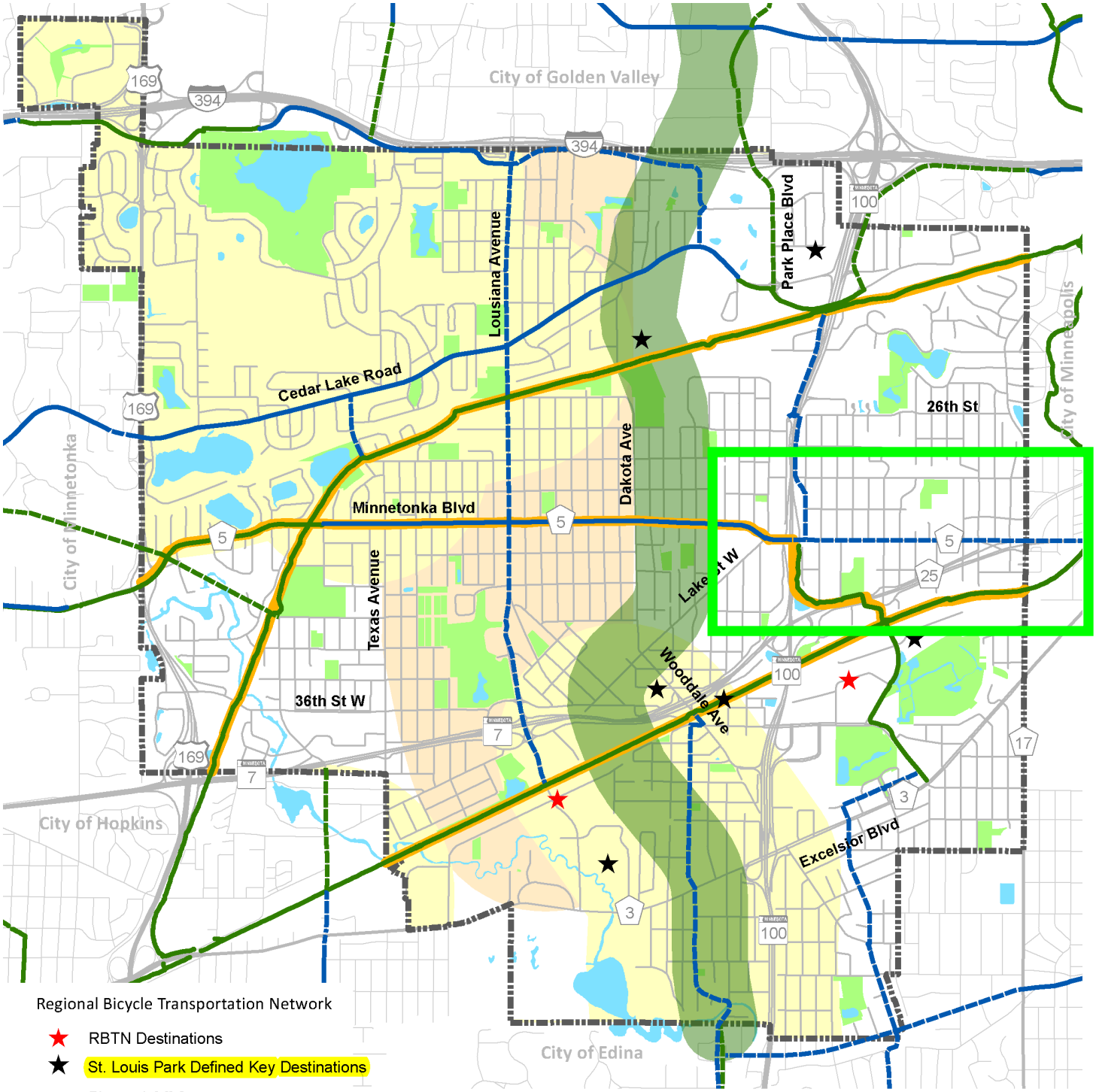
Figure 7-4. Planned Bikeway Projects for Connect the Park



Source: Saint Louis Park

2017 City of St. Louis Park
Community Development

Figure 7-5. RBTN System



St. Louis Park
MINNESOTA

Experience LIFE in the Park

Attachment 16 - St. Louis Park Letter of Support

May 30, 2018

Carla Stueve
Hennepin County Highway Engineer
Hennepin County
1600 Prairie Drive, Medina, MN 55340
612-596-0241 | hennepin.us

RE: Support for Regional Solicitation Application
Minnetonka Blvd (CSAH 5) Roadway Reconstruction Project – TH 100 to France Ave

Dear Ms. Stueve:

The City of St. Louis Park hereby expresses its support for the Hennepin County Regional Solicitation federal funding application for the proposed roadway reconstruction project on CSAH 5 (Minnetonka Blvd) from Trunk Highway 100 to France Avenue.

Minnetonka Boulevard between Trunk Highway (TH) 169 and France Avenue is a Hennepin County road and is one of the few continuous west-to-east roadway connections in the City of St. Louis Park. The Minnetonka Boulevard bridge over TH 100 was reconstructed in 2015 and includes bicycle, pedestrian and intersection improvements that have greatly increased the efficiency and safety in this segment of the corridor. The road to the west and to the east of the new bridge is in need of reconstruction to ensure that it accommodates the best facility for pedestrians, bicycles, and motorists.

We are pleased that the County is pursuing the reconstruction of the segment east of TH100. The project will involve roadway reconstruction, sidewalk replacement, addition of bicycle facilities, upgrade of traffic signals, and capacity improvements at major intersections. The roadway design will also take into account the future CSAH 25 improvements near this corridor. The city has included this project in our 10 year Capital Improvement Plan and we look forward to partnering with the county on these much needed improvements.

Thank you for making us aware of this application effort and the opportunity to provide support. The city looks forward to working with you on this project.

Sincerely,

Debra M. Heiser, P.E.
Engineering Director

CC: Tom Harmening, City Manager
Jason Pieper, Transportation Engineer