Application

04786 - 2016 Multiuse Trails and Bicycle Facilities

05217 - Creating Critical Bicycle Transportation Link and closing regional pedestrian gap on Portland Avenue (CSAH 35) over the Crosstown Highway (TH 62).

Regional Solicitation - Bicycle and Pedestrian Facilities

Status:	Submitted
Submitted Date:	07/15/2016 2:23 PM

Primary Contact

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

Organization Information

Name:	HENNEPIN COUNTY
Jurisdictional Agency (if different):	
Organization Type:	County Government
Organization Website:	
Address:	701 FOURTH AVE S #400

*	MINNEAPOLIS	Minnesota	55401-1362
	City	State/Province	Postal Code/Zip

County:	Hennepin
Phone:*	612-348-9260 Ext.
Fax:	
PeopleSoft Vendor Number	0000028004A19

Project Information

Project Name	Creating Critical Bicycle Transportation Link on Portland Avenue (CSAH 35) at the Crosstown Highway (TH 62)
Primary County where the Project is Located	Hennepin
Jurisdictional Agency (If Different than the Applicant):	

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

This project will complete a critical bicycle transportation link on Portland Avenue (CSAH 35) between Richfield and Minneapolis over the TH 62 bikeway barrier. The 0.76 mile project will install protected bikeway, improved pedestrian facilities, 170 feet of new sidewalk and a four-to-three-lane conversion for half of the project length.

This segment is a high-priority Tier 1 component of the Regional Bicycle Transportation Network that meets all three definitions of a critical bicycle transportation link established in the Metropolitan Council's 2014 Twin Cities Regional Bicycle Study. The project will 1. Close a gap in the regional network 2. Improve continuity and connections between jurisdictions and 3. Remove a physical barrier.

The project coupled with existing facilities on Portland Avenue will connect 11 RBTN bikeways, including nine in RBTN Tier 1 and two in RBTN Tier 2. See attached map.

Only one other dedicated bicycle facility crosses controlled-access TH 62 connecting Richfield and Minneapolis, at Nokomis-Minnesota River Regional Trail.

Portland Avenue is among the county's most biked corridors, at 726 average annual daily bicyclists (AADB) in Minneapolis and 132 AADB in Richfield. The corridor connects downtown Minneapolis and north with the 494 employment corridor, MSP airport and the southeast metro.

The project will markedly improve safety for people in motor vehicles, biking and walking by converting about 2,000 feet of the roadway to three lanes, a crash reduction factor of 47 percent. Portland Avenue from Park Avenue in Minneapolis to 66th Street in Richfield is a four-lane undivided with no

turn lanes, no shoulders and no continuous bikeway. Two people were killed while walking in the project limits, both in a double-threat crash with a motor vehicle in 2013. Another four pedestrian crashes resulted in non-incapacitating injuries from 2011 through 2015. Crash data are attached.
The four-to-three-lane conversion and bike facilities will create a consistent configuration from 46th Street in Minneapolis to 76th Street in Bloomington with the exception of the TH 62 interchange, where a curb-protected bikeway and sidewalk will maintain mode separation.

The project ties into Hennepin County's $37 million reconstruction of 66th Street (CSAH 53) that includes cycle tracks (bikeways protected by curb), scheduled for 2017. It capitalizes on a 4 to 3 conversion under construction south of 66th, which includes a surface-differentiated bike lane.

The link is a top 25 gap in the county's 2040 Bicycle Transportation Plan, is in the Richfield Bicycle Master Plan and is in the Minneapolis Bicycle Master Plan.
A feasibility study completed in 2016 is attached. No additional right of way is needed.

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

TIP Description Guidance (will be used in TIP if the project is selected for funding)	Bikeway: from CSAH 53 to 60th; sidewalk: east side of CSAH 35 from TH 62 to Park Avenue
Project Length (Miles)	0.76

Project Funding

Are you applying for funds from another source(s) to implement this project?	No
If yes, please identify the source(s)	
Federal Amount	$750,176.00
Match Amount	$187,544.00

Minimum of 20% of project total

Project Total $937,720.00

Match Percentage 20.0%

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

Source of Match Funds 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: 2020

For TDM projects, select 2018 or 2019. For Roadway, Transit, or Trail/Pedestrian projects, select 2020 or 2021.

Additional Program Years:

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

Project Information

County, City, or Lead Agency Hennepin County

Zip Code where Majority of Work is Being Performed 55423

(Approximate) Begin Construction Date 04/30/2020

(Approximate) End Construction Date 10/30/2020

Name of Trail/Ped Facility: Portland Avenue (CSAH 35)

(i.e., CEDAR LAKE TRAIL)

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

From:
(Intersection or Address) 66th Street (CSAH 53), Richfield

To:
(Intersection or Address) 60th Street, Minneapolis

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

Or At:

Primary Types of Work Buffered bike lane, protected bike lane, sidewalk installation, bridge sidewalk modification, 4-to-3 conversion

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

BRIDGE/CULVERT PROJECTS (IF APPLICABLE)

Old Bridge/Culvert No.:

New Bridge/Culvert No.:

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

Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	$17,860.00
Removals (approx. 5% of total cost)	$10,716.00
Roadway (grading, borrow, etc.)	$0.00
Roadway (aggregates and paving)	$0.00
Subgrade Correction (muck)	$0.00
Storm Sewer	$0.00
Ponds	$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	$263,000.00
Traffic Control	$0.00
Striping	$53,200.00
Signing	$8,000.00
Lighting	$0.00
Turf - Erosion & Landscaping	$15,000.00
Bridge	$0.00
Retaining Walls	$0.00
Noise Wall (do not include in cost effectiveness measure)	$0.00
Traffic Signals	$18,000.00
Wetland Mitigation	$0.00
Other Natural and Cultural Resource Protection	$0.00
RR Crossing	$0.00
Roadway Contingencies	$96,444.00
Other Roadway Elements	$0.00
Totals	**$482,220.00**

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Path/Trail Construction	$192,500.00
Sidewalk Construction	$15,700.00
On-Street Bicycle Facility Construction	$78,400.00
Right-of-Way	$0.00
Pedestrian Curb Ramps (ADA)	$12,400.00

Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	$0.00
Pedestrian-scale Lighting	$15,000.00
Streetscaping	$0.00
Wayfinding	$5,400.00
Bicycle and Pedestrian Contingencies	$106,100.00
Other Bicycle and Pedestrian Elements	$45,000.00
Totals	**$470,500.00**

Specific Transit and TDM Elements

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

Transit Operating Costs

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

Totals

Total Cost	$952,720.00
Construction Cost Total	$952,720.00
Transit Operating Cost Total	$0.00

Requirements - All Projects

All Projects

1.The project must be consistent with the goals and policies in these adopted regional plans: Thrive MSP 2040 (2014), the 2040 Transportation Policy Plan, the 2040 Regional Parks Policy Plan (2015), and the 2040 Water Resources Policy Plan (2015).

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

2.The project must be consistent with the 2040 Transportation Policy Plan. Reference the 2040 Transportation Plan objectives and strategies that relate to the project.

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

Goal: Safety and Security, Objective A. (Page 60)

Goal: Access to Destinations, Objectives A and D. (Page 62)

Goal: Competitive Economy, Objectives A and B. (Page 64)

Goal: Healthy Environment, Objectives A, C and D (Page 66)

(Limit 2500 characters; approximately 750 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:

Richfield Bicycle Master Plan, page 29; Protected Bikeway Update to the Minneapolis Bicycle Master Plan, page 16; Hennepin County 2040 Bicycle Transportation Plan, pages 36 and 87.

(Limit 2500 characters; approximately 750 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 bicycle/pedestrian projects, transit stations/stops, transit terminals, park-and-ride facilities, or pool-and-ride lots. Noise barriers, drainage projects, fences, landscaping, etc., are not eligible for funding as a standalone project, but can be included as part of the larger submitted project, which is otherwise eligible.

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

5.Applicants that are not cities or counties in the seven-county metro area with populations over 5,000 must contact the MnDOT Metro State Aid Office prior to submitting their application to determine if a public agency sponsor is required.

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

6.Applicants must not submit an application for the same project 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.
Multiuse Trails and Bicycle Facilities: *$250,000 to $5,500,000*
Pedestrian Facilities (Sidewalks, Streetscaping, and ADA): *$250,000 to $1,000,000*
Safe Routes to School: *$150,000 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.

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

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

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

10.The owner/operator of the facility must operate and maintain the project for the useful life of the improvement.

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

11.The project must represent a permanent improvement with independent utility. The term independent utility means the project provides benefits described in the application by itself and does not depend on any construction elements of the project being funded from other sources outside the regional solicitation, excluding the required non-federal match. Projects that include traffic management or transit operating funds as part of a construction project are exempt from this policy.

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

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

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

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

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

Requirements - 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.

Safe Routes to School projects only:

3.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.

4.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

Measure A: Project Location Relative to the RBTN

Select one:

Tier 1, Priority RBTN Corridor	Yes
Tier 1, RBTN Alignment	
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	1466189251687_PortlandRBTN.pdf

Measure A: Population Summary

Existing Population Within One Mile (Integer Only)	40067
Existing Employment Within One Mile (Integer Only)	12425
Upload the "Population Summary" map	1466189312468_PortlandPopulationEmployment.pdf

Measure A: Project Location and Impact to Disadvantaged Populations

Select one:

Project located in Area of Concentrated Poverty with 50% or more of residents are people of color (ACP50):	
Project located in Area of Concentrated Poverty:	
Projects census tracts are above the regional average for population in poverty or population of color:	Yes
Project located in a census tract that is below the regional average for population in poverty or populations of color or includes children, people with disabilities, or the elderly:	

The Portland Avenue critical bicycle transportation link is in an area of above average concentration of poverty or population of color and will directly connect to a racially concentrated area of poverty 0.5 mile to the east via the 66th Street curb-protected cycletrack to begin construction in 2017.

The Portland Avenue link will connect residents over the major barrier of TH 62 to jobs, serving 40,067 people and 12,425 jobs within one mile of the project. At a regional scale, the Portland Avenue link will connect people to job concentrations in downtown Minneapolis, the Mall of America, the 494 employment corridor, MSP International Airport, the south Minneapolis industrial area in Windom neighborhood, the 66th Street corridor and, via the 494 bridge or Long Meadow Lake Bridge, Eagan and Mendota Heights.

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

The $937,720 project will further Hennepin County?s investment in safety, mobility and nonmotorized transportation in the area, complementing the county?s $37 million investment to reconstruct 66th street as a three-lane roadway with curb-separated cycle tracks.
The project fills a gap in Metro Transit's high-frequency transit network by connecting Route 515 (66th Street in Richfield) with Route 5 (Chicago Avenue in Minneapolis).
The project will directly connect children, seniors, people with low incomes and others to Veterans Memorial Park, Richfield's flagship park with an ice arena, pool, mini golf, farmers market, playground, walking trails and biking trails. Portland Avenue currently is a barrier to reaching these community facilities by bicycle or on foot, prioritizing car travel over equitable access. This project will turn the barrier into a safe and welcoming connection to existing community assets.

The Portland Avenue link will connect residents

with routine shopping needs, including grocers 0.5 west of the corridor on the reconstructed 66th street cycle track at The Hub shopping center in Richfield and Cub Foods 0.4 mile west of the corridor in Minneapolis via 60th Street bike lanes.
These connections are particularly important to the 10 percent of households in the project's Minneapolis census tract that don't have a motor vehicle and the 5 percent of households in the Richfield census tract. The census tracts' median household income is below Hennepin County's average, at $61,397 in Minneapolis and $54,735 in Richfield. 15 percent of people in the Minneapolis tract live below the federal poverty level and 18.4 percent of people in the Richfield tract live in poverty, including 17.5 percent of children in the Minneapolis tract and 32.9 percent in the Richfield tract.

The project is expected to have only positive impacts on disadvantaged populations by increasing the safety of and access to facilities for walking, biking and transit.

The response should address the benefits, impacts, and mitigation for the populations affected by the project.

Upload Map 1466189690984_PortlandSocioeconomic.pdf

Measure B: Affordable Housing

City/Township	Segment Length in Miles (Population)
	0

Total Project Length

Total Project Length (Total Population) 0.76

Affordable Housing Scoring - To Be Completed By Metropolitan Council Staff

City/Township	Segment Length (Miles)	Total Length (Miles)	Score	Segment Length/Total Length	Housing Score Multiplied by Segment percent

0	**0**	**0**	**0**

Affordable Housing Scoring - To Be Completed By Metropolitan Council Staff

Total Project Length (Miles)	0
Total Housing Score	0

Measure A: Gaps, Barriers and Continuity/Connections

Check all that apply:

Gap improvements can be on or off the RBTN and may include the following:
• Providing a missing link between existing or improved segments of a regional (i.e., RBTN) or local transportation network;

•Improving bikeability to better serve all ability and experience levels by:
• Providing a safer, more protected on-street facility;

•Improving crossings at busy intersections (signals, signage, pavement markings); OR

•Improving a bike route or providing a trail parallel to a highway or arterial roadway along a lower-volume neighborhood collector or local street. Barrier crossing improvements (on or off the RBTN) can include crossings (over or under) of rivers or streams, railroad corridors, freeways, or multi-lane highways, or enhanced routes to circumvent the barrier by channeling bicyclists to existing safe crossings or grade separations. (For new barrier crossing projects, data about the nearest parallel crossing (as described above) must be included in the application to be considered for the full allotment of points under this criterion).

Closes a transportation network gap and/or provides a facility that crosses or circumvents a physical barrier	Yes

Improves continuity and/or connections between jurisdictions (on or off the RBTN) (e.g., extending a specific bikeway facility treatment across jurisdictions to improve consistency and inherent bikeability)

Improves Continuity and/or Connections Between Jurisdictions	Yes

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

This project on Portland Avenue in Minneapolis and Richfield is a high-priority Tier 1 component of the Regional Bicycle Transportation Network that meets all three definitions of a critical bicycle transportation link established in the Metropolitan Council's 2014 Twin Cities Regional Bicycle Study. The project will 1. Close a gap in the regional network 2. Improve continuity and connections between jurisdictions and 3. Remove a physical barrier.

The project will create a bikeway across Trunk Highway 62 where no link exists today and will extend 0.76 mile on Portland Avenue (CSAH 35), which is a four-lane undivided arterial A-minor reliever between 60th Street in Minneapolis and 66th Street in Richfield. It will include safer, more protected on-street and off-street facilities, crossing improvements at the TH 62 interchange and install a trail along Portland Avenue for part of the project length.

The Portland link will overcome the TH 62 barrier separating Richfield and Minneapolis as only the second bikeway connection between the cities (the other is the Nokomis-Minnesota River Regional Trail).

The project will convert most of its length from four to three lanes, making it safer and consistent with the configurations on either end.
The project will connect with bicycle lanes on Portland Avenue to the south and north, as well as biking facilities on the cross streets at both termini, a curb-protected cycle track on 66th Street (construction in 2017) and bike lanes on 60th Street.

The link is a top 25 gap in Hennepin County's 2040 Bicycle Transportation Plan and is in the Richfield Bicycle Master Plan and Minneapolis Bicycle

Master Plan. The bicycle advisory committees of Hennepin County and Minneapolis regularly call for completing the link.

The project includes 170 feet of sidewalk to close a highly used pedestrian gap on Portland Avenue between Park Avenue and TH 62 at the southern edge of Minneapolis.
Hennepin County completed a feasibility study in 2016 to identify preferred strategies for closing the gap (see attachments). The preferred strategy includes buffered bike lanes, protected bike lanes and standard bike lanes, with an expansion of existing 8-foot sidewalks on the bridge over TH 62 into 11-foot shared use trails.

The Portland Avenue corridor from downtown Minneapolis to the Minnesota River in Bloomington is a vital bicycle transportation route, connecting to 11 other RBTN routes, including nine Tier 1s. The corridor through most of Minneapolis is planned as a protected bikeway. The link will result in a continuous connection between downtown Minneapolis and the 494 employment corridor, MSP International airport, Bloomington, the 66th Street corridor and Minnesota River crossings at Interstate 35W (planned) TH 77 and Interstate 494.

Measure B: Project Improvements

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

The Portland Avenue link between Richfield and Minneapolis will markedly improve safety for all present modes of transportation by converting the four-lane undivided roadway to a three lane, adding protected and buffered bike lanes and sidewalk.

The Portland Avenue link will resolve deficiencies by incorporating bike facilities the full 0.76 mile of the corridor - including buffered and protected bikeways, constructing sidewalk in a current gap, installing high-visibility crosswalks and bikeway markings at intersections and installing turn lanes. The corridor is a critical bicycle transportation link on the regional bicycle transportation network defined by the Metropolitan Council. The project will safely and conveniently connect downtown Minneapolis with Bloomington and beyond in a consistent, continuous route.

The four- to three-lane conversion has a crash reduction factor (CRF) of 47 percent for all motor vehicle-involved crashes (CRF ID 2841), bike lanes have a CRF of 35 percent of motor vehicle/bicycle crashes (1719), the cycle track at a roundabout has a CRF of 44 percent of motor vehicle/bicycle crashes when compared with a traditional intersection (2944), the high-visibility crosswalks have a CRF of 40 percent for motor vehicle/pedestrian crashes (4123) and the sidewalk installation has a CRF of 75 percent (1334). A CRF for protected bike lanes was not found in FHWA's CRF clearinghouse, but is expected to be higher than the 35 percent for unprotected bike lanes.

The project will convert most of the current four-lane undivided A-minor reliever to a three-lane configuration with a center turn lane. This configuration will reduce the multiple-threat situation people walking, biking and driving across Portland Avenue face today, creating a safer and better-functioning roadway. A four-lane

configuration will be maintained at the TH 62 interchange to accommodate heavy peak motor vehicle turning movements, but the effects on biking and walking will be mitigated with the conversion of an 8-foot sidewalk to an 11-foot multiuse trail and high-visibility crosswalk and bikeway markings.

Crash data for the corridor from 2011 through 2015 include four reported crashes involving five pedestrians, resulting in two people killed, two people with non-incapacitating injuries and one person possibly injured. A 63-year-old man was killed while trying to cross four-lane undivided Portland Avenue on foot after leaving the American Legion and a 55-year-old man who was walking with the first man died a month later from injuries received in the same crash.

Crash data are attached, showing 78 crashes between 2011 and 2015 in the 0.76-mile corridor. It is expected that the number of unreported crashes involving people walking and biking exceeds the number reported.

Measure A: Multimodal Elements

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

The Portland Avenue link will improve safety and experiences for bicycling, walking, using transit and driving. The project includes a four-lane to three-lane conversion, protected bikeway, buffered bikeway, sidewalk, shared use trail, connections to transit and transit improvements (see attached study, pages 24 to 31).
The Portland Avenue link will connect with Metro Transit routes 5 (Portland Avenue, with the region's highest bus ridership), 515 (66th Street, high frequency), 553 (Portland Avenue, express) and 111 (66th Street and Portland Avenue, limited stop). The project will improve bus operations by reducing conflicts with people biking and providing bus standing space. The project also accommodates planned arterial rapid transit in the corridor (the Chicago-Fremont line).

The project will improve safety and comfort for people driving with a four- to three-lane conversion, bikeways and a simplified connection with the 66th Street roundabout.

The Portland Avenue project will fill a high-demand pedestrian gap between Park Avenue and TH 62 in south Minneapolis by installing 170 feet of sidewalk. People walking and biking through the gap have worn a significant desire line. This sidewalk will fit in existing right of way and will be fully ADA compliant. The project will provide bike lanes, reducing conflicts between people biking and walking on an existing trail.

Transit Projects Not Requiring Construction

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

Check Here if Your Transit Project Does Not Require Construction

Measure A: Risk Assessment

1)Project Scope (5 Percent of Points)

Meetings or contacts with stakeholders have occurred Yes

100%

Stakeholders have been identified

40%

Stakeholders have not been identified or contacted

0%

2)Layout or Preliminary Plan (5 Percent of Points)

Layout or Preliminary Plan completed Yes

100%

Layout or Preliminary Plan started

50%

Layout or Preliminary Plan has not been started

0%

Anticipated date or date of completion 05/02/2016

3)Environmental Documentation (5 Percent of Points)

EIS

EA

PM Yes

Document Status:

Document approved (include copy of signed cover sheet)

100%

Document submitted to State Aid for review

75% date submitted

Document in progress; environmental impacts identified; review request letters sent

50%

Document not started Yes

0%

Anticipated date or date of completion/approval 05/31/2017

4)Review of Section 106 Historic Resources (10 Percent of Points)

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

100%

Historic/archeological review under way; determination of no historic properties affected or no adverse effect anticipated

80%

Historic/archaeological review under way; determination of adverse effect anticipated

40%

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

0%

Anticipated date or date of completion of historic/archeological review:

Project is located on an identified historic bridge

5)Review of Section 4f/6f Resources (10 Percent of Points)

4(f) Does the project impacts any public parks, public wildlife refuges, public golf courses, wild & scenic rivers or public private historic properties?
6(f) Does the project impact any public parks, public wildlife refuges, public golf courses, wild & scenic rivers or historic property that was purchased or improved with federal funds?

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

100%

No impact to 4f property. The project is an independent bikeway/walkway project covered by the bikeway/walkway Negative Declaration statement; letter of support received

100%

Section 4f resources present within the project area, but no known adverse effects

80%

Project impacts to Section 4f/6f resources likely coordination/documentation has begun

50%

Project impacts to Section 4f/6f resources likely coordination/documentation has not begun

30%

Unsure if there are any impacts to Section 4f/6f resources in the project area

0%

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

Right-of-way, permanent or temporary easements not required Yes

100%

Right-of-way, permanent or temporary easements has/have been acquired

100%

Right-of-way, permanent or temporary easements required, offers made

75%

Right-of-way, permanent or temporary easements required, appraisals made

50%

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

25%

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

0%

Right-of-way, permanent or temporary easements identification has not been completed

0%

Anticipated date or date of acquisition

7)Railroad Involvement (25 Percent of Points)

No railroad involvement on project Yes

100%

Railroad Right-of-Way Agreement is executed (include signature page) 100%

Railroad Right-of-Way Agreement required; Agreement has been initiated

60%

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

40%

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

0%

Anticipated date or date of executed Agreement

8)Interchange Approval (15 Percent of Points)*

**Please contact Karen Scheffing at MnDOT (Karen.Scheffing@state.mn.us or 651-234-7784) to determine if your project needs to go through the Metropolitan Council/MnDOT Highway Interchange Request Committee.*

Project does not involve construction of a new/expanded interchange or new interchange ramps Yes

100%

Interchange project has been approved by the Metropolitan Council/MnDOT Highway Interchange Request Committee

100%

Interchange project has not been approved by the Metropolitan Council/MnDOT Highway Interchange Request Committee

0%

9)Construction Documents/Plan (10 Percent of Points)

Construction plans completed/approved (include signed title sheet)

100%

Construction plans submitted to State Aid for review

75%

Construction plans in progress; at least 30% completion

50%

Construction plans have not been started Yes

0%

Anticipated date or date of completion 07/12/2017

10)Letting

Anticipated Letting Date 04/30/2020

Measure A: Cost Effectiveness

Total Project Cost (entered in Project Cost Form): $952,720.00

Enter Amount of the Noise Walls: $0.00

Total Project Cost subtract the amount of the noise walls: $952,720.00

Points Awarded in Previous Criteria

Cost Effectiveness $0.00

Other Attachments

File Name	Description	File Size
CrashData2011to2015.xlsx	Crash data	59 KB
CrashReductionFactors.pdf	Cited crash reduction factors	192 KB
Hi-FrequencyMap.pdf	Illustrates new bicycle connection between high-frequency transit routes 5 and 515.	414 KB
Minneapolis letter of support.pdf	Letter of support from Minneapolis	312 KB
NotificationLettersMPLSRichfieldMNDOT.pdf	Notification letter to Minneapolis, Richfield and MnDOT	1.2 MB
PlanExcerpts.pdf	Pages including the project in Hennepin County's Bicycle Transportation Plan, Richfield Bicycle Master Plan, Minneapolis Bicycle Plan and Regional Bicycle System Study.	6.3 MB
Portland Ave-MN62_ MnDOT letter of support.pdf	Letter of support from MnDOT	106 KB
PortlandAveFeasibilityStudy.pdf	2016 Feasibility Study	9.9 MB
Preliminary Layout.pdf	Preferred layout from feasibility study	5.2 MB
RegionalContext.pdf	Regional map with location in RBTN	3.5 MB
Richfield letter of support.pdf	Letter of support from Richfield	455 KB

Project to RBTN Orientation

Multiuse Trails and Bicycle Facilities Project: Portland Avenue Critical Bicycle Transportation Link | Map ID: 1465959147487

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

0 0.225 0.45 0.9 1.35 1.8 Miles

Created: 6/14/2016
LandscapeRSA1

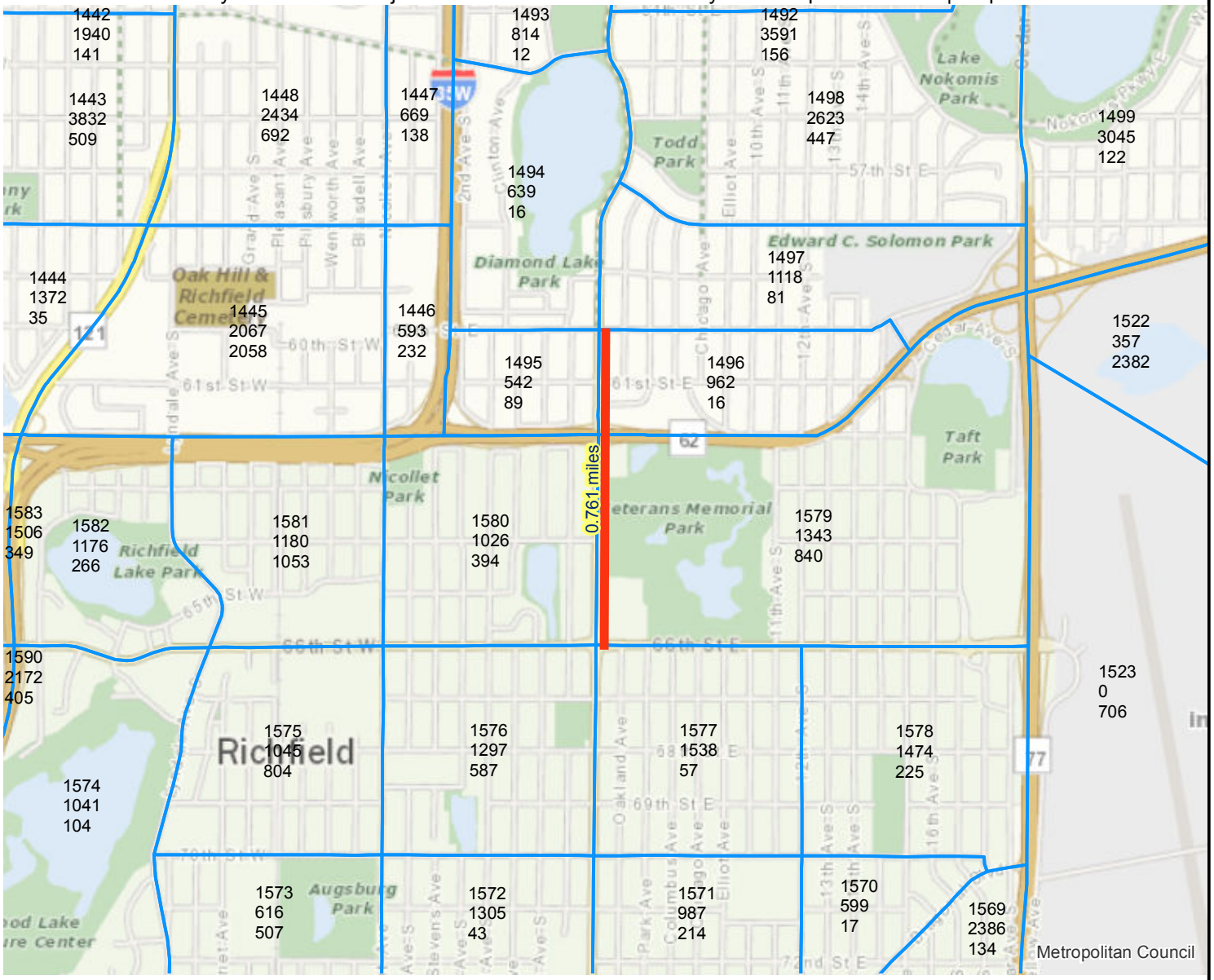
METROPOLITAN COUNCIL

Population Summary

Multiuse Trails and Bicycle Facilities Project: Portland Avenue Critical Bicycle Transportation Link | Map ID: 1465959147487

Results

Within ONE Mile of project:
Total Population: 40067
Total Employment: 12425



Project

2010 TAZ

0 0.225 0.45 0.9 1.35 1.8 Miles

Created: 6/14/2016
LandscapeRSA4

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

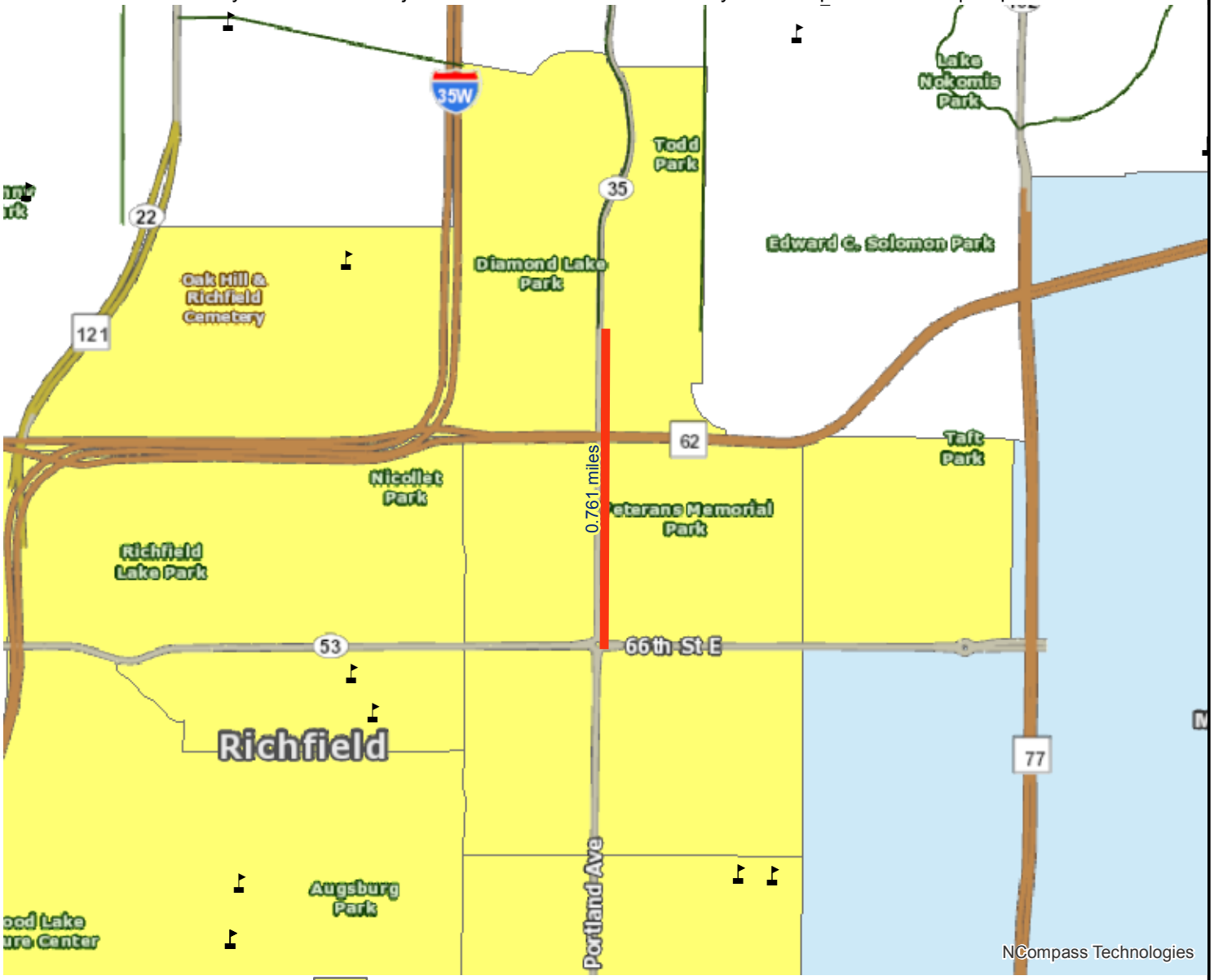
METROPOLITAN COUNCIL

Socio-Economic Conditions

Multiuse Trails and Bicycle Facilities Project: Portland Avenue Critical Bicycle Transportation Link | Map ID: 1465959147487

Results

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



Project

Area of Concentrated Povertry > 50% residents of color

Area of Concentrated Poverty

Above reg'l avg conc of race/poverty

School

0 0.225 0.45 0.9 1.35 1.8 Miles

Created: 6/14/2016
LandscapeRSA2

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

METROPOLITAN COUNCIL

CMF / CRF Details

CMF ID: 1334

Install sidewalk (to avoid walking along roadway)

Description:

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

Category: Pedestrians

Study: ***Update of Florida Crash Reduction Factors and Countermeasures to Improve the Development of District Safety Improvement Projects*****, Gan et al., 2005**

Star Quality Rating:	Cannot Be Rated

Crash Modification Factor (CMF)	
Value:	0.25
Adjusted Standard Error:	
Unadjusted Standard Error:	

Crash Reduction Factor (CRF)

Value:	75 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	
Unadjusted Standard Error:	

Applicability

Crash Type:	Vehicle/pedestrian
Crash Severity:	All
Roadway Types:	Not specified
Number of Lanes:	
Road Division Type:	
Speed Limit:	
Area Type:	
Traffic Volume:	
Time of Day:	

If countermeasure is intersection-based

Intersection Type:	
Intersection Geometry:	
Traffic Control:	
Major Road Traffic Volume:	

Minor Road Traffic Volume:	

Development Details

Date Range of Data Used:	
Municipality:	
State:	AK
Country:	
Type of Methodology Used:	
Sample Size Used:	

Other Details

Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	
Comments:	

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in the CMF Clearinghouse does not constitute a standard, specification, or regulation, nor is it a substitute for sound engineering judgment.

CMF / CRF Details

CMF ID: 1719

Provide bike lanes

Description:

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

Category: Bicyclists

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

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

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

Crash Reduction Factor (CRF)	
Value:	35 *(This value indicates a **decrease** in crashes)*

Adjusted Standard Error:	
Unadjusted Standard Error:	20.3

Applicability

Crash Type:	Vehicle/bicycle
Crash Severity:	Fatal,Serious injury,Minor injury
Roadway Types:	Not specified
Number of Lanes:	
Road Division Type:	
Speed Limit:	
Area Type:	
Traffic Volume:	
Time of Day:	

If countermeasure is intersection-based

Intersection Type:	
Intersection Geometry:	
Traffic Control:	
Major Road Traffic Volume:	

Minor Road Traffic Volume:	

Development Details

Date Range of Data Used:	
Municipality:	
State:	
Country:	
Type of Methodology Used:	Simple before/after
Sample Size Used:	Crashes
Before Sample Size Used:	26 Crashes
After Sample Size Used:	11 Crashes

Other Details

Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	
Comments:	

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CMF / CRF Details

CMF ID: 2841

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

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

Prior Condition: Four-lane undivided roadway

Category: Roadway

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

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

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

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

Applicability	
Crash Type:	All
Crash Severity:	All
Roadway Types:	Not Specified
Number of Lanes:	4
Road Division Type:	Undivided
Speed Limit:	
Area Type:	Suburban
Traffic Volume:	
Time of Day:	All
If countermeasure is intersection-based	
Intersection Type:	
Intersection Geometry:	
Traffic Control:	

Major Road Traffic Volume:	
Minor Road Traffic Volume:	

Development Details

Date Range of Data Used:	1982 to 2004
Municipality:	
State:	
Country:	
Type of Methodology Used:	Before/after using empirical Bayes or full Bayes
Sample Size Used:	
Before Sample Size Used:	263
After Sample Size Used:	67

Other Details

Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	

Comments:	When this CMF was initially entered in the Clearinghouse, it was incorrectly entered as a CMF of 0.47. In March 2015, this was corrected to be 0.53, as presented in the original paper.

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CMF / CRF Details

CMF ID: 2944

Replacement of traditional intersection with roundabout with a grade separated cycle path

Description: Installation of a roundabout with a grade separated cycle path in place of a traditional (signalized or unsignalized) intersection.

Prior Condition: Traditional signalized or unsignalized intersection

Category: Bicyclists

Study: *Injury crashes with bicyclists at roundabouts: influence of some location characteristics and the design of cycle facilities*, Daniels et al. (2009), 2009

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

Crash Modification Factor (CMF)	
Value:	0.56
Adjusted Standard Error:	
Unadjusted Standard Error:	0.691

Crash Reduction Factor (CRF)	
Value:	44 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	
Unadjusted Standard Error:	69.1

Applicability	
Crash Type:	Vehicle/bicycle
Crash Severity:	All
Roadway Types:	Not Specified
Number of Lanes:	
Road Division Type:	All
Speed Limit:	
Area Type:	Urban
Traffic Volume:	
Time of Day:	All
If countermeasure is intersection-based	
Intersection Type:	Roadway/roadway (not interchange related)
Intersection Geometry:	Not specified
Traffic Control:	Roundabout

Major Road Traffic Volume:	
Minor Road Traffic Volume:	

Development Details

Date Range of Data Used:	1991 to 2001
Municipality:	
State:	
Country:	Belgium
Type of Methodology Used:	Before/after using empirical Bayes or full Bayes
Sample Size Used:	Sites
Before Sample Size Used:	3 Sites
After Sample Size Used:	3 Sites

Other Details

Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	
Comments:	

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CMF / CRF Details

CMF ID: 4123

Install high-visibility crosswalk

Description: High-visibility crosswalks aim to increase awareness of pedestrians at intersections by using highly visible marking patterns. The markings used in this study included a series of longitudinal white stripes constructed from thermoplastic material.

Prior Condition: High visibility crosswalks aim to increase awareness of pedestrians at intersections by using highly visible marking patterns. High visibility crosswalks installed in NYC have a series of longitudinal white stripes that are constructed from thermoplastic materials.

Category: Pedestrians

Study: *The Relative Effectiveness of Pedestrian Safety Countermeasures at Urban Intersections - Lessons from a New York City Experience*, Li Chen, Cynthia Chen, and Reid Ewing, 2012

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

Crash Modification Factor (CMF)	
Value:	0.6
Adjusted Standard Error:	

Unadjusted Standard Error:	

Crash Reduction Factor (CRF)

Value:	40 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	
Unadjusted Standard Error:	

Applicability

Crash Type:	Vehicle/pedestrian
Crash Severity:	All
Roadway Types:	Not Specified
Number of Lanes:	
Road Division Type:	
Speed Limit:	
Area Type:	Urban
Traffic Volume:	
Time of Day:	All

If countermeasure is intersection-based

Intersection Type:	Roadway/roadway (not interchange related)

Intersection Geometry:	3-leg,4-leg
Traffic Control:	Not specified
Major Road Traffic Volume:	
Minor Road Traffic Volume:	

Development Details

Date Range of Data Used:	1998 to 2008
Municipality:	New York City
State:	NY
Country:	USA
Type of Methodology Used:	Simple before/after
Sample Size Used:	Crashes
Before Sample Size Used:	63 Crashes
After Sample Size Used:	15 Crashes

Other Details

Included in Highway Safety Manual?	No

Date Added to Clearinghouse:	
Comments:	The treatment group included both signalized and unsignalized intersections. The corresponding change in crashes in the comparison group was an 18 percent reduction in pedestrian-vehicle crashes. This could be used to adjust the treatment effect to account for other factors not related to the treatment.

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High Frequency Service Network

HIGH FREQUENCY PROMISE

Service every 15 minutes (or better)

Weekdays: 6 a.m. to 7 p.m.

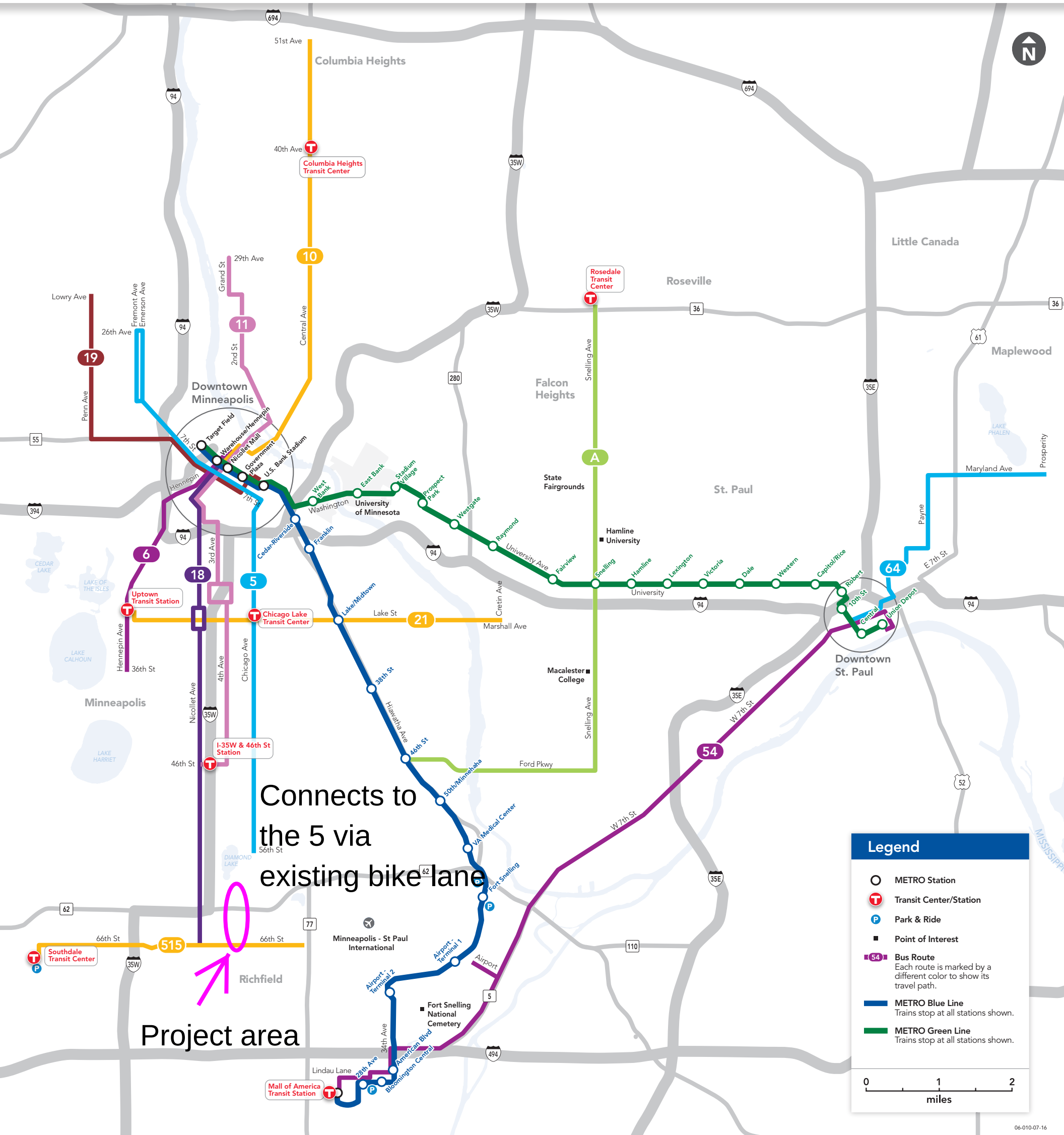
Saturdays: 9 a.m. to 6 p.m.

Colored lines show where High Frequency service is available.

All of Route 54, A Line and METRO Blue Line and Green Line offer High Frequency service.

Service on these routes—5, 6, 10, 11, 18, 19, 21, 64 and 515—continues outside the areas shown, but operates less frequently. For details, see specific route schedules, visit metrotransit.org or call 612-373-3333.

Metro Transit
a service of the Metropolitan Council



06-010-07-16

Minneapolis
City of Lakes

Public Works
350 S. Fifth St. - Room 203
Minneapolis, MN 55415
TEL 612.673.2352
www.minneapolismn.gov

June 20, 2016

James N. Grube, P.E.
Director of Transportation and County Engineer
Transportation Department
1600 Prairie Drive
Medina, Minnesota 55340

Re: Letter of Support for Regional Solicitation Application
CSAH 35 (Portland Ave) Bikeway and Sidewalk Improvements
From E 60th St to CSAH 53 (E 66th St)

Dear Mr. Grube:

The City of Minneapolis supports Hennepin County's federal funding application through the Regional Solicitation for the proposed CSAH 35 (Portland Avenue) bikeway and sidewalk improvement project from E 60th St to CSAH 53 (E 66th St) in Richfield, which will include the following improvements:

- Addition of a new bikeway
- Addition of a new sidewalk between Park Ave and the TH 62 bridge
- Widen shared use paths along the TH 62 bridge

This street segment is identified as in the City's bicycle and pedestrian master plans. In addition, City staff has been participating with Hennepin County in a working group of agencies for the past nine months to develop a plan to close this key bikeway and sidewalk gap and connect the Cities of Minneapolis and Richfield for people biking and walking.

We support this Hennepin County bikeway and sidewalk project. The project will close a gap in the bikeway and sidewalk networks and improve the safety for all transportation modes. Improvements along this corridor will enhance the livability and quality of life for Minneapolis and Hennepin County residents, and improved connectivity and mobility options for users of the bikeway system.

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

Sincerely,

Lisa K. Cerney

Lisa Cerney
Director of Public Works

Hennepin County
Public Works

Planning Department
701 Fourth Avenue South, Suite 700
Minneapolis, Minnesota 55415-1842

612-348-8532, Fax
www.hennepin.us/spr

June 9, 2016

Jeni Hager, Director of Transportation Planning
City of Minneapolis
350 S 5th Street
Minneapolis, MN 55415

Re: Support for Regional Solicitation Application CSAH 35 (Portland Ave) Bikeway and Sidewalk Improvements from E 60th St to CSAH 53 (E 66th St)

Dear Ms. Hager,

As part of the regional solicitation through the Metropolitan Council, Hennepin County is submitting an application to obtain federal funding for Bikeway and Sidewalk Improvements on CSAH 35 (Portland Ave) from E 60th St to CSAH 53 (E 66th St).

Federal funding through this solicitation is available for the years 2020 – 2021. The project will consist of adding a new bikeway, adding a new sidewalk between Park Ave and the TH 62 Bridge, and widening the existing TH 62 Bridge sidewalks into shared use paths.

These improvements will increase the safety on this roadway, 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. If you agree to support this proposed project, please address your letter to: James N. Grube, P.E., Hennepin County Engineer. You may email the electronic version of the letter to Kelley Yemen. I have attached a letter template that you could use or modify as you see fit.

Hennepin County appreciates the opportunity to partner with the city on this important transportation improvement project. Since the application is due July 15, 2016, we would appreciate your support letter by June 22, 2016, if possible. If you have any questions, please contact me at (612)543-1963 or at kelley.yemen@hennepin.us .

Sincerely,

Kelley Yemen, AICP
Bicycle and Pedestrian Coordinator

Cc: Jim Grube, Hennepin County Engineer
Yvonne Forsythe, Acting Director of Planning

Hennepin County
Public Works

Planning Department
701 Fourth Avenue South, Suite 700
Minneapolis, Minnesota 55415-1842

612-348-8532, Fax
www.hennepin.us/spr

June 9, 2016

Gina Mitteco, Director of Multimodal Planning
Minnesota Department of Transportation
1500 West County Rd B-2
Roseville MN 55113

Re: Support for Regional Solicitation Application CSAH 35 (Portland Ave) Bikeway and Sidewalk Improvements from E 60th St to CSAH 53 (E 66th St)

Dear Ms. Mitteco,

As part of the regional solicitation through the Metropolitan Council, Hennepin County is submitting an application to obtain federal funding for Bikeway and Sidewalk Improvements on CSAH 35 (Portland Ave) from E 60th St to CSAH 53 (E 66th St).

Federal funding through this solicitation is available for the years 2020 – 2021. The project will consist of adding a new bikeway, adding a new sidewalk between Park Ave and the TH 62 Bridge, and widening the existing TH 62 Bridge sidewalks into shared use paths.

These improvements will increase the safety on this roadway, thereby enhancing the livability and quality of life for Hennepin County residents. We would appreciate a letter of support or resolution from MnDOT for this application and project. If you agree to support this proposed project, please address your letter to: James N. Grube, P.E., Hennepin County Engineer. You may email the electronic version of the letter to Kelley Yemen. I have attached a letter template that you could use or modify as you see fit.

Hennepin County appreciates the opportunity to partner with the city on this important transportation improvement project. Since the application is due July 15, 2016, we would appreciate your support letter by June 22, 2016, if possible. If you have any questions, please contact me at (612)543-1963 or at kelley.yemen@hennepin.us .

Sincerely,

Kelley Yemen, AICP
Bicycle and Pedestrian Coordinator

Cc: Jim Grube, Hennepin County Engineer
Yvonne Forsythe, Acting Director of Planning

Hennepin County
Public Works

Planning Department
701 Fourth Avenue South, Suite 700
Minneapolis, Minnesota 55415-1842

612-348-8532, Fax
www.hennepin.us/spr

June 9, 2016

Kristin Asher, Director of Public Works
City of Richfield
1901 East 66th Street
Richfield, MN 55423

Re: Support for Regional Solicitation Application CSAH 35 (Portland Ave) Bikeway and Sidewalk Improvements from E 60th St to CSAH 53 (E 66th St)

Dear Ms. Asher,

As part of the regional solicitation through the Metropolitan Council, Hennepin County is submitting an application to obtain federal funding for Bikeway and Sidewalk Improvements on CSAH 35 (Portland Ave) from E 60th St to CSAH 53 (E 66th St).

Federal funding through this solicitation is available for the years 2020 – 2021. The project will consist of adding a new bikeway, adding a new sidewalk between Park Ave and the TH 62 Bridge, and widening the existing TH 62 Bridge sidewalks into shared use paths.

These improvements will increase the safety on this roadway, thereby enhancing the livability and quality of life for Richfield and Hennepin County residents. We would appreciate a letter of support or resolution from Richfield for this application and project. If you agree to support this proposed project, please address your letter to: James N. Grube, P.E., Hennepin County Engineer. You may email the electronic version of the letter to Kelley Yemen. I have attached a letter template that you could use or modify as you see fit.

Hennepin County appreciates the opportunity to partner with the city on this important transportation improvement project. Since the application is due July 15, 2016, we would appreciate your support letter by June 22, 2016, if possible. If you have any questions, please contact me at (612)543-1963 or at kelley.yemen@hennepin.us .

Sincerely,

Kelley Yemen, AICP
Bicycle and Pedestrian Coordinator

Cc: Jim Grube, Hennepin County Engineer
Yvonne Forsythe, Acting Director of Planning

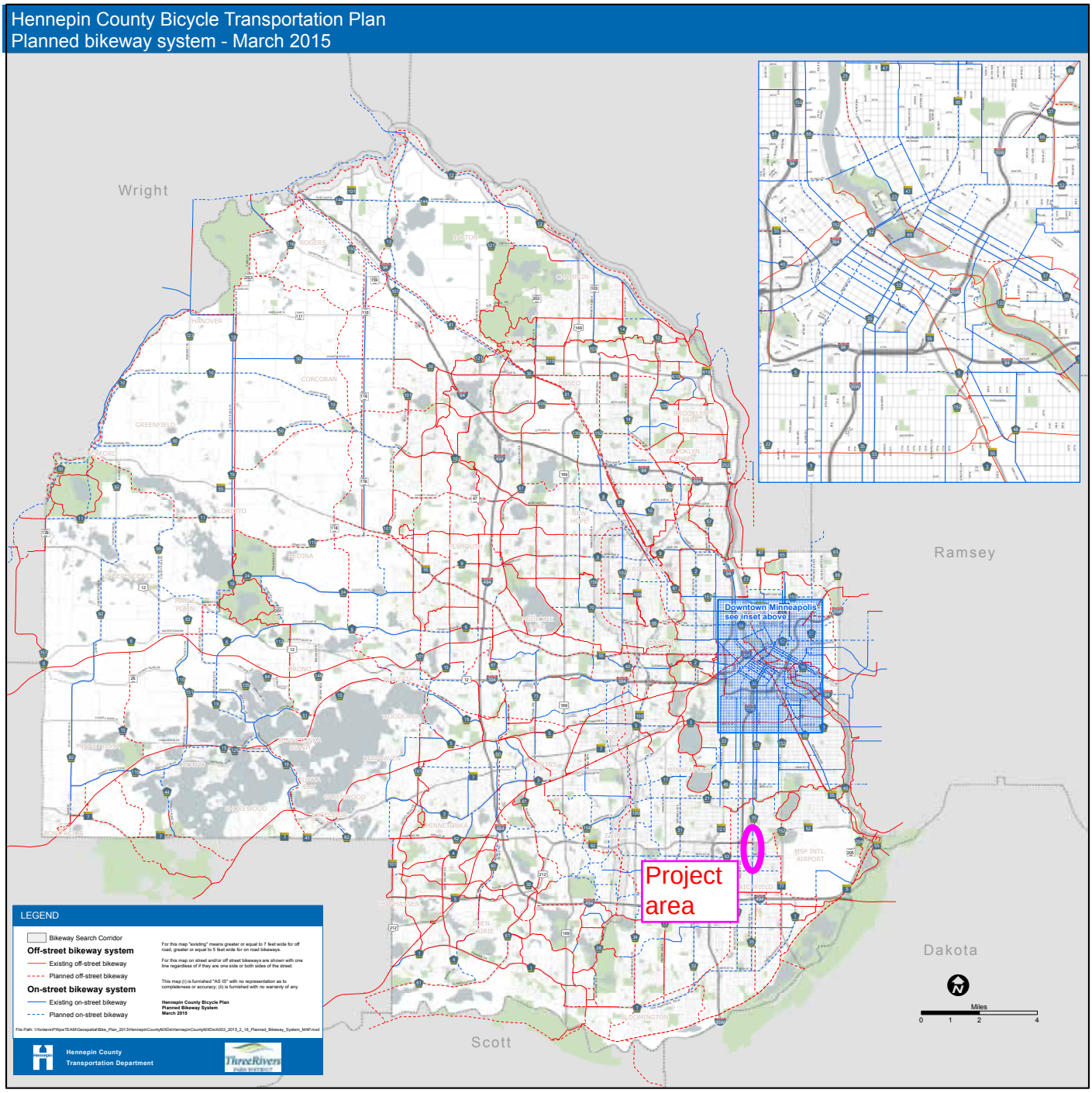


Figure 10: 2040 bikeway system

Table 4: Hennepin County bikeway system mileage

	Existing System	Planned System
Off-street planned bikeway	425	238
On-street planned bikeway	226	302
Total 2040 planned system	**651**	**540**

Table 14: Hennepin County top 25 bikeway system gaps (not ranked; ordered by gap ID number)

Description	Jurisdiction	Gap ID	Miles	Anticipated type
Lowry Avenue (CSAH-153) (over I-94)	Hennepin County	14016	0.23	On-street bike lane
26th Avenue No. (over I-94)	Minneapolis	14017	0.08	On-street bike lane
7th Street No. (Glenwood Ave. to 1st Ave.)	Minneapolis	14023	0.16	On-street bike lane
18th Avenue SE (Elm Street SE to Hennepin E)	Minneapolis	14025	0.50	Bike Boulevard
4th Street SE (15th Ave. SE to 13th Ave. SE)	Hennepin County	14033	0.16	On-street bike lane
Pleasant Avenue SE (University Ave. to East River Road)	Minneapolis	14035	0.38	Bike Boulevard
6th Street S (LRT Trail to 20th Ave. S)	Minneapolis	14040	0.40	Bike Boulevard
4th Street S (Chicago Ave. to 11th Ave. S)	Minneapolis	14041	0.26	On-street bike lane
3rd Avenue S Mississippi River Bridge	Minneapolis	14042	0.49	Protected bike lane
Park Avenue S (Washington Ave. to 3rd Ave. S)	Hennepin County	14045	0.09	Buffered bike lane
2nd Street S (Hennepin Ave. to 2nd Ave. S)	Minneapolis	14048	0.19	Off-street trail
Excelsior Boulevard (CSAH-3) (8th Ave. to 11th Ave.)	Hennepin County	14127	0.20	Off-street trail
Nine Mile Creek Trail (77th Street Connector)	Three Rivers Park District	14146	0.30	Off-street trail
Blake Road (CSAH-20) (MN Bluff Trail to Boyce)	Hennepin County	14150	0.27	Off-street trail
38th Street E (Hiawatha Ave. to Minnehaha Ave.)	Minneapolis	14170	0.23	On-street bike lane
42nd Street E (Hiawatha Ave. to Dight Ave.)	Minneapolis	14171	0.16	On-street bike lane
Nine Mile Creek Trail (12th Ave. S. over I-494)	Three Rivers Park District	14212	0.41	Protected bike lane
Bass Lake Road (W. Broadway to CSAH-81)	Hennepin County	14258	0.37	On-street bike lane
Virginia Avenue S (Cedar Lake Rd. to N. Cedar Trail)	St. Louis Park	14299	0.26	On-street bike lane
2nd Street N (1st Ave. N to 3rd Ave. N)	Minneapolis	14310	0.16	On-street bike lane
Ferndale Road (Dakota Rail Trail to Luce Line)	Three Rivers Parks	14318	0.45	Off-street trail
Portland Avenue (60th St. to TH-62 bridge area)	Hennepin County	14320	0.29	Protected bike lane
8th Avenue N (Lake Minnetonka Trail to Cedar Lake LRT Trail)	Three Rivers Park District	14323	0.31	Protected bike lane
Midtown Greenway Extension (Mississippi River Bridge)	Minneapolis	14168	0.17	Off-street trail
Dunwoody Avenue (I-394 ramps to Hennepin Ave.)	Minneapolis	14021	0.42	On-street bike lane

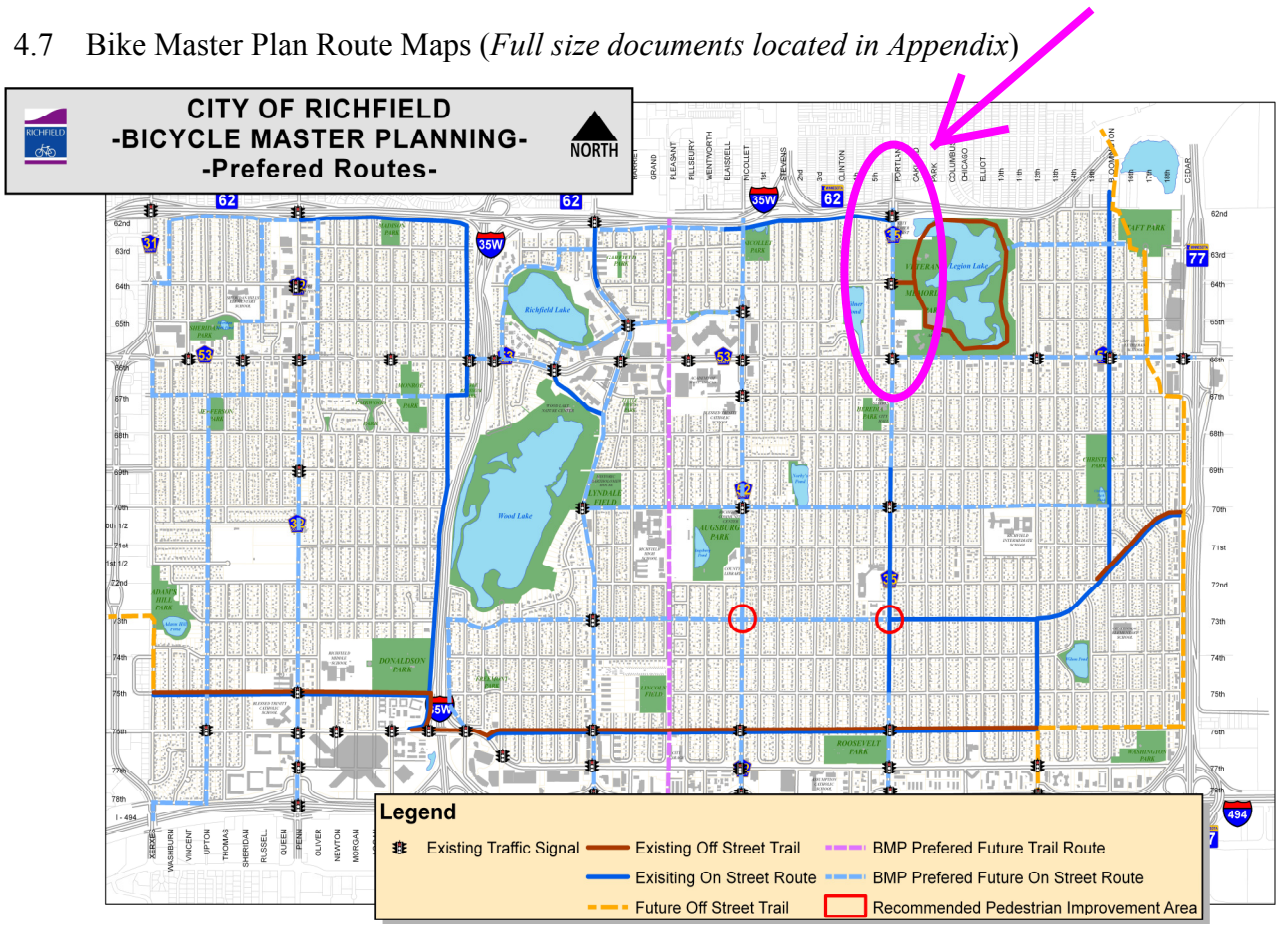
Certainly the availability of funding resources is also important to implementing a successful project. However, experience has found that if the above elements are in place, project funding is usually not an impediment in the long run.

The plan development collaboration with Three Rivers Parks was initiated in order to align the county's and park district's priorities so that there is a common basis of agreement for the continued expansion of the 2040 bikeway system. The county and park district would like to use this partnership as a foundation for a larger coalition with cities and state agencies (e.g., MnDOT and MnDNR).

A realistic early determination of project feasibility is important for informing policymakers and the public as well as for laying the groundwork for any grant funding applications. Especially for federal funding programs, a strong realistic application generally receives a better evaluation and avoids future scope changes that are difficult to obtain.

The active support of elected and appointed policymakers for both agencies is critical to a project, especially during the initial phases of project development. The officials' participation helps to explain the project need to interest groups and the public when there may be concerns of potential impacts, general fears of change, or the project includes controversial components.

4.7 Bike Master Plan Route Maps (*Full size documents located in Appendix*)



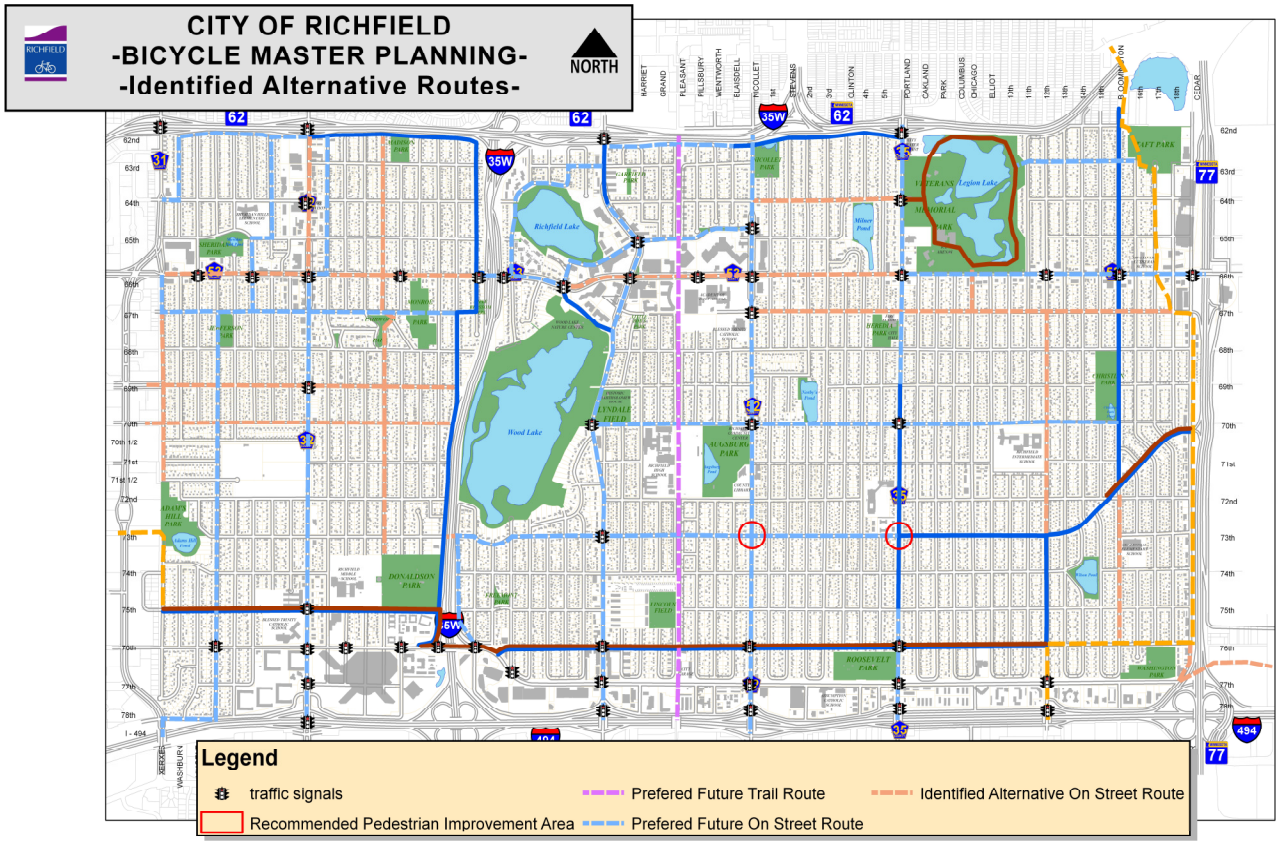
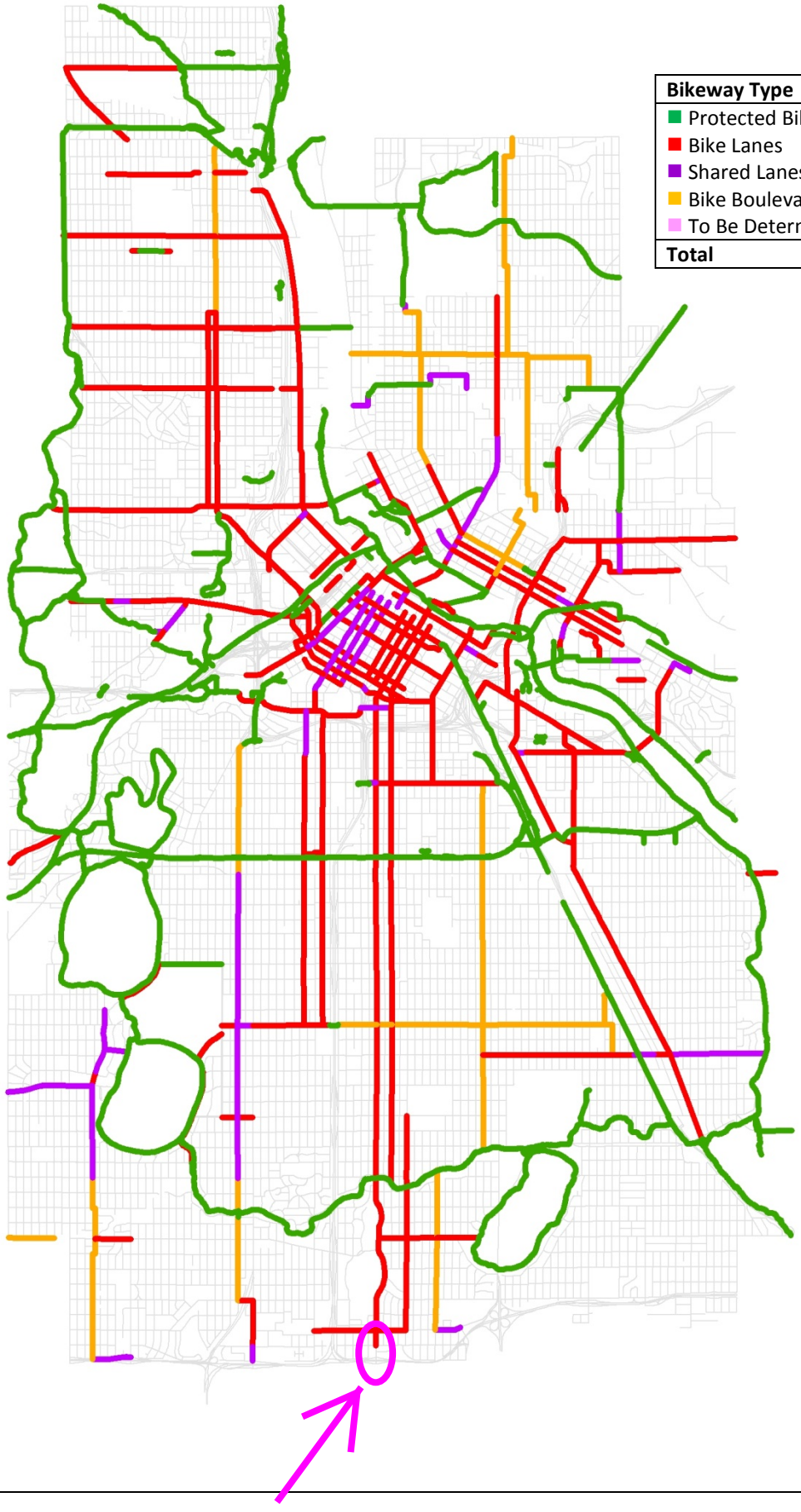


Figure 7: Existing Bicycle Network

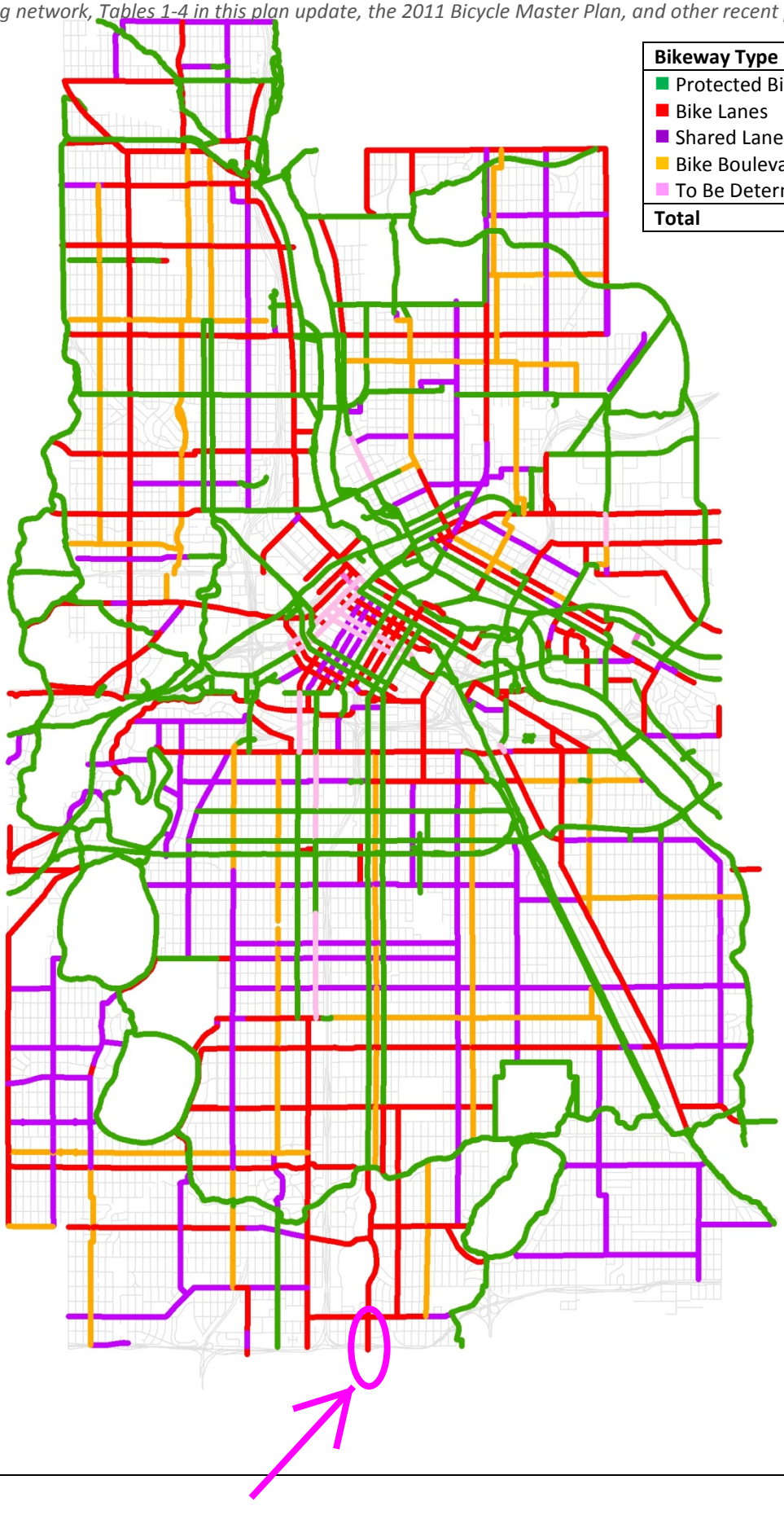


Bikeway Type	Mileage
Protected Bikeways	96
Bike Lanes	82
Shared Lanes	15
Bike Boulevards	20
To Be Determined	
Total	**213**

Figure 9: Planned Long-Term Bicycle Network

Based on the existing network, Tables 1-4 in this plan update, the 2011 Bicycle Master Plan, and other recent planning activities.

Bikeway Type	Mileage
Protected Bikeways	172
Bike Lanes	104
Shared Lanes	76
Bike Boulevards	44
To Be Determined	6
Total	**403**



Regional Bicycle Transportation Network (RBTN) Corridors

PROPOSED

RBTN Corridors with Alignments

- Tier 1 Aligments
- Tier 2 Alignments

RBTN Corridors (Alignments Undefined)

- Tier 1 Priority Regional Bicycle Transportation Corridor
- Tier 2 Regional Bicycle Transportation Corridors

Other Trail Systems

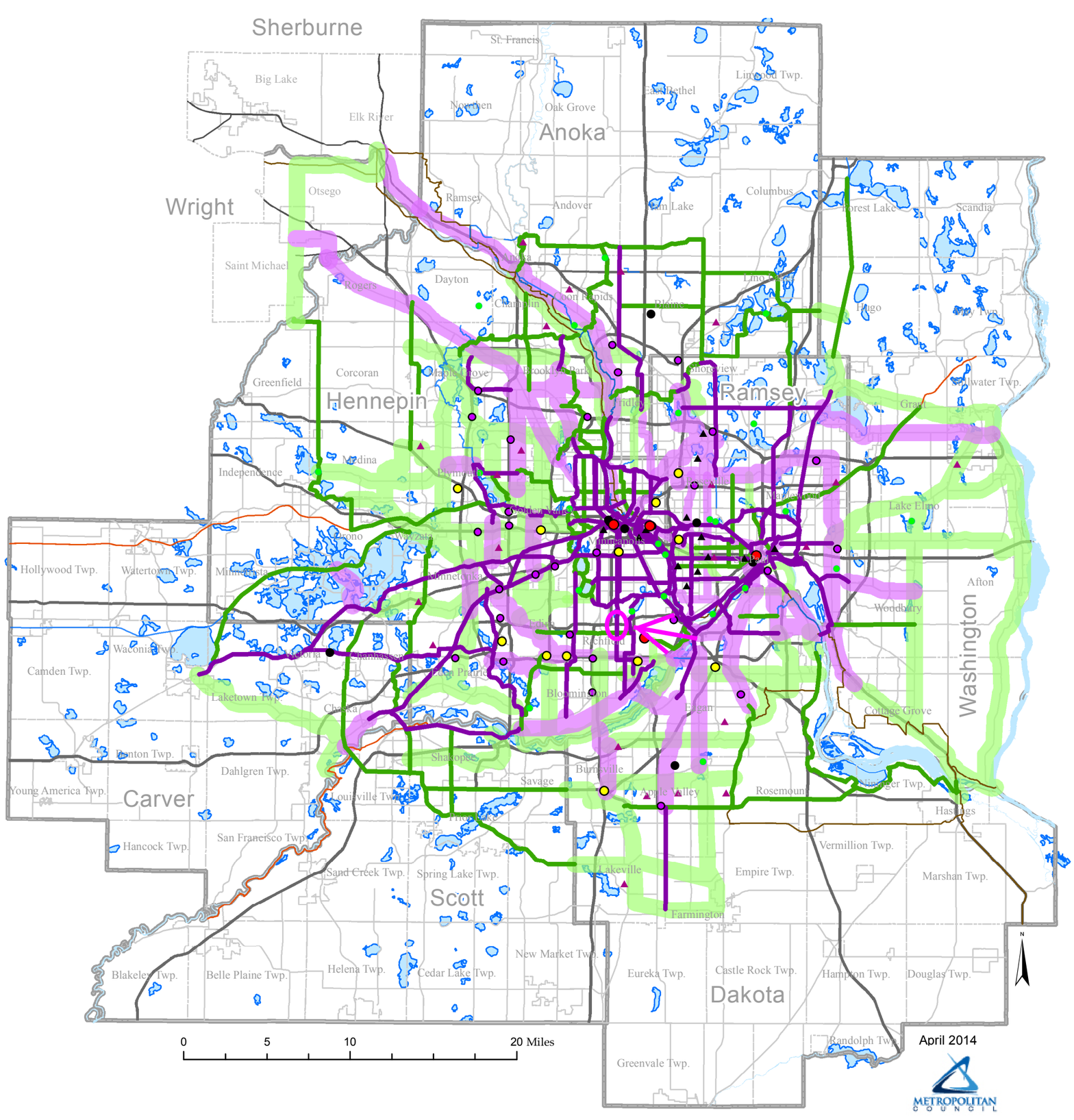
- Regional Trails (Regional Parks Policy Plan)
- Mississippi River Trail (US Route 45)
- State Trails (DNR)

Regional Destinations

- Metropolitan Job Centers (50,000+ jobs)
- Regional Job Centers (15,000 - 50,000 jobs)
- Subregional Job Centers (7,000 - 15,000 jobs)
- Large High Schools (2000+ Students)
- Colleges & Universities (2000+ Students)
- Major Sport & Entertainment Centers
- Highly Visited Regional Parks (400,00+ visits per year)

Reference Items

- Principal Arterial Roads
- Lakes and Rivers
- City Boundary
- County Boundary
- 2040 Municipal Urban Service Area
- MPO Area



Minnesota Department of Transportation
Metro District
1500 West County Road B-2
Roseville, MN 5511

July 8, 2016

James N. Grube, P.E.
Director of Transportation and County Engineer
Transportation Department
1600 Prairie Drive
Medina, Minnesota 55340

RE: Regional Solicitation Application for CSAH 35 (Portland Ave)
Bikeway and Sidewalk Improvements from E 60th St to CSAH 53 (E 66th St),
including Portland Ave Bridge over TH 62

Dear Mr. Grube:

Thank you for requesting a letter of support from MnDOT for the Metropolitan Council/ Transportation Advisory Board (TAB) 2016 Regional Solicitation. Your application for the CSAH 35 (Portland Ave) project impacts MnDOT right of way on TH 62.

MnDOT, as the agency with jurisdiction over TH 62, supports this County project to improve the bikeway and sidewalk system, including the addition of a new bikeway, addition of a new sidewalk between Park Ave and the TH 62 Bridge, and widen shared use paths along the TH 62 Bridge. MnDOT staff has participated with the County in a multi-agency work group to develop a plan to close this key bikeway and sidewalk gap and connect the cities of Minneapolis and Richfield for people biking and walking.

Details of any future maintenance agreement with the County will be determined during project development to define how the project will be maintained; however, ped/bike amenities that impact MnDOT right of way are normally owned and maintained by the local agency.

This project has no funding from MnDOT. In addition, the Metro District currently has no discretionary funding in year 2020 of the State Transportation Improvement Program (STIP) or year 2021 of the Capital Highway Investment Plan (CHIP) to assist with construction or assist with MnDOT services such as the design or construction engineering of the project. Please continue to work with MnDOT Area staff to assist in identifying additional project funding if needed.

Sincerely,

Scott McBride, P.E.
Metro District Engineer

Cc: Elaine Koustsoukos, Metropolitan Council
John Griffith, MnDOT Metro District – West Area Manager

HENNEPIN COUNTY - PORTLAND AVENUE BIKE GAP

Portland Avenue from 60th Street to 66th Street

May 2016

PREPARED FOR

Hennepin County

BY

Alta Planning + Design

Acknowledgments

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Table of Contents

1 Introduction

A. Intent of Project

IMPLEMENT THE HENNEPIN COUNTY 2040 BICYCLE TRANSPORTATION PLAN

Hennepin County recently adopted the 2040 Bicycle Transportation Plan, a visionary document with the overarching goal of making bicycling safe and comfortable for people of all ages and abilities. Gaps in the bicycle system stand in the way of this goal: when a bikeway abruptly ends it creates uncomfortable situations and safety concerns for people bicycling, walking, and driving. Gaps on the map discourage people from bicycling for transportation, as they realize "you can't get there from here."

Hennepin County understands how important it is to create a seamless system of bicycle transportation. For this reason, the county identified the top 25 bicycle gaps that create significant barriers to bicycle transportation. Over the last several decades, the county and its partners have built one of the best bicycle transportation systems in the US. Now, many of the bikeway gaps that remain are the challenging ones: areas where bicycle access is cut off by freeway crossings and in constrained urban settings with limited right of way and competing demands for use.

A FOCUS ON PORTLAND AVENUE

The Portland Avenue (CSAH 35) crossing of State Trunk Highway (TH) 62—one of the top 25 bicycle gaps in the county—includes many challenges that create barriers to bicycle transportation. To reach an implementable solution, this project has required a combination of technical expertise, creativity, stakeholder coordination, and a thorough understanding of the local context and existing conditions. To explore options for completing this bikeway gap, this study includes traffic and structural analyses to further explore options for completing this bikeway gap.

B. Study Area

The Portland Avenue crossing of TH 62, is a critical gap in the bicycle network between Minneapolis and Richfield, Minnesota. This study examines the gap on Portland Avenue South between 60th Street East in Minneapolis and 66th Street East in Richfield.

Without infrastructure for bicycle transportation, people on bikes who travel along Portland Avenue are required to either ride in the motor vehicle travel lane or the sidewalk.

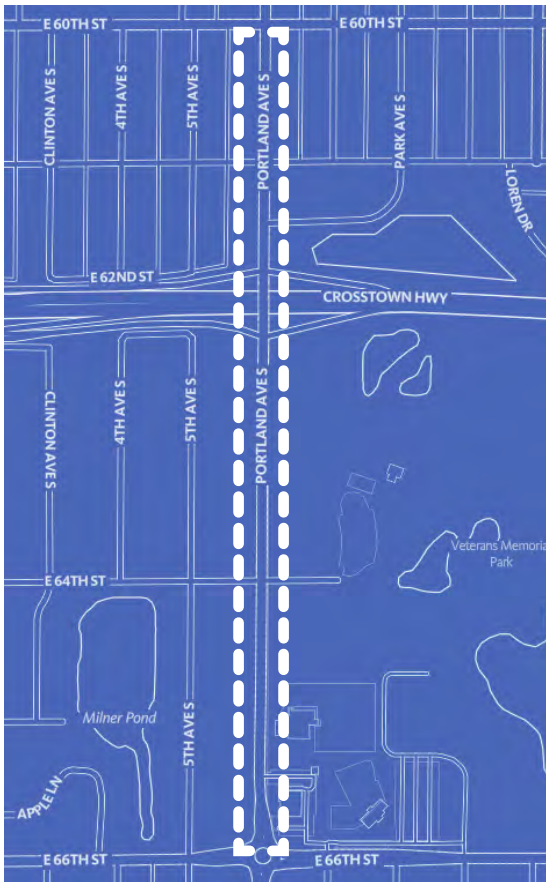
C. Primary Goals

DEVELOP OPTIONS FOR COMPLETING THE BIKEWAY GAP

Portland Avenue is one of the few continuous routes connecting downtown Minneapolis with Richfield and Bloomington. Over the last several years, the importance of this gap has been highlighted by the Minneapolis and Hennepin County Bicycle Advisory Committees. This current gap will become an even more important issue when a cycle track along 66th Street is constructed.

COMPLETE A TRAFFIC AND BRIDGE ANALYSIS

To date, the gap has not been able to be completed due to high traffic volumes on Portland Avenue, high turning movements at the TH 62 on-ramps, and narrow width of the bridge over TH 62. While the bridge over TH 62 was re-decked within the last 10 years, adequate width was not provided for dedicated bikeways and four lanes of vehicle traffic. Initial county analysis had found that traffic volumes and turning movements were



Study Area.

too high to convert Portland Avenue from a four- to a three-lane roadway between 61st and 67th Streets.

This study includes both a traffic and structural analysis to determine options for roadway and bridge modifications.

INVESTIGATE THE SIDEWALK GAP

This gap feasibility study also includes a 170-foot sidewalk gap at the interchange of Portland Avenue and TH 62. The gap extends along the east side of Portland Avenue from the northeast corner of the TH 62 interchange to Park Avenue South.

A need for a sidewalk connection is demonstrated by a worn path through the grass adjacent to the curb between TH 62 and Park Avenue.

D. Planning Process

PROJECT ADVISORY COMMITTEE

A Project Advisory Committee (PAC) for this project was formed to include a variety of stakeholders, including representatives from Minneapolis, Richfield, MnDOT and Hennepin County.

The PAC met three times during the development of the study:

- Near the start of the project to discuss goals, timeline, and issues
- During the middle of the project to discuss possible scenarios and project options
- Near the end of the project to discuss all tasks leading into final plan preparation

The PAC supported the county between meetings by reviewing draft materials and preparing content for upcoming meetings.

EXISTING CONDITIONS, OPPORTUNITIES AND CONSTRAINTS

The planning team gathered maps, plans and other relevant background data from the County, Minneapolis, Richfield and MnDOT to help support the understanding of the existing conditions. From the information gathered, the team created an opportunities and constraints map to summarize the existing conditions and prepare for the formation of recommendations.

TRAFFIC ANALYSIS

The planning team conducted an assessment of existing traffic conditions in the project area to evaluate how well Portland Avenue serves the needs of its users. The analysis used readily available traffic data and traffic signal operations data to assess level of service. The results of the analysis were used to determine if and how existing motor vehicle lanes could be eliminated or reduced to accommodate bicycle infrastructure within the study area.

INSPECTION AND CONDITION EVALUATION OF EXISTING BRIDGE

An important component of this project was to evaluate the existing conditions of the bridge on Portland Avenue over TH 62. Our team's structural group reviewed existing bridge plans and reports, and performed additional field analysis of the existing bridge conditions. The findings from the bridge evaluation were used to discuss current conditions and options for structurally retrofitting the bridge to accommodate bicycle infrastructure.

FORMATION OF RECOMMENDATIONS

Based on the goals of the project, existing conditions, and PAC input, the project team developed multiple options and scenarios to address the existing bicycle and sidewalk gaps.

The Minneapolis portion of the study area generally consists of a three-lane motor vehicle cross-section with shoulders/parking and sidewalks.

2 Existing Conditions

A. Opportunities and Constraints

Using GIS maps, existing plans, and other information collected from Minneapolis, Richfield, Hennepin County, and MnDOT, a summary of the opportunities and constraints was assembled on a map of the existing conditions. The existing conditions map, combined with the opportunities and constraints along the Portland Avenue corridor, is shown in Figures 01 and 02.

The opportunities and constraints analysis included the entire corridor from 60th Street in Minneapolis to 66th Street in Richfield. One of the most challenging constraints is the existing bridge over TH 62. The current bridge has four motor vehicle travel lanes (two in each direction) and a sidewalk on each side.

The bridge of TH 62 has four motor vehicle travel lanes and a sidewalk on each side. The view in this photo is looking toward Minneapolis.

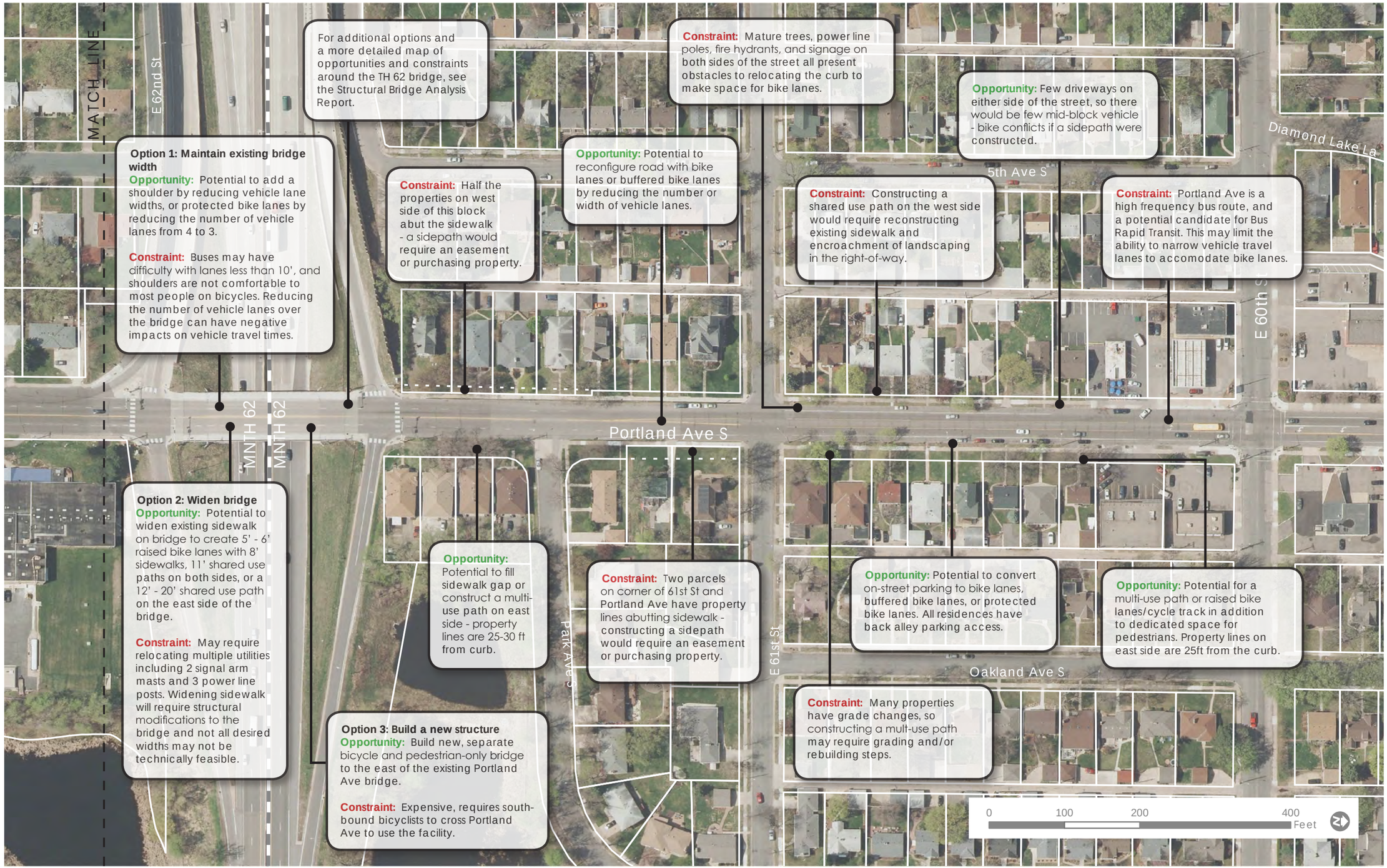


Figure 01. Opportunities and Constraints: 60th Street to TH 62

This map shows the existing conditions, opportunities, and constraints of the Portland Avenue corridor between 60th Street and TH 62.

Figure 02. Opportunities and Constraints: TH 62 to 66th Street

This map shows the existing conditions, opportunities, and constraints of the Portland Avenue corridor between TH 62 and 66th Street.

B. Traffic Analysis

A traffic analysis was performed at the interchange of Portland Avenue with TH 62 to support the addition of bicycle facilities along the corridor to close the gap in bicycle infrastructure between 60th Street in Minneapolis and 66th Street in Richfield.

The traffic analysis reviewed two scenarios:

- Keeping the existing four-lane road configuration on the bridge and widening the bridge to add more room to accommodate bicyclists
- Conducting a lane reconfiguration that results in a three-lane section to include bicycle lanes on the existing bridge structure. The two signalized intersections at the eastbound and westbound interchange ramps were considered as the project extents in terms of this analysis.

A view of the TH 62 eastbound ramps. A significant number of motorized vehicles use this intersection to bypass traffic on eastbound TH 62 during times of congestion.

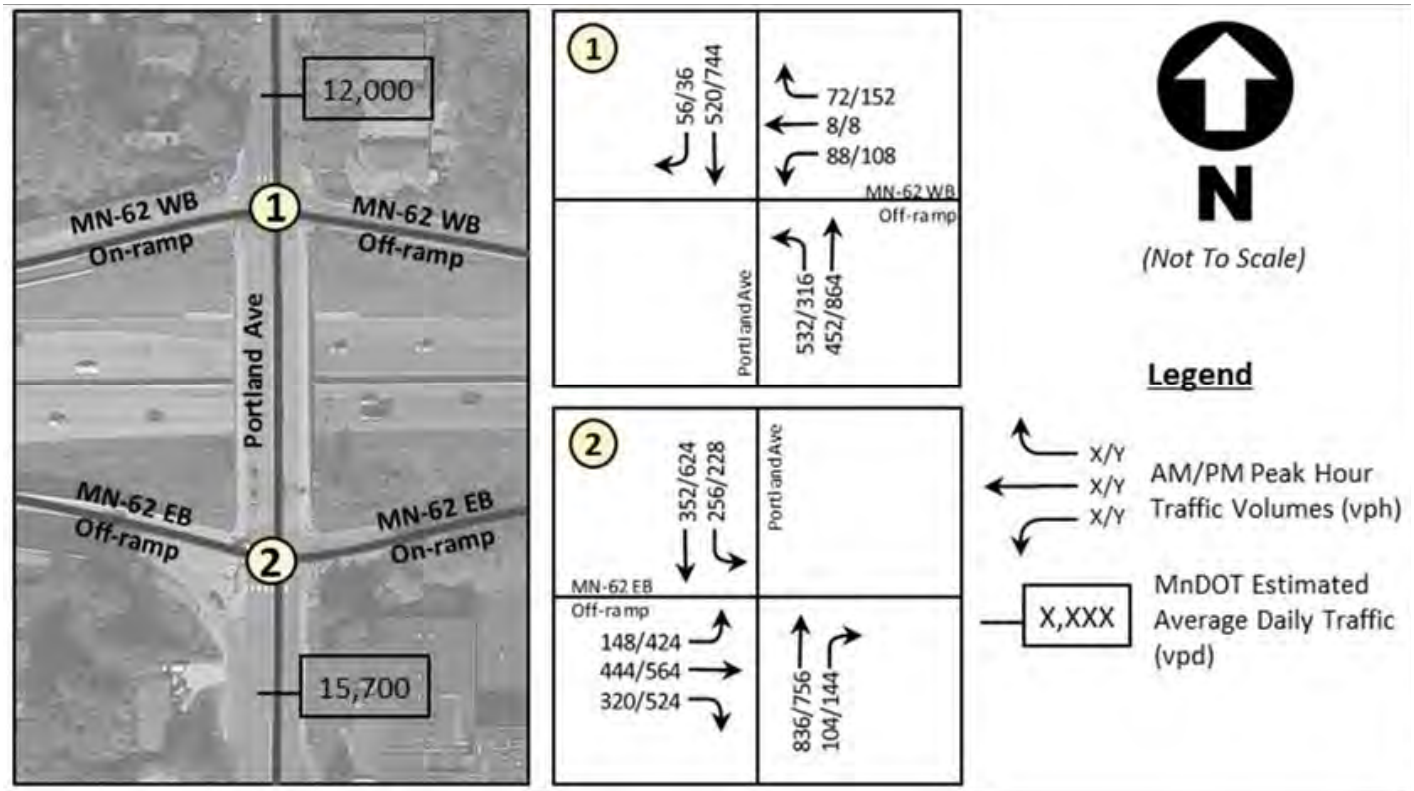


Figure 03. Existing motor vehicle traffic volumes. Peak hour volumes are shown.

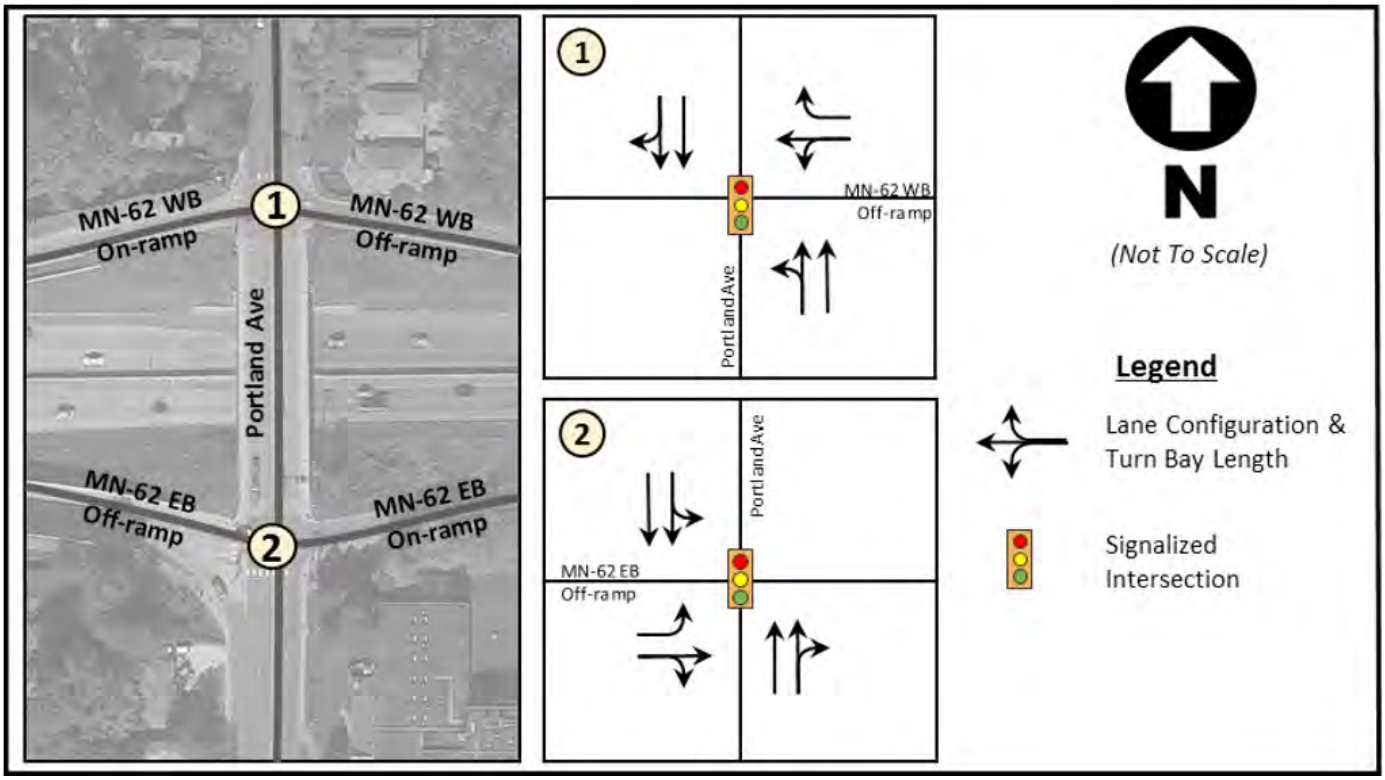


Figure 04. Existing lane configuration and traffic control.

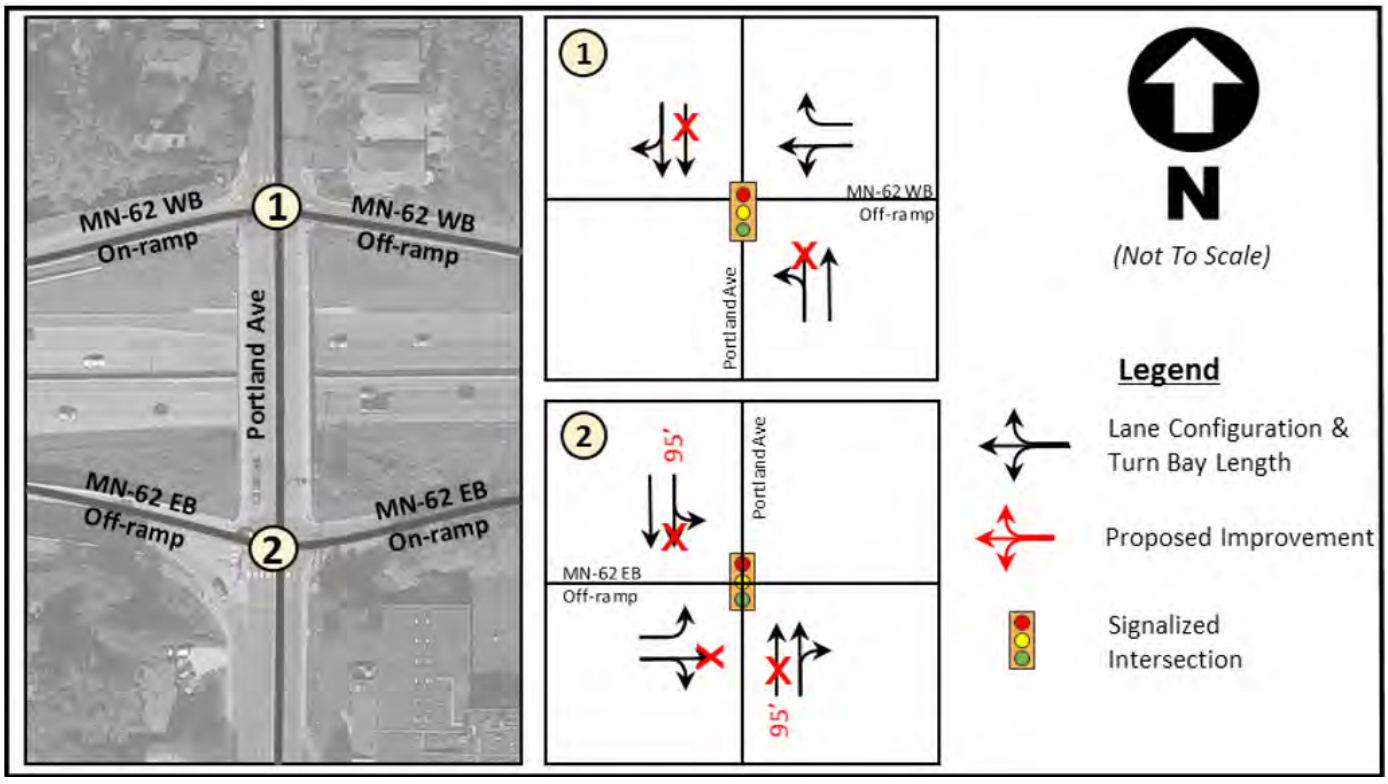


Figure 05. Proposed lane configuration and traffic control for the traffic analysis.

The traffic analysis supports the following findings and recommendations:

- Provide a physical barrier or channelizing island on the TH 62 eastbound ramps that prevents eastbound through traffic, but allows movements for the northbound right turn and southbound left turn. This is recommended whether the road remains in the existing four-lane configuration across the bridge or it is reduced to a three-lane section. This is to ensure that traffic traveling on the TH 62 mainline will not cause problems on the arterial network by using the interchange to bypass the mainline queue.
- Though Synchro capacity analysis shows improvements in levels of service at the study intersection compared to existing conditions, the Simtraffic microsimulation shows extensive queuing along the mainline and eastbound approach, with vehicles taking multiple signal cycles to make it through the intersection. Based on this result and observation, it is recommended to keep the existing four lanes on the bridge over TH 62 and the northbound and southbound approaches to the intersection, and structurally modify the bridge to accommodate people on bicycles through the TH 62 interchange.
- If structural deficiencies on the bridge deck prevent expansion of the bridge to accommodate the bicycle facilities, a '4 to 3' conversion can be considered on Portland Avenue with significantly longer cycle lengths to give Portland Avenue enough green time to operate acceptably. In this scenario, though, the eastbound approach will experience considerable delay and queuing, which may potentially extend beyond the eastbound off-ramp queuing area.
- The most inexpensive yet effective solution would be narrow the existing four travel lanes and reclaim the space as a combined bikeway/walkway on either side of the bridge. Minor modifications of the existing sidewalk can widen this area (without structural modifying/widening the bridge) to be a comfortable space for people both walking and biking. A two-lane approach to the bridge should be provided to accommodate the existing motor vehicle queue length at the peak hour.

The complete traffic analysis is included in the appendix.

By reducing existing motor vehicle travel lane widths and making modifications to the existing sidewalk, a space can be created to support comfortable walking and biking.

C. Inspection and Condition Evaluation of Existing Bridge

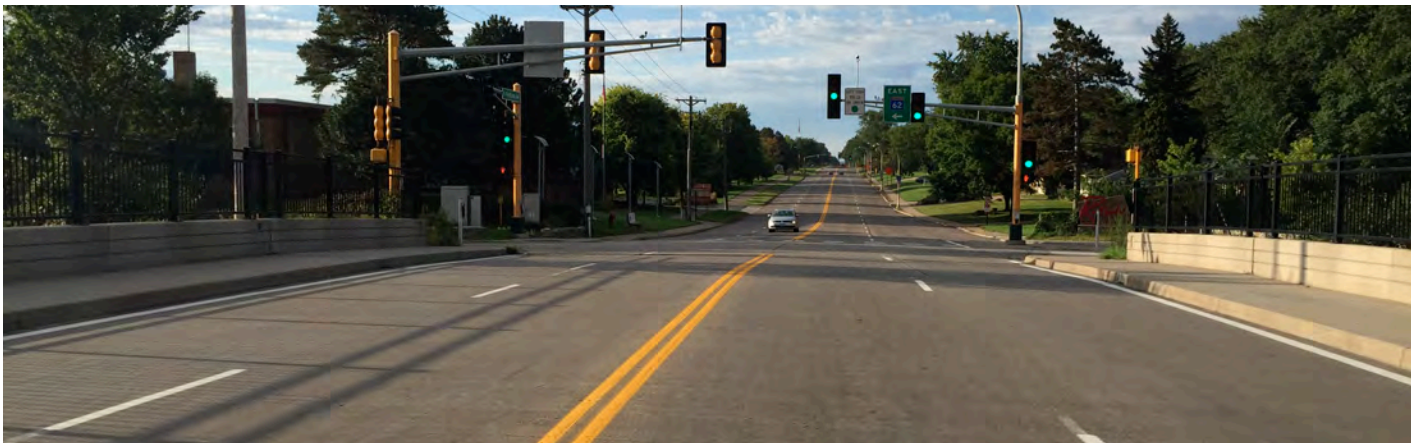
The project team evaluated the existing condition of and improvement alternatives for Bridge No. 7269, which carries Portland Avenue over TH 62

Bridge No. 7269 was built in 1963 and is owned, maintained and inspected by the Minnesota Department of Transportation (MnDOT). The bridge is comprised of two spans of eight (8) rolled steel beams with a cast in place concrete deck. The non-skewed bridge has a span arrangement of 74'-74' (West to East) with a pier in the middle of the TH 62 median. Based on the 2013 National Bridge Inventory (NBI) Inspection Report, the bridge has 4 lanes of two-way traffic and carries approximately 16,300 vehicles per day, 130 bicyclists per day, and 70 pedestrians per day.

In 2011 the bridge deck was replaced and widened from 64'-4" to 66'-4". New concrete approaches, deck, parapet, railings and sidewalks were installed, as well as Type 4 strip joints at the abutments and new bearings at the substructures. The cost of the 2011 improvements was about $860,000, which included some ADA and signal improvements. The bridge was last painted in 1977 with an organic zinc primer and a vinyl finish.

Bridge No. 7269 has a 79 sufficiency rating. Bridge sufficiency is a method of evaluating highway bridge data by calculating four separate factors to obtain a numeric value which is indicative of bridge sufficiency to remain in service. The result of this method is a percentage in which 100 percent would represent an entirely sufficient bridge and zero percent would represent an entirely insufficient or deficient bridge. Because the rating is below 80, the bridge is eligible for federal funds for rehabilitation.

Bridge No. 7269 is considered functionally obsolete due to the limited vertical and horizontal clearances beneath the bridge. According to the bridge inventory report, the vertical clearance is 15'-0", whereas the current standard is 16'-4". MnDOT representatives have stated that the vertical clearance under the bridge might be closer to 14'-9." The horizontal clearance on the right lane of eastbound TH 26 is 5.4', which is below current standards. A functionally obsolete bridge is one that was built to standards that no longer meet the minimum federal clearance requirements for a new bridge. These bridges are not automatically rated as structurally deficient, nor are they inherently unsafe. Functionally obsolete bridges include those that have sub-standard geometric features such as narrow lanes, narrow shoulders, poor approach alignment or inadequate vertical under clearance.



The bridge deck looking east.

The bridge superstructure looking east.

Expansion joint at sidewalk curb with cover plate.

The bridge substructure.

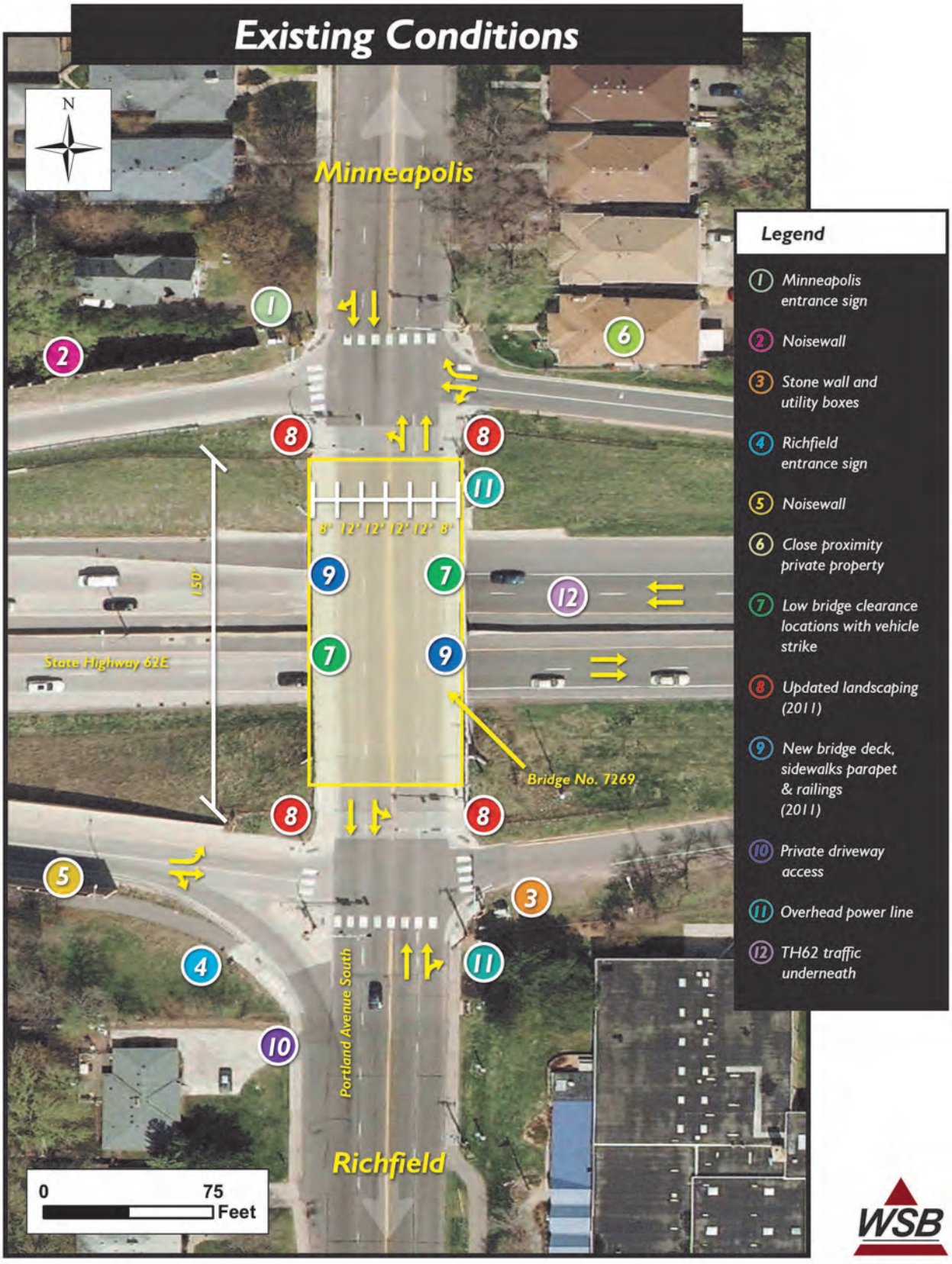


Figure 06. Existing bridge site conditions and constraints.

The following descriptions augment the key notes in Figure 06:

1 & 4. Minneapolis and Richfield entrance signs: Monument-style city entrance signs were recently constructed near the northern and southern bridge approaches.

2 & 5. Noise wall: Timber noise walls were recently constructed adjacent to the westbound entrance ramp to TH 62 and the eastbound exit from TH 62 to Portland Avenue.

3. Stone wall: The existing stone wall is damaged at the southeast corner of Portland Avenue and the eastbound entrance to TH 62.

6. Close proximity to private property: Right of way adjacent to the bridge seems limited. There are currently tight clearances with private property and the on/off ramps of Highway 62.

7 & 12. Low bridge clearance locations over TH 62: The bridge has low clearance over TH 62 and several locations have been struck by vehicles.

8. Updated landscaping: New landscaping was installed following the 2011 bridge re-decking.

9. New bridge deck, sidewalks, parapet and railings: a new bridge deck, expansion joints, bearings, sidewalk, parapet, railings and signals were constructed in 2011. The cost of this work was about $886,000. See Figure 07 for a an understanding of the on-the-ground lane width dimensions.

10. Private driveway access: There is existing private driveway access immediately south of the eastbound TH 62 exit ramp to Portland Avenue.

11. Overhead power lines: Overhead power lines cross TH 62 on the east side of Portland Avenue.

The complete bridge condition report is included in the appendix.

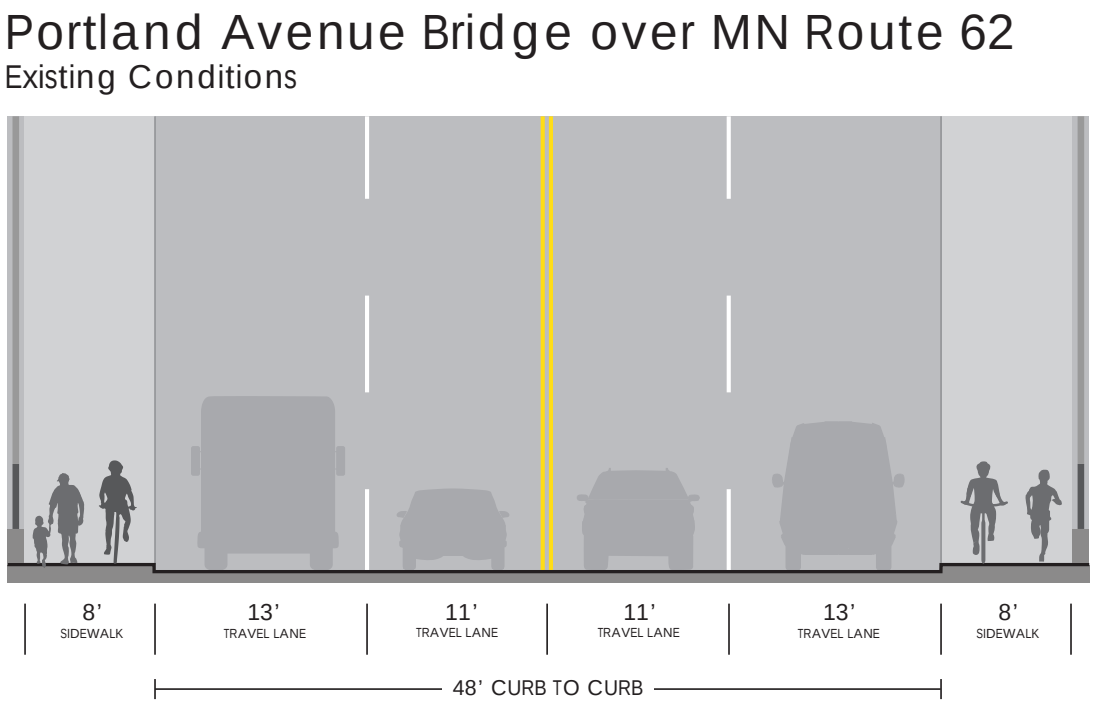


Figure 07. Current road layout on the bridge.

4 Recommendations

A. Structural Analysis of Potential Bridge Retrofits

Based on the review of the bridge plans, bridge inspection report and site visit findings, there are several for providing improved bicycle/pedestrian connectivity over TH 62. The three main options are:

- **Option 1:** No widening of existing bridge
- **Option 2:** Widening of existing bridge
- **Option 3:** Separate bridge
- **Option 4:** New bridge

These three options can be further broken down in the following options:

- **Option 1a:** 3-lane with separated bike lane
- **Option 1b:** 4-lane with narrow motor vehicle lanes
- **Option 2a:** Separated-use symmetrical widening
- **Option 2b:** Shared-use unsymmetrical widening
- **Option 2c:** Separated-use unsymmetrical widening
- **Option 3:** Separate bridge
- **Option 4:** New bridge

Currently there are no long term plans to rehabilitate or reconstruct Bridge 7269; however, Portland Avenue has been considered to become a Bus Rapid Transit (BRT) Route. Consideration has also been given to expand Highway 62 to three lanes in each direction. Either of these possibilities would result in major bridge reconstruction or replacement.

Potential bridge improvement options are summarized in Table 01.

An option matrix with weighted scores based on certain criteria is summarized in Table 02. The criteria considered were construction cost, traffic impacts during construction, bicycle and pedestrian convenience and comfort, vehicle traffic operations, safety, and right-of-way and utility impacts (including approaches). These scores are from 0 to 100, with 100 being the most desirable. For example a bridge with a low cost would have a score closer to 100 compared to a bridge with a high cost.

Based on the weighted score below, Options 1a and 1b appear to be the best bridge improvement options. Neither of these options includes widening of the existing bridge. Further impacts, rating and traffic forecasting may alter these scores.

Portland Avenue Bridge over MN Route 62

Option 1a: Reconfigure bridge deck with 3 vehicle travel lanes (instead of the existing 4)and install protected bike lanes

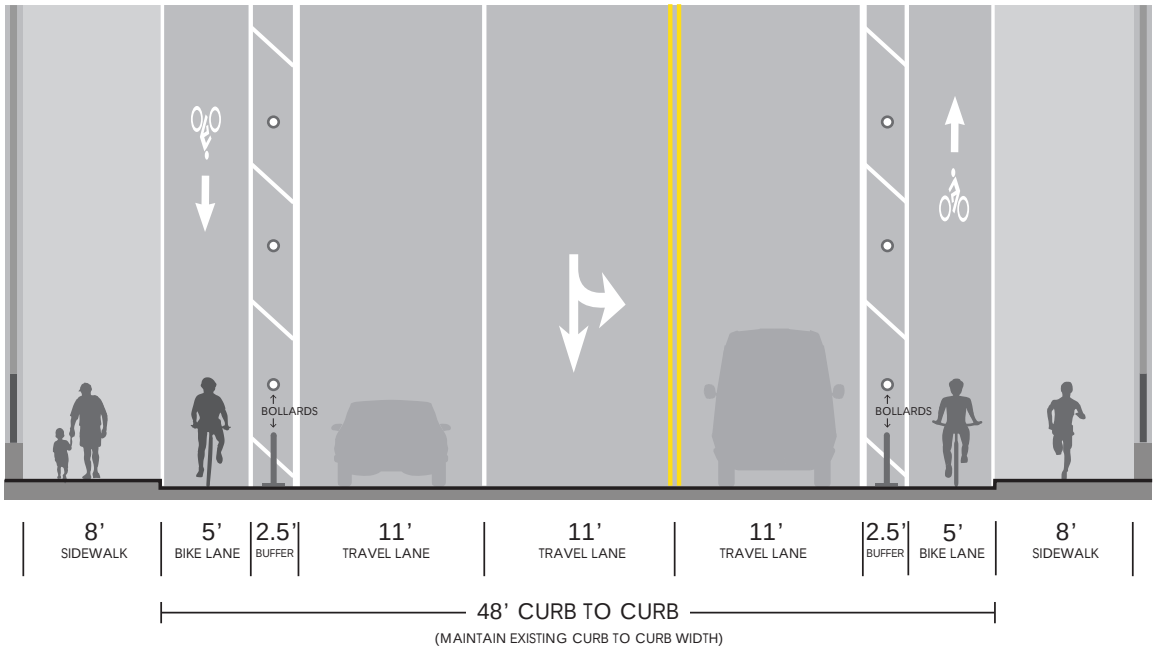


Figure 08. Option 1a.

Portland Avenue Bridge over MN Route 62

Option 1b: Narrow existing travel lanes to create space for shared-use paths

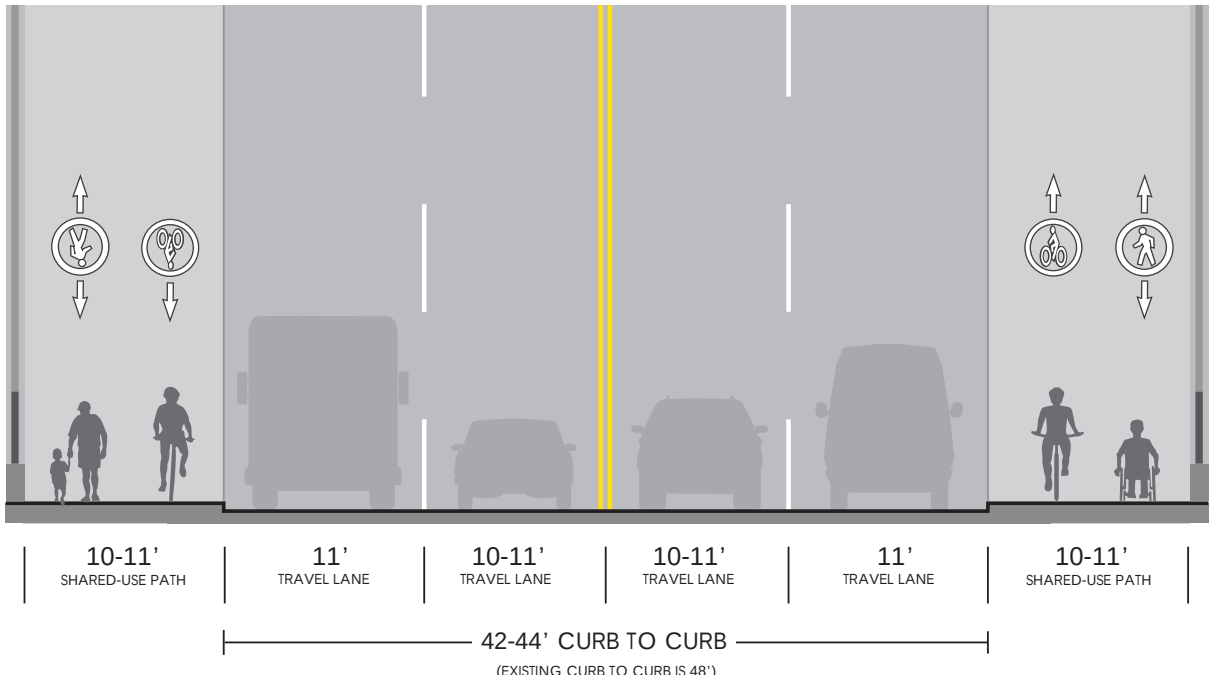


Figure 09. Option 1b.

Portland Avenue Bridge over MN Route 62

Option 2a: Expand sidewalk outward to create space for raised bike lanes in addition to sidewalks on both sides of the bridge

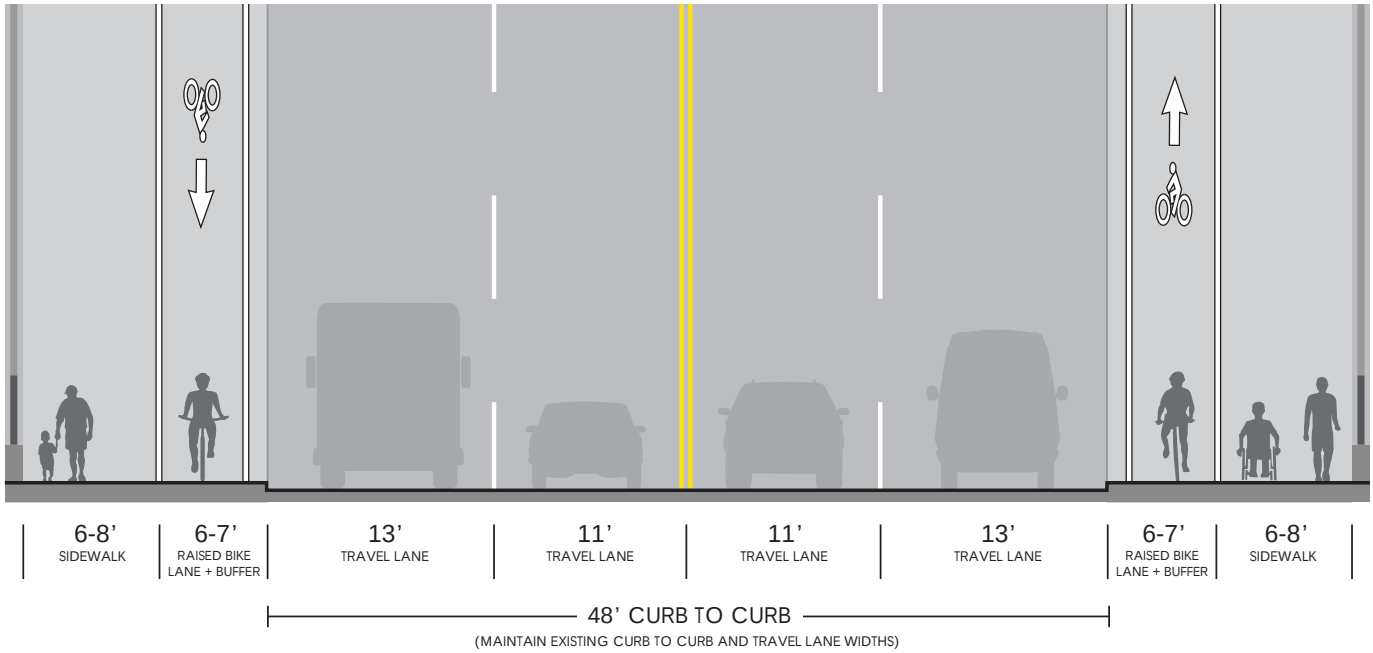


Figure 10. Option 2a.

Portland Avenue Bridge over MN Route 62

Option 2b: Expand sidewalk outward on the east side of the bridge, creating a shared-use path

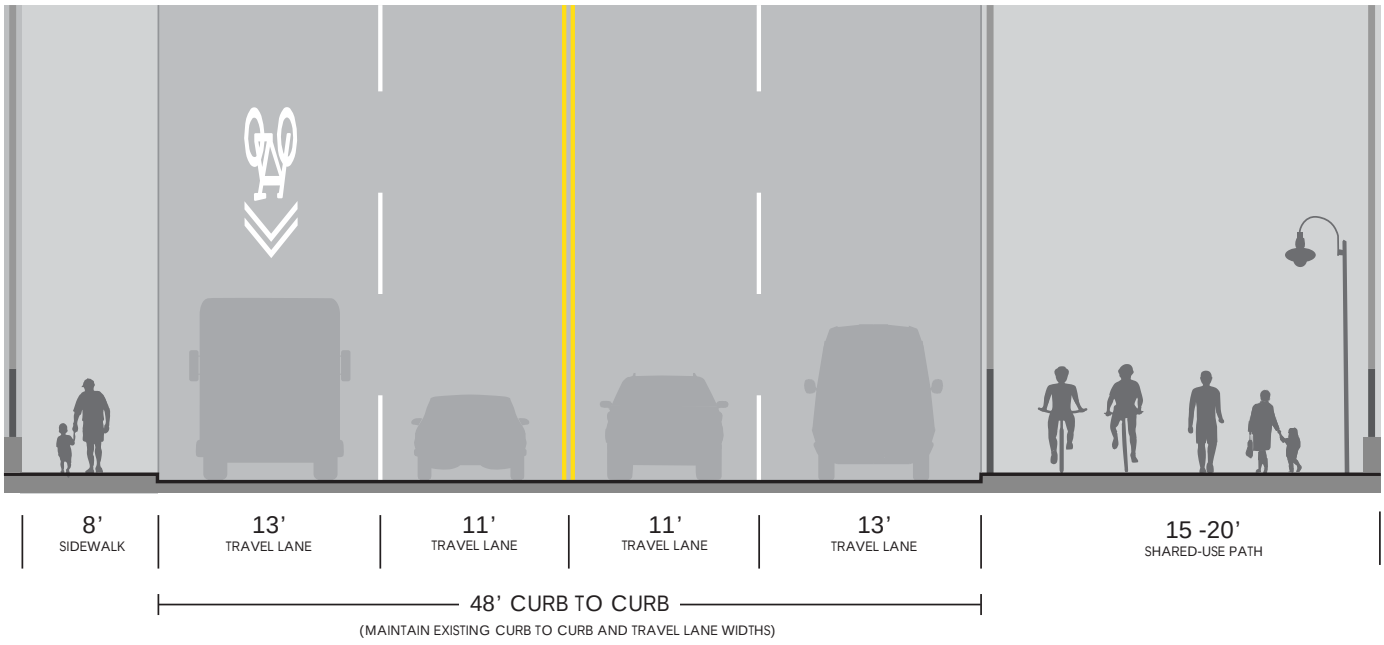


Figure 11. Option 2b.

Portland Avenue Bridge over MN Route 62

Option 2c: Reconfigure existing travel lanes to create space for a southbound bike lane within existing curbs. Expand sidewalk on east side of bridge outward, creating a raised bike lane for northbound bicyclists in addition to a sidewalk.

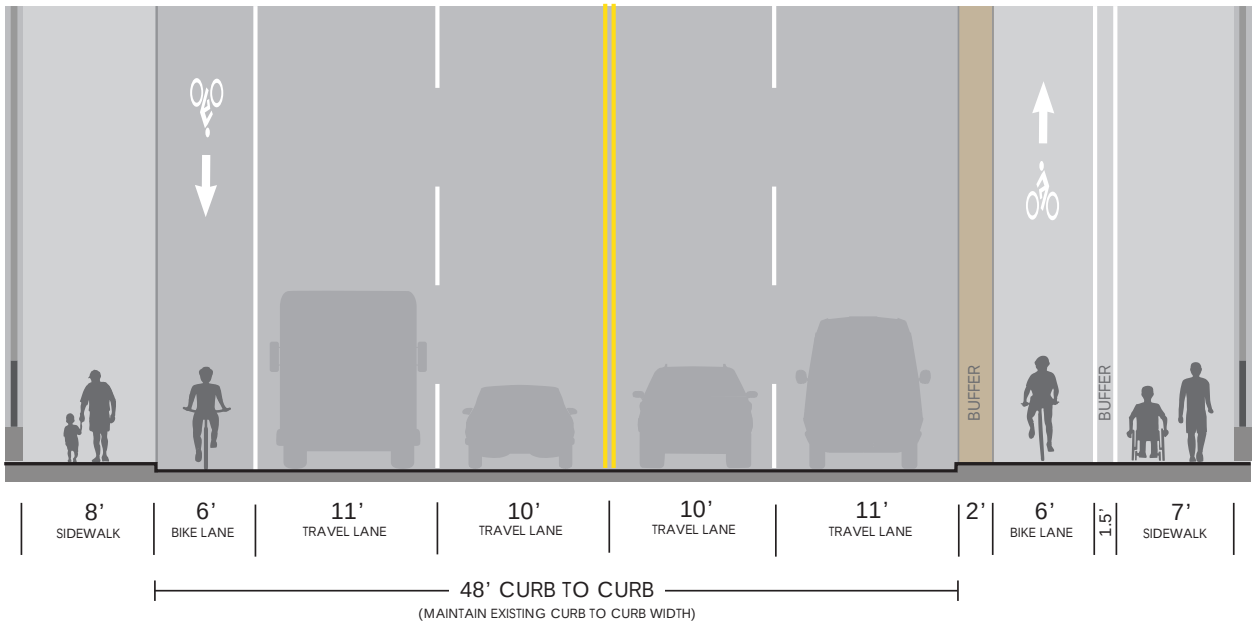


Figure 12. Option 2c.

Portland Avenue Bridge over MN Route 62

Option 3: Construct new bicycle and pedestrian-only bridge to the east of the existing bridge

New bicycle and pedestrian bridge to the east of existing structure

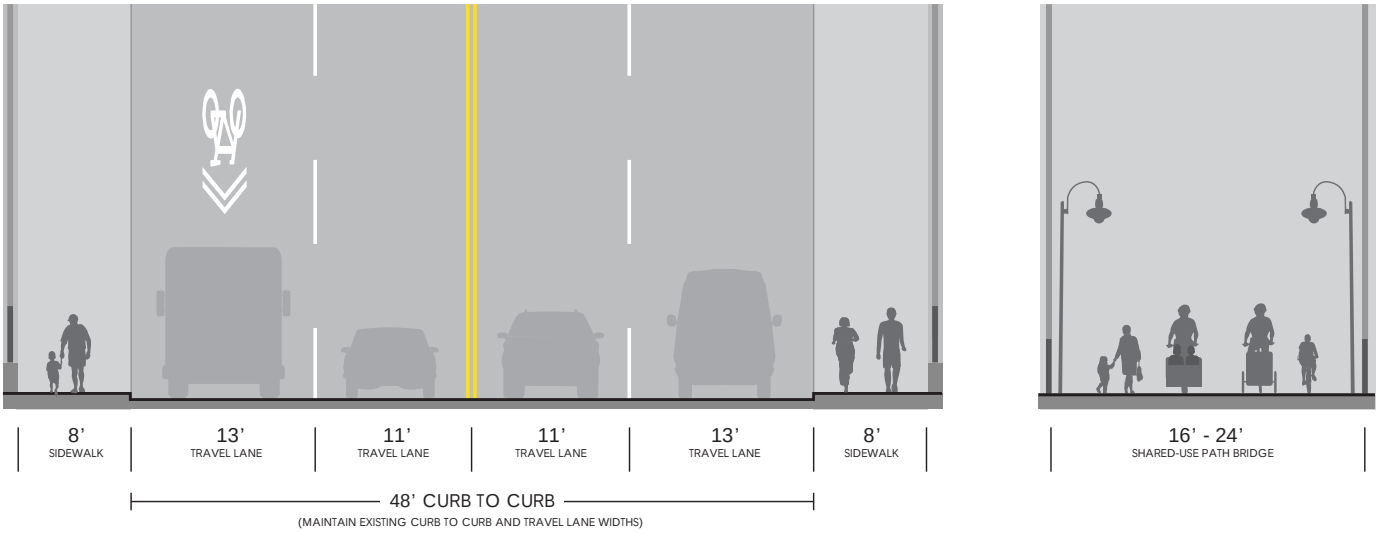


Figure 13. Option 3.

Table 01. Summary of bridge improvement options.

OPTION	CONSTRUCTION COST	COST/SF	LONGEVITY	COMMENTS
1a	$5,000 - $10,000	$10	30 years	Low cost option with moderate longevity. Would cause more driver congestion on Portland while improving bicycle facilities.
1b	$175,000 - $215,000	$125	30 years	Medium cost option with moderate longevity. Narrow lane and bicycle facility widths. Expansion joint modifications are expected.
2a	$850,000 - $950,000	$350+	30 years	This option has high cost for its longevity. Symmetrical widening. Impacts TH 62 traffic during construction.
2b	$450,000 - $500,00	$350+	30 years	This option has a high cost for its longevity and limited improvement. Large trail on one side. Impacts TH 62 traffic during construction.
2c	$450,000 - $500,000	$350+	30 years	This option has a high cost for its longevity and limited improvement. Small bike facility on west side, reduced lane widths, and large trail on one side. Impacts TH 62 traffic during construction.
3	$660,000 - $1,000,00	$235	75-100 years	New pedestrian bridge. This option has the greatest longevity. If the Portland Ave. Bridge would need to be replaced for any of the reasons mentioned above, the stand alone pedestrian truss would not need to be removed.
4	$2,000,000	$165	75-100 years	Complete replacement of Portland Ave Bridge. This option has the highest cost and greatest longevity, and would most favorably accommodate all users.

Note: Option 1c is not included here as a viable option - see more information in the appendix about Option 1c

Table 02. Bridge alternatives analysis.

CRITERIA	CONST. COST (LOW)	TRAFFIC IMPACTS DURING CONST. (MINIMAL)	BICYCLE AND PEDESTRIAN CONVENIENCE AND COMFORT (HIGH)	VEHICLE TRAFFIC OPERATIONS (HIGH)	SAFETY (HIGH)	RIGHT OF WAY AND UTILITY IMPACTS (LOW)	OTHER*	OVERALL
Weight (%)	***20***	***5***	***20***	***10***	***30***	***5***	***10***	***100***
1a	95	95	95	20	85	100	0	75.25
1b	80	85	90	90	85	100	0	77.75
2a	15	20	95	100	95	25	0	62.75
2b	50	40	80	90	85	25	0	63.75
2c	50	40	90	85	85	25	0	65.25
3	40	95	85	90	85	25	0	65.5
4	5	10	100	100	100	75	0	65.25

** Other considerations have not been included in the overall analysis; this criterion includes long-range planning and other decisions between Hennepin County, MnDOT, Minneapolis and Richfield.*

B. Complete Analysis of Options

Based on buy-in from the PAC, the results from the structural analysis of the existing bridge, and the traffic analysis, the project team developed a preliminary planning-level layout of the entire corridor from 66th Street in Richfield to 60th Street in Minneapolis. Conceptual diagrams of the corridor are included in Figures 14-21 on the following pages and are based on bridge alternative 1b.

Three primary types of bicycle facilities were considered for the corridor: bike lanes, protected bike lanes, and shared-use paths. Safety, convenience and comfort for people walking and on bikes, and construction cost were important considerations not only when evaluating bridge alternatives, but when considering the entire corridor between 60th and 66th Streets.

Generally, desirable corridor options for safety, comfort and convenience include protected bike lane and shared-use path treatments. Convenient and safe options for bicycling do not include multiple street crossings; therefore, one-way facilities on each side of the street are preferred. Additionally, when considering cost, facilities that do not require the removal and reconstruction of existing street curbs are much less expensive. When at all possible, preferred corridor options maintain the existing Portland Avenue curb lines north and south of TH 62.

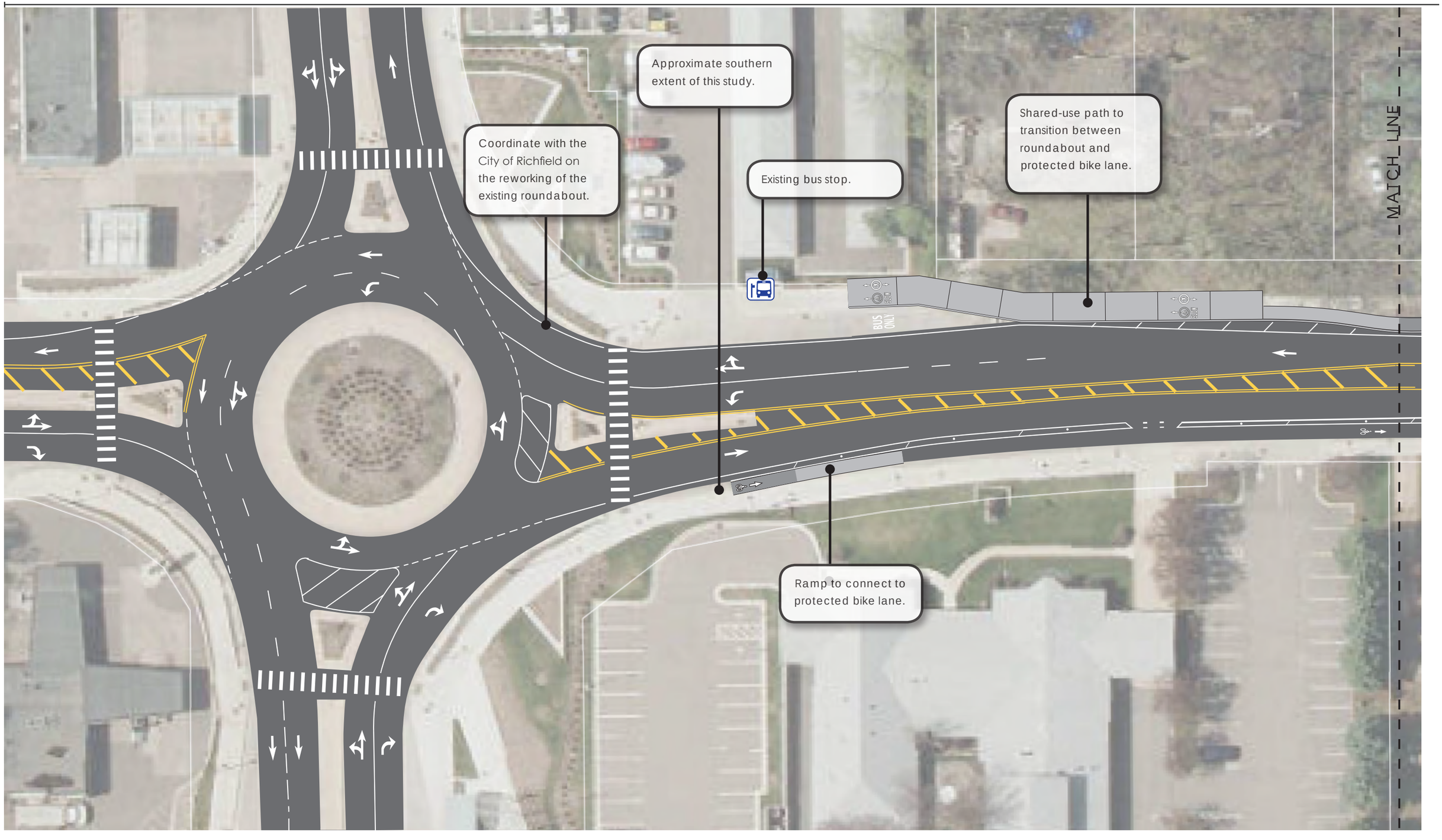

Approximate southern extent of this study.
Coordinate with the City of Richfield on the reworking of the existing roundabout.
Existing bus stop.
Shared-use path to transition between roundabout and protected bike lane.
MATCH LINE
BUS ONLY
Ramp to connect to protected bike lane.

Figure 14.


MATCH LINE
Ramp to connect to protected bike lane.
MATCH LINE
Protected Bike Lanes (looking north)
Reconfigure roadway with 3 travel lanes (instead of the existing 4) and install protected bike lanes
No changes to existing sidewalks or planting strips

Figure 15.

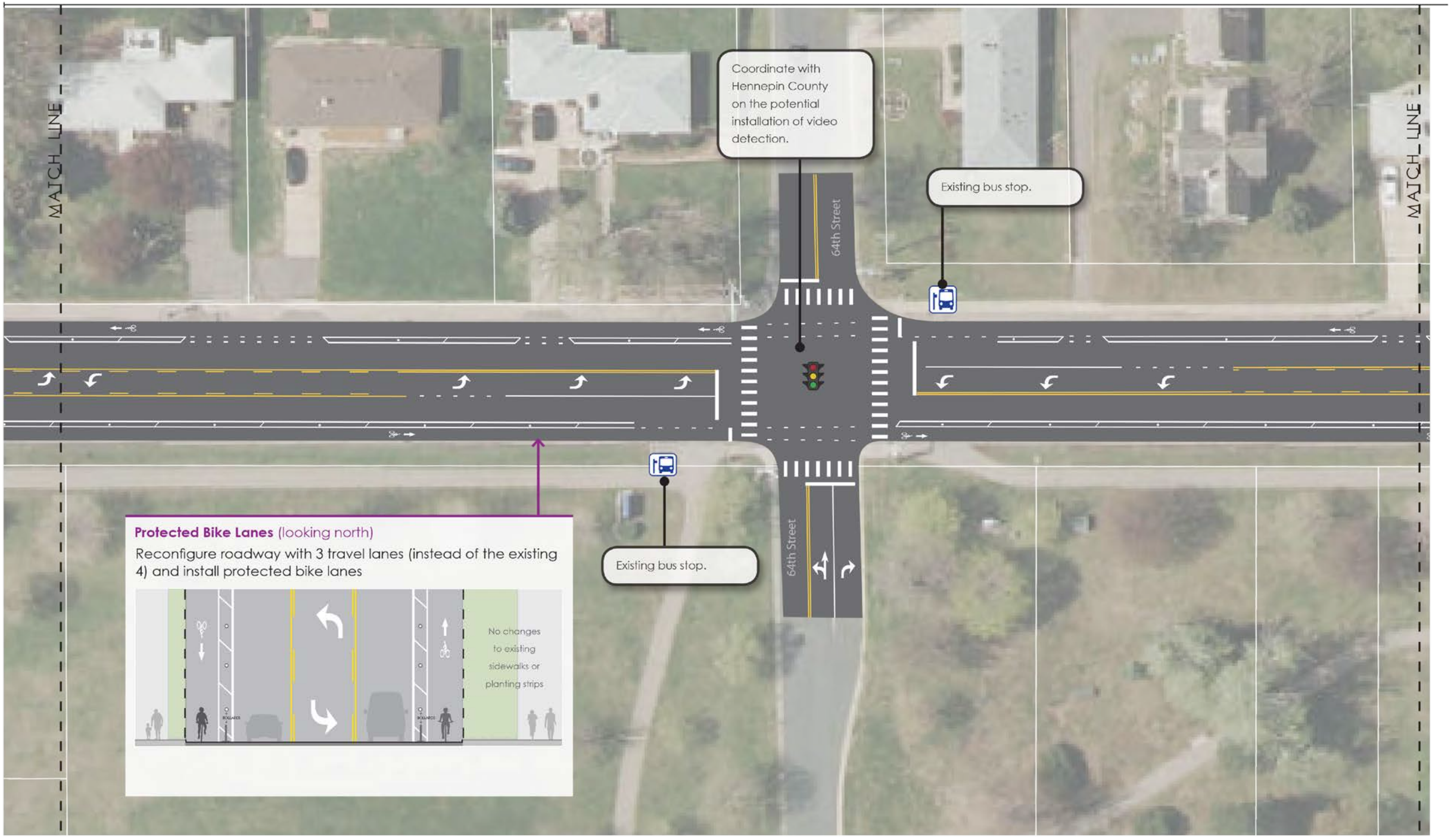

MATCH LINE
MATCH LINE
Coordinate with Hennepin County on the potential installation of video detection.
Existing bus stop.
64th Street
Existing bus stop.
64th Street
Protected Bike Lanes (looking north)
Reconfigure roadway with 3 travel lanes (instead of the existing 4) and install protected bike lanes
No changes to existing sidewalks or planting strips

Figure 16.


MATCH LINE
MATCH LINE
Transition between protected bike lane and bike lane.
Existing bus stop. Coordinate with Metro Transit BRT for potential removal.
Protected Bike Lanes (looking north)
Reconfigure roadway with 3 travel lanes (instead of the existing 4) and install protected bike lanes
No changes to existing sidewalks or planting strips
Southbound Bike Lane, Shared-Use Path (looking north)
Reconfigure existing travel lanes to create space for a southbound bike lane within existing curbs. Reconstruct sidewalk on east side of street as a shared-use path to accommodate northbound bicycle travel.

Figure 17.

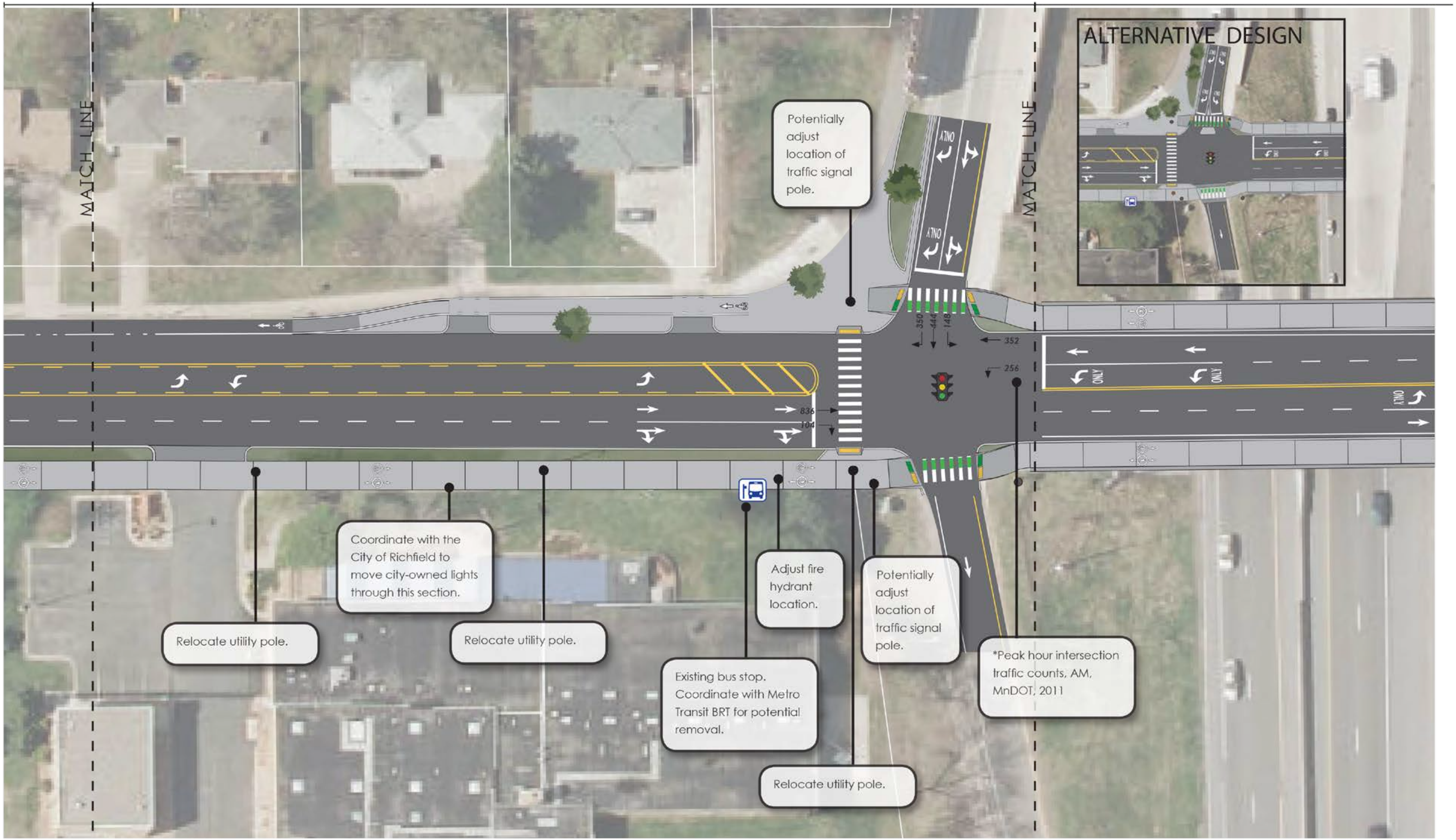

MATCH LINE
MATCH LINE
ALTERNATIVE DESIGN
Potentially adjust location of traffic signal pole.
Coordinate with the City of Richfield to move city-owned lights through this section.
Relocate utility pole.
Relocate utility pole.
Adjust fire hydrant location.
Existing bus stop. Coordinate with Metro Transit BRT for potential removal.
Relocate utility pole.
Potentially adjust location of traffic signal pole.
*Peak hour intersection traffic counts, AM, MnDOT, 2011
ONLY
350
444
148
352
256
836
104

Figure 18.

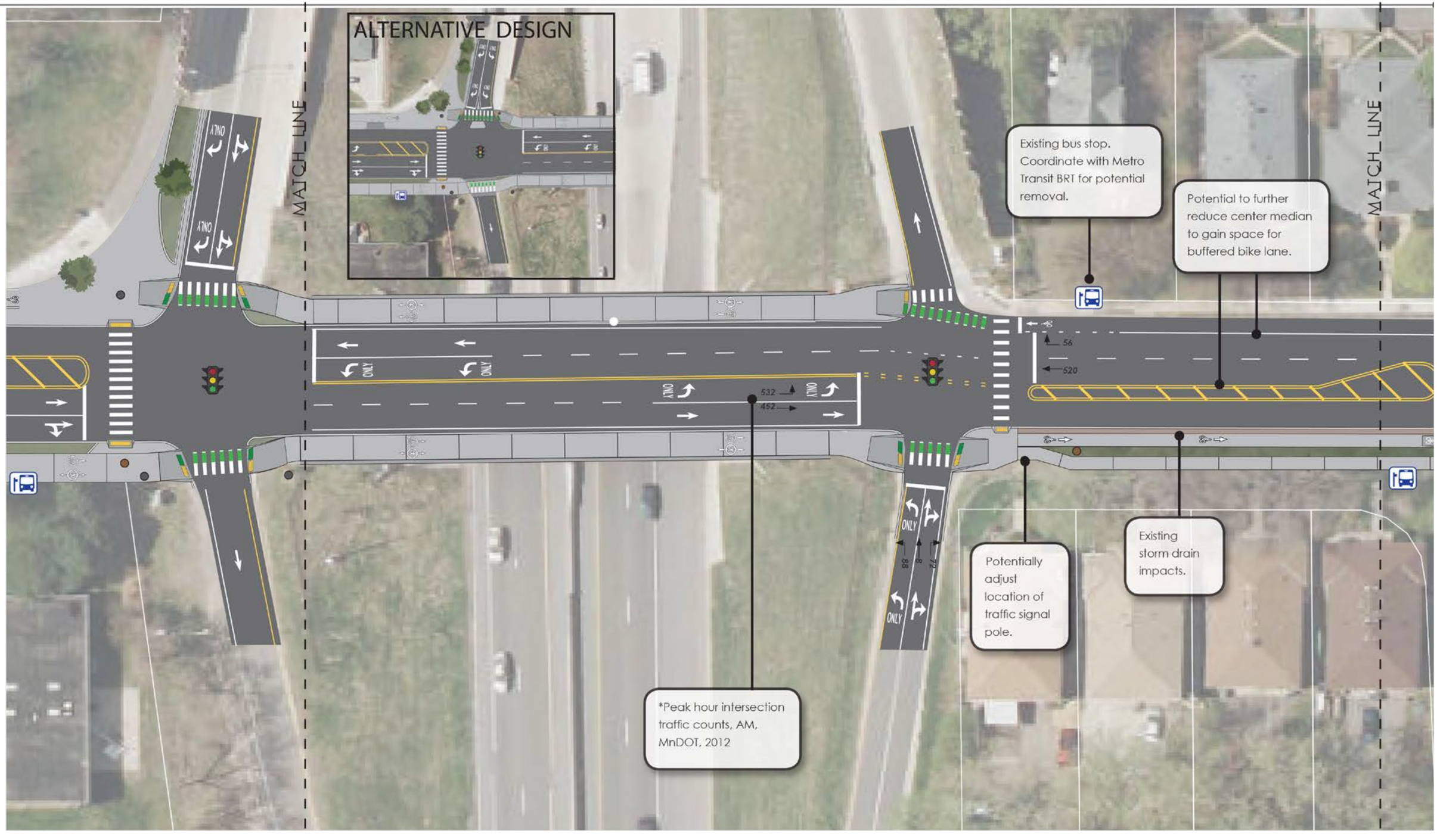

ALTERNATIVE DESIGN
MATCH LINE
MATCH LINE
ONLY
ONLY
ONLY
ONLY
ONLY
ONLY
532
452
56
520
88
72
Existing bus stop. Coordinate with Metro Transit BRT for potential removal.
Potential to further reduce center median to gain space for buffered bike lane.
*Peak hour intersection traffic counts, AM, MnDOT, 2012
Potentially adjust location of traffic signal pole.
Existing storm drain impacts.

Figure 19.

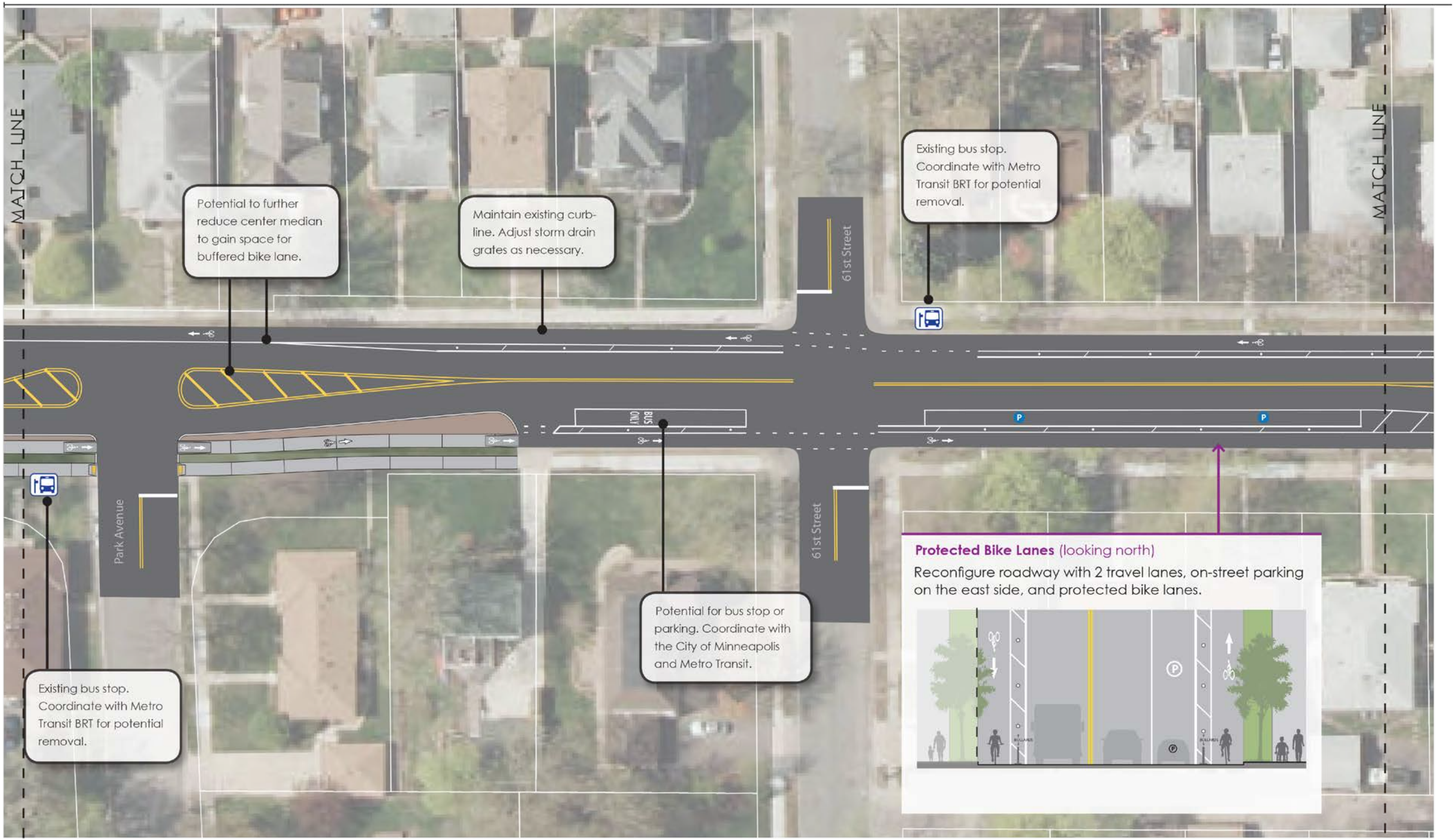

MATCH LINE
MATCH LINE
Potential to further reduce center median to gain space for buffered bike lane.
Maintain existing curb-line. Adjust storm drain grates as necessary.
Existing bus stop. Coordinate with Metro Transit BRT for potential removal.
61st Street
BUS ONLY
Park Avenue
61st Street
Potential for bus stop or parking. Coordinate with the City of Minneapolis and Metro Transit.
Existing bus stop. Coordinate with Metro Transit BRT for potential removal.
Protected Bike Lanes (looking north)
Reconfigure roadway with 2 travel lanes, on-street parking on the east side, and protected bike lanes.

Figure 20.

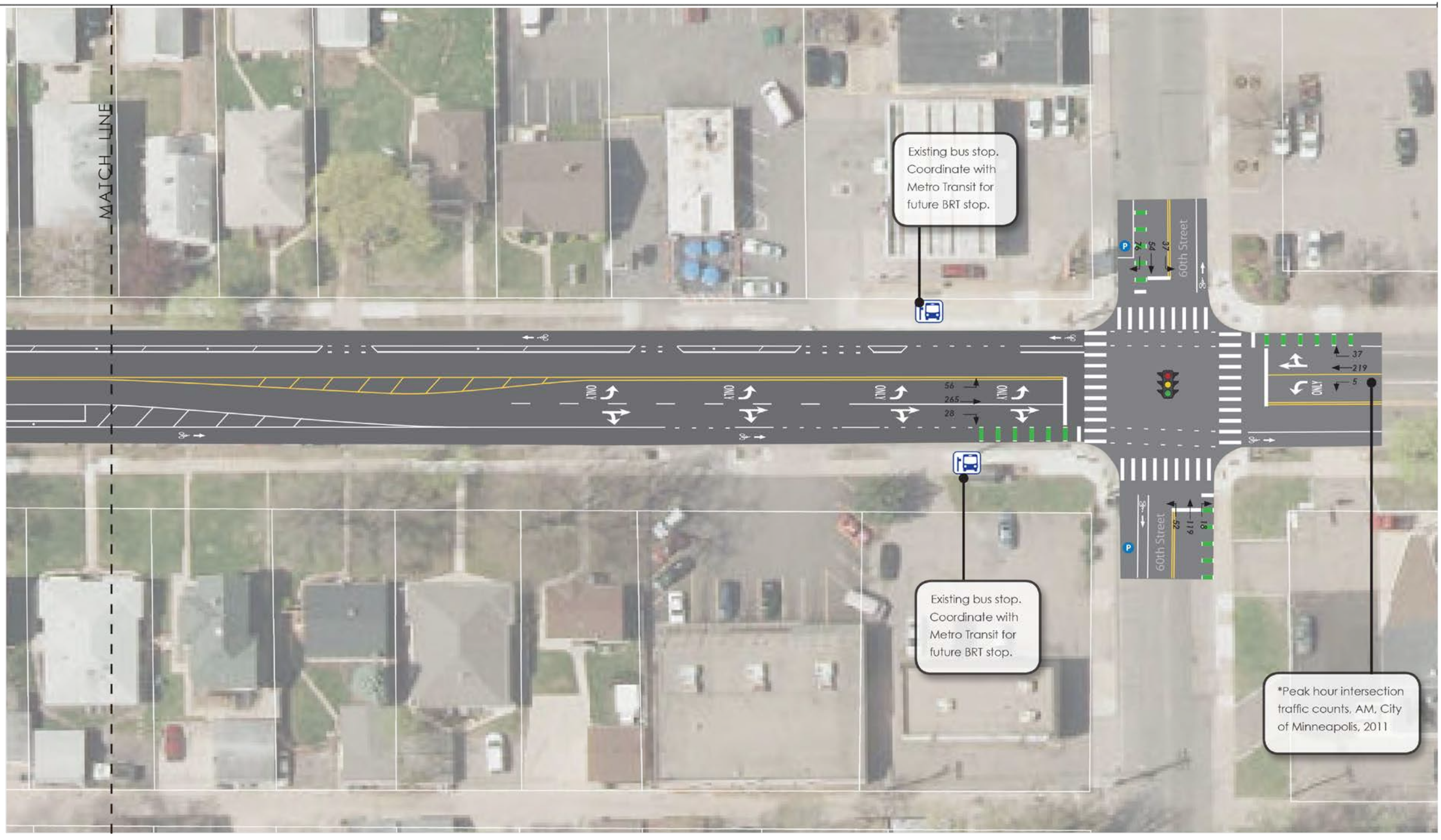
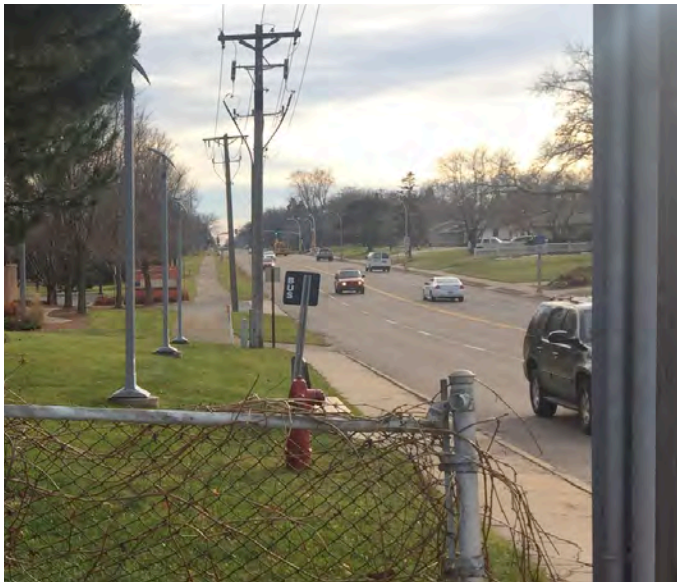

MATCH LINE
Existing bus stop. Coordinate with Metro Transit for future BRT stop.
ONLY
ONLY
ONLY
ONLY
56
265
28
60th Street
76
54
37
37
219
5
ONLY
Existing bus stop. Coordinate with Metro Transit for future BRT stop.
60th Street
52
119
18
*Peak hour intersection traffic counts, AM, City of Minneapolis, 2011

Figure 21.

C. Potential Risks and Unknowns

Referencing the conceptual diagrams of the corridor in Figures 14-21, the following list includes potential risks and unknowns associated with implementing the bikeway gap project.

- Utility pole impacts (for example, the three utility poles identified in Figure 18)
- Lighting impacts (for example, the Richfield-owned lights identified in Figure 18)
- Storm sewer impacts (including potential adjustments from improvements shown in Figures 19 and 20)
- Parking impacts (including reduced on-street parking in Minneapolis and no Sunday street parking in Richfield)
- Metro Transit BRT design implications (including bus stop and bus vehicle design impacts to the proposed layout)
- Narrow lanes and/or curb reaction distance will require a State Aid Variance on bridge area over TH 62
- Frontage improvements and coordination associated with the installation of the sidewalk in Figures 19 and 20
- Existing roadway condition
- The proposed conceptual layout avoids the impact of private rights-of-way based on available ownership information - ownership information should be confirmed prior to construction



Shared-use path implementation will require utility coordination just south of TH 62 in Richfield.

Consideration should be given to any storm sewer grates that will remain in a bicycle facility to make them bike-safe.

D. Opinion of Probable Costs

Below is a planning-level opinion of probable costs for completing the bike and sidewalk gaps.

66th Street to TH 62

Description	Unit	Quantity	Cost/Unit	Cost
Northbound Protected Bikeway	LF	1700	$ 15.76	$ 26,800
Soutbound Protected Bikeway	LF	1650	$ 15.76	$ 26,100
4-3 Lane Conversion / Roadway restriping	LF	2400	$ 13.77	$ 33,100
Northbound Shared-use Path	LF	600	$ 110.00	$ 66,000
Southbound Shared-use Path	LF	550	$ 110.00	$ 60,500
Southbound Bike Lane	LF	170	$ 5.21	$ 900
Ramp for prot. bikeway	EA	4	$ 1,300.00	$ 5,200
Raised crosswalk	EA	2	$ 15,000.00	$ 30,000
Video detection at 64th St	EA	1	$ 18,000.00	$ 18,000
Wayfinding sign for bikes	EA	8	$ 300.00	$ 2,400
Curb extension/curb work	EA	1	$ 20,000.00	$ 20,000
Contingency (25%)				$ 72,250
Subtotal				$ 361,250

Over TH 62

Description	Unit	Quantity	Cost/Unit	Cost
Curb rework and expand sidewalk area	LS	1	$ 215,000.00	$ 215,000
Curb extension	EA	4	$ 4,000.00	$ 16,000
Wayfinding sign for bikes	EA	4	$ 300.00	$ 1,200
Modify curb ramp for bikeway	EA	1	$ 1,300.00	$ 1,300
Roadway restriping	LF	300	$ 13.77	$ 4,200
Contingency (25%)				$ 59,425
Subtotal				$ 297,125

TH 62 to 60th Street

Description	Unit	Quantity	Cost/Unit	Cost
Northbound Protected Bikeway	LF	500	$ 15.76	$ 7,900
Soutbound Protected Bikeway	LF	860	$ 15.76	$ 13,600
Roadway restriping	LF	1150	$ 13.77	$ 15,900
Northbound Sidewalk	LF	330	$ 47.50	$ 15,700
Northbound Cyclepath (incl. curb)	LF	330	$ 200.00	$ 66,000
Northbound Bike Lane	LF	270	$ 5.21	$ 1,500
Southbound Bike Lane	LF	290	$ 5.21	$ 1,600
Ramp for prot. bikeway	EA	3	$ 1,300.00	$ 3,900
Raised crosswalk	EA	1	$ 15,000.00	$ 15,000
Curb extension	EA	3	$ 4,000.00	$ 12,000
Wayfinding sign for bikes	EA	6	$ 300.00	$ 1,800
Curb ramp	EA	2	$ 1,000.00	$ 2,000
Contingency (25%)				$ 39,225
				$ 196,125
Total:				**$ 854,500**

Notes:

All costs include labor to install unless otherwise noted

Costs do not include amounts for Design / Construction Engineering / or Bidding Services

Costs do not include mobilization or traffic control; these costs will vary depending on how the projects are bid

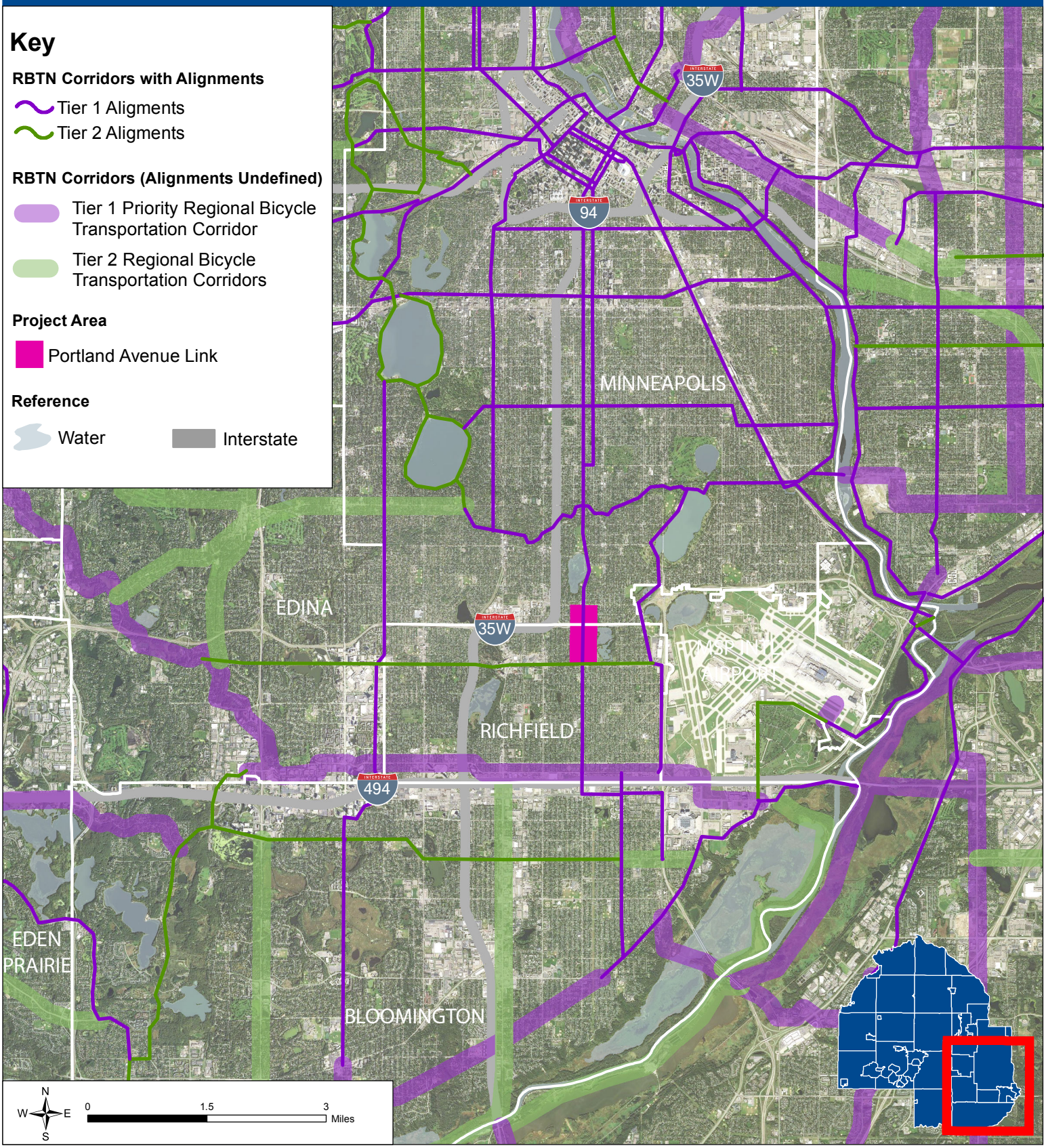
Costs do not include utility impacts

Additional items may need to be accounted for once crews are on the job


ALTERNATIVE DESIGN

Portland Avenue Critical Bicycle Transportation Link

Regional Bikeway Connections



Regional Solicitation
Map version date: 07/11/2016

Data source: Hennepin County

Hennepin County Public Works

June 28, 2016

James N. Grube, P.E.
Director of Transportation and County Engineer
Transportation Department
1600 Prairie Drive
Medina, Minnesota 55340

RE: Letter of Support for Regional Solicitation Application CSAH 35 (Portland Ave) Bikeway and Sidewalk Improvements from E 60th St to CSAH 53 (E 66th St)

Dear Mr. Grube:

The City of Richfield supports Hennepin County's federal funding application through the Regional Solicitation for the proposed CSAH 35 (Portland Avenue) bikeway and sidewalk improvement project from E 60th St in Minneapolis to CSAH 53 (E 66th St) in Richfield, which will include the following improvements:

- Addition of on-street bikelanes
- Addition of a new sidewalk between Park Ave and the TH 62 bridge
- Widen shared use paths along the TH 62 bridge

This street segment is identified as a preferred route in the City's Bicycle Master Plan. In addition, Richfield staff have been participating with the County in a working group of agencies for the last nine months to develop a plan to close this key bikeway and sidewalk gap and connect the cities of Minneapolis and Richfield for people biking and walking.

We support this county bikeway and sidewalk project. The project will close a gap in the bikeway and sidewalk networks and improve the safety for all transportation modes. Improvements along this corridor will enhance the livability and quality of life for Richfield and Hennepin County residents, and improved connectivity and mobility options for users of the bikeway system.

We wish you success with this application and look forward to working with you on the implementation of the project.

Sincerely,

Debbie Goettel
Mayor

Steve Devich
City Manager