



Application

19842 - 2024 Multiuse Trails and Bicycle Facilities  
20260 - CSAH 152 (Washington Ave) Bikeway Project  
Regional Solicitation - Bicycle and Pedestrian Facilities

Status: Submitted  
Submitted Date: 12/12/2023 4:21 PM

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### Primary Contact

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Pronouns First Name Middle Name Last Name

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**\*** Medina Minnesota 53340  
City State/Province Postal Code/Zip

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

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### 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

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### Project Information

**Project Name** CSAH 152 (Washington Ave) Bikeway Project

**Primary County where the Project is Located** Hennepin

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

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

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

The proposed project includes multimodal enhancements along CSAH 152 (Washington Ave) from 5th Ave S to 11th Ave S in the City of Minneapolis. Attachment 02 includes a map of the project location.

The current configuration of CSAH 152 (Washington Ave) includes a four-lane divided typical section with on-street bike lanes, sidewalk facilities, and parking lanes on both sides. This A-minor reliever is heavily used by both bicycle and motor vehicle commuter traffic, and crossing distances for people walking are relatively long. There is no vertical separation along CSAH 152 (Washington Ave) between people biking, driving, and parked vehicles. On-street parking and commercial uses throughout the corridor creates further conflict points between people biking and people driving, including bus transit. Left turns at several intersections include protected and permissive operations with a negative left turn offset, leading to conflicts between left turning vehicles and nonmotorized users. Photos depicting existing conditions are included in Attachment 03.

The project objectives include improving safety, comfort, and accessibility along CSAH 152 (Washington Ave); with a focus on introducing complete streets design strategies to promote traffic calming and an All Ages and Abilities bicycle facility that complements first and last mile connections to Metro Transit's planned H Line arterial Bus Rapid Transit (aBRT) service and to provide a continuous off-street bicycle facility between Hennepin Ave and 11th Ave S.

This project will include, but is not limited to the following elements. The specific locations and types of improvements will be determined as part of the design process based on additional community input, data analysis, and environmental review. The proposed typical section is included in Attachment 04 and the potential concept is included in Attachment 05.

- Bicycle improvements; such as the introduction of protected bicycle facilities, protected intersections (as feasible), shortened crossing distances, and improved first/last mile connections to the H Line Service and local routes.

- Pedestrian improvements; such as ADA compliant curb ramps, APS, high visibility crosswalk markings, improved first/last mile connections to the H Line Service and local routes; curb extensions, medians, and crossing enhancements (where feasible).

- Safety improvements; such as the upgrading of traffic signal systems to accommodate new roadway configurations, and the installation of curb extensions to reduce crossing distances and manage speeds.

- Streetscaping improvements; such as the introduction of greenspace and storm water infrastructure to provide additional space between the off-street bicycle facility and people walking, and driving.

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

**TRANSPORTATION IMPROVEMENT PROGRAM (TIP) DESCRIPTION - will be used in TIP if the project is selected for funding. See MnDOT's TIP description guidance.** CSAH 152 (Washington Ave) from 5th Ave S to 11th Ave S in the City of Minneapolis

*Include both the CSAH/MSAS/TH references and their corresponding street names in the TIP Description (see Resources link on Regional Solicitation webpage for examples).*

**Project Length (Miles)**

0.5

*to the nearest one-tenth of a mile*

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## Project Funding

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

If yes, please identify the source(s)

Federal Amount \$5,500,000.00

Match Amount \$4,070,000.00

*Minimum of 20% of project total*

Project Total \$9,570,000.00

*For transit projects, the total cost for the application is total cost minus fare revenues.*

Match Percentage 42.53%

*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: 2028

*Select 2026 or 2027 for TDM and Unique projects only. For all other applications, select 2028 or 2029.*

Additional Program Years:

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

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## Project Information

If your project has already been assigned a State Aid Project # (SAP or SP)

Please indicate here SAP/SP#.

Location

County, City, or Lead Agency Hennepin County

Name of Trail/Ped Facility: CSAH 152 (Washington Ave) Bikeway Project

*(example: CEDAR LAKE TRAIL)*

IF TRAIL/PED FACILITY IS ADJACENT TO ROADWAY:

Road System CSAH

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

Road/Route No. 152

*(Example: 53 for CSAH 53)*

Name of Road Washington Ave

*(Example: 1st ST., Main Ave.)*

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

From: Road System MSAS

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

Road/Route No. 18374

*(Example: 53 for CSAH 53)*

Name of Road 5th Ave S

*(Example: 1st ST., Main Ave.)*

To: Road System MSAS

*DO NOT INCLUDE LEGAL DESCRIPTION; INCLUDE NAME OF ROADWAY IF MAJORITY OF FACILITY RUNS ADJACENT TO A SINGLE CORRIDOR*

Road/Route No. 3889

*(Example: 53 for CSAH 53)*

Name of Road 11th Ave S

*(Example: 1st ST., Main Ave.)*

In the City/Cities of: Minneapolis

*(List all cities within project limits)*

IF TRAIL/PED FACILITY IS NOT ADJACENT TO ROADWAY:

Termini: Termini listed must be within 0.3 miles of any work

From:

To:

Or

At:

In the City/Cities of:

*(List all cities within project limits)*

Primary Types of Work (Check all that apply)

Multi-Use Trail

Reconstruct Trail

Resurface Trail

Bituminous Pavement

Concrete Walk

Pedestrian Bridge

Signal Revision

Yes

Landscaping

Yes

Other (do not include incidental items)

Bikeway, ADA, APS, Signal Modifications, Streetscaping, and Stormwater Management

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

Old Bridge/Culvert No.:

New Bridge/Culvert No.:

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

Zip Code where Majority of Work is Being Performed

55415

Approximate Begin Construction Date (MOYR)

05/01/2028

Approximate End Construction Date (MOYR)

10/31/2029

Miles of Pedestrian Facility/Trail (nearest 0.1 miles):

1.0

Miles of trail on the Regional Bicycle Transportation Network (nearest 0.1 miles):

1.0

Is this a new trail?

No

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## Requirements - All Projects

### All Projects

1. The project must be consistent with the goals and policies in these adopted regional plans: Thrive MSP 2040 (2014), the 2040 Transportation Policy Plan (2018), the 2040 Regional Parks Policy Plan (2018), 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.

Briefly list the goals, objectives, strategies, and associated pages:

A) Transportation System Stewardship (p 2.2-2.4)

Objectives A & B; Strategies A1, A2, A3

The project will extend the county's enhanced bikeway network along CSAH 152 (Washington Ave). Dedicated facilities for nonmotorized users will improve transportation operations for all users. These improvements will enhance roadway efficiency and improve accessibility to the future H Line BRT along CSAH 152 (Washington Ave).

B) Safety and security (p 2.5-2.9)

Objectives A & B; Strategies B1, B3, B4 & B6

Currently people are biking along an on-street bike lane on a road with approximately 18,500 people driving. The separated facility for bicyclists will improve safety and comfort for all users. The project will include bump outs to support shorter distances for people walking and biking across intersections.

C) Access to destinations (p 2.10-2.25)

Objectives A, B, C, D & E; Strategies C1, C2, C3, C4, C8, C9, C11, C12, C14, C15, C16 & C17

CSAH 152 (Washington Ave) is an A-minor reliever that provides significant access to jobs, shopping, entertainment and residential destinations in downtown Minneapolis. The corridor is a Tier 1 alignment on the RBTN. The proposed changes are consistent with a Complete Streets design in the urban context, making it more convenient to take non-motorized trips.

D) Competitive economy (p 2.26-2.29)

Objectives A, B & C; Strategies D1, D3 & D4

CSAH 152 (Washington Ave) provides direct access to businesses in downtown and the North Loop neighborhoods. The project enhances a multimodal corridor for all modes; making it more attractive for businesses and residents. This project will prepare the roadway to serve as the H Line BRT corridor.

E) Healthy and equitable communities (p 2.30-2.34)

Objectives A, B, C & D; Strategies E1, E2, E3, E4, E5, E6 & E7

CSAH 152 (Washington Ave) serves as a critical multimodal connection in downtown Minneapolis for people to connect to jobs, recreation, culture, goods and services. The project will increase the use of non-motorized travel, which can improve public health outcomes for all people.

F) Leveraging transportation investments to guide land use (p 2.35-2.41)

Objectives A & C; Strategies F1, F2, F3, F5, F6, F7

The project will enhance nonmotorized modes which aligns with the urbanized downtown core. This project prepares the corridor for the future H Line BRT, and will integrate all modes safely while promoting the livability of the area.

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

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

List the applicable documents and pages: Unique projects are exempt from this qualifying requirement because of their innovative nature.

1) Hennepin County 2040 Transportation Plan (pages 2-11 - 2-18)

URL: [hennepin.us/-/media/hennepinus/your-government/projects-initiatives/2040-comprehensive-plan/2040-comprehensive-plan-full.pdf](https://hennepin.us/-/media/hennepinus/your-government/projects-initiatives/2040-comprehensive-plan/2040-comprehensive-plan-full.pdf)

2) Hennepin County Climate Action Plan (pages 50-54)

URL: [hennepin.us/climate-action/-/media/climate-action/hennepin-county-climate-action-plan-final.pdf](https://hennepin.us/climate-action/-/media/climate-action/hennepin-county-climate-action-plan-final.pdf)

3) Hennepin County Complete and Green Streets Policy (pages 10-11)

URL: [hennepin.us/-/media/hennepinus/your-government/projects-initiatives/complete-streets/Complete-and-Green-Streets-Policy\\_Oct2023.pdf](https://hennepin.us/-/media/hennepinus/your-government/projects-initiatives/complete-streets/Complete-and-Green-Streets-Policy_Oct2023.pdf)

4) Hennepin County Pedestrian Plan (page 8)

URL: [hennepin.us/-/media/hennepinus/residents/transportation/documents/pedestrian-plan.pdf](https://hennepin.us/-/media/hennepinus/residents/transportation/documents/pedestrian-plan.pdf)

5) City of Minneapolis Vision Zero Action Plan (pages 16-35)

URL: [lms.minneapolismn.gov/Download/RCAV2/31027/18-Vision-Zero-Action-Plan-2023-2025.pdf](https://lms.minneapolismn.gov/Download/RCAV2/31027/18-Vision-Zero-Action-Plan-2023-2025.pdf)

6) City of Minneapolis Pedestrian Priority Network Map (page 47 (2 of 26))

URL: [go.minneapolismn.gov/application/files/7316/0753/2056/TAP\\_Final\\_WALKING\\_G.pdf](https://go.minneapolismn.gov/application/files/7316/0753/2056/TAP_Final_WALKING_G.pdf)

7) Hennepin County Enhanced Bikeway Network Study (See Attachment 06)

8) Minneapolis All Ages and Abilities Bicycle Network (See Attachment 07)

9) Metro Transit's H Line Project and Network Next

URL: [metrotransit.org/h-line-project](https://metrotransit.org/h-line-project)

URL: [metrotransit.org/Data/Sites/1/media/network-next/network-next-arterial-brt-final-report.pdf](https://metrotransit.org/Data/Sites/1/media/network-next/network-next-arterial-brt-final-report.pdf)

(Limit 2,800 characters; approximately 400 words)

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. Unique project costs are limited to those that are federally eligible.

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

Yes

5. Applicant is a public agency (e.g., county, city, tribal government, transit provider, etc.) or non-profit organization (TDM and Unique Projects applicants only). Applicants that are not State Aid 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 in more than one funding sub-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 in Table 1. For unique projects, the minimum award is \$500,000 and the maximum award is the total amount available each funding cycle (approximately \$4,000,000 for the 2024 funding cycle).

**Multiuse Trails and Bicycle Facilities:** \$250,000 to \$5,500,000  
**Pedestrian Facilities (Sidewalks, Streetscaping, and ADA):** \$250,000 to \$2,000,000  
**Safe Routes to School:** \$250,000 to \$1,000,000

**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 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 plan must be completed by the local agency before the Regional Solicitation application deadline. For future Regional Solicitation funding cycles, this requirement may include that the plan has undergone a recent update, e.g., within five years prior to application.

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

**Date plan completed:** 08/31/2015

**Link to plan:** [hennepin.us/-/media/hennepinus/residents/transportation/documents/ada-sidewalk-transition-plan.pdf](https://hennepin.us/-/media/hennepinus/residents/transportation/documents/ada-sidewalk-transition-plan.pdf)

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

**Date self-evaluation completed:**

**Link to plan:**

**Upload plan or self-evaluation if there is no link**

Upload as PDF

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. This includes assurance of year-round use of bicycle, pedestrian, and transit facilities, per FHWA direction established 8/27/2008 and updated 4/15/2019. Unique projects are exempt from this qualifying requirement.

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

12. The project must represent a permanent improvement with independent utility. The term "independent utility" means the project provides benefits described in the application by itself and does not depend on any construction elements of the project being funded from other sources outside the regional solicitation, excluding the required non-federal match.

Projects that include traffic management or transit operating funds as part of a construction project are exempt from this policy.

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

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

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

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

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

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## Requirements - Bicycle and Pedestrian Facilities Projects

1. All projects must relate to surface transportation. As an example, for multiuse trail and bicycle facilities, surface transportation is defined as primarily serving a commuting purpose and/or that connect two destination points. A facility may serve both a transportation purpose and a recreational purpose; a facility that connects people to recreational destinations may be considered to have a transportation purpose.

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

### Multiuse Trails on Active Railroad Right-of-Way:

2. All multiuse trail projects that are located within right-of-way occupied by an active railroad must attach an agreement with the railroad that this right-of-way will be used for trail purposes.

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

[Upload Agreement PDF](#)

**Check the box to indicate that the project is not in active railroad right-of-way.** Yes

### Multiuse Trails and Bicycle Facilities projects only:

3. All applications must include a letter from the operator of the facility confirming that they will remove snow and ice for year-round bicycle and pedestrian use. The Minnesota Pollution Control Agency has a resource for best practices when using salt. Upload PDF of Agreement in Other Attachments.

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

Upload PDF of Agreement in Other Attachments.

### Safe Routes to School projects only:

4. All projects must be located within a two-mile radius of the associated primary, middle, or high school site.

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

5. All schools benefitting from the SRTS program must conduct after-implementation surveys. These include the student travel tally form and the parent survey available on the National Center for SRTS website. The school(s) must submit the after-evaluation data to the National Center for SRTS within a year of the project completion date. Additional guidance regarding evaluation can be found at the MnDOT SRTS website.

Check the box to indicate that the applicant understands this requirement and will submit data to the National Center for SRTS within one year of project completion.

## Requirements - Bicycle and Pedestrian Facilities Projects

### Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	\$378,000.00
Removals (approx. 5% of total cost)	\$315,000.00
Roadway (grading, borrow, etc.)	\$0.00
Roadway (aggregates and paving)	\$471,400.00
Subgrade Correction (muck)	\$0.00
Storm Sewer	\$617,000.00
Ponds	\$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	\$236,350.00
Traffic Control	\$378,000.00
Striping	\$84,300.00
Signing	\$22,500.00
Lighting	\$200,000.00
Turf - Erosion & Landscaping	\$309,000.00
Bridge	\$0.00
Retaining Walls	\$0.00
Noise Wall (not calculated in cost effectiveness measure)	\$0.00
Traffic Signals	\$2,040,000.00
Wetland Mitigation	\$0.00
Other Natural and Cultural Resource Protection	\$0.00
RR Crossing	\$0.00
Roadway Contingencies	\$1,543,230.00
Other Roadway Elements	\$100,000.00
<b>Totals</b>	<b>\$6,694,780.00</b>

### Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Path/Trail Construction	\$300,150.00
Sidewalk Construction	\$784,550.00
On-Street Bicycle Facility Construction	\$0.00
Right-of-Way	\$0.00
Pedestrian Curb Ramps (ADA)	\$265,000.00
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	\$178,000.00
Pedestrian-scale Lighting	\$200,000.00
Streetscaping	\$309,000.00
Wayfinding	\$0.00
Bicycle and Pedestrian Contingencies	\$663,520.00
Other Bicycle and Pedestrian Elements	\$175,000.00
<b>Totals</b>	<b>\$2,875,220.00</b>

### 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

**PROTECT Funds Eligibility**

One of the new federal funding sources is Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT). Please describe which specific elements of your project and associated costs out of the Total TAB-Eligible Costs are eligible to receive PROTECT funds. Examples of potential eligible items may include: storm sewer, ponding, erosion control/landscaping, retaining walls, new bridges over floodplains, and road realignments out of floodplains.

*INFORMATION: Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) Formula Program Implementation Guidance (dot.gov).*

**Response:** Based on a planning level review of the proposed scope of work that's primarily focused on constructing a new bikeway facility, county staff did not identify any project elements that were obviously eligible for the PROTECT Program.

**Totals**

Total Cost	\$9,570,000.00
Construction Cost Total	\$9,570,000.00
Transit Operating Cost Total	\$0.00

**Measure A: Project Location Relative to the RBTN**

Select one:

Tier 1, Priority RBTN Corridor

Tier 1, RBTN Alignment Yes

Tier 2, RBTN Corridor

Tier 2, RBTN Alignment

Direct connection to an RBTN Tier 1 corridor or alignment

Direct connection to an RBTN Tier 2 corridor or alignment

OR

Project is not located on or directly connected to the RBTN but is part of a local system and identified within an adopted county, city or regional parks implementing agency plan.

Upload Map 1701961512718\_2024 RS Map 03 - CSAH 152 Washington Ave Bikeway - RBTN Orientation.pdf

Please upload attachment in PDF form

**Measure A: Population Summary**

Existing Population Within One Mile (Integer Only) 90274

Existing Employment Within One Mile (Integer Only) 207764

Upload the "Population Summary" map 1701970391032\_2024 RS Map 02 - CSAH 152 Washington Ave Bikeway - Population Employment.pdf

Please upload attachment in PDF form

**Measure A: Engagement**

i. Describe any Black, Indigenous, and People of Color populations, low-income populations, disabled populations, youth, or older adults within a ½ mile of the proposed project. Describe how these populations relate to regional context. Location of affordable housing will be addressed in Measure C.

ii. Describe how Black, Indigenous, and People of Color populations, low-income populations, persons with disabilities, youth, older adults, and residents in affordable housing were engaged, whether through community planning efforts, project needs identification, or during the project development process.

iii. Describe the progression of engagement activities in this project. A full response should answer these questions:

1. What engagement methods and tools were used?
2. How did you engage specific communities and populations likely to be directly impacted by the project?
3. What techniques did you use to reach populations traditionally not involved in community engagement related to transportation projects?
4. How were the project's purpose and need identified?
5. How was the community engaged as the project was developed and designed?
6. How did you provide multiple opportunities for Black, Indigenous, and People of Color populations, low-income populations, persons with disabilities, youth, older adults, and residents in affordable housing to engage at different points of project development?
7. How did engagement influence the project plans or recommendations? How did you share back findings with community and re-engage to assess responsiveness of these changes?
8. If applicable, how will NEPA or Title VI regulations will guide engagement activities?

**Response:**

Within 0.5 miles of the project corridor, 52% of the population are Black, Indigenous, or People of Color (BIPOC) and 16% of the population has a disability of any kind. 40% of the population within 0.5 miles of the project area has a household income under 200% of the federal poverty level. 12% of the population of the project area has limited English proficiency. These demographic profiles are from the 2017 - 2021 5-year ACS estimates.

The project was identified as part of the City of Minneapolis's All Ages and Abilities network, which seeks to provide safe and comfortable bicycling for all people, not just those who are fit and confident. The network was developed as part of the city's Transportation Action Plan. That planning effort worked with residents citywide from 2018 to 2020 and included workshops, online surveys, social media conversations, community engagement with community organizations, and small-group conversations among city staff and community members of historically underrepresented groups.

This project also was identified in Hennepin County's Bicycle Transportation Plan which included a robust community outreach process. In that plan, residents expressed a desire to cycle more but that a lack of separated facilities served as a barrier.

The proposed project responds to themes heard through the City of Minneapolis's planning process as well as during the creation of the Hennepin County Bike Plan to create a separated bikeway facility that feels safe and comfortable to connect residents with destinations in Downtown East including first and last mile connections with light rail and bus transit.

While project engagement has not yet occurred for this specific project, if funded Hennepin County will collaborate with the City of Minneapolis, the Downtown Improvement District, and other stakeholders to identify appropriate strategies to facilitate community input, particularly from underrepresented communities. In particular, project development will coordinate closely with and be informed by Metro Transit's corridor planning process for the proposed H Line arterial bus rapid transit service proposed through the project area. This project will ensure first and last mile connections to this proposed service through an all ages and abilities bicycle facility and appropriate crossing improvements.

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

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## **Measure B: Disadvantaged Communities Benefits and Impacts**

Describe the project's benefits to Black, Indigenous, and People of Color populations, low-income populations, children, people with disabilities, youth, and older adults. Benefits could relate to:

- ? pedestrian and bicycle safety improvements;
- ? public health benefits;
- ? direct access improvements for residents or improved access to destinations such as jobs, school, health care, or other;
- ? travel time improvements;
- ? gap closures;
- ? new transportation services or modal options;
- ? leveraging of other beneficial projects and investments;
- ? and/or community connection and cohesion improvements.

This is not an exhaustive list. A full response will support the benefits claimed, identify benefits specific to Disadvantaged communities residing or engaged in activities near the project area, identify benefits addressing a transportation issue affecting Disadvantaged communities specifically identified through engagement, and substantiate benefits with data.

Acknowledge and describe any negative project impacts to Black, Indigenous, and People of Color populations, low-income populations, children, people with disabilities, youth, and older adults. Describe measures to mitigate these impacts. Unidentified or unmitigated negative impacts may result in a reduction in points.

Below is a list of potential negative impacts. This is not an exhaustive list.

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

**Response:**

The CSAH 152 (Washington Ave) Bikeway project will provide direct benefit to Black, Indigenous and People of Color (BIPOC) populations, low-income populations, those with disabilities, youth, and other disadvantaged communities through constructing and all ages and abilities bikeway. The project will close a gap between the existing cycle track / protected bikeway on CSAH 152 (Washington Ave) that ends at 5th Ave S and a north/south bikeway connection along on 11th St. This project will also ensure accessibility and safety for all modes making a first or last mile connection to the future H line arterial bus rapid transit service proposed through the project area, providing connections to the North Loop and the University of Minnesota and beyond.

The proposed project will also benefit disadvantaged populations by adding boulevard space where today green space is limited. Improved green infrastructure will provide shade, air filtration and aesthetics, promoting safety and comfort for those walking and rolling and advancing the county's climate action goals.

In addition to complementing the proposed H line service, the project will create accessible last-mile connections from and to the multiple transit options nearby, including the METRO Green and Blue line U.S. Bank Station two blocks south. Other METRO services such as the proposed F line, E line, and existing C and D lines are both within 0.5 miles of the proposed project. Downtown Minneapolis is a major employment center, drawing employees from across the Twin Cities. Communities from all over the metropolitan area will benefit from greater access to the employment and destinations enabled by this project, but particularly those who do not have access to a vehicle. Attachment 08 provides an overview of key community resources, including childcare, healthcare, and other resources which serve both a local and regional population.

Increased noise and impacts to the roadway and sidewalks are anticipated during construction. The contractor will be required to follow temporary traffic control plans which specify detour routes for all people traveling through the corridor. Access to adjacent buildings will be critical, and staff will seek out opportunities to ensure that nearby businesses and services are not negatively impacted during construction.

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

Describe any affordable housing developments?existing, under construction, or planned?within ½ mile of the proposed project. The applicant should note the number of existing subsidized units, which will be provided on the Socio-Economic Conditions map. Applicants can also describe other types of affordable housing (e.g., naturally-occurring affordable housing, manufactured housing) and under construction or planned affordable housing that is within a half mile of the project. If applicable, the applicant can provide self-generated PDF maps to support these additions. Applicants are encouraged to provide a self-generated PDF map describing how a project connects affordable housing residents to destinations (e.g., childcare, grocery stores, schools, places of worship).

Describe the project?s benefits to current and future affordable housing residents within ½ mile of the project. Benefits must relate to affordable housing residents. Examples may include:

- ? specific direct access improvements for residents
- ? improved access to destinations such as jobs, school, health care or other;
- ? new transportation services or modal options;
- ? and/or community connection and cohesion improvements.

This is not an exhaustive list. Since residents of affordable housing are more likely not to own a private vehicle, higher points will be provided to roadway projects that include other multimodal access improvements. A full response will support the benefits claimed, identify benefits specific to residents of affordable housing, identify benefits addressing a transportation issue affecting residents of affordable housing specifically identified through engagement, and substantiate benefits with data.

**Response:**

The CSAH 152 (Washington Ave) Bikeway Project in downtown Minneapolis is within a half mile of 2,805 housing units affordable at 60 percent area median income or better across 16 sites. Attachment 09 provides a map and full detail summary of these locations, including unit sizes and affordability limits based on area median incomes. The largest property is Riverside Plaza, with 1,303 affordable units. Another example of the nearby affordable housing is Emanuel Housing one block south of the project. Emanuel offers recovery-focused affordable housing in 101 units, 54 of which are affordable at 30 percent area median income. It also serves previously homeless veterans and people with disabilities. As identified in the Met Council generated Socio-Economic Conditions map, 7386 subsidized units exist in census tracts proximate to the project.

The project is in downtown Minneapolis, which may include some naturally occurring affordable housing, particularly in the Elliot Park neighborhood to the south. The ongoing recalibration of downtown office space due to aftereffects of the COVID-19 pandemic may significantly increase affordable housing nearby, as would a continuation of the trend toward downtown living. The downtown Minneapolis population has increased from 49,721 in 2018 to 56,748 in 2022.

The project will benefit residents of affordable housing by improving their access to destinations, including employment, higher education, childcare, entertainment, downtown library, food and health care. The project would substantially improve biking on CSAH 152 (Washington Ave), making it feel safer and more comfortable, creating a new mode option for people who are not comfortable biking on-street with heavy traffic. The connection will improve access to transit departing downtown Minneapolis, which connects to a tremendous number of destinations and opportunities, including jobs, recreation, education, and entertainment venues.

The eastern end of downtown Minneapolis, where this project would be, is redeveloping and is anchored by U.S. Bank Stadium. It is expected the area will continue to redevelop and may include additional affordable housing over the expected life of the project.

The project would improve community cohesion and integration by eventually connecting downtown with downtown east and the University of Minnesota. This will also directly benefit residents of affordable housing who utilize transit for their daily needs as it will improve first and last mile connections to the proposed H Line, as well as the Blue Line, Green Line, and other routes in the METRO network.

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

---

## Measure D: BONUS POINTS

Project is located in an Area of Concentrated Poverty:

Project?s census tracts are above the regional average for population in poverty or population of color (Regional Environmental Justice Area): Yes

Project located in a census tract that is below the regional average for population in poverty or populations of color (Regional Environmental Justice Area):

Upload the ?Socio-Economic Conditions? map used for this measure.

1701971563311\_2024 RS Map 01 - CSAH 152 Washington Ave Bikeway - Socio Economic.pdf

---

## Measure A: Bikeway Network Gaps, Physical Barriers, and Continuity of Bicycle Facilities

*PART 1: Qualitative assessment of project narrative discussing how the project will close a bicycle network gap, create a new or improved physical bike barrier crossing, and/or improve continuity and connections between jurisdictions.*

*Specifically, describe how the project would accomplish the following: Close a transportation network gap, provide a facility that crosses or circumvents a physical barrier, and/or improve continuity or connections between jurisdictions.*

*Bike system gap improvements include the following:*

- *Providing a missing link between existing or improved segments of a local transportation network or regional bicycle facility (i.e., regional trail or RBTN alignment);*
- *Improving bikeability to better serve all ability and experience levels by:*
  - *Providing a safer, more protected on-street facility or off-road trail;*
  - *Improving safety of bicycle crossings at busy intersections (e.g., through signal operations, revised signage, pavement markings, etc.); OR*
  - *Providing a trail adjacent or parallel to a highway or arterial roadway or improving a bike route along a nearby and parallel lower-volume neighborhood collector or local street.*

*Physical bicycle barrier crossing improvements include grade-separated crossings (over or under) of rivers and streams, railroad corridors, freeways and expressways, and multi-lane arterials, or enhanced routes to circumvent the barrier by channeling bicyclists to existing safe crossings or grade separations. Surface crossing improvements (at-grade) of major highway and rail barriers that upgrade the bicycle facility treatment or replace an existing facility at the end of its useful life may also be considered as bicycle barrier improvements. (For new barrier crossing projects, distances to the nearest parallel crossing must be included in the application to be considered for the full allotment of points under Part 1).*

*Examples of continuity/connectivity improvements may include constructing a bikeway across jurisdictional lines where none exists or upgrading an existing bicycle facility treatment so that it connects to and is consistent with an adjacent jurisdiction's bicycle facility.*

**Response:**

The CSAH 152 (Washington Ave) Bikeway Project would upgrade the current on-street bike lane to a separated bikeway to correct a bicycle network deficiency. It would connect three low-stress bikeways on Minneapolis's All Ages and Abilities Network. The project would reconstruct 0.5 miles of CSAH 152 (Washington Ave) from 5th Ave S to just east of 11th Ave S in downtown Minneapolis, extending the existing protected bikeway that is west of the project.

The bikeway would separate people biking from people driving and people walking on a busy corridor that carries 18,578 motor vehicles a day with pronounced peaks in the morning and evening. It will make bicycling more accessible and safer for people who are not as comfortable with bicycling adjacent heavy traffic with no separation. It will include bicycle signals and intersection treatments intended to improve safety for people walking, biking, driving and using transit.

This segment of CSAH 152 (Washington Ave) is a priority corridor in Hennepin County's enhanced bikeway study and part of the Minneapolis All Ages and Abilities Network (Attachments 06 and 07).

At the project's eastern terminus is the 11th Ave protected bikeway, a north-south All Ages and Abilities route connecting to south Minneapolis past U.S. Bank Stadium and over I-94/I-35W via the Hiawatha LRT Regional Trail. Toward the western end are CSAHs 33 and 35 (Park and Portland avenues), which are major All Ages and Abilities bicycle routes connecting to south Minneapolis. Hennepin County is planning to create separated bikeways on CSAHs 33 and 35 (Park and Portland avenues) from approximately I-94/I-35W Bridge to 46th St.

The CSAH 152 (Washington Ave) Bikeway Project would connect to a future Tier 1 Regional Bicycle Barrier Crossing Improvement that will cross I-35W on CSAH 152 (Washington Ave) about 700 feet away. Closing that gap will better connect downtown Minneapolis with the University of Minnesota without having to descend into the Mississippi River Gorge, which is challenging biking route for many people.

CSAH 152 (Washington Ave) is a backbone of the bicycling network in downtown Minneapolis paralleling the Mississippi River about 0.2 mile away. Hennepin County reconstructed the roadway from CSAH 52 (Hennepin Ave) to 5th Ave S to include a protected bikeway in 2017.

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

## **PART 2: Regional Bicycle Barrier Crossing Improvements and Major River Bicycle Barrier Crossings**

### **DEFINITIONS:**

*Regional Bicycle Barrier Crossing Improvements include crossings of barrier segments within the ?Regional Bicycle Barrier Crossing Improvement Areas? as updated in the 2019 Technical Addendum to the Regional Bicycle Barriers Study and shown in the RBBS online map (insert link to forthcoming RBBS Online Map). Projects must create a new regional barrier crossing, replace an existing regional barrier crossing at the end of its useful life, or upgrade an existing barrier crossing to a higher level of bike facility treatment, to receive points for Part 2.*

*Major River Bicycle Barrier Crossings include all existing and planned highway and bicycle/pedestrian bridge crossings of the Mississippi, Minnesota and St. Croix Rivers as identified in the 2018 update of the 2040 Transportation Policy Plan. Projects must create a new major river bicycle barrier crossing, replace an existing major river crossing at the end of its useful life, or upgrade the crossing to a higher level of bike facility treatment, to receive points for Part 2.*

*Projects that construct new or improve existing Regional Bicycle Barrier Crossings or Major River Bicycle Barrier Crossings will be assigned points as follows: (select one)*

#### **Tier 1**

*Tier 1 Regional Bicycle Barrier Crossing Improvement Area segments & any Major River Bicycle Barrier Crossings*

#### **Tier 2**

*Tier 2 Regional Bicycle Barrier Crossing Improvement Area segments*

#### **Tier 3**

*Tier 3 Regional Bicycle Barrier Crossing Improvement Area segments*

#### **Non-tiered**

*Crossings of non-tiered Regional Bicycle Barrier segments*

#### **No improvements**

*No Improvements to barrier crossings*

Yes

If the project improves multiple regional bicycle barriers, check box.

## Multiple

Projects that improve crossing of multiple regional bicycle barriers receive bonus points (except Tier 1 & MRBCCs)

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### Measure B: Deficiencies corrected or safety problems addressed

#### Response:

The CSAH 152 (Washington Ave) Bikeway Project corridor had 17 reported pedestrian-involved crashes and eight reported bicycle-involved crashes from 2013 to 2022, for a total of 25 crashes. The total includes three serious-injury crashes (see Attachment 10).

The proposed project will improve safety for people biking, walking and driving by creating a separated bikeway. It will reduce conflicts between people driving and biking at the street level, where parking, loading/unloading and lane departures create hazards. Today, people who are not comfortable biking in the street-level bike lane bike on the sidewalk, creating conflicts with people walking and rolling (using wheelchairs or other assistive devices). The separated bikeway will reduce those conflicts.

The project would accommodate a bus rapid transit station for Metro Transit's H Line at Chicago Ave, where the bikeway would go behind the station and platform area, reducing conflicts between buses and bikes as well as between people biking and using transit.

The CSAH 152 (Washington Ave) Bikeway Project would add accessible pedestrian signals where absent today, making the corridor more accessible and safer for people walking and rolling (using a wheelchair or other assistive device). It would include an accessible pedestrian and bicycle crossing at the T intersection with 9th Ave So, where today a raised concrete median on Washington prevents people from using what should be a crosswalk, potentially stranding people in the general lane if they were not aware of the lack of accessible infrastructure. The county also will evaluate pedestrian crossing improvements at 10th Ave South, which today is not signalized.

Attachment 11 includes crash reduction references from MnDOT's Minnesota's Best Practices for Pedestrian and Bicycle Safety for the project elements that are anticipated to be constructed as part of this project.

- Protected bikeway - 59% reduction in crashes.
- Crossing Beacons - 47% reduction in vehicle-pedestrian crashes
- Curb extensions - Up to a 45% reduction in crashes.
- Raised medians - 46-56% reduction in pedestrian crashes.
- Protected intersections - Crash reduction varies based on design elements selected.

(Limit 2,800 characters; approximately 400 words)

---

### Measure A: Multimodal Elements

**Response:**

The CSAH 152 (Washington Ave) Bikeway Project will construct significant improvements for all modes.

This project will be coordinated with Metro Transit to incorporate arterial Bus Rapid Transit (aBRT) stations for the planned H Line, which is anticipated to be construction in 2027/2028. The proposed bikeway will be routed behind the station platform areas at Chicago Ave to improve safety for people using transit. Currently, Routes 3, 17 and 22 utilize this segment of CSAH 152 (Washington Ave).

Transit users will benefit from having an upgraded first mile/last mile connection between the many bus and LRT stops located nearby in downtown Minneapolis. The U.S. Bank LRT station is two blocks south of the project and transit users likely will be more comfortable biking, using a scooter or walking while utilizing the infrastructure proposed as part of this project, expanding the potential market for ridership.

People walking will benefit from having a sidewalk-level bikeway separate from the sidewalk, as today many people choose to bike on the sidewalk rather than the on-street bike lane next to motor vehicle traffic. The project's pedestrian infrastructure will be fully ADA compliant, including accessible pedestrian signals (APS), where today several ramps are not compliant and (APS) is absent.

People walking and rolling (using a wheelchair or other assistive device) will also benefit from a new pedestrian refuge at 9th Ave S, a T-intersection where today a median without curb cuts obstructs people walking and rolling from crossing CSAH 152 (Washington Ave).

People walking, rolling and using the adjacent buildings also will benefit from the narrower roadway profile, keeping motor vehicles farther from them, which should reduce noise, roadspray and speeds while improving safety. The project will include a green space and stormwater infrastructure for a more pleasant user experience.

The current pedestrian environment includes obstructions such as tree grates and parking meter kiosks that limit accessibility, as do noncompliant ramps and lack of APS (some intersections have APS and most have compliant ramps, but not all). The sidewalks vary between 8 feet and 11 feet, appropriate for downtown.

People driving will have the same number of general lanes for their use, at four (two in each direction). Providing a bikeway behind the curb with its own signal should reduce conflicts between turning vehicle operators and people biking.

Attachment 12 highlights key multimodal connections, including nearby transit routes, as well as on and off street bikeway facilities. Through the protected bikeway along 11th Ave S, people biking can connect from the CSAH 152 (Washington Ave) corridor to the Mississippi River Trail or the Hiawatha LRT Regional Trail.



## 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. Public Involvement (20 Percent of Points)

Projects that have been through a public process with residents and other interested public entities are more likely than others to be successful. The project applicant must indicate that events and/or targeted outreach (e.g., surveys and other web-based input) were held to help identify the transportation problem, how the potential solution was selected instead of other options, and the public involvement completed to date on the project. The focus of this section is on the opportunity for public input as opposed to the quality of input. NOTE: A written response is required and failure to respond will result in zero points.

Multiple types of targeted outreach efforts (such as meetings or online/mail outreach) specific to this project with the general public and partner agencies have been used to help identify the project need. Yes

100%

At least one meeting specific to this project with the general public has been used to help identify the project need.

50%

At least online/mail outreach effort specific to this project with the general public has been used to help identify the project need.

50%

No meeting or outreach specific to this project was conducted, but the project was identified through meetings and/or outreach related to a larger planning effort.

25%

No outreach has led to the selection of this project.

0%

Describe the type(s) of outreach selected for this project (i.e., online or in-person meetings, surveys, demonstration projects), the method(s) used to announce outreach opportunities, and how many people participated. Include any public website links to outreach opportunities.

Response:

Existing outreach activities occurred related to the Hennepin County 2040 Bicycle Transportation Plan and during the reconstruction of CSAH 152 (Washington Ave) from Hennepin Ave to 5th Ave S directly adjacent to this project. As part of the CSAH 152 (Washington Ave) reconstruction project from Hennepin Ave to 5th Ave S, county staff completed multiple types of outreach for the entire CSAH 152 (Washington Ave) corridor from Hennepin Avenue to I-35W that specifically informed the potential concept for the CSAH 152 (Washington Ave) Bikeway Project. Previous engagement efforts led to a county board resolution (Attachment 13) that designated CSAH 152 (Washington Ave) between Hennepin Ave and I-35W as a multi-modal complete streets corridor.

Outreach will include in-person events and meetings and online methods. Hennepin County's goal is to reach a wide and diverse cross section of residents and corridor users to gain public input that is representative of the community.

(Limit 2,800 characters; approximately 400 words)

### 2. Layout (25 Percent of Points)

Layout includes proposed geometrics and existing and proposed right-of-way boundaries. A basic layout should include a base map (north arrow, scale; legend;\* city and/or county limits; existing ROW, labeled; existing signals;\* and bridge numbers\*) and design data (proposed alignments; bike and/or roadway lane widths; shoulder width;\* proposed signals;\* and proposed ROW). An aerial photograph with a line showing the project?s termini does not suffice and will be awarded zero points. \*If applicable

Layout approved by the applicant and all impacted jurisdictions (i.e., cities/counties/MnDOT. If a MnDOT trunk highway is impacted, approval by MnDOT must have occurred to receive full points. A PDF of the layout must be attached along with letters from each jurisdiction to receive points.

100%

A layout does not apply (signal replacement/signal timing, stand-alone streetscaping, minor intersection improvements). Applicants that are not certain whether a layout is required should contact Colleen Brown at MnDOT Metro State Aid ? colleen.brown@state.mn.us.

100%

For projects where MnDOT trunk highways are impacted and a MnDOT Staff Approved layout is required. Layout approved by the applicant and all impacted local jurisdictions (i.e., cities/counties), and layout review and approval by MnDOT is pending. A PDF of the layout must be attached along with letters from each jurisdiction to receive points.

75%

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

50%

Layout has been started but is not complete. A PDF of the layout must be attached to receive points.

25%

Layout has not been started

0%

**Attach Layout**

1702417304259\_Attachment 05 - Potential Concept.pdf

*Please upload attachment in PDF form*

**Additional Attachments**

*Please upload attachment in PDF form*

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

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

100%

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

100%

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

80%

Historic/archeological property impacted; determination of ?adverse effect? anticipated

40%

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

0%

Project is located on an identified historic bridge

**4. Right-of-Way (25 Percent of Points)**

Right-of-way, permanent or temporary easements, and MnDOT agreement/limited-use permit either not required or all have been acquired

100%

Right-of-way, permanent or temporary easements, and/or MnDOT agreement/limited-use permit required - plat, legal descriptions, or official map complete

50%

Right-of-way, permanent or temporary easements, and/or MnDOT agreement/limited-use permit required - parcels identified Yes

25%

Right-of-way, permanent or temporary easements, and/or MnDOT agreement/limited-use permit required - parcels not all identified

0%

**5. Railroad Involvement (15 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%

**Measure A: Cost Effectiveness**

Total Project Cost (entered in Project Cost Form): \$9,570,000.00

Enter Amount of the Noise Walls: \$0.00

Total Project Cost subtract the amount of the noise walls: \$9,570,000.00

Points Awarded in Previous Criteria

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**Other Attachments**

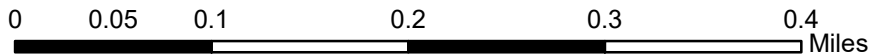
File Name	Description	File Size
Attachment 00 - List of Attachments.pdf	Attachment 00 - List of Attachments	78 KB
Attachment 01 - Project Narrative.pdf	Attachment 01 - Project Narrative	103 KB
Attachment 02 - Project Location Map.pdf	Attachment 02 - Project Location Map	1.3 MB
Attachment 03 - Existing Condition Photos.pdf	Attachment 03 - Existing Condition Photos	434 KB
Attachment 04 - Potential Typical Section.pdf	Attachment 04 - Potential Typical Section	114 KB
Attachment 05 - Potential Concept.pdf	Attachment 05 - Potential Concept	927 KB
Attachment 06 - Hennepin County Enhanced Bikeway Study Maps.pdf	Attachment 06 - Hennepin County Enhanced Bikeway Study Maps	3.6 MB
Attachment 07 - City of Minneapolis All Ages and Abilities Network Map.pdf	Attachment 07 - City of Minneapolis All Ages and Abilities Network Map	255 KB
Attachment 08 - Disadvantaged Communities and Resources Map.pdf	Attachment 08 - Disadvantaged Communities and Resources Map	1.1 MB
Attachment 09 - Affordable Housing Access Map and Detail Summary.pdf	Attachment 09 - Affordable Housing Access Map and Detail Summary	666 KB
Attachment 10 - Crash Data Summary.pdf	Attachment 10 - Crash Data Summary	198 KB
Attachment 11 - Crash Reduction References.pdf	Attachment 11 - Crash Reduction References	1.2 MB
Attachment 12 - Multimodal Connections Map.pdf	Attachment 12 - Multimodal Connections Map	1.1 MB
Attachment 13 - Hennepin County Board Resolution 13-0470.pdf	Attachment 13 - Hennepin County Board Resolution 13-0470	164 KB
Attachment 14 - MnDOT Support Letter.pdf	Attachment 14 - MnDOT Support Letter	184 KB
Attachment 15 - Metro Transit Support Letter.pdf	Attachment 15 - Metro Transit Support Letter	106 KB
Attachment 16 - Notice of Application Submittal to City of Minneapolis.pdf	Attachment 16 - Notice of Application Submittal to City of Minneapolis	139 KB
Attachment 17 - Hennepin County and City of Minneapolis Maintenance Agreement.pdf	Attachment 17 - Hennepin County and City of Minneapolis Maintenance Agreement	1.6 MB

# Project to RBTN Orientation

Multiuse Trails and Bicycle Facilities Project: CSAH 152 (Washington Ave) Bikeway Project | Map ID: 1699017591099



- Project
- RBTN Tier 1 Alignment
- Principal Arterials
- Minor Arterials
- RBTN Tier 1
- RBTN Tier 2



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LandscapeRSA6



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



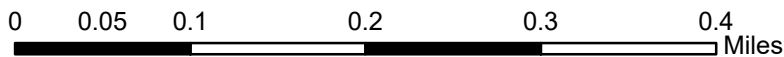
# Population/Employment Summary

## Results

Within ONE Mile of project:  
 Total Population: 90274  
 Total Employment: 207764



-  Project Points
-  Project Area
-  Project
-  2016 TAZ



Created: 11/3/2023  
 LandscapeRSA4



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

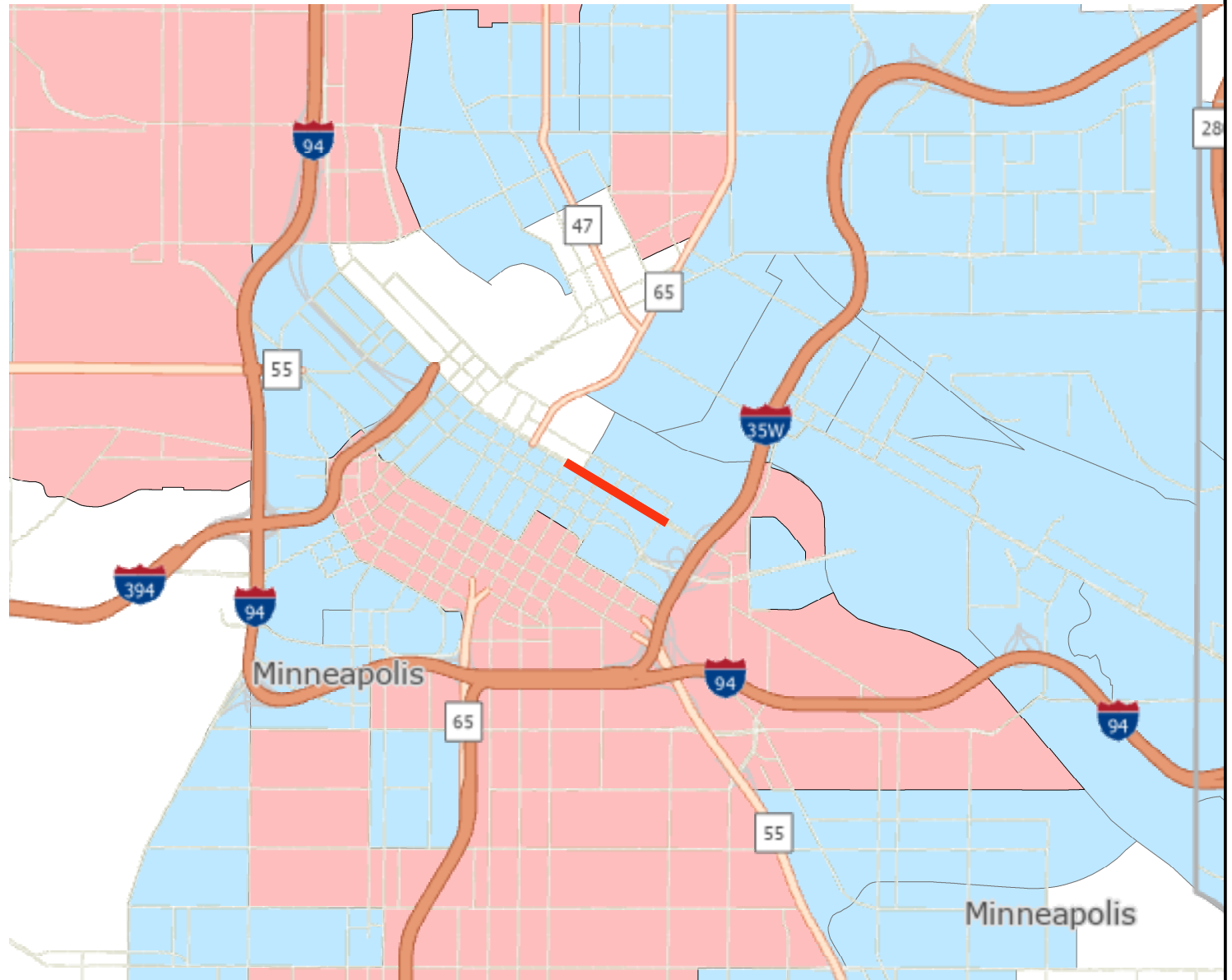


# Socio-Economic Conditions

## Results

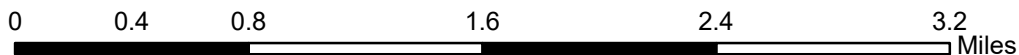
Total of publicly subsidized rental housing units in census tracts within 1/2 mile: 7386

Project located in census tract(s) that are ABOVE the regional average for population in poverty or population of color.



— Lines  
— Area of Concentrated Poverty

— Regional Environmental Justice Area



Created: 11/3/2023  
LandscapeRSA2



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# Transit Connections

## Results

Transit with a Direct Connection to project:

11 113 114 17 18 22 3 460 465 467 470  
 472 475 477 490 493 600 695 698 7 755 764  
 774 784 789 795 901 902 904 940

\*West Broadway/Cedar

\*H Line

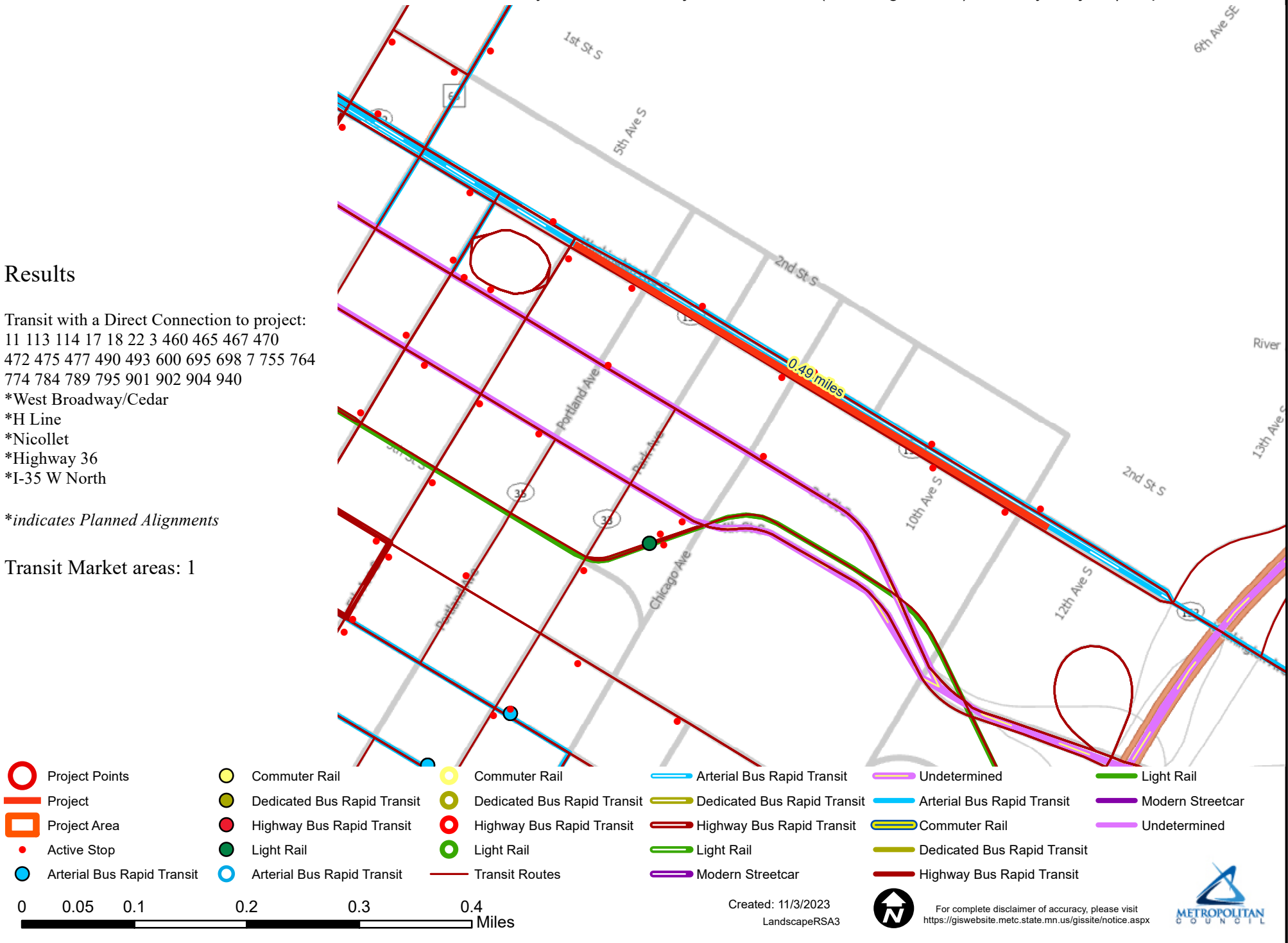
\*Nicollet

\*Highway 36

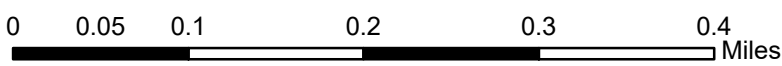
\*I-35 W North

\*indicates Planned Alignments

Transit Market areas: 1



- |                            |                             |                             |                             |                             |                  |
|----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|------------------|
| Project Points             | Commuter Rail               | Commuter Rail               | Arterial Bus Rapid Transit  | Undetermined                | Light Rail       |
| Project                    | Dedicated Bus Rapid Transit | Dedicated Bus Rapid Transit | Dedicated Bus Rapid Transit | Arterial Bus Rapid Transit  | Modern Streetcar |
| Project Area               | Highway Bus Rapid Transit   | Highway Bus Rapid Transit   | Highway Bus Rapid Transit   | Commuter Rail               | Undetermined     |
| Active Stop                | Light Rail                  | Light Rail                  | Light Rail                  | Dedicated Bus Rapid Transit |                  |
| Arterial Bus Rapid Transit | Arterial Bus Rapid Transit  | Transit Routes              | Modern Streetcar            | Highway Bus Rapid Transit   |                  |



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 LandscapeRSA3



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



# CSAH 152 (Washington Ave) Bikeway Project

Attachment 05 | Potential Concept

HENNEPIN COUNTY  
MINNESOTA

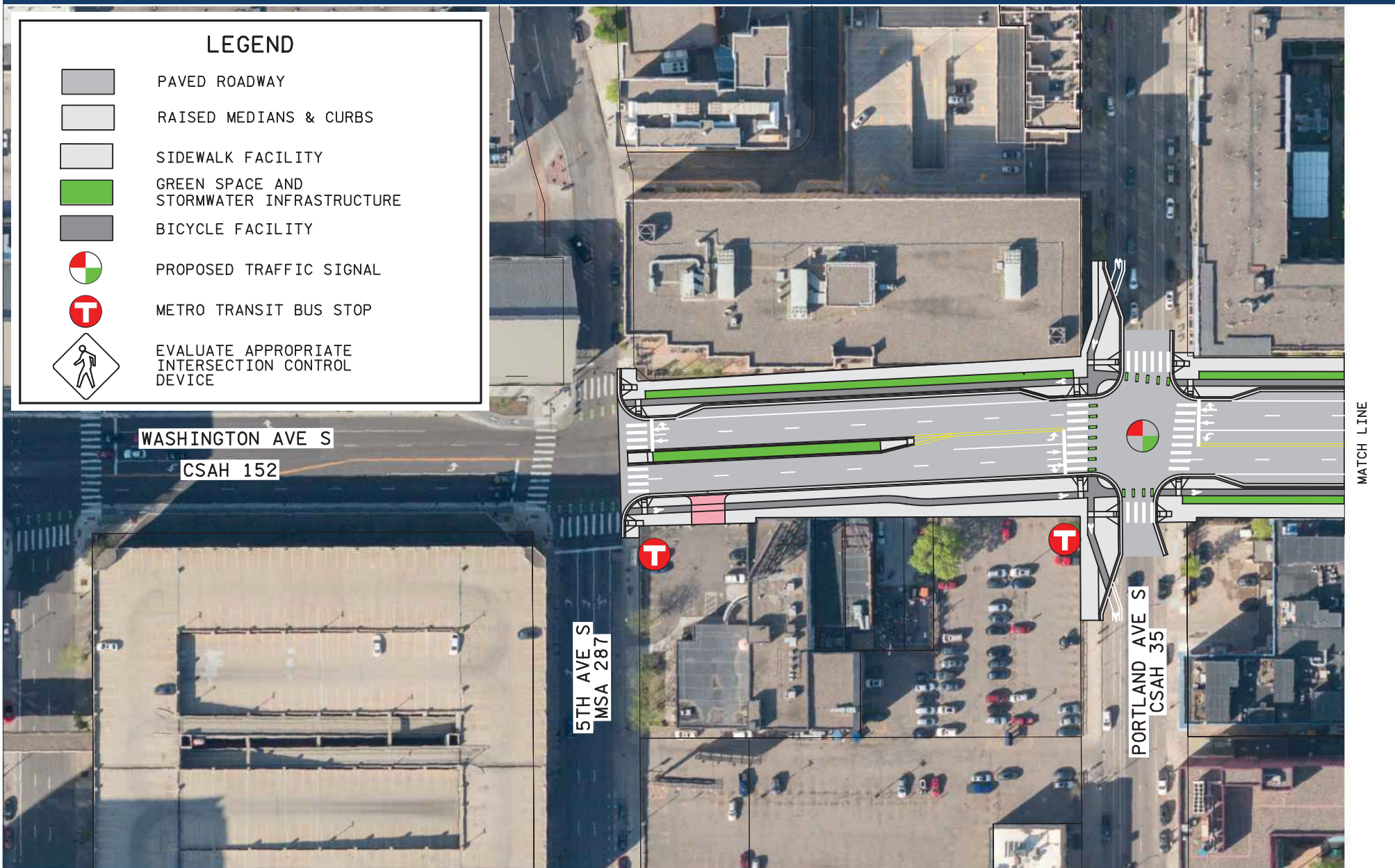


Figure 1



# CSAH 152 (Washington Ave) Bikeway Project

Attachment 05 | Potential Concept

HENNEPIN COUNTY  
MINNESOTA

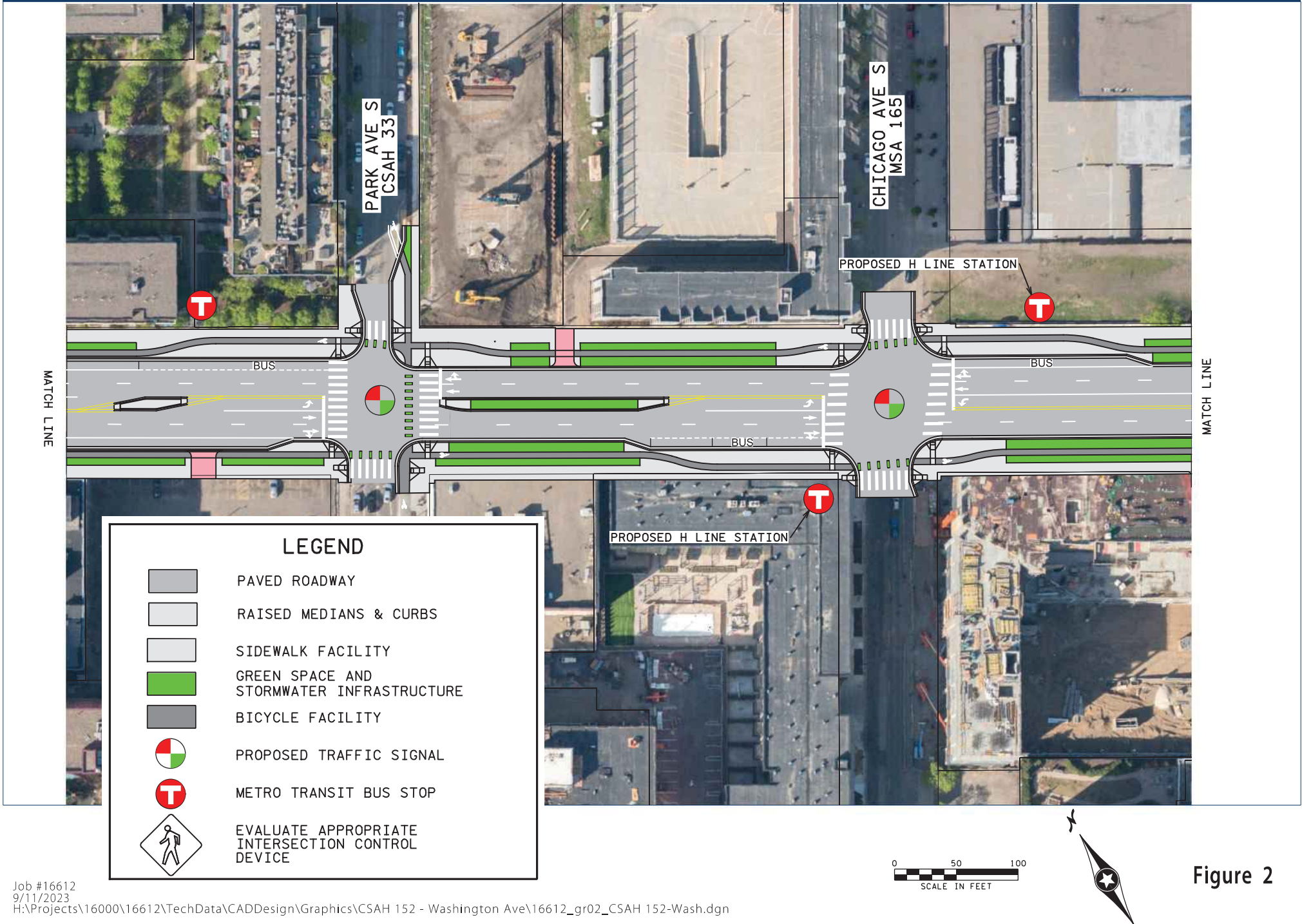


Figure 2

# CSAH 152 (Washington Ave) Bikeway Project

Attachment 05 | Potential Concept

HENNEPIN COUNTY  
MINNESOTA

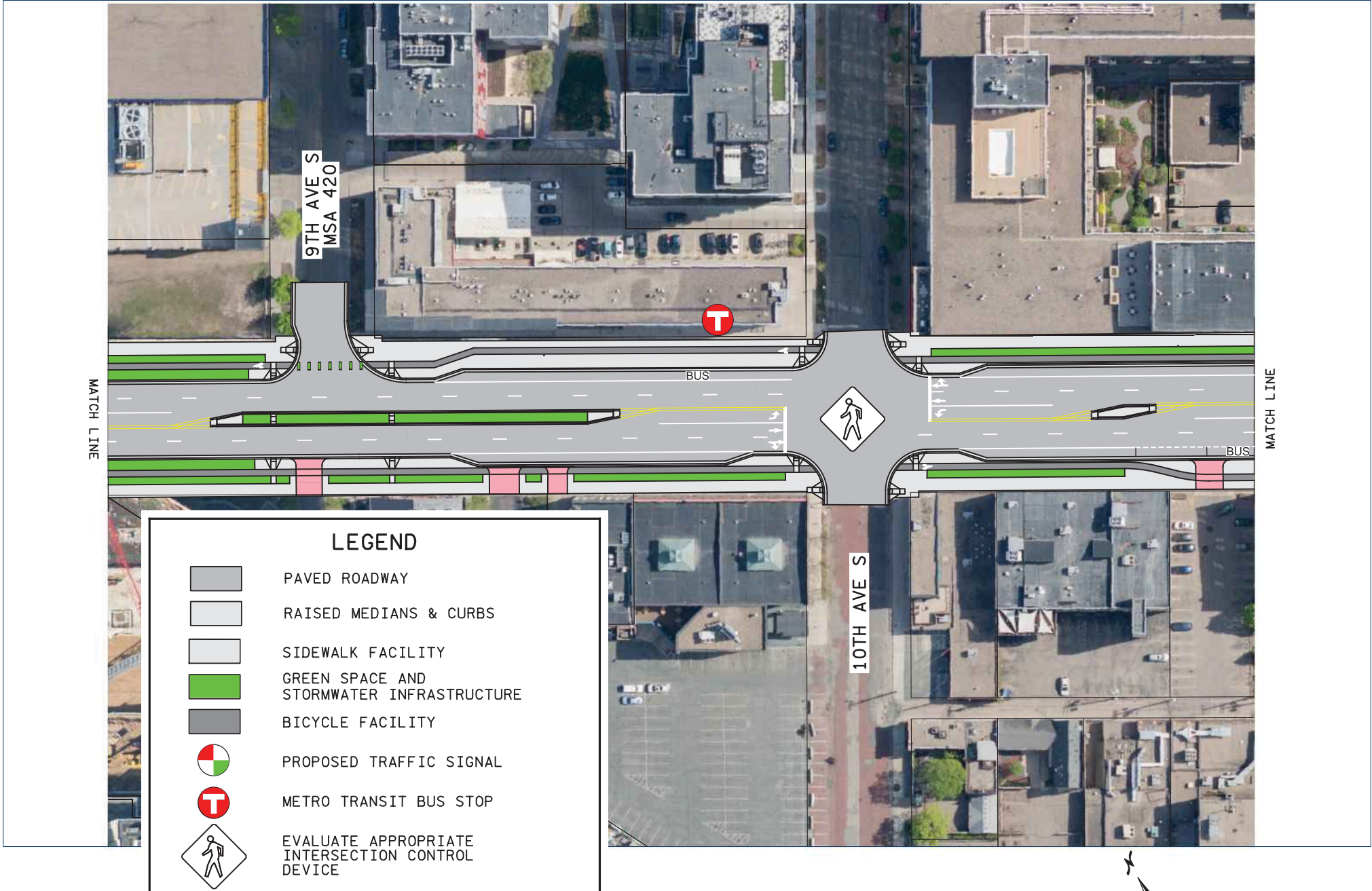


Figure 3

# CSAH 152 (Washington Ave) Bikeway Project

Attachment 05 | Potential Concept

HENNEPIN COUNTY  
MINNESOTA

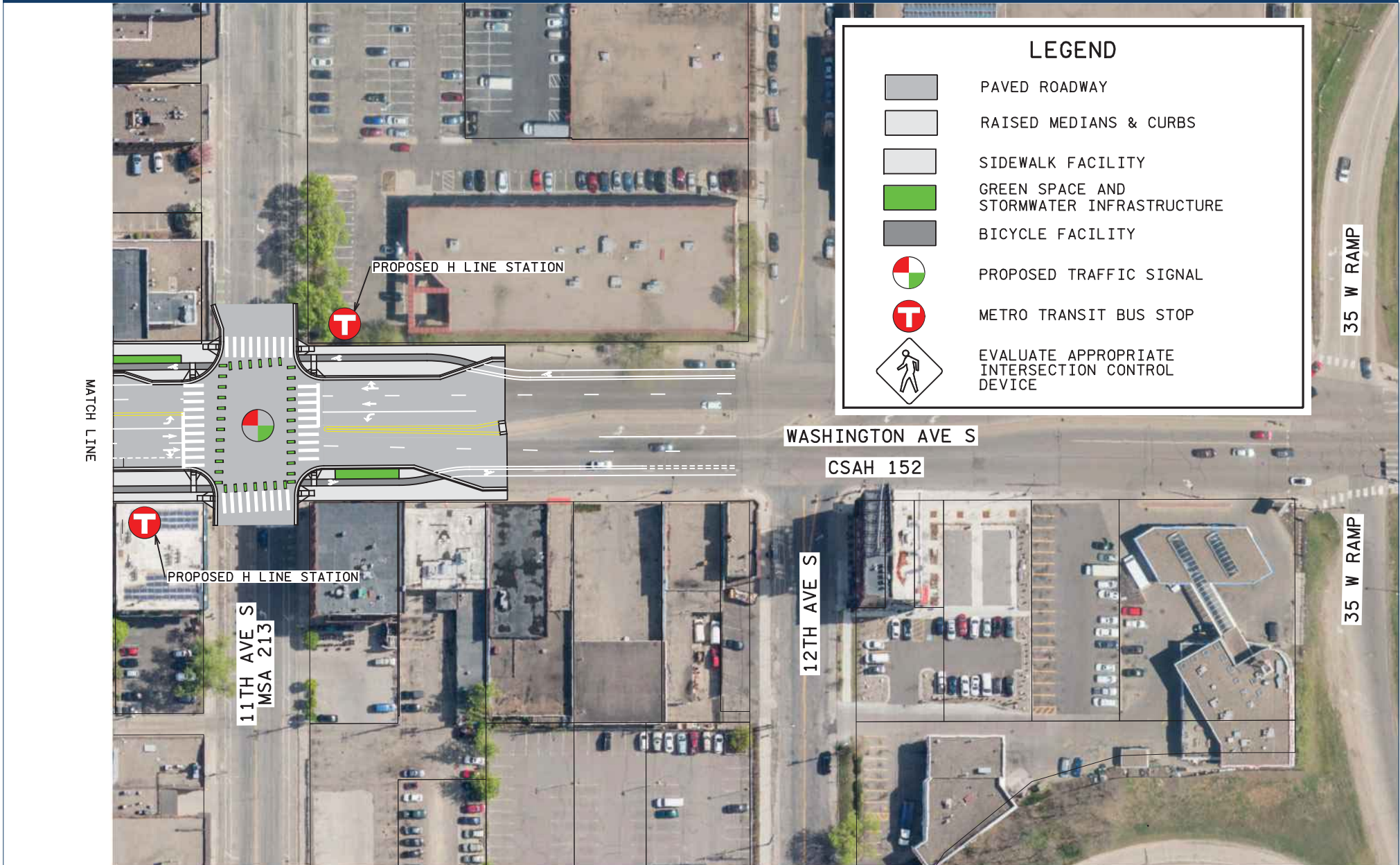


Figure 4

# **CSAH 152 (Washington Ave) Bikeway Project**

## Attachment 00 | List of Attachments

1. Project Narrative
2. Project Location Map
3. Existing Condition Photos
4. Potential Typical Section
5. Potential Concept
6. Hennepin County Enhanced Bikeway Network Study Maps
7. City of Minneapolis All Ages and Abilities Network Map
8. Disadvantaged Communities and Resources Map
9. Affordable Housing Access Map and Detail Summary
10. Crash Data Summary
11. Crash Reduction References
12. Multimodal Connections Map
13. Hennepin County Board Resolution 13-0470
14. MnDOT Support Letter
15. Metro Transit Support Letter
16. Notice of Application Submittal to City of Minneapolis
17. Hennepin County and City of Minneapolis Maintenance Agreement PW 41-20-20

# CSAH 152 (Washington Ave) Bikeway Project

## Attachment 01 | Project Narrative

### Project Name

CSAH 152 (Washington Ave S) Bikeway Project

### City(ies)

Minneapolis

### Commissioner District(s)

4

### Capital Project Number

2221000

### Project Category

Multimodal Safety (Corridor)

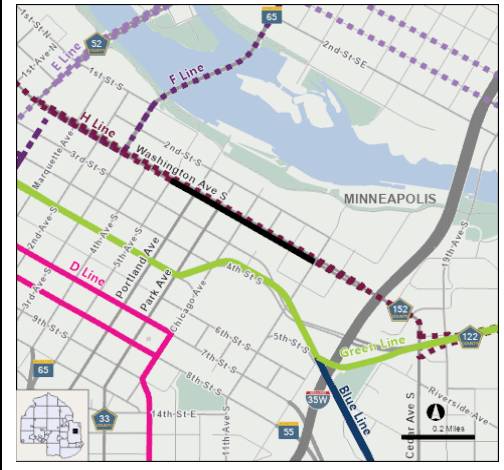
### Scoping Manager

Clare Riley

### Scoping Form Revision Dates

10/17/2023

### Project Map



### Project Summary

Multimodal safety improvements along Washington Avenue S (CSAH 152) from 5th Ave S to 11th Ave S in the City of Minneapolis.

### Roadway History

The current configuration of Washington Avenue S (CSAH 152) includes a four-lane divided typical section with on-street bike lanes, sidewalk facilities, and parking lanes on both sides. This A-minor reliever is heavily used by both bicycle and motor vehicle commuter traffic, and crossing distances for people walking are relatively long. There is no vertical separation along Washington Avenue S (CSAH 152) between people biking, driving, and parked vehicles. On-street parking and commercial uses throughout the corridor creates additional conflict points between people biking and people driving, including bus transit operations. Left turns at several intersections include protected and permissive operations with a negative left turn offset, leading to conflicts between left turning vehicles and nonmotorized users.

### Initial Project Timeline

Scoping:	Q1 2023 - Q4 2024
Design:	Q1 2025 - Q4 2027
R/W Acquisition:	Q1 2026 - Q4 2027
Bid Advertisement:	Q1 2028
Construction:	Q2 2028 - Q4 2029

### Project Delivery Responsibilities

Preliminary Design:	Consultant
Final Design:	Consultant
Construction Services:	Consultant

### Project Description and Benefits

The project objectives include improving safety, comfort, and accessibility along Washington Avenue S (CSAH 152); with a focus on introducing complete streets design strategies to promote traffic calming and the creation of an All Ages and Abilities bikeway. Intersections are anticipated to be redesigned to incorporate curb extensions to slow turning vehicles. Also, the project will introduce a protected bikeway design to provide better separation from people driving and parked vehicles. Protected intersection designs will be evaluated at several signalized intersections across the corridor to provide safe crossings for north/south bicycling operations. A protected bikeway will also provide safe first and last mile connections to the proposed H Line arterial bus rapid transit service along Washington Avenue S (CSAH 152). Lastly, ADA accommodations will be upgraded, including the installation of APS, to promote accessibility.

### Project Budget -

### Project Level

Construction:	\$	7,360,000
Cost Estimate Year:		2023
Construction Year:		2028
Annual Inflation Rate:		2.0%
Inflated Construction:	\$	8,130,000
Design Services:	\$	1,630,000
R/W Acquisition:	\$	560,000
Other (Utility Burial):	\$	-
Construction Services:	\$	650,000
Contingency:	\$	2,440,000
<b>Total Project Budget:</b>	<b>\$</b>	<b>13,410,000</b>

### Project Risks & Uncertainties

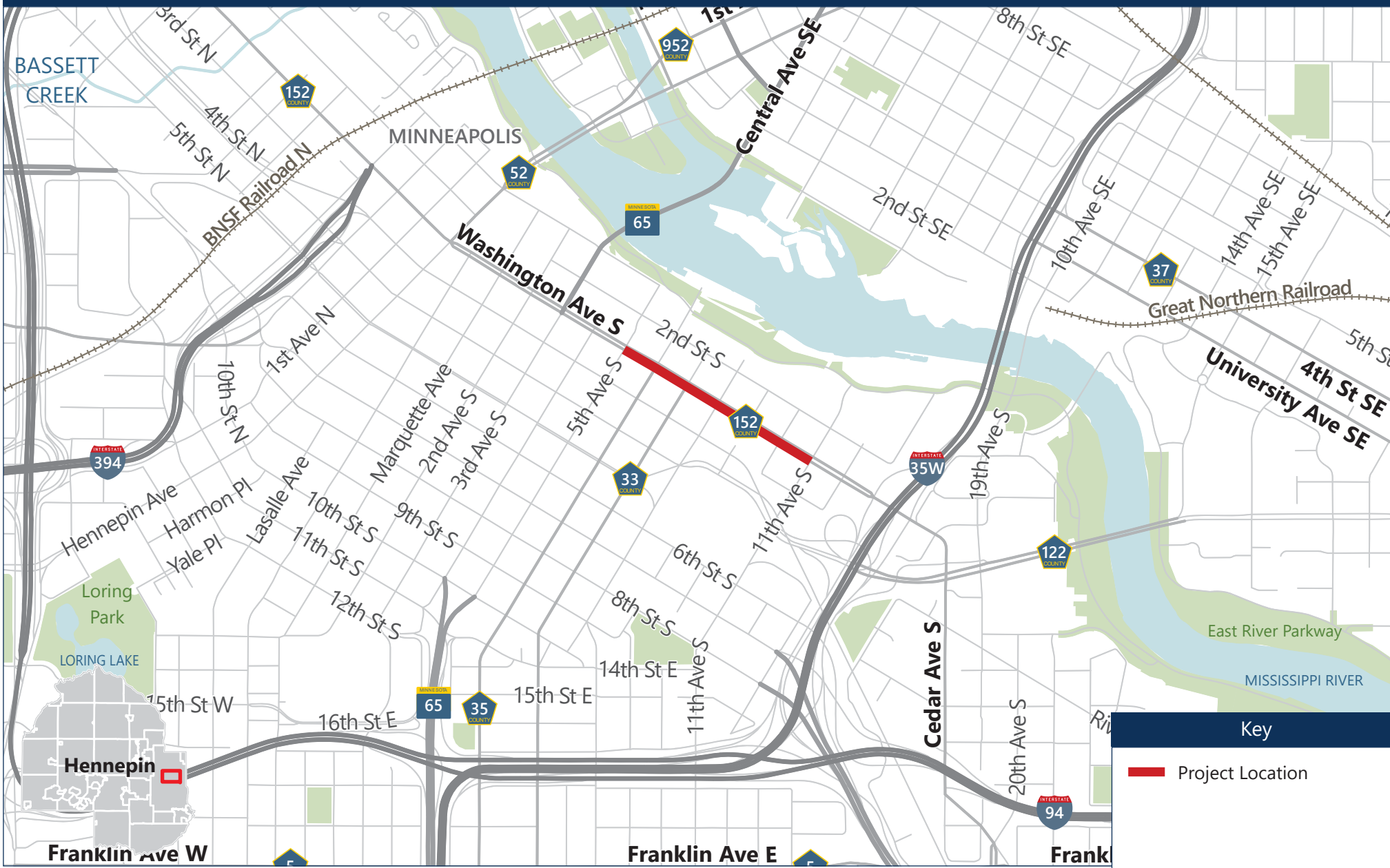
No project risks and uncertainties identified at this time of application submittal.

### Funding Notes

Hennepin County is pursuing federal funds that will likely be administered through FHWA, whereas, Metro Transit's federal funds for the H Line ABRT Project will likely be administered through FTA.

# CSAH 152 (Washington Ave) Bikeway Project

Attachment 02 | Project Location Map



**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: 10/17/2023

Data sources (if applicable):



# CSAH 152 (Washington Ave) Bikeway Project

Attachment 03 | Existing Condition Photos



The Intersection of Washington Ave (CSAH 152) and Portland Ave (CSAH 35) is pictured above. Intersection signals pictured above are from 1957 and require replacement.



Bike infrastructure along the corridor provides no separation for people biking from parked vehicles and people driving.



Pavement infrastructure is cracked and requires repairs.



Many pedestrian ramps along the corridor are not compliant with current ADA standards such as those within the photo above at Washington Ave (CSAH 152) and Portland Ave (CSAH 35).

# CSAH 152 (Washington Ave) Bikeway Project

Attachment 04 | Potential Typical Section





# CSAH 152 (Washington Ave) Bikeway Project

Attachment 05 | Potential Concept

HENNEPIN COUNTY  
MINNESOTA

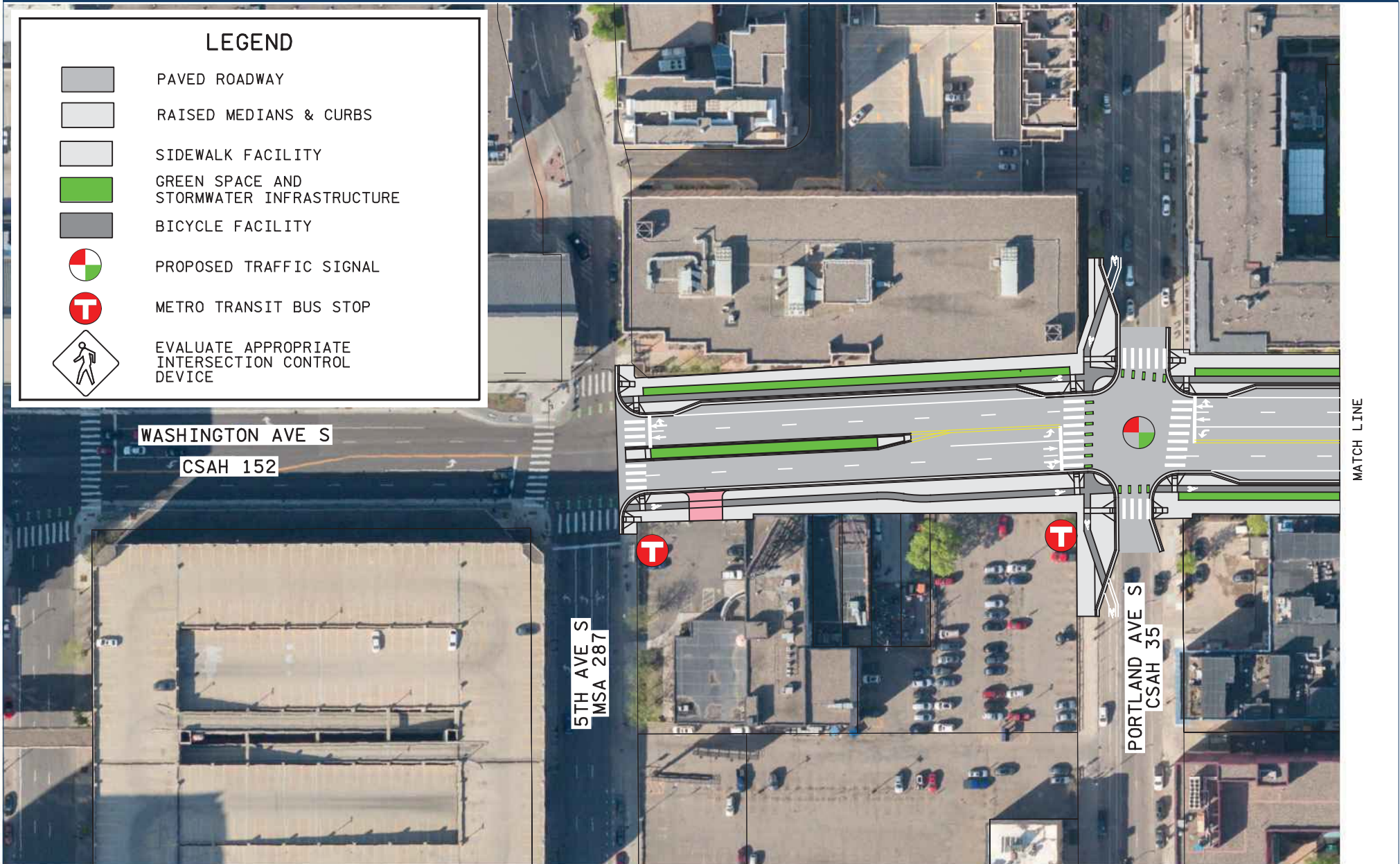


Figure 1

# CSAH 152 (Washington Ave) Bikeway Project

Attachment 05 | Potential Concept

HENNEPIN COUNTY  
MINNESOTA

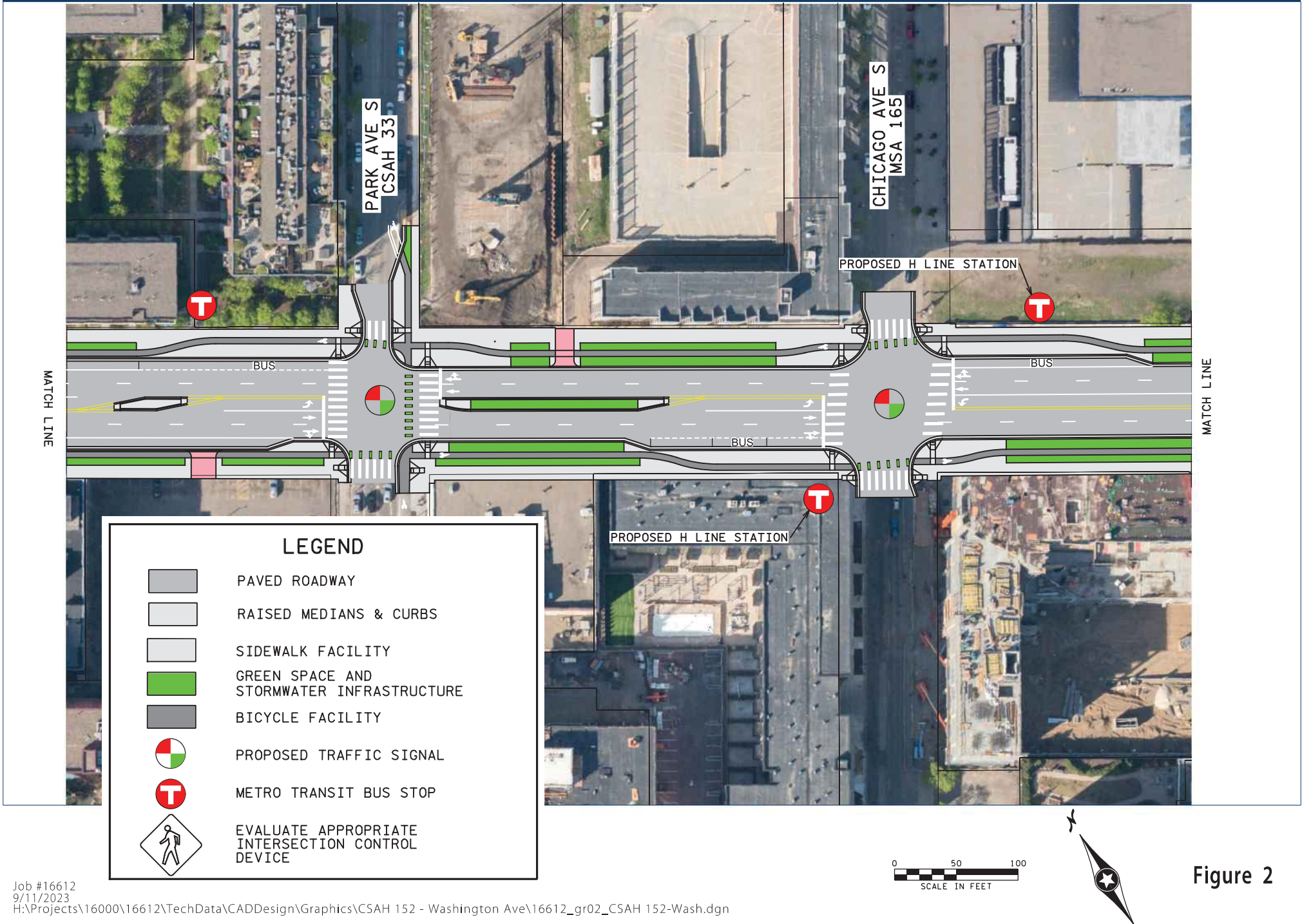


Figure 2

# CSAH 152 (Washington Ave) Bikeway Project

Attachment 05 | Potential Concept

HENNEPIN COUNTY  
MINNESOTA

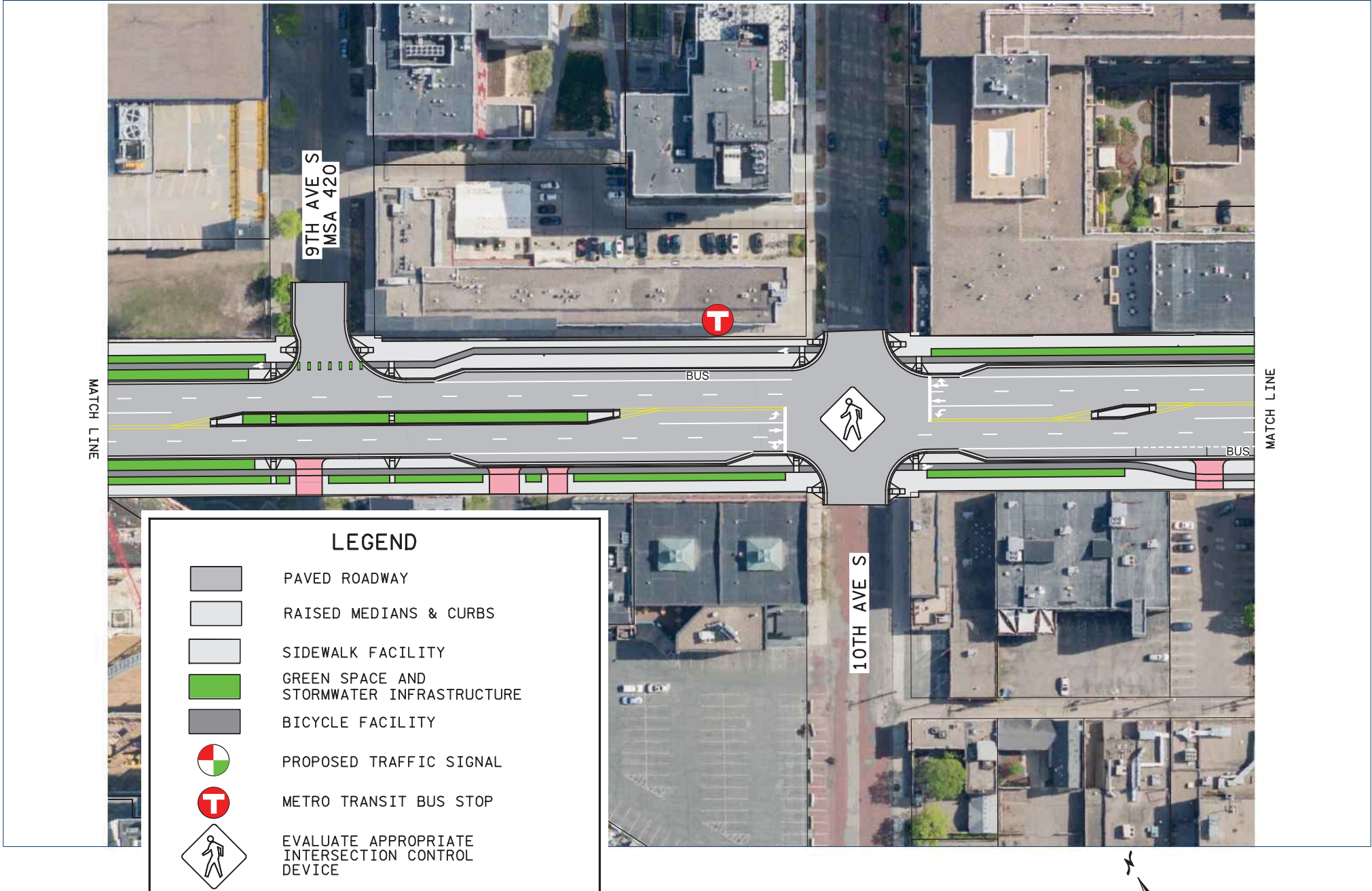


Figure 3

# CSAH 152 (Washington Ave) Bikeway Project

Attachment 05 | Potential Concept

HENNEPIN COUNTY  
MINNESOTA

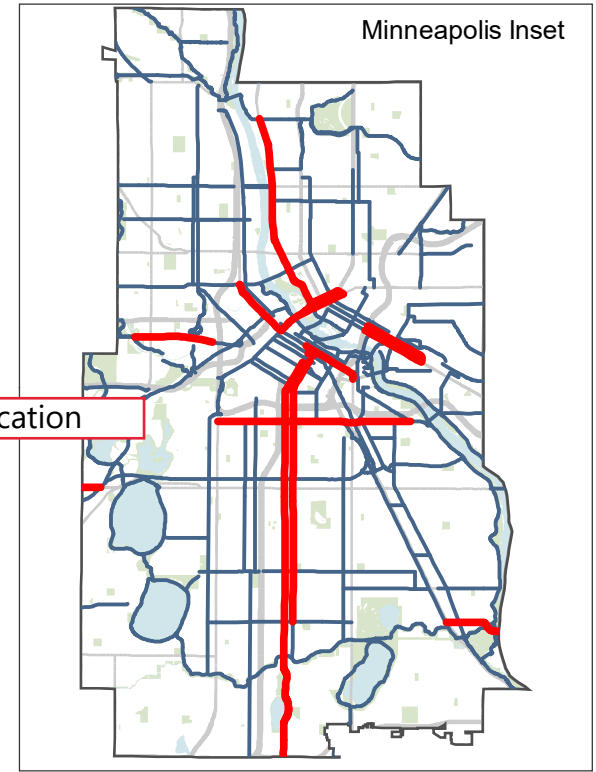
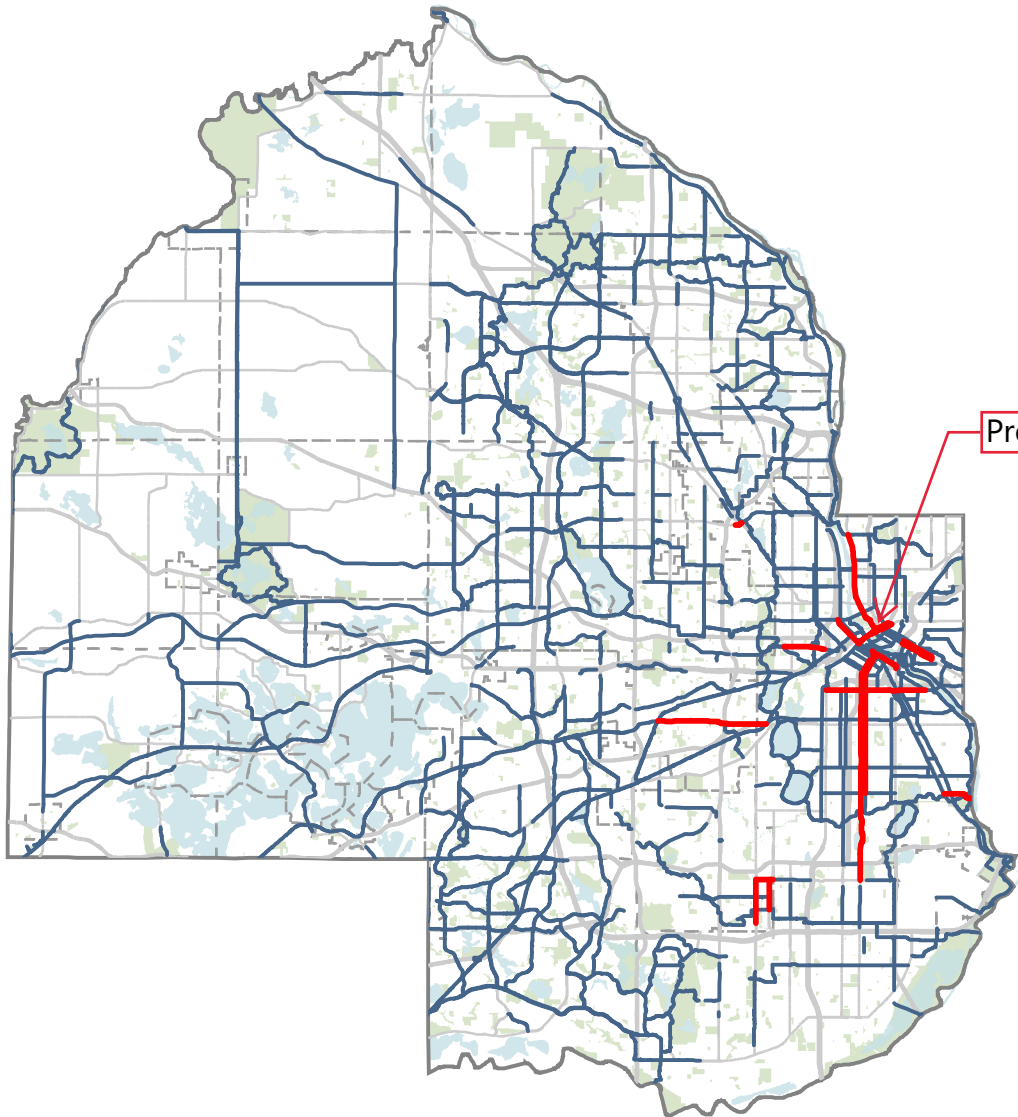




Figure 4

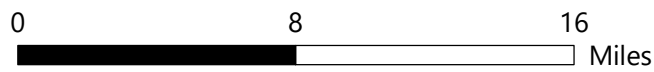
# CSAH 152 (Washington Ave) Bikeway Project

Attachment 06 | Hennepin County Enhanced Bikeway Study Maps

HENNEPIN COUNTY  
MINNESOTA



-  Hennepin Proposed Enhanced Bikeway
-  Open Bikeway

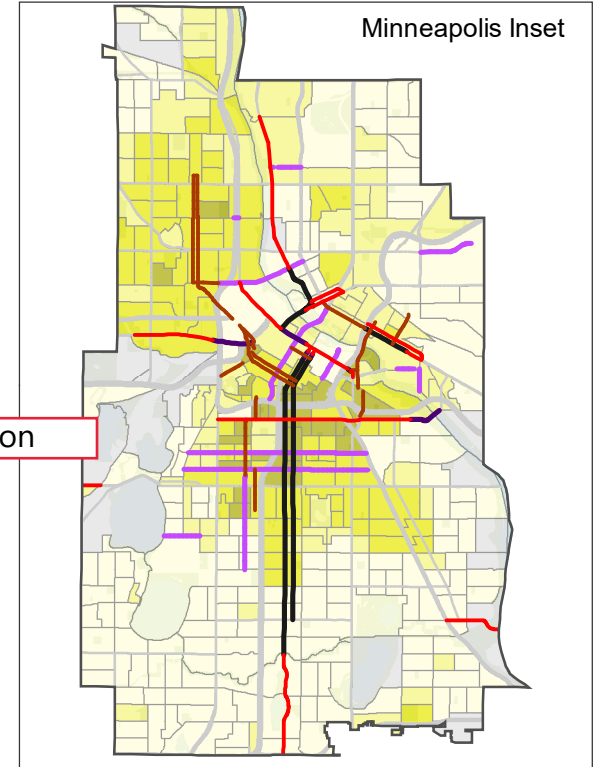
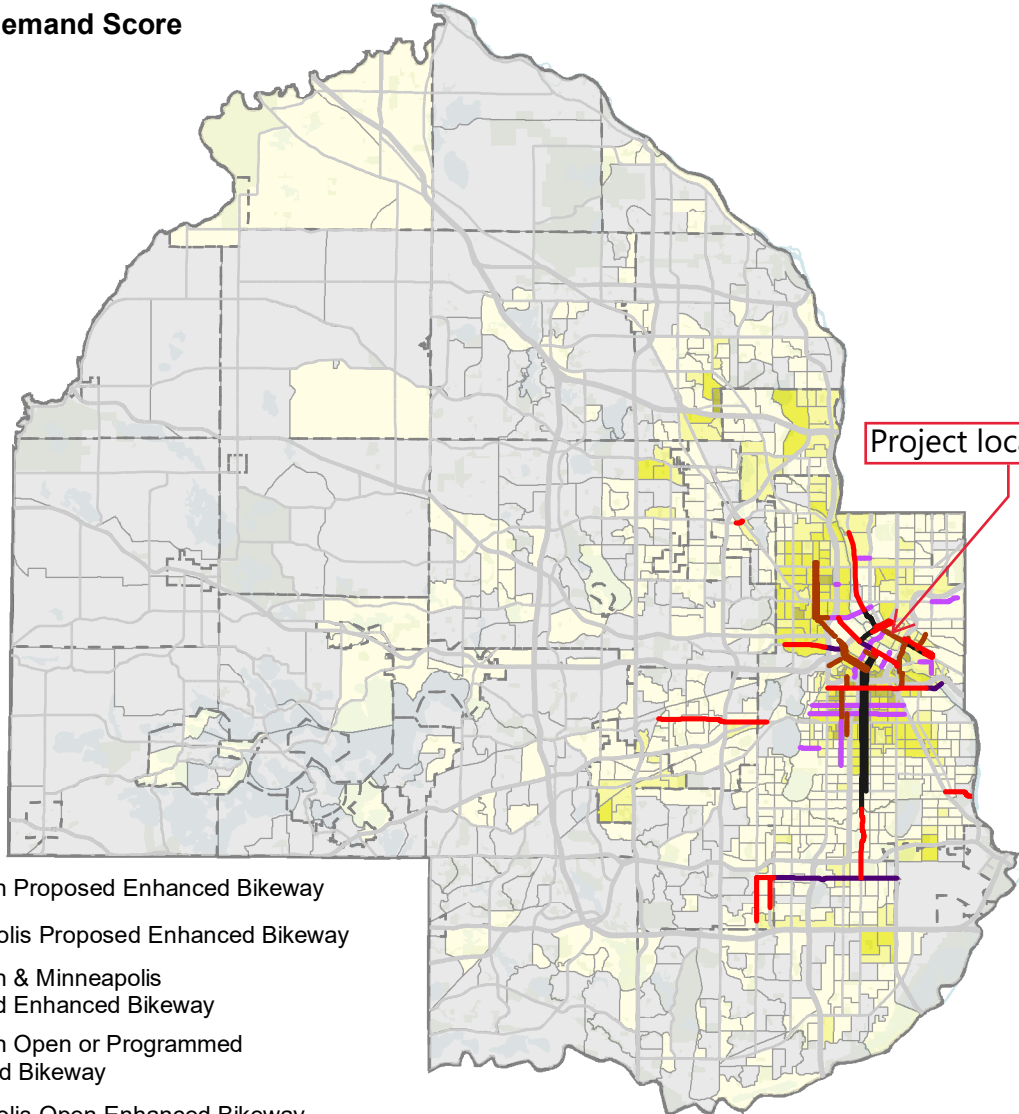
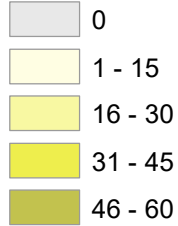


# CSAH 152 (Washington Ave) Bikeway Project

Attachment 06 | Hennepin County Enhanced Bikeway Study Maps

HENNEPIN COUNTY  
MINNESOTA

## Equity and Demand Score



- Hennepin Proposed Enhanced Bikeway
- Minneapolis Proposed Enhanced Bikeway
- Hennepin & Minneapolis Proposed Enhanced Bikeway
- Hennepin Open or Programmed Enhanced Bikeway
- Minneapolis Open Enhanced Bikeway

Equity and demand scores were calculated by summing scores using three criteria: areas of concentrated poverty, population density, percentage of households with no vehicle. Highly-scored areas should get more investment consideration based on these measures.

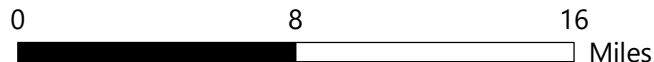
Area of concentrated poverty: Yes=20, No=0

\*Population density: 20,15,10,5,0

\*Households with no vehicle: 20,15,10,5,0

\*These criteria were grouped into five categories and scored using the natural breaks classification scheme

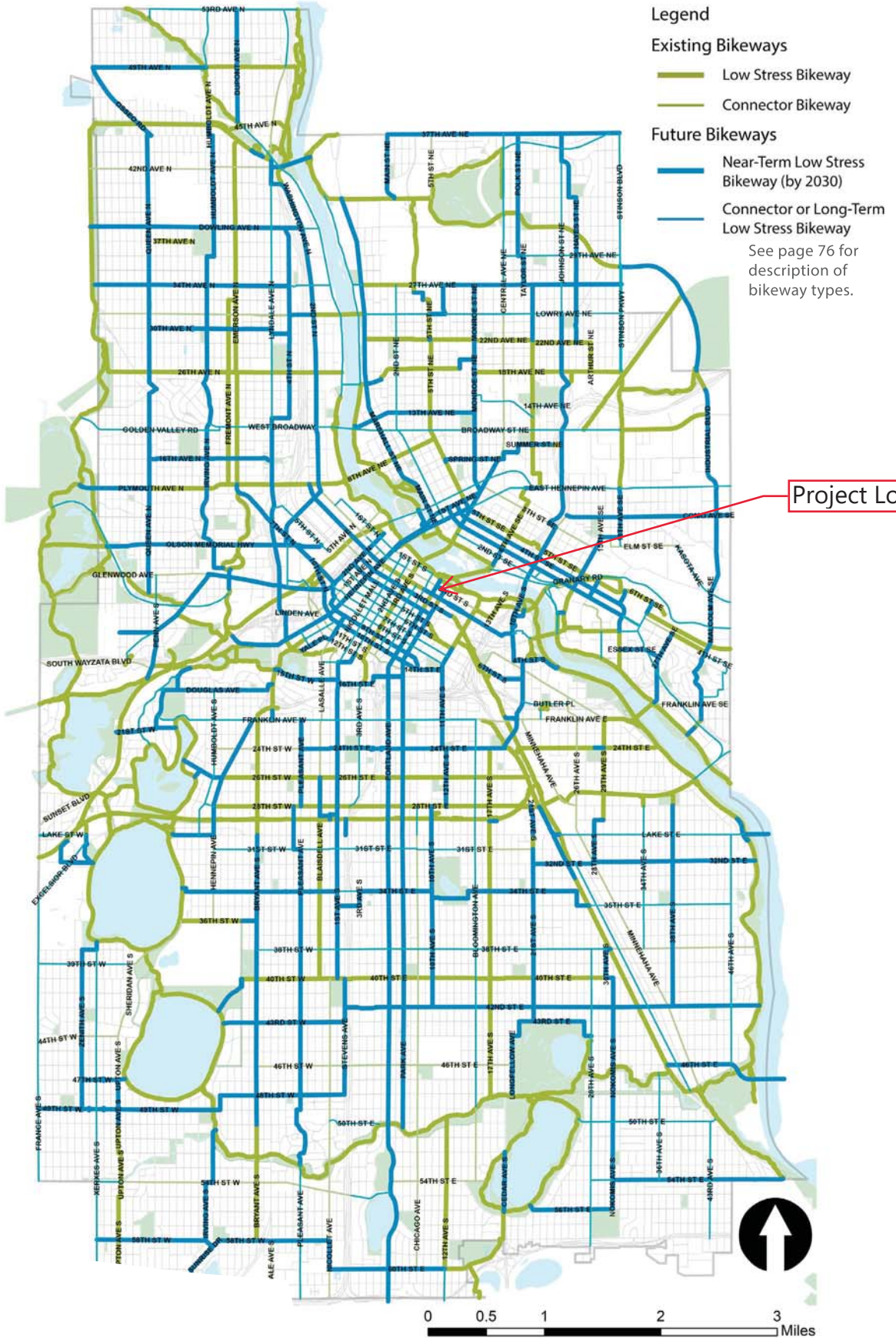
Source: Metropolitan Council, 2012-2016 American Community Survey





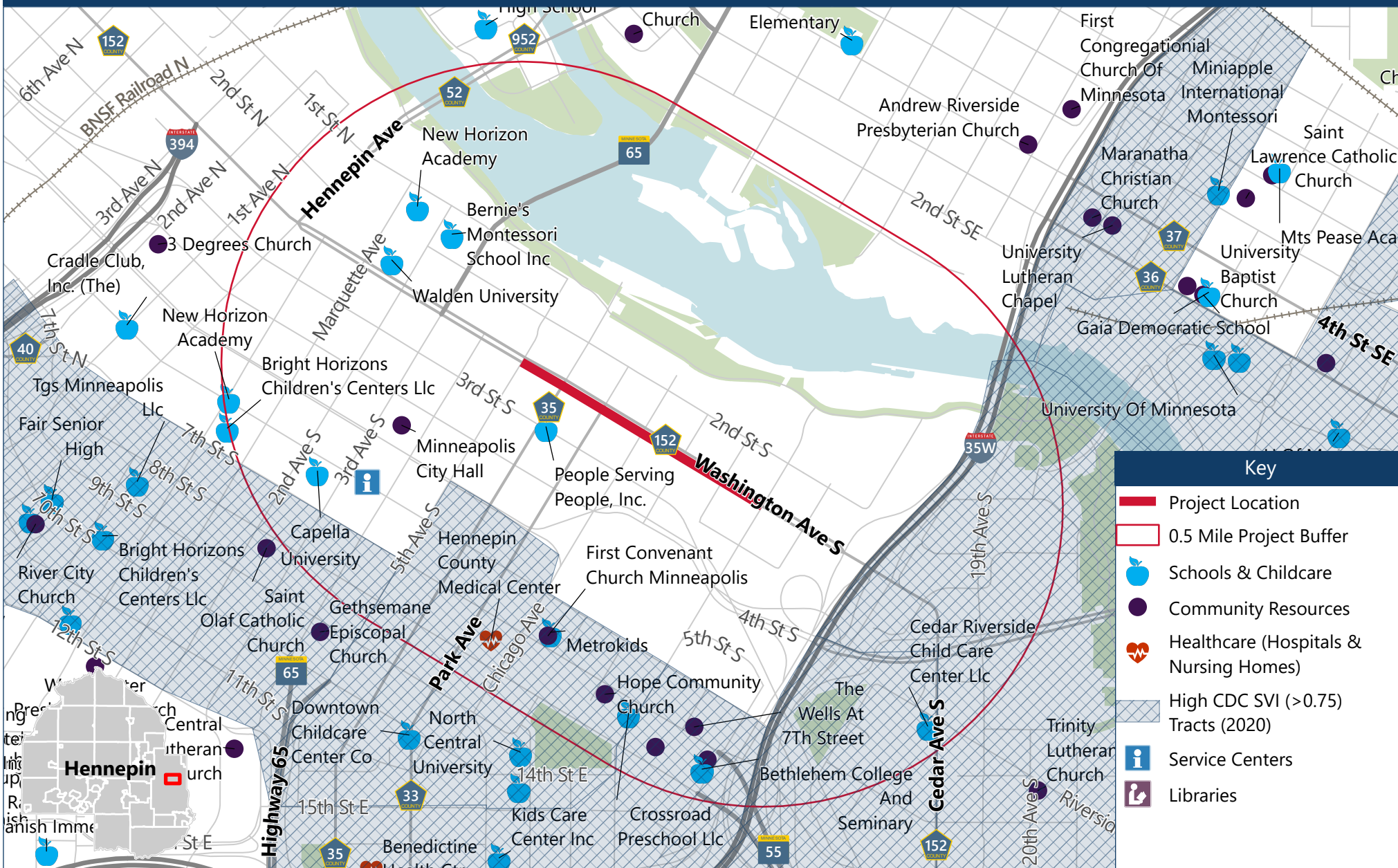
# CSAH 152 (Washington Ave) Bikeway Project

Attachment 07 | City of Minneapolis All Ages and Abilities Network Map

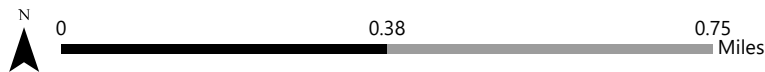


# CSAH 152 (Washington Ave) Bikeway Project

Attachment 08 | Disadvantaged Communities and Resources Map



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Publication date: 11/9/2023

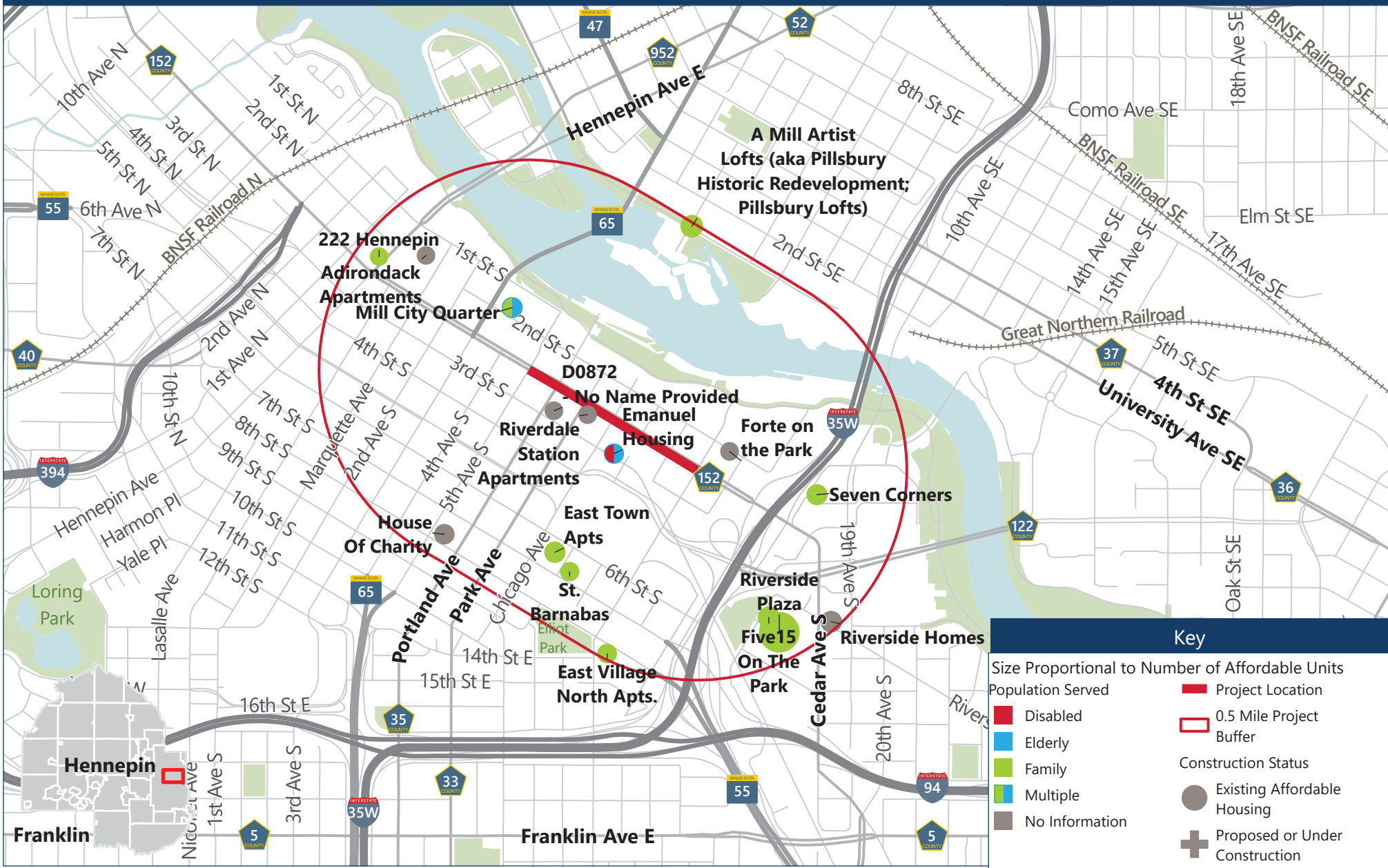
Data sources (if applicable):





# CSAH 152 (Washington Ave) Bikeway Project

Attachment 09 | Affordable Housing Access Map and Detail Summary



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Publication date: 11/6/2023

Data sources (if applicable):



# CSAH 152 (Washington Ave) Bikeway Project

## Attachment 09 | Affordable Housing Access Map and Detail Summary

Property ID	Property Name	Total Units	Affordable Units	30% AMI	50% AMI	60% AMI	0 BR	1 BR	2 BR	3 BR	4 BR
	Riverside Plaza	1303	1303	0	669	634	192	511	534	58	8
4570	East Village North Apts.	70	70	0	0	70	0	30	0	9	1
4729	D0872 - No Name Provided	109	10	10	0	0	89	0	10	0	0
4958	House Of Charity	119	119	0	0	119	0	0	0	0	0
9418	St. Barnabas	52	49	49	0	0	49	0	0	0	0
10305	Emanuel Housing	101	101	54	47	0	95	6	0	0	0
10443	222 Hennepin	286	3	0	0	3	0	2	1	0	0
10514	Seven Corners	248	149	0	100	49	21	58	63	7	0
10592	Five15 On The Park	259	208	0	52	156	41	92	52	23	0
10990	Mill City Quarter	150	150	0	60	90	0	115	35	0	0
10886	A Mill Artist Lofts (aka Pillsbury Historic Redevelopment; Pillsbury Lofts)	251	251	0	0	251	7	159	75	7	3
13445	East Town Apts	169	169	0	0	169	29	87	47	6	0
13482	Riverdale Station Apartments	65	6	6	0	0	0	6	0	0	0
14638	Riverside Homes	191	191	0	0	191	2	51	102	34	2
15725	Forte on the Park	225	18	0	0	18	0	0	0	0	0
16189	Adirondack Apartments	36	8	0	0	8	0	0	0	0	0

# CSAH 152 (Washington Ave) Bikeway Project

## Attachment 10 | Crash Data Summary

Table 01 | Pedestrian reported crashes

Year	Total	K	A	B	C	N
2013	0	0	0	1	0	0
2014	0	0	0	0	2	0
2015	0	0	0	1	0	0
2016	0	0	0	2	3	0
2017	0	0	0	1	1	0
2018	0	0	0	1	0	0
2019	0	0	0	0	1	0
2020	0	0	0	0	0	0
2021	0	0	1	0	0	0
2022	0	0	0	0	1	2
<b>Ten Year Totals</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>6</b>	<b>8</b>	<b>2</b>

Table 02 | Bicycle reported crashes

Year	Total	K	A	B	C	N
2013	0	0	0	0	1	0
2014	0	0	0	0	1	0
2015	0	0	0	0	0	0
2016	0	0	0	1	0	0
2017	0	0	0	0	0	0
2018	0	0	1	0	0	0
2019	0	0	0	1	1	0
2020	0	0	1	0	0	0
2021	0	0	0	0	1	0
2022	0	0	0	0	0	0
<b>Ten Year Totals</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>0</b>



# CSAH 152 (Washington Ave) Bikeway Project

## Attachment 10 | Crash Data Summary

Crash Severity/Crash Year												
Crash Severity	Total	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
K - Fatal	0	0	0	0	0	0	0	0	0	0	0	0
A - Serious Injury	2	0	0	0	0	0	1	0	1	0	0	0
B - Minor Injury	2	0	0	0	1	0	0	1	0	0	0	0
C - Possible Injury	4	1	1	0	0	0	0	1	0	1	0	0
N - Prop Dmg Only	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>8</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>

Crash Severity/Number of Vehicles					
Crash Severity	Total	0	1	2	3+
K - Fatal	0	0	0	0	0
A - Serious Injury	2	0	2	0	0
B - Minor Injury	2	0	2	0	0
C - Possible Injury	4	0	4	0	0
N - Prop Dmg Only	0	0	0	0	0
<b>Total</b>	<b>8</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>

Relationship to Intersection Summary		Total	%
Not at Intersection/Interchange		1	12.5
Four-Way Intersection		5	62.5
T or Y Intersection		0	0.0
Five-Way Intersection or More		0	0.0
Roundabout		0	0.0
Intersection Related		2	25.0
Driveway Access Related		0	0.0
At School Crossing		0	0.0
Railway Grade Crossing		0	0.0
Shared Use Path or Trail		0	0.0
Interchange or Ramp		0	0.0
Crossover Related		0	0.0
Acceleration/Deceleration Lane		0	0.0
Other/Unknown		0	0.0
<b>Total</b>		<b>8</b>	<b>100.0</b>

Basic Type Summary		Total	%
Pedestrian		0	0.0
Bike		8	100.0
Single Vehicle Run Off Road		0	0.0
Single Vehicle Other		0	0.0
Sideswipe Same Direction		0	0.0
Sideswipe Opposing		0	0.0
Rear End		0	0.0
Head On		0	0.0
Left Turn		0	0.0
Angle		0	0.0
Other		0	0.0
<b>Total</b>		<b>8</b>	<b>100.0</b>

Weather 1 Summary		Total	%
Clear		5	62.5
Cloudy		1	12.5
Rain		2	25.0
Snow		0	0.0
Sleet, Hail (Freezing Rain/Drizzle)		0	0.0
Fog/Smog/Smoke		0	0.0
Blowing Sand/Soil/Dirt/Snow		0	0.0
Severe Crosswinds		0	0.0
Other/Unknown		0	0.0
<b>Total</b>		<b>8</b>	<b>100.0</b>

First Harmful Event Summary		Total	%
Pedestrian		0	0.0
Bicyclist		8	100.0
Motor Vehicle In Transport		0	0.0
Parked Motor Vehicle		0	0.0
Train		0	0.0
Deer/Animal		0	0.0
Other - Non Fixed Object		0	0.0
Collision Fixed Object		0	0.0
Non-Collision Harmful Events		0	0.0
Other/Unknown		0	0.0
<b>Total</b>		<b>8</b>	<b>100.0</b>

Light Condition Summary		Total	%
Daylight		7	87.5
Sunrise		0	0.0
Sunset		0	0.0
Dark (Str Lights On)		1	12.5
Dark (Str Lights Off)		0	0.0
Dark (No Str Lights)		0	0.0
Dark (Unknown Light)		0	0.0
Other/Unknown		0	0.0
<b>Total</b>		<b>8</b>	<b>100.0</b>



# CSAH 152 (Washington Ave) Bikeway Project

## Attachment 10 | Crash Data Summary

Time of Day/Day of Week														Total	%
From To	00:00 01:59	02:00 03:59	04:00 05:59	06:00 07:59	08:00 09:59	10:00 11:59	12:00 13:59	14:00 15:59	16:00 17:59	18:00 19:59	20:00 21:59	22:00 23:59			
SUN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
MON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
TUE	0	0	0	0	0	0	1	0	0	0	0	0	0	1	12.5
WED	0	0	0	0	0	0	1	0	0	0	0	0	0	1	12.5
THU	0	0	0	0	0	1	1	0	1	0	0	0	0	3	37.5
FRI	0	0	0	0	0	0	0	1	1	0	1	0	0	3	37.5
SAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
<b>Total</b>	0	0	0	0	0	1	3	1	2	0	1	0	0	8	100.0
<b>%</b>	0.0	0.0	0.0	0.0	0.0	12.5	37.5	12.5	25.0	0.0	12.5	0.0	0.0	100.0	100.0

Driver & Non-Motorist Age/Gender Summary						
Age	M	F	NR	No Value	Total	%
<14	0	0	0	0	0	0.0
14	0	0	0	0	0	0.0
15	0	0	0	0	0	0.0
16	0	0	0	0	0	0.0
17	0	0	0	0	0	0.0
18	0	0	0	0	0	0.0
19	0	0	0	0	0	0.0
20	0	0	0	0	0	0.0
21-24	1	0	0	0	1	6.2
25-29	1	2	0	0	3	18.8
30-34	1	0	0	0	1	6.2
35-39	3	1	0	0	4	25.0
40-44	2	0	0	0	2	12.5
45-49	2	1	0	0	3	18.8
50-54	0	0	0	0	0	0.0
55-59	0	0	0	0	0	0.0
60-64	0	1	0	0	1	6.2
65-69	0	0	0	0	0	0.0
70-74	1	0	0	0	1	6.2
75-79	0	0	0	0	0	0.0
80-84	0	0	0	0	0	0.0
85-89	0	0	0	0	0	0.0
90-94	0	0	0	0	0	0.0
95+	0	0	0	0	0	0.0
No Value	0	0	0	0	0	0.0
<b>Total</b>	11	5	0	0	16	100.0
<b>%</b>	68.8	31.2	0.0	0.0	100.0	100.0

Month Summary		Total	%
January		1	12.5
February		0	0.0
March		1	12.5
April		1	12.5
May		0	0.0
June		2	25.0
July		0	0.0
August		2	25.0
September		0	0.0
October		1	12.5
November		0	0.0
December		0	0.0
<b>Total</b>		8	100.0

Physical Condition Summary		Total	%
Apparently Normal (Including No Drugs/Alcohol)		13	92.9
Physical Disability (Short Term or Long Term)		0	0.0
Medical Issue (Ill, Sick or Fainted)		0	0.0
Emotional (Depression, Angry, Disturbed, etc.)		0	0.0
Asleep or Fatigued		0	0.0
Has Been Drinking Alcohol		0	0.0
Has Been Taking Illicit Drugs		0	0.0
Has Been Taking Medications		0	0.0
Other/Unknown		1	7.1
Not Applicable		0	0.0
<b>Total</b>		14	100.0

Selection Filter:

WORK AREA: Construction District('M') - FILTER: Date('01/01/2013','12/31/2022'), Basic Type('2') - SPATIAL FILTER APPLIED

Analyst:

James Weatherly

Notes:

CSAH 152 Bicycle Crashes 2013 - 2022



# CSAH 152 (Washington Ave) Bikeway Project

## Attachment 10 | Crash Data Summary

Crash Severity/Crash Year												
Crash Severity	Total	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
K - Fatal	0	0	0	0	0	0	0	0	0	0	0	0
A - Serious Injury	1	0	0	0	0	0	0	0	0	1	0	0
B - Minor Injury	6	1	0	1	2	1	1	0	0	0	0	0
C - Possible Injury	8	0	2	0	3	1	0	1	0	0	1	0
N - Prop Dmg Only	2	0	0	0	0	0	0	0	0	0	2	0
<b>Total</b>	<b>17</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>0</b>

Crash Severity/Number of Vehicles					
Crash Severity	Total	0	1	2	3+
K - Fatal	0	0	0	0	0
A - Serious Injury	1	0	1	0	0
B - Minor Injury	6	0	6	0	0
C - Possible Injury	8	0	8	0	0
N - Prop Dmg Only	2	0	2	0	0
<b>Total</b>	<b>17</b>	<b>0</b>	<b>17</b>	<b>0</b>	<b>0</b>

Relationship to Intersection Summary		Total	%
Not at Intersection/Interchange		0	0.0
Four-Way Intersection		17	100.0
T or Y Intersection		0	0.0
Five-Way Intersection or More		0	0.0
Roundabout		0	0.0
Intersection Related		0	0.0
Driveway Access Related		0	0.0
At School Crossing		0	0.0
Railway Grade Crossing		0	0.0
Shared Use Path or Trail		0	0.0
Interchange or Ramp		0	0.0
Crossover Related		0	0.0
Acceleration/Deceleration Lane		0	0.0
Other/Unknown		0	0.0
<b>Total</b>		<b>17</b>	<b>100.0</b>

Basic Type Summary		Total	%
Pedestrian		17	100.0
Bike		0	0.0
Single Vehicle Run Off Road		0	0.0
Single Vehicle Other		0	0.0
Sideswipe Same Direction		0	0.0
Sideswipe Opposing		0	0.0
Rear End		0	0.0
Head On		0	0.0
Left Turn		0	0.0
Angle		0	0.0
Other		0	0.0
<b>Total</b>		<b>17</b>	<b>100.0</b>

Weather 1 Summary		Total	%
Clear		8	47.1
Cloudy		4	23.5
Rain		4	23.5
Snow		1	5.9
Sleet, Hail (Freezing Rain/Drizzle)		0	0.0
Fog/Smog/Smoke		0	0.0
Blowing Sand/Soil/Dirt/Snow		0	0.0
Severe Crosswinds		0	0.0
Other/Unknown		0	0.0
<b>Total</b>		<b>17</b>	<b>100.0</b>

First Harmful Event Summary		Total	%
Pedestrian		17	100.0
Bicyclist		0	0.0
Motor Vehicle In Transport		0	0.0
Parked Motor Vehicle		0	0.0
Train		0	0.0
Deer/Animal		0	0.0
Other - Non Fixed Object		0	0.0
Collision Fixed Object		0	0.0
Non-Collision Harmful Events		0	0.0
Other/Unknown		0	0.0
<b>Total</b>		<b>17</b>	<b>100.0</b>

Light Condition Summary		Total	%
Daylight		8	47.1
Sunrise		0	0.0
Sunset		0	0.0
Dark (Str Lights On)		9	52.9
Dark (Str Lights Off)		0	0.0
Dark (No Str Lights)		0	0.0
Dark (Unknown Light)		0	0.0
Other/Unknown		0	0.0
<b>Total</b>		<b>17</b>	<b>100.0</b>



# CSAH 152 (Washington Ave) Bikeway Project

## Attachment 10 | Crash Data Summary

Time of Day/Day of Week														
From To	00:00 01:59	02:00 03:59	04:00 05:59	06:00 07:59	08:00 09:59	10:00 11:59	12:00 13:59	14:00 15:59	16:00 17:59	18:00 19:59	20:00 21:59	22:00 23:59	Total	%
SUN	1	0	0	0	0	0	1	0	0	0	1	0	3	17.6
MON	0	0	0	1	1	0	0	0	0	0	0	0	2	11.8
TUE	0	0	0	0	0	0	1	0	0	2	0	1	4	23.5
WED	0	0	0	0	0	0	0	0	1	1	0	1	3	17.6
THU	0	0	0	1	0	0	0	0	0	0	0	1	2	11.8
FRI	0	0	0	0	0	1	0	0	0	0	0	0	1	5.9
SAT	0	0	0	0	0	0	0	0	0	1	1	0	2	11.8
<b>Total</b>	1	0	0	2	1	1	2	0	1	4	2	3	17	100.0
<b>%</b>	5.9	0.0	0.0	11.8	5.9	5.9	11.8	0.0	5.9	23.5	11.8	17.6	100.0	100.0

Driver & Non-Motorist Age/Gender Summary						
Age	M	F	NR	No Value	Total	%
<14	0	0	0	0	0	0.0
14	0	0	0	0	0	0.0
15	0	0	0	0	0	0.0
16	0	0	0	0	0	0.0
17	0	0	0	0	0	0.0
18	0	0	0	0	0	0.0
19	1	0	0	0	1	2.9
20	1	1	0	0	2	5.9
21-24	1	2	0	0	3	8.8
25-29	2	4	0	0	6	17.6
30-34	2	1	0	0	3	8.8
35-39	0	2	0	0	2	5.9
40-44	0	1	0	0	1	2.9
45-49	0	2	0	0	2	5.9
50-54	2	0	0	0	2	5.9
55-59	3	0	0	0	3	8.8
60-64	2	0	0	0	2	5.9
65-69	1	1	0	0	2	5.9
70-74	1	0	0	0	1	2.9
75-79	1	0	0	0	1	2.9
80-84	0	1	0	0	1	2.9
85-89	0	0	0	0	0	0.0
90-94	0	0	0	0	0	0.0
95+	0	0	0	0	0	0.0
No Value	0	0	0	2	2	5.9
<b>Total</b>	17	15	0	2	34	100.0
<b>%</b>	50.0	44.1	0.0	5.9	100.0	100.0

Month Summary		Total	%
January		1	5.9
February		2	11.8
March		2	11.8
April		2	11.8
May		1	5.9
June		1	5.9
July		1	5.9
August		0	0.0
September		4	23.5
October		2	11.8
November		1	5.9
December		0	0.0
<b>Total</b>		17	100.0

Physical Condition Summary		Total	%
Apparently Normal (Including No Drugs/Alcohol)		27	84.4
Physical Disability (Short Term or Long Term)		0	0.0
Medical Issue (Ill, Sick or Fainted)		0	0.0
Emotional (Depression, Angry, Disturbed, etc.)		0	0.0
Asleep or Fatigued		0	0.0
Has Been Drinking Alcohol		3	9.4
Has Been Taking Illicit Drugs		0	0.0
Has Been Taking Medications		0	0.0
Other/Unknown		2	6.2
Not Applicable		0	0.0
<b>Total</b>		32	100.0

Selection Filter:

WORK AREA: Construction District('M') - FILTER: Date('01/01/2013','12/31/2022'), Basic Type('1') - SPATIAL FILTER APPLIED

Analyst:  
James Weatherly

Notes:  
CSAH 152 Ped Crashes 2013 - 2022

### Separated Bicycle Lanes

#### What is their purpose?

Separated bike lanes, also known as cycle tracks and protected bike lanes, are exclusive facilities for bicycling that are located within or directly adjacent to a roadway. They are physically separated from motor vehicle traffic by a vertical element such as flexible post delineators, channelizing curb, rigid bollards, raised medians, concrete barriers, parked motor vehicles, planters and landscaping, and/or other physical objects. The presence of this vertical element is what differentiates separated bike lanes from conventional and buffered bike lanes.

Unlike sidepaths and shared use paths, separated bike lanes are bike-only facilities. The buffer between the bicycle facility and the roadway is known as the street buffer; the buffer between the bicycle facility and sidewalk is known as the sidewalk buffer. Separated bike lanes can be:

- One- or two-way facilities
- On the left or right-hand side of a street
- At road-grade, at sidewalk-grade, or at an intermediate-grade between the roadway and sidewalk.



Capital City Bikeway, Jackson Street, Saint Paul, MN

#### Are they a proven strategy?

Physical separation of bicyclists from motor vehicle traffic promotes multimodal safety. The specific impact of separated bike lanes is not yet quantified, but has been shown to be more comfortable for people of all ages and abilities. Because of the lack of specific data for this measure, it is considered **TRIED**.

#### Where would we use them?

Separated bike lanes can be considered at the following locations:

- In areas with traffic volumes over 6,000 ADT or high motor vehicle speeds (over 30 mph)
- In areas with peak hour bicycle traffic over 100 per hour
- In areas with a wide range of user types and variety of speeds
- In areas that connect existing or planned biking networks
- Freight movements, delivery locations, on-street parking, accessible parking, pedestrian curb ramps, bus and transit access, and curb cuts must be carefully considered when designing separated bike lanes.

#### What are the maintenance impacts?

Partner with maintenance team members to discuss strategies and issues related to routine maintenance for separated bicycle lanes, in particular for debris in the spring and snow in the winter. Separated bicycle lanes typically require special equipment to remove snow. If adequate snow storage space is not provided in the buffer



### Separated Bicycle Lanes

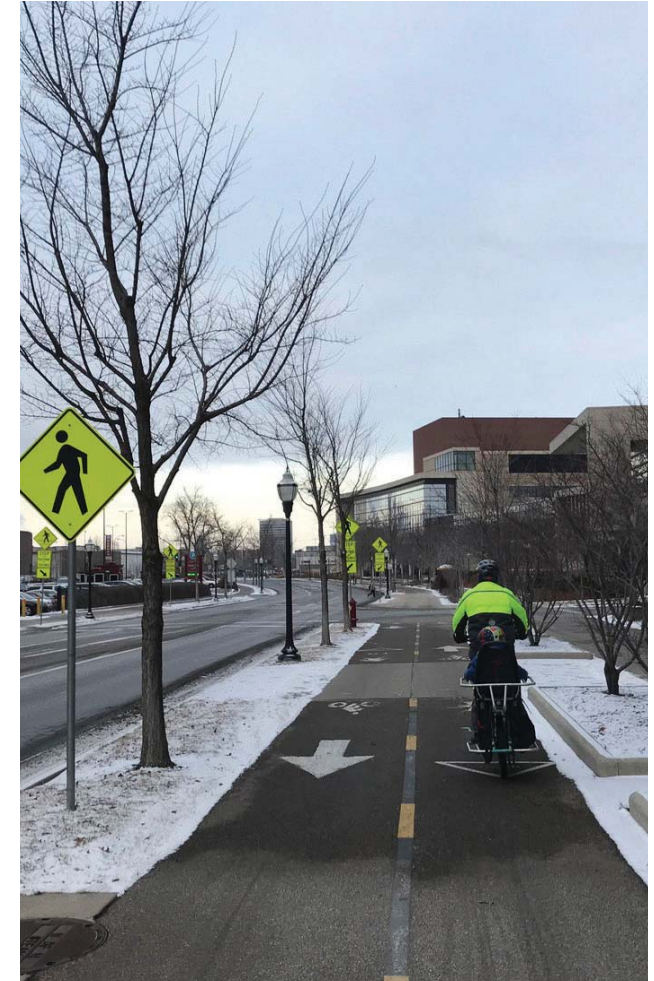
zone, snow removal may be needed. If delineator posts are used in lieu of curb separation, agencies should plan on replacing delineators that are damaged or destroyed during regular use; in high-traffic areas, this may require replacing up to 1/3 of delineators annually.

#### + What are the advantages?

- Minimize bicyclist exposure and reduce the interaction between bicyclists and motor vehicles through the corridor.
- If a separated bike lane is at sidewalk- or intermediate-level through driveways and intersections, this design reduces the speed of motor vehicles at conflict points. This reduces bicycle crash severity.
- The street buffer provides space outside of the pedestrian accessible route space for roadway signs, utility poles, and parking meters. The street buffer can also provide space for snow storage.
- The sidewalk buffer can provide space outside of the pedestrian accessible route for trash receptacles, landscaping, benches, and/or pedestrian scale lighting.
- A buffer width of 5' or more can create the opportunity for additional landscaping or for providing stormwater best management practices.

#### ! What are the challenges?

- One-way separated bicycle lanes may attract wrong way riding if a separated bike lane is not provided in the opposite direction.
- Two-way separated bicycle lanes present unexpected conflicts between bicyclists and motorists at intersections and driveways because bicycles are riding against traffic.
- The design of the vertical separation must consider the drainage impacts.
- Consider freight movements and delivery locations when designing separated bike lanes.
- The design of the vertical separation will need to consider accessibility features, such as a space for paratransit needs since paratransit vehicles cannot park in bike lanes.



A separated bicycle lane in Minneapolis

#### \$ How much do they cost?

Typical costs range from \$16,000 per mile for restriping to \$500,000 per mile for overlay to \$5 million per mile for reconstruction.

## Separated Bicycle Lanes

### Design Features

- Coordinate with MnDOT ADA Group for guidance related to ADA needs and paratransit needs on roadways where separated bicycle lanes are proposed.
- For state specific design details, including preferred and minimum bike lane widths, see Chapter 5 of the [MnDOT Bicycle Facility Manual](#).
- If a separated bike lane is at sidewalk-level, the design should allow the bicycle facility to continue at grade and while motor vehicles change grade to cross the facility.
- On two-way roadways, one-way separated bike lanes on each side of the roadway are typically preferred over a two-way separated bike lane on one side of the roadway.
- If motorists and bike/pedestrian movements are concurrent or uncontrolled at conflict points, sight lines on the intersection or driveway approach must be kept clear to maintain visibility between street users.
- Separated bike lanes can present some specific accessibility challenges that must be carefully thought through during the initial planning process.
- Protected intersections are commonly used with separated bike lanes. Refer to Separated Bicycle Lanes section.
- The [MassDOT Separated Bicycle Lane Planning and Design Guide](#) provides additional detailed guidance for Separated Bicycle Lanes.



A separated bicycle lane along Minnesota Avenue, Glenwood, MN

### Resources

- FHWA Separated Bike Lane Planning and Design Guide: [https://www.fhwa.dot.gov/environment/bicycle\\_pedestrian/publications/separated\\_bikelane\\_pdg/separatedbikelane\\_pdg.pdf](https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/separated_bikelane_pdg/separatedbikelane_pdg.pdf)
- MnDOT Bicycle Facility Design Manual, Chapter 5
- MassDOT Separated Bicycle Lane Planning and Design Guide: <https://www.mass.gov/lists/separated-bike-lane-planning-design-guide>



A separated bicycle lane along Minnesota Avenue, Glenwood, MN

## Rectangular Rapid Flashing Beacons

### CSAH 152 (Washington Ave) Bikeway Project

Attachment 11 | Crash Reduction References

#### What is their purpose?

A Rectangular Rapid Flashing Beacon (RRFB) is a crossing enhancement at uncontrolled intersections that can be activated manually by a pedestrian using a pushbutton or by a pedestrian detection system. The RRFB assembly typically includes one RRFB device on each end of a crosswalk. Each device includes two rapidly and alternatively flashing rectangular yellow indications attached to a pole supplementing the pedestrian warning sign (W11-2) or school crossing sign (S1-1) at a crosswalk. The irregular “wig-wag” flashing sequence is similar to emergency flashers on police vehicles (left light on, then right light on, etc.) with a pulsing light source.

MnDOT has received statewide Interim Approval from FHWA for the use of a pedestrian actuated RRFB (IA-21). Statewide Interim Approval allows any jurisdiction within Minnesota to use the device as long as the jurisdiction agrees to notify the MnDOT Traffic Standards Engineer of the location for each installation and agrees to the specific conditions outlined for [Statewide Interim Approvals](#).



RRFB at Johnson Street NE & 22nd Avenue NE, Minneapolis, MN

#### Are they a proven strategy?

FHWA has reviewed studies related to the effectiveness of the RRFB device and have confirmed its success at uncontrolled marked crosswalks. Therefore, based on the number of successful experiments, the RRFB is a **PROVEN** safety countermeasure strategy for marked crosswalks.

Supporting Research: [Evaluation of Pedestrian Hybrid Beacons and Rapid Flashing Beacons](#)

#### Where would we use them?

The purpose of the RRFB is to increase driver awareness of the presence of pedestrians at crosswalks that are not across approaches controlled by YIELD signs, STOP signs, or traffic control signals. RRFBs can be used on crosswalks across the approach to and/or egress from a roundabout. Research shows that an RRFB is most effective on roadways with volumes less than 12,000 vehicles per day and with speeds less than 40 mph.

Per the IA-21 the use of an RRFB shall:

- Only be installed to function as a pedestrian-actuated enhancement
- Only be used to supplement a post-mounted or overhead-mounted W11-2 (Pedestrian), S1-1 (School), or W11-15 (Trail) crossing warning sign. A diagonal downward arrow (W16-7P) plaque shall supplement the post-mounted signs.

The IA-21 also provides information regarding sign/beacon assembly locations, beacon dimensions and placement, beacon flashing requirements, beacon operations, and accessible pedestrian features. Reference the [Interim Approval-21](#) for more details regarding the federal guidance.

## Rectangular Rapid Flashing Beacons

### CSAH 152 (Washington Ave) Bikeway Project

Attachment 11 | Crash Reduction References

#### What are the advantages?

- RRFBs can utilize power from the existing grid network or by solar panels furnished on the devices.
- Increases driver awareness of the crosswalks and driver yielding compliance, especially at night. Compliance rates vary per site, and are generally highest on low-speed, single-lane facilities. Studies have found compliance rates from 17% to as high as 98%, which are comparable to a traffic signal or pedestrian hybrid beacon system.
- Can reduce the number of multiple-threat crashes, especially when used in combination with other strategies noted below.
- 47% reduction in vehicle-pedestrian crashes.

#### What are the maintenance impacts?

Maintenance for the RRFB is dependent on the power supply type. If solar power is used, the primary concern is removing nearby foliage and the amount of sun exposure throughout the day. Solar powered RRFBs typically function for several years without maintenance issues.

Solar powered RRFB systems do not require underground conduit, and would only require a push button to activate the system. The largest solar panel (55 watt) can accommodate around 1,000 activations per day. These solar panels typically can last up to 10 years or longer depending on usage. The batteries require replacement approximately every 5 years.

#### What are the challenges?

- RRFB effectiveness varies depending on the type of roadway, traffic volumes, and speeds. On higher-speed (40 mph or higher), multilane, or high-volume (over 12,000 vehicles per day), RRFB's are less effective, and other strategies (or a combination of strategies) should be considered.
- Additional maintenance and operating costs, depending on power source

RRFB systems that are hardwired are powered from a nearby electrical source by running wire underground. Hard wired systems are typically recommended at crossing locations that experience very high pedestrian activity. A hardwired system can ensure consistent operation, especially during the fall and winter months when the sun is low in the sky and reducing the ability to charge the batteries as frequently.

#### Supplemental treatments

Rectangular Rapid Flashing Beacons are often combined with the following treatments:

- Marked crosswalk (required) and Advance STOP markings and signs (recommended if multi-lane)
- Warning signs (required)
- Parking restrictions (required)
- Curb extensions and ADA curb ramps
- Pedestrian refuge island
- Speed bumps

#### Best practices

The RRFB offers significant safety benefits, achieving high rates of compliance for a relatively low cost. The RRFB increases yield rates at uncontrolled crosswalks, and studies show they are most effective on roadways with volumes less than 12,000 vehicles per day and with speeds less than 40 mph. Reference the [Interim Approval-21](#) for more details regarding the federal guidance.

#### How much do they cost?

Costs can vary widely for the installation of two RRFB units (one on either side of the street). For an RRFB system using a solar-powered system, the cost is approximately \$15,000 for materials and installation. For an RRFB system that is hardwired, the costs range between \$30,000 and \$50,000 depending on the proximity of a power source. RRFB systems that include overhead flashers cost between \$80,000 to \$100,000, which includes a mast arm and pole for each direction of traffic and hardwired power.

## Rectangular Rapid Flashing Beacons

### CSAH 152 (Washington Ave) Bikeway Project

Attachment 11 | Crash Reduction References

#### Design Features

The installation of an RRFB must include two units: one on the right-hand side and one on the left-hand side of the roadway. It is also recommended to consider placing an additional unit within a median if available. The two yellow indications shall flash in a rapidly flashing pattern (“wig-wag”), at a rate not less than 50 or more than 60 times per minute (IA 21). The lights should rest in dark until activated, and should start and stop simultaneously. Additionally, the RRFB indication should be approximately 5" wide by 2" high and aligned horizontally between the bottom of the crossing warning sign and the top of the supplemental downward diagonal arrow plaque. Pedestrian push buttons should be properly installed, in accordance with ADA design standards, and in a position where the activated lights are visible to the pedestrian.

RRFBs typically receive power from solar panel units attached to each device, but can also be hard wired to a traditional power source.



RRFB at CSAH 16, Shakopee, MN

#### Resources

- [https://safety.fhwa.dot.gov/ped\\_bike/step/docs/TechSheet\\_RRFB\\_508compliant.pdf](https://safety.fhwa.dot.gov/ped_bike/step/docs/TechSheet_RRFB_508compliant.pdf)
- [https://www.fhwa.dot.gov/innovation/everydaycounts/edc\\_4/STEP-field-guide.pdf](https://www.fhwa.dot.gov/innovation/everydaycounts/edc_4/STEP-field-guide.pdf)
- <http://www.dot.state.mn.us/stateaid/trafficsafety/county/CRSP-EnhancedCrosswalks.pdf>
- Development of Crash Modification Factors for Uncontrolled Pedestrian Crossing Treatments: <https://www.nap.edu/download/24627>

## Curb Extensions and Curb Radii

### CSAH 152 (Washington Ave) Bikeway Project

Attachment 11 | Crash Reduction References

#### What is their purpose?

A curb extension is an extension of the sidewalk into the roadway that reduces the crossing distance of a roadway for pedestrians and pedestrian exposure to vehicular traffic. Curb extensions can provide visual cues to drivers that encourage them to reduce speeds and be aware of pedestrians and bicyclists. Curb extensions also improve intersection sight distance for vehicles and pedestrians since they restrict parking near the intersection. They can also provide additional space to construct ADA-compliant curb ramps, making them an effective strategy on ADA retrofit projects where constructing an ADA-compliant ramp may be otherwise difficult. Curb extensions are used at intersections and at mid-block crosswalks.



*A curb extension at an intersection*

#### Are they a proven strategy?

Curb extensions are **PROVEN** safety strategies. Research shows that reducing the crossing distance, restricting the street width, and reducing wide corner radii improve pedestrian safety and enhance the sight distance between motorists and pedestrians.

Supporting Documentation: [MnDOT Enhanced Crosswalks](#)

#### Where would we use them?

Curb extensions are most appropriate in urban settings when there is an on-street parking lane or a shoulder where the extensions will not impede bicycle travel. The curb extension physically precludes vehicles parking near an intersection or pedestrian crossing, improving sight lines and visibility both for and of crossing pedestrians near parked vehicles. Beyond being used at intersections, curb extensions can be applied in a variety of ways depending on the roadway's needs. Examples include the following:

- Mid-block curb extensions or pinch points
- Offset curb extensions or chicanes
- Bus stops

#### What are the maintenance impacts?

Partner with maintenance team members during design development to discuss strategies and issues related to routine maintenance, especially during winter months. Curb extensions may increase the level of effort required to remove snow from the parking lane. This can be minimized by adding delineators or markers on the curb extension to help guide snow plows, and by flattening the taper rate of the curb extension to 1:5 so plows can maintain a limited forward speed while clearing snow adjacent to the curb extension.

## Curb Extensions and Curb Radii

### CSAH 152 (Washington Ave) Bikeway Project

Attachment 11 | Crash Reduction References

#### + What are the advantages?

- May be temporarily implemented and evaluated using low-cost, interim materials such as gravel, planters, paint and striping, flexible posts, or bollards until a permanent improvement can be funded through a reconstruction project or other programming.
- Increase visibility of pedestrians and bicyclists crossing the street.
- Encourage slower turning speeds.
- Reduce crossing distance at mid-block crosswalks.
- Serve as a gateway or visual cue for drivers entering a slower, more residential area.
- May dedicate width for bus stops (bus bulbs).
- May dedicate width for on-street parking.
- Increase space for street furniture, landscaping, and stormwater treatment.
- Improve intersection sight distance (by prohibiting parking near the intersection)
- Provide additional space to construct ADA-compliant curb ramps.
- Studies show a reduction in crashes up to 45%.

#### ! What are the challenges?

- Design can be restricted by the turning radius of the larger design vehicles (trucks and buses).
- Stormwater management needs associated with the new curb alignment (e.g., catch basin locations) can bring additional design and construction costs.
- Require additional winter maintenance considerations.
- Curb extension retrofits may reduce the amount of available on-street parking

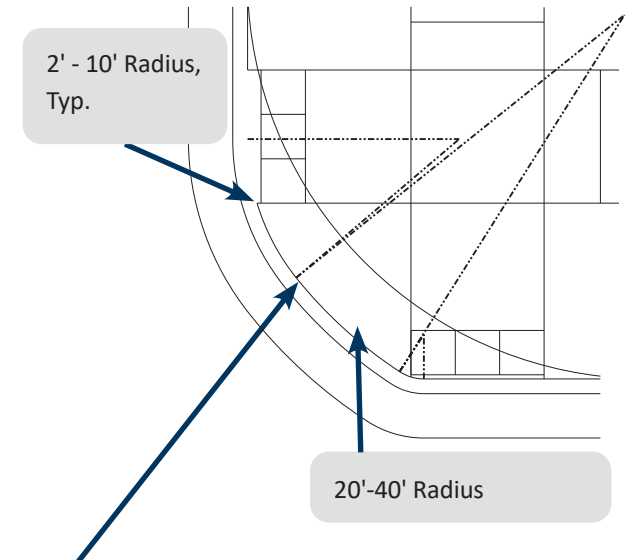
#### Supplemental treatments

Curb extensions and curb radii can be combined with the following treatments:

- High-visibility crosswalk markings
- Advanced warning signs
- Right turn on red restrictions at signalized intersections
- Landscaping or other aesthetic improvements

#### Best practices

Curb extensions can often be lengthened to provide additional space for landscaping, stormwater treatment, transit waiting areas, and bus shelters. In addition, curb extensions can create additional space to fit ADA-compliant curb ramps, improving accessibility in constrained locations where it may otherwise be difficult to do so.



A compound radius can increase available curb extension space while still allowing large vehicles to turn, especially on multi-lane roadways.

*Compound radius detail, Source: MnDOT Curb Ramp Standard Plan*

#### \$ How much do they cost?

Costs depend on site conditions, drainage impacts, pavement design, and ADA accommodations. Curb extension installation can range between \$2,000-\$3,500 per corner if it does not cause storm sewer impacts and between \$10,000-\$20,000 per corner if it does cause storm sewer impacts.

## Curb Extensions and Curb Radii

### CSAH 152 (Washington Ave) Bikeway Project

Attachment 11 | Crash Reduction References



Curb retrofit on Snelling Avenue, Saint Paul, MN; Source: Google

Before/after photo of curb ramp retrofit. The curb extension allowed the construction of ADA-compliant ramps on an otherwise constrained corridor. Note the upstream side of curb extension has a flatter taper than the downstream side.

#### Design Features

Curb extensions should be tailored to the unique characteristics of the site at which they are installed, though [MnDOT's Pedestrian Curb Ramp Standard Plans](#) has details that may be helpful. See Curb Extensions and Curb Radii section of this handbook.

Designers should also consider or incorporate the following:

- Curb extensions should extend the full width of an adjacent parking lane.
- Maintain proper sight distance between pedestrians and motorists, including street furniture and landscaping features.
- Stormwater runoff may be impacted and additional catch basins may be required as part of the design. Avoid designs that cause water to pool on the sidewalk.

#### Resources

- Proven: <http://www.dot.state.mn.us/stateaid/trafficsafety/county/CRSP-EnhancedCrosswalks.pdf>
- <https://safety.fhwa.dot.gov/intersection/conventional/signalized/fhwasa13027/ch9.cfm#s911>
- Minnesota DOT Roadway Design Manual, Chapter 5-1.04
- [http://www.pedbikeinfo.org/cms/downloads/Countermeasure%20Costs\\_Report\\_Nov2013.pdf](http://www.pedbikeinfo.org/cms/downloads/Countermeasure%20Costs_Report_Nov2013.pdf)
- Bump Outs: [http://pedbikesafe.org/PEDSAFE/countermeasures\\_detail.cfm?CM\\_NUM=5](http://pedbikesafe.org/PEDSAFE/countermeasures_detail.cfm?CM_NUM=5)
- <https://nacto.org/publication/urban-street-design-guide/street-design-elements/curb-extensions/>
- Curb Radii: [http://pedbikesafe.org/PEDSAFE/countermeasures\\_detail.cfm?CM\\_NUM=28](http://pedbikesafe.org/PEDSAFE/countermeasures_detail.cfm?CM_NUM=28)
- [https://safety.fhwa.dot.gov/ped\\_bike/step/docs/STEP\\_Guide\\_for\\_Improving\\_Ped\\_Safety\\_at\\_Unsig\\_Loc\\_3-2018\\_07\\_17-508compliant.pdf](https://safety.fhwa.dot.gov/ped_bike/step/docs/STEP_Guide_for_Improving_Ped_Safety_at_Unsig_Loc_3-2018_07_17-508compliant.pdf)



## Medians and Crossing Islands

### CSAH 152 (Washington Ave) Bikeway Project

Attachment 11 | Crash Reduction References

#### What is their purpose?

Medians and crossing islands (also known as refuge islands or center islands) are raised areas that are constructed in the center portion of a roadway, serving as a place of refuge for people who cross the road mid-block or at an intersection. They allow pedestrians and bicyclists to concentrate their attention on one direction of traffic at a time while crossing the roadway. After crossing to the center island, users wait for motorists to stop for an adequate gap in traffic before crossing the second half of the street. Refuge islands can drastically reduce pedestrian delay and vehicle conflicts by increasing the number of safe gaps that are available.



Median at Maryland Avenue and Greenbrier Street, Saint Paul, MN

#### Are they a proven strategy?

FHWA research shows that median and crossing islands are a **PROVEN** safety countermeasure.

Supporting Document: [FHWA Proven Countermeasures – Pedestrian Medians](#)

#### Where would we use them?

When installing a median or crossing island, an agency should develop a design that allows accessibility for all users and adheres to ADA crossing standards. 6' is the minimum median width where detectable warning surfaces are required. However, to allow storage space for a bicycle and to allow space for a level landing and truncated domes, a best practice is to construct crossing islands or medians of at least 8' in width. 10' or greater width is preferred, especially where bicycle traffic is expected. Crossing islands less than 6' are not considered pedestrian refuges since they cannot include detectable warning surfaces and may not safely serve as a refuge for all users.

Crossing islands are commonly installed at:

- Mid-block crossing locations or candidate locations
- High-priority pedestrian crossing locations such as transit stops, schools, and parks
- On roadways where marked crosswalks alone may not be sufficient, including roadways with speeds greater than 35 mph, and when annual average daily traffic (AADT) is greater than 9000. The raised medians must be accessible by all users, and should adhere to ADA crossing standards.

## Medians and Crossing Islands

### CSAH 152 (Washington Ave) Bikeway Project

Attachment 11 | Crash Reduction References

#### + What are the advantages?

- Separates opposing vehicle travel lanes and allows pedestrians/bicyclists to cross the roadway in two stages rather than all at once.
- Reduces certain types of motor vehicle crashes, such as head-on crashes.
- Can help slow vehicle speeds by providing visual narrowing/traffic calming of the roadway.
- Can be implemented using low-cost, interim materials such as striping, flexible posts, and other bollards until a permanent improvement can be funded through a reconstruction project or other programming.
- Can provide area for landscaping and other visual enhancements as well as stormwater treatment.
- Studies show that a **raised median can reduce up to 46% of pedestrian crashes, and a pedestrian crossing island can reduce up to 56% of pedestrian crashes.**

#### What are the maintenance impacts?

Partner with maintenance team members during design development to discuss strategies and issues related to routine maintenance, especially during winter months, to keep the crossing island clear of snow and debris, along with the rest of the sidewalk network. Median crossings can pose an obstacle to snow plows, and to reduce plow strikes on median island curbs, designers should follow

#### ! What are the challenges?

- Permanent medians can be costly and are recommended to be included in larger construction projects.
- May restrict driveway access and on-street parking.
- Can introduce more significant design features and construction costs if stormwater management is impacted and additional inlets are required at locations with curb extensions.
- Require additional winter maintenance considerations.

the pedestrian approach nose details in [MnDOT Standard Plan 5-297.250](#).

#### Supplemental treatments

Raised medians and crossing islands are often combined with the following treatments:

- High-visibility crosswalk markings
- Advanced warning signs
- Curb extensions
- Street lighting
- Advance stop bars
- RRFBs or PHBs



*A median with a refuge island*

#### Best practices

To accommodate all users, medians must be fully accessible by ramp or cut through, and should provide tactile cues for pedestrians with visual impairments to indicate the border between the pedestrian refuge area and the motorized vehicle roadway.

#### \$ How much do they cost?

The average cost for a raised island or crossing island is approximately \$10/sf, and the total cost can vary widely from approximately \$2,000 to \$45,000. Costs depend on the design, site conditions, and whether the median can be included as part of a larger construction project.

# Medians and Crossing Islands

## CSAH 152 (Washington Ave) Bikeway Project

Attachment 11 | Crash Reduction References

### Design Features

Continuously raised medians may not be appropriate or physically possible at all locations. They may need to be weighed against other roadway features such as wider sidewalks, bicycle lanes, landscaping buffers, or on-street parking.

At both intersections and mid-block locations, short sections of median at high-priority crossings such as schools and parks provide benefit to pedestrians. Pedestrian islands may be appropriate at unsignalized and signalized crossing locations.

Raised medians must incorporate the following:

- Fully accessible ramps.
- Tactile cues for pedestrians with visual impairments, that meet ADA standards.
- Adequate visibility between pedestrian and approaching vehicles.
- The median crossing can be angled (rather than perpendicular) to allow pedestrians easier visibility of on-coming traffic.
- Crossing islands may also be staggered (also known as a Z-crossing), which is a treatment that forces pedestrians to turn in the median and face the direction of traffic. Staggered crossings may be difficult for pedestrians with vision impairments to navigate, so it's important to provide a detectable edge along the crossing.



*Pedestrian approach nose shown at a refuge island*



*Z-crossing treatment*

### Resources

- Proven countermeasure: [https://safety.fhwa.dot.gov/provencountermeasures/ped\\_medians/](https://safety.fhwa.dot.gov/provencountermeasures/ped_medians/)
- [http://pedbikesafe.org/PEDSAFE/countermeasures\\_detail.cfm?CM\\_NUM=6](http://pedbikesafe.org/PEDSAFE/countermeasures_detail.cfm?CM_NUM=6)
- CRFs: <https://safety.fhwa.dot.gov/tools/crf/resources/fhwas08011/fhwas08011.pdf>
- <https://www.dot.state.mn.us/ada/pdf/5-297-250.pdf>

# Protected Intersections

## CSAH 152 (Washington Ave) Bikeway Project

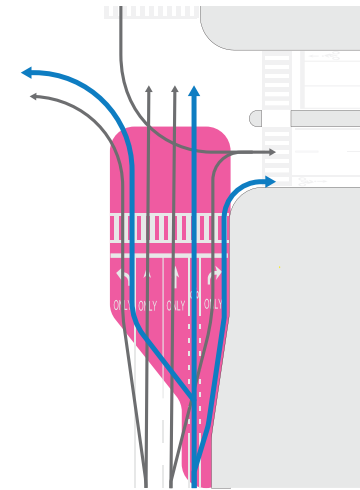
Attachment 11 | Crash Reduction References

### What is their purpose?

Protected intersections separate pedestrians and bicyclists from motor vehicles using physical barriers that eliminate merging and weaving movements. Well-designed protected intersections are intuitive and comfortable, provide clear right-of-way assignment, promote predictability of movement, and allow eye contact between motorists, bicyclists, and pedestrians. A comparison of conflict points at conventional (on-road) bike lanes and at protected intersections is shown in pink on the figures to the right. The single conflict point at a protected intersection can be eliminated by providing a separated signal phase for turning traffic, when used in conjunction with dedicated turn lanes.

Protected intersections can also incorporate intersection design elements that reduce speeds (see Intersection Design section).

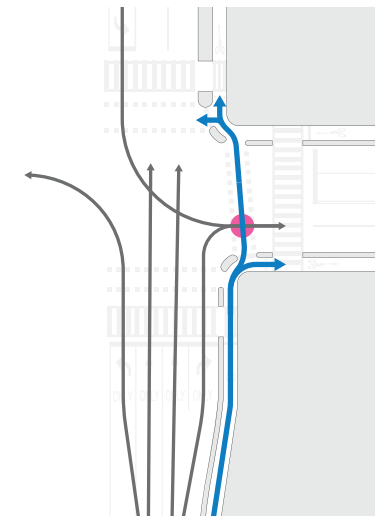
By moving the bicycle through movement further from the vehicle lane, it becomes easier for a cyclist to spot a right-turning vehicle in time to avoid a collision, and improves motorist sight lines as well.



Conflict area between bicycles and motor vehicles (in pink) at a conventional intersection, Source: MassDOT Separated Bike Lane Planning and Design Guide



A protected intersection



Conflict points with a protected intersection, Source: MassDOT Separated Bike Lane Planning and Design Guide

## Protected Intersections

### CSAH 152 (Washington Ave) Bikeway Project

Attachment 11 | Crash Reduction References

#### What are the advantages?

- Reduce motor vehicle speeds at intersections, which reduces bicycle and pedestrian crash severity.
- When combined with intersection design practices such as smaller curb radii, can reduce crossing distance, minimizing pedestrian and bicycle exposure at the intersection.
- Reduce the interaction between bicyclists and motor vehicles through an intersection, which minimizes bicycle exposure at the intersection.
- Improve the ability of drivers to perceive and react to bicyclist in the intersection, and improve ability of cyclists to recognize when a vehicle is turning right.
- Forward queuing area for bicyclists and pedestrian refuge median reduces crossing distances for both users and improves their visibility to motorists.
- Can reduce bicyclist speeds by adding deflection to the bike lane or sidepath.

#### What are the challenges?

- Design may require additional right-of-way depending on the existing roadway's cross-section. Existing roadway amenities, such as on-street parking lanes, may need to be removed to fit the design.
- Reducing curb radii and removing channelized right turns can make it difficult for larger vehicles to navigate an intersection without encroaching into opposing lanes of travel.
- Adjustments to curb radii and channelized right turns may require modifications to existing drainage infrastructure.
- Channelized right-turn lanes may need to be removed from an intersection in order to make the design fit, which may increase motor vehicle delay.
- If motorists and bike/pedestrian movements are concurrent or uncontrolled, sight lines on the approach must be kept clear to maintain visibility between street users.
- Significant impacts on maintenance efforts.

#### Are they a proven strategy?

Individual strategies to slow vehicles at intersections have been **PROVEN**. Protected intersections have **PROVEN** safety benefits at signalized and unsignalized intersections where bicycle crossings are offset from the motorist travel way by a preferable distance of between 6' and 16.5'.

#### Where would we use them?

Protected intersections can be considered at the following locations:

- At signalized or stop-controlled intersections to create safe, comfortable conditions for people bicycling and walking, where there are high volumes of turning motor vehicle traffic.
- They are most commonly used with separated bike lanes and sidepaths, but can be used with conventional (on-road) bike lanes, paved shoulders, or shared lanes.

#### What are the maintenance impacts?

Partner with maintenance team members during design development to discuss strategies and issues related to routine maintenance, especially during winter months, to keep the bike lane and small concrete islands free of snow and debris. The design should ensure that maintenance vehicles can clear snow and debris from the narrow bikeways.



#### How much do they cost?

The cost for a protected intersection varies widely depending on the site conditions, drainage impacts, and existing intersection features. On average, it costs approximately \$100,000 to upgrade a signalized intersection to a protected intersection with permanent features, without a separate bicycle phase. A seasonal or other short-term design (only intended for a few years) can be achieved at a much lower cost by using flexible posts.

# Protected Intersections

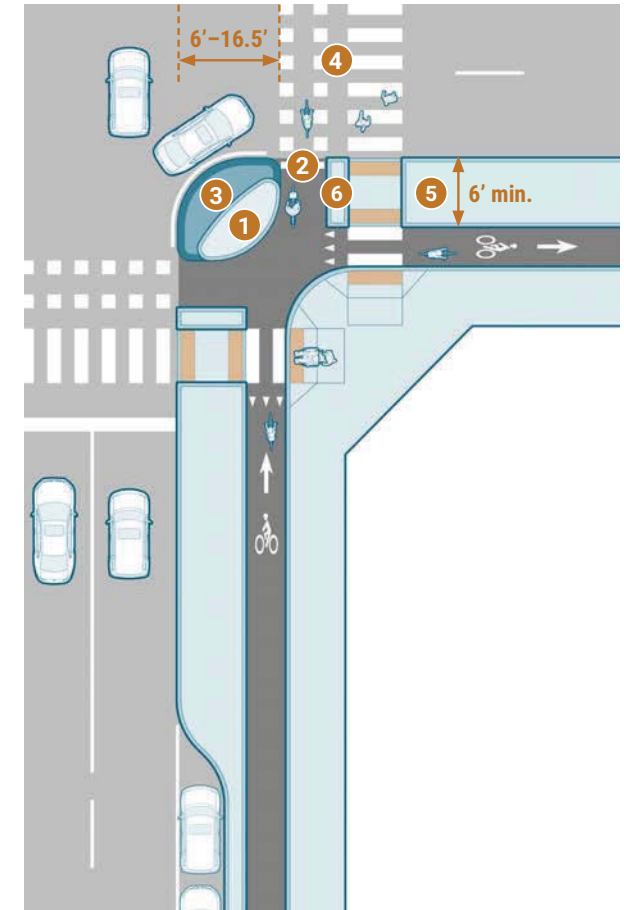
## CSAH 152 (Washington Ave) Bikeway Project

Attachment 11 | Crash Reduction References

### Design Features

FHWA Achieving Multimodal Networks report and Chapter 4 of the MassDOT Separated Bicycle Lane Planning and Design Guide both provide additional detailed guidance for protected intersections. Noteworthy design features include the following (specific points in some notes are illustrated in the graphic on the right):

- Key features include a corner island, forward bicycle queuing area, driver yield zone, and pedestrian refuge median.
- Corner island – A corner island allows the bike lane to be physically separated from motor vehicle traffic up to the edge of the intersection and reduces motor vehicle turning speeds **1**. Mountable truck aprons can accommodate large vehicles **3**.
- Forward bicycle queuing area – Forward bicycle queuing area provides a waiting area for bicyclists that is fully within view of drivers waiting behind the pedestrian crosswalk **2**.
- Driver yield zone – A driver yield zone creates a space for turning drivers to yield to bicyclists and pedestrians by setting the bicycle and pedestrian crossings back from the intersection, similar to the offset geometry recommended for sidepath crossings **4**. If pedestrian and/or bicyclist movements are to be protected by signal phasing, a driver yield zone is not as critical.
- Pedestrian refuge median – A pedestrian refuge median enables pedestrians to cross bicycle and motor vehicle traffic separately and reduces the pedestrian crossing distance ( **5** and **6** ). Medians less than 6'-wide should not be considered refuges, and cannot include detectable warning surfaces.
- Can be constructed of curbs and more permanent features, or using flexible delineators and other rapid implementation materials.



A protected intersection. Source: FHWA Achieving Multimodal Networks

### Supplemental treatments

Protected intersections include several other treatments discussed in more detail in the following sections of this handbook:

- Intersection Design
- Bicycle Boxes
- Medians and Crossing Islands

- Curb Extensions and Curb Radii
- Bicycle Signal Indications
- LPI and/or LBI

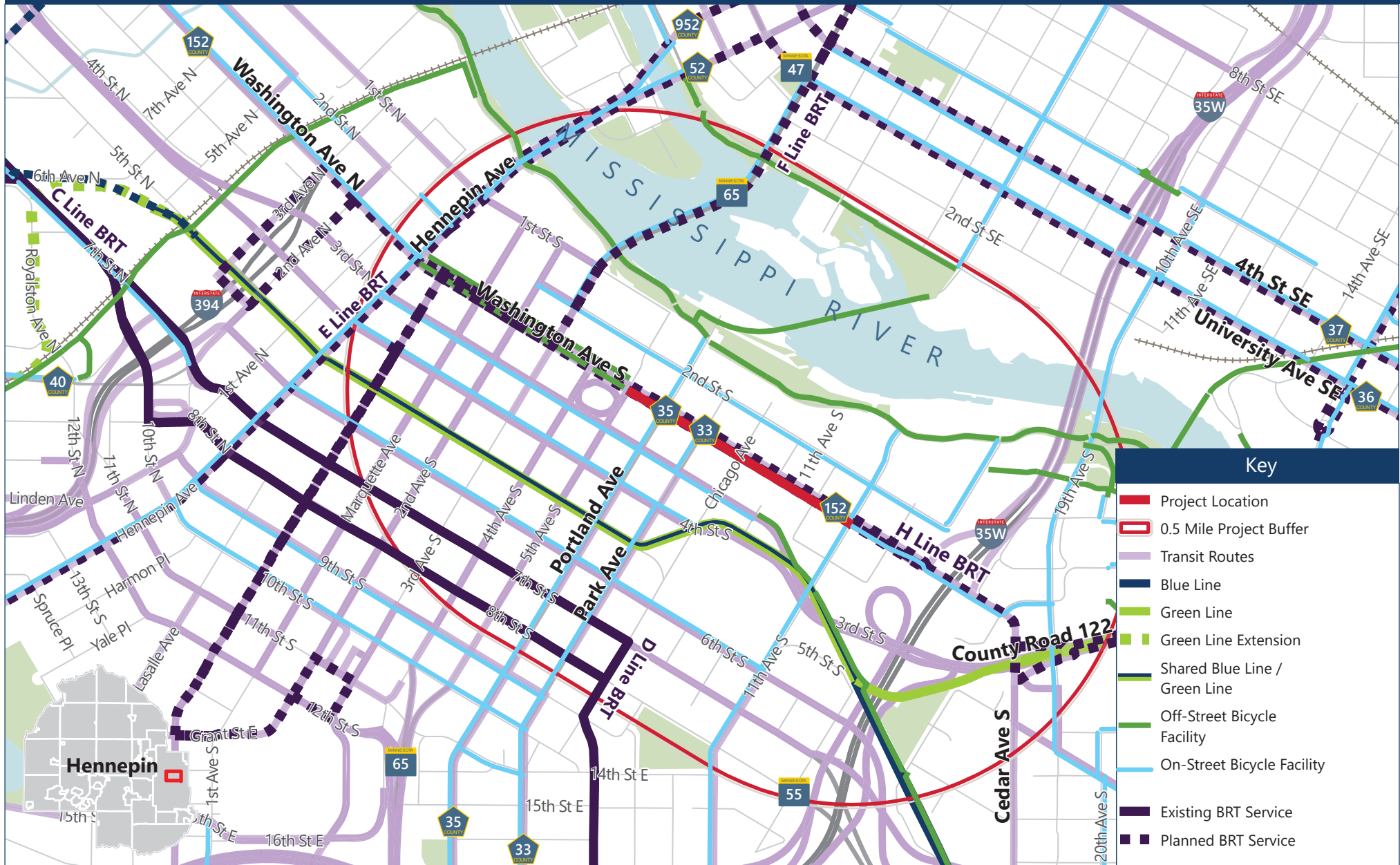
### Resources

- FHWA Achieving Multimodal Networks: [https://www.fhwa.dot.gov/environment/bicycle\\_pedestrian/publications/multimodal\\_networks/fhwahep16055.pdf](https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/multimodal_networks/fhwahep16055.pdf)

- MnDOT's Bicycle Facility Manual: <http://www.dot.state.mn.us/bike/design-engineering.html>
- MassDOT Separated Bicycle Lane Planning and Design Guide: <https://www.mass.gov/lists/separated-bike-lane-planning-design-guide>

# CSAH 152 (Washington Ave) Bikeway Project

Attachment 12 | Multimodal Connections Map



**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: 10/24/2023

Data sources (if applicable):



# CSAH 152 (Washington Ave) Bikeway Project

Attachment 13 | Hennepin County Board Resolution 13-0470

## Hennepin County Board Action Request

### 13-0470



[www.hennepin.us](http://www.hennepin.us)

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#### Item Description:

Design of Washington Avenue between Hennepin Avenue and I-35W as a multi-modal complete streets corridor


#### Resolution:

BE IT RESOLVED, that the Hennepin County Board of Commissioners authorizes staff to design Washington Avenue (CSAH 152) between Hennepin Avenue and I-35W as a multi-modal corridor, providing an enhanced pedestrian realm, protected bike lanes, travel lanes and designated lanes for turning movements for motor vehicles and transit service within an urban core setting.



# CSAH 152 (Washington Ave) Bikeway Project

Attachment 13 | Hennepin County Board Resolution 13-0470

<b>Hennepin County Board Action Request (continued)</b>		 www.Hennepin.us
Requesting Department	Public Works Administration	
Recommendation from County Administrator	Recommend Approval	
Committee Assignment	Public Works, Energy & Environment Committee	

## Background

**History:** Through a series of formal actions in 1996 and 2005 between Hennepin County and the City of Minneapolis and the Minnesota Department of Transportation (MnDOT), the County Board approved the acceptance of Washington Avenue into its County State Aid Highway (CSAH) network. Pursuant to agreements with MnDOT, the county has been able to use state turnback funds to finance the reconstruction of Washington Avenue (CSAH 152) between Plymouth Avenue and Hennepin Avenue. State turnback funding remains available to the county for the reconstruction of Washington Avenue between Hennepin Avenue and Fifth Avenue South. In recognition of the state funds available, the county's Capital Improvement Program (Capital Budget line item 2984000) included this segment for reconstruction in 2013.

Between the time the proposed Washington Avenue reconstruction project first appeared in the county's Capital Improvement Program, the County Board adopted the county's Transportation Systems Plan (Resolution 11-0471, November 11, 2011). This plan identified goals; (1) preserve and modernize the existing transportation system, (2) improve safety for all transportation users, (3) provide mobility and choice to meet the diversity of transportation needs as well as to support health objectives throughout the county, and (4) increase spatial efficiency of system.

In addition, the County Board adopted Active Living (Resolution 09-0244), the county's Complete Streets Policy (Resolution 09-0317) and the county's pedestrian plan (13-0341). All of these documents provide guidance and direction to support multi-modal corridor development and implementation.

During the past few years, Downtown Minneapolis has experienced a resurgence of housing developments, including numerous developments served by Washington Avenue. This resurgence has increased the need for Washington Avenue to be enhanced and improved for all modes of transportation, including connectivity and mobility for walking, biking within a protected area and vehicle, bus and truck travel on the roadway.

The Minneapolis Downtown Councils, *Downtown 2025 Plan* calls for a "...downtown Minneapolis that is thriving, livable, green, connected, exciting and welcoming for decades ahead." Based on these areas of emphasis, Washington Avenue has received attention by both the business and residential community to have an enhanced experience for walking and biking across and along the corridor while serving mobility needs on the roadway for cars, trucks and buses. Interests were also identified to green the corridor to compliment the transportation with landscaping and street furniture to support economic and community development. Recognizing the board's policies and guidance and the Downtown 2025 Plan, the county hosted events to support a robust public engagement process. The process included two design charrettes (November 20, 2012 and May 3, 2013) and open houses (December 4, 2012 and May 14, 2013), matched with two public surveys (December 6 to December 27, 2012 and May 14 to May 31, 2013).

The outcome revealed a strong public sentiment to enhance the pedestrian and bicycling environment along Washington Avenue connecting various areas of downtown Minneapolis, such as the University of Minnesota (I-35W) and the North Loop Neighborhood (Hennepin Avenue). In response, concepts were created, integrating wider sidewalks, introduction of protected bicycle lanes, and median islands all balanced with corridor landscaping, travel lanes and designated turn lanes for cars, trucks and buses. The concepts also integrate corner bump-outs to shorten the pedestrian crossing distance, median

# CSAH 152 (Washington Ave) Bikeway Project

Attachment 13 | Hennepin County Board Resolution 13-0470

islands separating travel lanes and synchronization of signals providing sequencing and timing for road mobility.

All concepts assumed that a new Fourth Street entrance to I-35W would be constructed prior to the Washington Avenue improvements. One of the primary reasons to validate the state's acceptance to use the transportation economic funding for the new northbound on ramp to I-35W was to reduce congestion on Washington Avenue.

**Current Requests:** This request is for the board to approve the advancement of design and construction of Washington Avenue between Hennepin Avenue and Fifth Avenue and to finalize conceptual layout from Fifth Avenue to I-35W that meets the following multi-modal goals and needs; provides safer mobility and connectivity for various modes of transportation, integrates an enhanced pedestrian realm including lessening the distance across Washington Avenue by placement of bump outs and islands, integration of a protected bicycle lanes advancing bicycling within the corridor, and designating right and left turn lanes for vehicles offsetting the turning movements from the through travel lanes. This request, for approval of Washington Avenue, respects the public, city and stakeholder outreach and engagement process conducted to date to refine the concepts to an alternative that balances the limited right of way with identified needs and interests for various modes of transportation.

A formal action will also need to occur with the City of Minneapolis. It is required that an approved layout for Washington Avenue be presented to the City Council for action through the municipal consent process.

**Impact / Outcome:** Reconstructed Washington Avenue, funded mostly with MnDOT Turnback funding, will support complete streets, active living, economic vitality and community pride and development. The action will also support the goals within the Transportation System Plan.

## Approvals

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Department Head	Reeves, Carol	Date	11/27/2013
Deputy/Assistant Administrator		Date	
County Administrator	Booth, Melissa	Date	12/2/2013

# CSAH 152 (Washington Ave) Bikeway Project

Attachment 13 | Hennepin County Board Resolution 13-0470

**Hennepin County, Minnesota**

**RESOLUTION NO. 13-0470**

[2013]



www.hennepin.us

The following Resolution was offered by Commissioner McLaughlin and seconded by Commissioner Dorfman:

BE IT RESOLVED, that the Hennepin County Board of Commissioners authorizes staff to design Washington Avenue (CSAH 152) between Hennepin Avenue and I-35W as a multi-modal corridor, providing an enhanced pedestrian realm, protected bike lanes, travel lanes and designated lanes for turning movements for motor vehicles and transit service within an urban core setting.

The question was on the adoption of the resolution and there were 4 YEAS and 3 NAYS, as follows:

<b>County of Hennepin Board of County Commissioners</b>	<b>YEAS</b>	<b>NAYS</b>	<b>ABSTAIN</b>	<b>ABSENT</b>
Mike Opat		X		
Gail Dorfman	X			
Peter McLaughlin	X			
Randy Johnson		X		
Linda Higgins	X			
Jan Callison	X			
Jeff Johnson		X		

**RESOLUTION ADOPTED ON 12/17/2013**

ATTEST:

A handwritten signature in black ink that reads 'Kelly Allen'. The signature is written over a solid horizontal line.

**Clerk to the County Board**

11/29/2023

**CSAH 152 (Washington Ave) Bikeway Project**

Attachment 14 | MnDOT Support Letter

Carla Stueve, P.E.  
Director and County Highway Engineer  
Hennepin County Transportation Project Delivery  
1600 Prairie Drive  
Medina, MN 55340

**Re: MnDOT Letter for Hennepin County  
Metropolitan Council/Transportation Advisory Board 2024 Regional Solicitation Funding  
Request for Washington Avenue (CSAH 152) Bikeway Project**

Dear Carla Stueve,

This letter documents MnDOT Metro District's recognition for Hennepin County to pursue funding for the Metropolitan Council/Transportation Advisory Board's (TAB) 2024 Regional Solicitation for the Washington Avenue (CSAH 152) Bikeway Project.

The proposed project involves the construction of a protected bikeway along Washington Avenue, up to and near the I-35W interchange and ramp system. As the agency with jurisdiction over I-35W, MnDOT will allow Hennepin County to seek improvements proposed in the application. If funded, details of how the project is delivered and any future maintenance agreement with the County will need to be determined during the project's development to define how the improvements will be maintained for the project's useful life.

MnDOT does not anticipate partnering on local projects beyond current agreements. If your project receives funding, continue to work with MnDOT Area staff to coordinate and review needs and opportunities for cooperation.

MnDOT Metro District looks forward to continued cooperation with Hennepin County as this project moves forward and as we work together to improve safety and travel options within the Metro Area.

If you have questions or require additional information at this time, please reach out to your Area Manager at [Ryan.Wilson@state.mn.us](mailto:Ryan.Wilson@state.mn.us) or 651-775-4216.

Sincerely,

**Sheila**  
**Kauppi**

Digitally signed  
by Sheila Kauppi  
Date: 2023.11.29  
13:52:07 -06'00'

Sheila Kauppi, PE  
Metro District Engineer

# **CSAH 152 (Washington Ave) Bikeway Project**

Attachment 14 | MnDOT Support Letter

CC:

Ryan Wilson, Area Manager

Aaron Tag, Metro Program Director

Dan Erickson, Metro State Aid Engineer



**CSAH 152 (Washington Ave) Bikeway Project**  
Attachment 15 | Metro Transit Support Letter

December 1, 2023

Carla Stueve, P.E.  
Director and County Highway Engineer  
Hennepin County Transportation Project Delivery  
1600 Prairie Drive  
Medina, MN 55340

Dear Ms. Stueve:

Metro Transit is supportive of Hennepin County's Regional Solicitation federal funding application for the proposed bikeway project on CSAH 152 (Washington Avenue S) from 5th Avenue S to 11th Avenue S in Minneapolis.

The multimodal improvements in the proposed project will complement the future METRO H Line bus rapid transit project and will provide key first and last mile connections, as well as accessibility, safety, and mobility improvements for people walking, taking transit, and biking.

This project will involve the construction of a dedicated facility for people biking along CSAH 152 (Washington Avenue), and we understand that a protected bikeway design will be evaluated as part of the project development process for consistency with the existing bikeway design along CSAH 152 immediately to the west that extends from CSAH 52 (Hennepin Avenue) to 5th Ave S. We look forward to collaborating with the County in planning, design, and construction to accommodate transit needs within the project area.

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

Sincerely,

*Lesley Kandaras*

Lesley Kandaras (Nov 30, 2023 18:44 CST)

Lesley Kandaras  
General Manager

CC: Nick Thompson, METRO Projects for Metro Transit  
Katie Roth, Director, Arterial Bus Rapid Transit

# CSAH 152 (Washington Ave) Bikeway Project

Attachment 16 | Notice of Application Submittal to City of Minneapolis



October 19, 2023

Nathan Koster  
Transportation Planning Manager  
City of Minneapolis – Department of Public Works  
301 4<sup>th</sup> Ave S – Suite 785N  
Minneapolis, MN 55415

Re: Support for 2024 Regional Solicitation Application  
CSAH 152 (Washington Ave S) from 5<sup>th</sup> Ave S to 11<sup>th</sup> Ave S in Minneapolis

Dear Mr. Koster:

As part of the Metropolitan Council's 2024 Regional Solicitation, Hennepin County is submitting an application to seek federal funding for a bikeway project along CSAH 152 (Washington Ave S) from 5<sup>th</sup> Ave S to 11<sup>th</sup> Ave S in the City of Minneapolis. Federal funding through this solicitation is available for program years 2028 and 2029.

This project for this funding application will involve the construction of a dedicated bikeway facility along CSAH 152 (Washington Ave S). It is anticipated that a protected bikeway design will be evaluated as part of the project development process to promote consistency with the existing bikeway design along CSAH 152 (Washington Ave S) immediately to the west that extends from CSAH 52 (Hennepin Ave) to 5<sup>th</sup> Ave S. The proposed project will complement Metro Transit's future H Line Arterial Bus Rapid Transit (ABRT) service and will provide key first and last mile connections, as well as accessibility, safety, and mobility improvements for people walking, taking transit, and biking; thereby enhancing the livability and quality of life for Minneapolis and Hennepin County residents.

We would appreciate a letter of support or resolution from the City of Minneapolis for this application and project, acknowledging that the city is aware of this project and understands that the city will likely be required to cost participate in this project and maintain the new bikeway facility year-round as outlined in the county's Cost Participation and Maintenance policies. Specific details regarding cost participation and maintenance responsibilities are anticipated to be determined during the design process as project development is advanced. A PDF detailing the city's anticipated financial obligations is included as an attachment to this letter.

Hennepin County Public Works  
1600 Prairie Drive | Medina, MN 55340  
612-596-0300 | hennepin.us



# CSAH 152 (Washington Ave) Bikeway Project

Attachment 16 | Notice of Application Submittal to City of Minneapolis

If you agree to support this proposed project, please send a PDF letter via email addressed to:

Carla Stueve, P.E.  
Director and County Highway Engineer  
Hennepin County Transportation Project Delivery  
1600 Prairie Drive  
Medina, MN 55340

You may email the electronic version of the letter to me at [Emily.Buell@hennepin.us](mailto:Emily.Buell@hennepin.us). I have attached a letter template that you may use or modify as you see fit.

Hennepin County appreciates the opportunity to partner with the City of Minneapolis on this important transportation improvement project. Given an application deadline of December 15, 2023, we would appreciate your support letter by December 1, 2023. If you have any questions, please contact me at (612) 543-1963 or at [Emily.Buell@hennepin.us](mailto:Emily.Buell@hennepin.us).

Sincerely,



Emily Buell  
Transportation Project Delivery – Capital Programming

Cc: Carla Stueve, P.E. – Director and County Highway Engineer  
Jason Pieper, P.E. - Transportation Project Delivery – Capital Programming Manager



**CSAH 152 (Washington Ave) Bikeway Project**

Attachment 17 | Hennepin County and City of Minneapolis Maintenance Agreement PW 41-20-20

**COUNTY OF HENNEPIN/CITY OF MINNEAPOLIS ROAD  
MAINTENANCE AGREEMENT**

This Agreement (“Agreement”) is made between the **County of Hennepin**, a body politic and corporate under the laws of the State of Minnesota, hereinafter referred to as the “County”, and the **City of Minneapolis**, a Minnesota home-rule charter city under the laws of the State of Minnesota, hereinafter referred to as the “City”. The County and the City collectively are referred to as the “Parties”.

**Recitals**

The following Recitals are incorporated into this Agreement.

1. There exists County State Aid Highways (CSAHs) inside of and bordering the corporate limits of the City as shown in the attached Exhibit “A”, “B”, “C”, “D” and “H”, and traffic signal systems owned by the County within the said limits as shown in the attached Exhibit “E” and “I”.
2. The geographical location of the CSAHs and traffic signal systems listed in Exhibits above are such that the City can provide routine maintenance services in a more timely and cost effective manner.
3. To ensure proper maintenance, repair and coordination of the County’s infrastructure within and bordering the City’s corporate limits, both Parties periodically enter into an agreement called County of Hennepin/City of Minneapolis Road Maintenance Agreement (the “Agreement”), providing for the maintenance of County-owned roadways, bridges, storm sewers and traffic control devices within the corporate limits of the City.
4. To effectively coordinate all work, the County and City staffs will meet quarterly (or as needed) to discuss general maintenance items, and leadership will meet as needed to discuss any amendment to the Agreement.
5. The work will be carried out by the Parties under the provisions of Minnesota Statutes, Section 162.17.

# CSAH 152 (Washington Ave) Bikeway Project

Attachment 17 | Hennepin County and City of Minneapolis Maintenance Agreement PW 41-20-20

## Agreement

NOW, THEREFORE, the Parties agree as follows:

### 1. Term of Agreement, Survival of Terms, and Exhibits.

- 1.1. **Effective Date.** This Agreement is effective as of the date of the final signature, and retroactively in effect from January 01, 2021.
- 1.2. **Expiration Date.** This Agreement will expire on December 31, 2023.
- 1.3. **Survival of Terms.** Provisions that by their nature are intended to survive the term, cancellation or termination of this Agreement do survive such term, cancellation or termination. Such provisions include but are not limited to: Maintenance Responsibilities, Records/Audits, Indemnification, Insurance, Worker Compensation Claims, Cancellation, Termination, and Minnesota Laws Govern.
- 1.4. **Exhibits** are attached and incorporated into this Agreement.

#### 1.4.1. Exhibit “A”.

- COUNTY STATE AID HIGHWAYS IN MINNEAPOLIS  
Surface Maintenance by City of Minneapolis Forces
- COUNTY STATE AID HIGHWAYS IN MINNEAPOLIS  
Towing, Snow and Ice Control by City of Minneapolis Forces (Including  
Bridges and Bridge Sidewalks and Vertically Separated Bikeways)
- COUNTY STATE AID HIGHWAYS BORDERING MINNEAPOLIS  
Sign Maintenance, Permit Responsibility, and Lane Designation Striping by  
City of Minneapolis Forces

Routine Sweeping, Roadside, Drainage, Bridge Maintenance, Snow and Ice  
Control, and Sign Legends by Hennepin County Forces

#### 1.4.2. Exhibit “B”.

- COUNTY STATE AID HIGHWAYS IN MINNEAPOLIS  
Routine Sweeping, Roadside, Bridge Maintenance  
Sign Maintenance, Permit Responsibility, and Lane Designation Striping by  
City of Minneapolis Forces

Sign Legends by Hennepin County Forces

#### 1.4.3. Exhibit “C”.

- COUNTY STATE AID HIGHWAYS IN MINNEAPOLIS  
Routine Surface Maintenance by Hennepin County Forces

#### 1.4.4. Exhibit “D”.

- COUNTY STATE AID HIGHWAYS IN MINNEAPOLIS  
Snow and Ice Control by Hennepin County Forces (Bridge Sidewalks Cleared

# CSAH 152 (Washington Ave) Bikeway Project

Attachment 17 | Hennepin County and City of Minneapolis Maintenance Agreement PW 41-20-20

by City of Minneapolis) (Tagging and Towing Services by City of Minneapolis)

## 1.4.5. Exhibit “E”.

- COUNTY STATE AID HIGHWAYS IN MINNEAPOLIS Traffic Signals

## 1.4.6. Exhibit “F”. Schedule of Costs

## 1.4.7. Exhibit “G”. Lane Mile Table

## 1.4.8. Exhibit “H”. Selected Sample of Urban County State Aid Highways

## 1.4.9. Exhibit “I”. Selected Sample of Traffic Control Signals

## 1.4.10. Exhibit “J”. Lowry Bridge Electrical Services

## 2. The City’s Maintenance Responsibilities.

### 2.1. Surface Maintenance.

**2.1.1. The City’s Core Area Surface Maintenance.** The City shall maintain the City’s core area portion of the County State Aid Highways defined as the area south of CSAH 66 (Broadway Avenue), east and north of I-94, and west of I-35W and southwest of the Mississippi River, marked as Exhibit “A”, so as to keep the same reasonably smooth and in reasonably good repair for the passage of vehicular traffic and reasonably free of all obstructions and impediments to traffic. This maintenance shall include such preventative maintenance services as may be reasonably required to preserve the roadway in reasonably good condition, including but not limited to proper and timely crack and joint sealing and surface patching.

### 2.2. Snow and Ice Control.

**2.2.1. The City’s Core Area Snow and Ice Control.** The City shall keep the aforesaid portions of County State Aid Highways marked as Exhibit “A”, reasonably free and clear from snow, ice and debris and undertake proper snow and ice control operations when necessary. The City shall maintain the through traffic lanes to their full width and ensure that such lanes are reasonably free and clear from snow and ice within a reasonable period of time following each winter storm.

**2.2.2. Raised Medians/Pedestrian Refuges.** The City shall keep raised median pedestrian openings and pedestrian refuges reasonably free and clear from snow and ice in accordance with City practices following each winter storm.

**2.2.3. Bicycle Facilities.** The City shall keep protected bicycle facilities with vertical separation including; delineators, raised curb, concrete barrier, parking, etc., on County State Aid Highways marked as Exhibit “B”, reasonably free and clear

# CSAH 152 (Washington Ave) Bikeway Project

from snow, ice and debris in accordance with City practices.

**2.2.4. Unlimited Access to Fueling Station.** The City shall provide County personnel and vehicles unlimited access to an automated fueling station 24 hours a day. To facilitate fueling station access:

The County will:

- Provide employees' names and associated County driver permit numbers,
- Provide County unit numbers, unit descriptions, VINs, and tank capacities assigned to each City provided fueling fob,
- Provide the unit numbers that are taken out of service when no longer in use,
- Provide the employees' names and driver permit numbers of employees separated from employment and/or who no longer need to fuel County units,
- Pay for fuel usage within 30 calendar days of being invoiced by the City, and
- Provide a point of contact to resolve issues related to fueling and billing.

The City will:

- Provide a fueling PIN for each County employee with fueling station access,
- Provide fueling fobs and associated fob number,
- Add County employees to City's fueling station database,
- Add County vehicle information assigned to each fob to City's fueling station database,
- Modify unit status within fuel management system,
- Disable fuel access for users who no longer require the fuel privileges,
- Provide a monthly invoice of County fuel use, and
- Provide a point of contact to resolve issues related to fueling and billing.

**2.3. Sweeping.** Maintain the portions of the County State Aid Highways marked as Exhibit "B" by keeping them reasonably free of all obstructions and impediments. This maintenance shall include street sweeping, rubbish removal, and cleaning in accordance with City practices and trimming of trees within County State Aid Highway right of way.

**2.4. Drainage.** The City-owned drainage trunk line storm sewers under County roads listed on Exhibit "B" shall be maintained by the City in accordance with City practices.

**2.4.1 Manhole and Catch Basin Maintenance as Agreed to by County.** If, in the context of performing maintenance on the City's drainage system, the City observes a need for corrective maintenance on nearby County-owned manholes or catch basins, the City will notify the County Road Operations Manager via Hennepin County Dispatch 612-596-0299. If it is agreed to be mutually beneficial, the County, subject to limitations and restrictions provided in Subsection 4.1, may facilitate or cause the City to perform the agreed upon corrective maintenance. The