Application

17063 - 2022 Roadway Modernization

17640 - Highway 10 Chaska Corridor Reconstruction Improvement

Regional Solicitation - Roadways Including Multimodal Elements

Status:	Submitted
Submitted Date:	04/14/2022 11:15 AM

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

Organization Information

Name:	CARVER COUNTY

Jurisdictional Agency (if different):

Organization Type: County Government

Organization Website:

Address: PUBLIC WORKS

11360 HWY 212 W #1

*	COLOGNE	Minnesota	55322-9133
	City	State/Province	Postal Code/Zip

County: Carver

Phone:* Ext.

Fax:

PeopleSoft Vendor Number 0000026790A12

Project Information

Project Name Highway 10 Chaska Corridor Reconstruction Improvement

Primary County where the Project is Located Carver

Cities or Townships where the Project is Located: Chaska

Jurisdictional Agency (If Different than the Applicant):

The Highway 10 Chaska Corridor Reconstruction Improvement project modernizes over 0.7 miles of roadway along a key segment of Highway 10 within the City of Chaska. The existing roadway, classified as an A-Minor Expander, is currently a two-lane rural segment and carries over 6,000 vehicles per day. Forecasted traffic growth is expected to more than double in the next 20 years and this segment is in dire need of upgrading to accommodate the regional traffic growth. The segment also lacks any pedestrian facilities, limiting non-motorized travel to the nearby Chaska Middle Schools, Community Center, and athletic facilities. City trail networks south of the roadway provide access to downtown and several City parks but are largely inaccessible due to the lack of facilities. The corridor is identified as RBTN Tier 2 and is planned as a regional trail.

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

The project will reconstruct the existing segment as a two-lane urban divided section, making key drainage and clear zone improvements. Over 0.8 miles of multi-use trail will be added by the project and link to existing and planned regional trail facilities on both ends of the project. Two grade separated pedestrian crossings are proposed allowing safe travel from the new trail to existing trails south of the roadway. Turn lane and access improvements are also included in the project, benefitting vehicle safety. Intersection and pedestrian scale lighting is proposed as well as signal and ADA improvements at the Highway 15 intersection.

Extensive public engagement was conducted during project development as part of the Highway 10 Corridor Study, with extra effort made to engage environmental justice groups prevalent at the adjacent Brandondale Manufactured Home development. Outreach to the school district and

students? parents was also performed to identify key issues to pedestrian mobility and safety as it relates to the school campus just west of the project area.

(Limit 2,800 characters; approximately 400 words)

TRANSPORTATION IMPROVEMENT PROGRAM (TIP) DESCRIPTION - will be used in TIP if the project is selected for funding. See MnDOT's TIP description guidance.

CSAH 10 IN CHASKA, FROM 0.1 MI WEST OF RIDGE LN TO CSAH 15, 0.7 MILES. RECONSTRUCT, MEDIAN, TRAIL, PEDESTRIAN UNDERPASS, ADA, SIGNAL, LIGHTING, URBAN DRAINAGE.

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

Project Length (Miles)

0.7

to the nearest one-tenth of a mile

Project Funding

Are you applying for competitive funds from another source(s) to implement this project?

No

If yes, please identify the source(s)

Federal Amount

$5,448,000.00

Match Amount

$1,362,000.00

Minimum of 20% of project total

Project Total

$6,810,000.00

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

Match Percentage

20.0%

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

Source of Match Funds

County, City

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:

2026, 2027

Select 2024 or 2025 for TDM and Unique projects only. For all other applications, select 2026 or 2027.

Additional Program Years:

2024, 2025

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

Project Information-Roadways

County, City, or Lead Agency

Carver County

Functional Class of Road

A-Minor Arterial Expander

Road System *TH, CSAH, MSAS, CO. RD., TWP. RD., CITY STREET*	CSAH
Road/Route No. *i.e., 53 for CSAH 53*	10
Name of Road *Example; 1st ST., MAIN AVE*	Engler Boulevard
Zip Code where Majority of Work is Being Performed	55318
(Approximate) Begin Construction Date	04/01/2026
(Approximate) End Construction Date	11/01/2026

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

From: **(Intersection or Address)**	0.1 miles west of Ridge Lane
To: **(Intersection or Address)** *DO NOT INCLUDE LEGAL DESCRIPTION*	CSAH 15 (Audubon Rd)
Or At	
Miles of Sidewalk (nearest 0.1 miles)	0.1
Miles of Trail (nearest 0.1 miles)	0.9
Miles of Trail on the Regional Bicycle Transportation Network (nearest 0.1 miles)	0.7
Primary Types of Work *Examples: GRADE, AGG BASE, BIT BASE, BIT SURF, SIDEWALK, CURB AND GUTTER,STORM SEWER, SIGNALS, LIGHTING, GUARDRAIL, BIKE PATH, PED RAMPS, BRIDGE, PARK AND RIDE, ETC.*	GRADE, AGG BASE, BIT PAVEMENT, SIDEWALKS, BIKE PATH, SIGNAL, LIGHTING, PED UNDERPASSES, RETAINING WALLS, URBAN DRAINAGE, PED RAMPS

BRIDGE/CULVERT PROJECTS (IF APPLICABLE)

Old Bridge/Culvert No.:	
New Bridge/Culvert No.:	
Structure is Over/Under **(Bridge or culvert name):**	

Requirements - All Projects

All Projects

1.The project must be consistent with the goals and policies in these adopted regional plans: Thrive MSP 2040 (2014), the 2040 Transportation Policy Plan (2018), the 2040 Regional Parks Policy Plan (2018), and the 2040 Water Resources Policy Plan (2015).

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

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

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

Limit 2,800 characters, approximately 400 words

The overall goal of this project is to modernize this important transportation corridor in the heart of the City of Chaska. As such, this project effectively addresses most major goals and objectives described in the 2040 Transportation Policy Plan. However, this project will specifically contribute to the following goals:

GOAL: TRANSPORTATION SYSTEM STEWARDSHIP (p. 42-43): This project involves making major improvements to an existing roadway and therefore directly address the goal of stewardship and 'taking care of what we already have.'

GOAL: SAFETY AND SECURITY (p. 44-45): This proposed project will improve the safety of commuters traveling along both Highway 10 (Engler Blvd) as well as improve the safety of bicyclists and pedestrians by making improvements to the multi-use trail system.

GOAL: ACCESS TO DESTINATIONS (p. 46-47): The Highway 10 corridor is an essential connection to the City of Chaska's downtown business district as well as a major artery for surrounding neighborhoods and other residential areas.

GOAL: COMPETATIVE ECONOMY (P.48-49): As noted above this corridor is essential to access many parts of downtown Chaska and therefore these modernization efforts are essential in maintaining access to these business areas which are central to Chaska and Carver County's economy.

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

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

This project is referenced directly in both the Carver County Comprehensive Plan as well as the City of Chaska's Comprehensive Plan. Both documents emphasize the importance of this transportation corridor and underscore the need to modernizing this roadway. The project is specifically identified in the Highway 10 Corridor Study, which is adopted by the City and County. The project concept, layout, cost, and implementation is identified in the corridor study specifically as project L1. https://www.co.carver.mn.us/departments/public-works/projects-studies/highway-10-study-victoria-chaska-area

The Comprehensive Plan for the City of Chaska introduces and addresses extensive and wide-ranging plans for the future of the community. https://www.chaskamn.com/605/2040-Comprehensive-Plan

As noted above this project, and the proposed improvements along Highway 10 (Engler Blvd), are referenced directly in this document, as it is listed as an important transport corridor in need of modernization in the primary Transportation table (Table 6.2) (p.6.15 - 6.16). This stretch of Highway 10 is mentioned directly in reference to its role in improving multimodal transportation as well, particularly connecting important segments of bike trail (p. 6.64). Finally, as the primary goal of this project is to modernize this segment of Highway 10 through increasing the volume of traffic that this corridor can safely hold as well as improving safety for pedestrians and bicyclists through involvements to the existing trail system, this project implicitly addresses a number of goals and issues raised throughout the Transportation portion of the plan (Chapter 6), particularly regarding the roadway system (p. 4-46), the broader transit system plan

(p. 55-63), and the bicycle and trail system plan (p. 64-69).
https://www.chaskamn.com/DocumentCenter/View/2620/Ch-6-Transportation-PDF

This project is also referenced in the extensive Carver County Comprehensive Plan as a Priority B (2024-2028) in the Transportation Tax Projects section (p 4.13).

https://www.co.carver.mn.us/home/showpublisheddocument/19425/637194393883230000

Limit 2,800 characters, approximately 400 words

4.The project must exclude costs for studies, preliminary engineering, design, or construction engineering. Right-of-way costs are only eligible as part of transit stations/stops, transit terminals, park-and-ride facilities, or pool-and-ride lots. Noise barriers, drainage projects, fences, landscaping, etc., are not eligible for funding as a standalone project, but can be included as part of the larger submitted project, which is otherwise eligible. Unique project costs are limited to those that are federally eligible.

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

5.Applicant is a public agency (e.g., county, city, tribal government, transit provider, etc.) or non-profit organization (TDM and Unique Projects applicants only). Applicants that are not State Aid cities or counties in the seven-county metro area with populations over 5,000 must contact the MnDOT Metro State Aid Office prior to submitting their application to determine if a public agency sponsor is required.

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

6.Applicants must not submit an application for the same project elements in more than one funding application category.

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

7.The requested funding amount must be more than or equal to the minimum award and less than or equal to the maximum award. The cost of preparing a project for funding authorization can be substantial. For that reason, minimum federal amounts apply. Other federal funds may be combined with the requested funds for projects exceeding the maximum award, but the source(s) must be identified in the application. Funding amounts by application category are listed below in Table 1. For unique projects, the minimum award is $500,000 and the maximum award is the total amount available each funding cycle (approximately $4,000,000 for the 2022 funding cycle).
Strategic Capacity (Roadway Expansion): *$1,000,000 to $10,000,000*
Roadway Reconstruction/Modernization: *$1,000,000 to $7,000,000*
Traffic Management Technologies (Roadway System Management): *$500,000 to $3,500,000*
Spot Mobility and Safety: *$1,000,000 to $3,500,000*
Bridges Rehabilitation/Replacement: *$1,000,000 to $7,000,000*

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

8.The project must comply with the Americans with Disabilities Act (ADA).

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

9.In order for a selected project to be included in the Transportation Improvement Program (TIP) and approved by USDOT, the public agency sponsor must either have a current Americans with Disabilities Act (ADA) self-evaluation or transition plan that covers the public right of way/transportation, as required under Title II of the ADA. The plan must be completed by the local agency before the Regional Solicitation application deadline. For the 2022 Regional Solicitation funding cycle, this requirement may include that the plan is updated within the past five years.

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

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

Date plan completed: 02/18/2014

Link to plan: https://www.co.carver.mn.us/home/showpublisheddocument/1164/636964469138100000

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

Date self-evaluation completed:

Link to plan:

Upload plan or self-evaluation if there is no link

Upload as PDF

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

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

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

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

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

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

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

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

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

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

Roadways Including Multimodal Elements

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

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

Roadway Strategic Capacity and Reconstruction/Modernization and Spot Mobility projects only:

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

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

Bridge Rehabilitation/Replacement and Strategic Capacity projects only:

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

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

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

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

Bridge Rehabilitation/Replacement projects only:

5.The length of the bridge clear span must exceed 20 feet.

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

6. The bridge must have a National Bridge Inventory Rating of 6 or less for rehabilitation projects and 4 or less for replacement projects.

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

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

7. All roadway projects that involve the construction of a new/expanded interchange or new interchange ramps must have approval by the Metropolitan Council/MnDOT Interchange Planning Review Committee prior to application submittal. Please contact Michael Corbett at MnDOT (Michael.J.Corbett@state.mn.us or 651-234-7793) to determine whether your project needs to go through this process as described in Appendix F of the 2040 Transportation Policy Plan.

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

Requirements - Roadways Including Multimodal Elements

Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	$191,300.00
Removals (approx. 5% of total cost)	$232,200.00
Roadway (grading, borrow, etc.)	$1,070,400.00
Roadway (aggregates and paving)	$860,000.00
Subgrade Correction (muck)	$0.00
Storm Sewer	$385,000.00
Ponds	$385,000.00
Concrete Items (curb & gutter, sidewalks, median barriers)	$428,700.00
Traffic Control	$190,100.00
Striping	$57,400.00
Signing	$57,400.00

Lighting	$75,000.00
Turf - Erosion & Landscaping	$307,000.00
Bridge	$882,000.00
Retaining Walls	$396,700.00
Noise Wall (not calculated in cost effectiveness measure)	$0.00
Traffic Signals	$300,000.00
Wetland Mitigation	$0.00
Other Natural and Cultural Resource Protection	$0.00
RR Crossing	$0.00
Roadway Contingencies	$765,500.00
Other Roadway Elements	$0.00
Totals	**$6,583,700.00**

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Path/Trail Construction	$80,300.00
Sidewalk Construction	$0.00
On-Street Bicycle Facility Construction	$0.00
Right-of-Way	$0.00
Pedestrian Curb Ramps (ADA)	$0.00
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	$0.00
Pedestrian-scale Lighting	$50,000.00
Streetscaping	$96,000.00
Wayfinding	$0.00
Bicycle and Pedestrian Contingencies	$0.00
Other Bicycle and Pedestrian Elements	$0.00
Totals	**$226,300.00**

Specific Transit and TDM Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Fixed Guideway Elements	$0.00
Stations, Stops, and Terminals	$0.00
Support Facilities	$0.00

Transit Systems (e.g. communications, signals, controls, fare collection, etc.)	$0.00
Vehicles	$0.00
Contingencies	$0.00
Right-of-Way	$0.00
Other Transit and TDM Elements	$0.00
Totals	**$0.00**

Transit Operating Costs

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

Totals

Total Cost	$6,810,000.00
Construction Cost Total	$6,810,000.00
Transit Operating Cost Total	$0.00

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

Existing Employment within 1 Mile:	6414
Existing Manufacturing/Distribution-Related Employment within 1 Mile:	2462
Existing Post-Secondary Students within 1 Mile:	0
Upload Map	1649855755809_CSAH10E_Economy.pdf

Please upload attachment in PDF form.

Measure C: Current Heavy Commercial Traffic

RESPONSE: Select one for your project, based on the updated 2021 Regional Truck Corridor Study:

Along Tier 1:

Miles: 0

(to the nearest 0.1 miles)

Along Tier 2:

Miles: 0

(to the nearest 0.1 miles)

Along Tier 3:

Miles: 0

(to the nearest 0.1 miles)

The project provides a direct and immediate connection (i.e., intersects) with either a Tier 1, Tier 2, or Tier 3 corridor: Yes

None of the tiers:

Measure A: Current Daily Person Throughput

Location CSAH 10 at Ridge Ln

Current AADT Volume 7500

Existing Transit Routes on the Project N/A

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

Upload Transit Connections Map 1649855787230_CSAH10E_Transit.pdf

Please upload attachment in PDF form.

Response: Current Daily Person Throughput

Average Annual Daily Transit Ridership 0

Current Daily Person Throughput 9750.0

Measure B: 2040 Forecast ADT

Use Metropolitan Council model to determine forecast (2040) ADT volume No

If checked, METC Staff will provide Forecast (2040) ADT volume

OR

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

Forecast (2040) ADT volume 12700

Measure A: Engagement

i.Describe any Black, Indigenous, and People of Color populations, low-income populations, disabled populations, youth, or older adults within a ½ mile of the proposed project. Describe how these populations relate to regional context. Location of affordable housing will be addressed in Measure C.
ii.Describe how Black, Indigenous, and People of Color populations, low-income populations, persons with disabilities, youth, older adults, and residents in affordable housing were engaged, whether through community planning efforts, project needs identification, or during the project development process.
iii.Describe the progression of engagement activities in this project. A full response should answer these questions:

The project area includes and serves low-income, persons with disabilities, youth, and elderly populations. A cluster of low-income Hispanic population is located at the Brandondale Manufactured Home neighborhood immediately north, adjacent to the project area and is served by one access to Highway 10 at Brandon Boulevard. The development contains 430 existing households with capacity to expand to 493 households. The project directly serves and completes a trail gap providing access from the surrounding area and eastern Chaska to the Chaska Public School campus, which includes Chaska Middle Schools East and West, La Academia, Eastern Carver County Athletic Plaza, and the Chaska Community Center, with numerous programs for youth, persons with disabilities, and the elderly. La Academia is a two-way, dual language immersion school that combines Spanish and English-speaking students.

Response:

These populations were engaged through the Highway 10 Corridor Study, a robust planning process with a focus on community engagement. Specific outreach to target populations included a pop-up meeting at the Chaska Community Center 'Lodge Senior Center' on March 5, 2020; outreach to the Brandondale Manufactured Home neighborhood and translation of meeting invitations and materials into Spanish; two additional neighborhood meetings; and survey of student's parents regarding transportation priorities.

Parents of students at the Chaska school campus were sent a survey regarding the project and how multimodal facilities could be improved. 247 parents responded, with the majority indicating that improved pedestrian facilities, specifically an underpass at Ravoux Rd. and completed trail gaps, would change the environment to allow children to walk or bike to school.

In person open houses were held on Aug. 21, 2019 & Dec. 19, 2019 with a virtual open house held in March-April 2020. To further reach youth populations and families with children, an interactive online survey and comment map was available with each round of engagement. Residents were notified of public open houses or neighborhood meetings via direct postcard mailing that was sent to over 4,000 addresses. Meeting information was also shared on social media including Facebook and Twitter and sent out via a project e-bulletin email with a project specific subscriber list of 234.

Feedback from target populations included primarily pedestrian safety and access concerns. Specific ways the project was impacted by feedback is the pedestrian underpass at Ravoux Rd. to supplement the existing at-grade crossing and filling the trail and sidewalk gaps along Highway 10 connecting to the Chaska school campus and Community Center. The proposed improvements were presented to these groups and there is wide support for the project.

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

Measure B: Equity Population Benefits and Impacts

Describe the projects benefits to Black, Indigenous, and People of Color populations, low-income populations, children, people with disabilities, youth, and older adults. Benefits could relate to:
This is not an exhaustive list. A full response will support the benefits claimed, identify benefits specific to Equity populations residing or engaged in activities near the project area, identify benefits addressing a transportation issue affecting Equity populations specifically identified through engagement, and substantiate benefits with data.
Acknowledge and describe any negative project impacts to Black, Indigenous, and People of Color populations, low-income populations, children, people with disabilities, youth, and older adults. Describe measures to mitigate these impacts. Unidentified or unmitigated negative impacts may result in a reduction in points.
Below is a list of potential negative impacts. This is not an exhaustive list.

Response:

The project will serve low-income, children, and elderly populations most directly by improving safety and access to the Chaska Public School campus (Chaska Middle School East, Chaska Middle School West, La Academia, Eastern Carver County Athletic Plaza) & the Chaska Community Center. One main benefit of the project is the completion of a 0.7 mile trail gap in a topographically challenging area. The existing gap is a missing link in the local pedestrian network, limiting east-west mobility between Hwys 15, 41, and 61. Connecting the trail gap on Hwy 10 will increase quality of life for residents in the Brandondale Manufactured Home neighborhood (430 existing households) providing direct access and community connection to the Chaska Community Center and school campus. This project will complete the largest remaining gap in the city's pedestrian network and provide connection to the existing trail network, specifically the trail networks east of the project area including the MN River Bluffs Regional Trail which links Chaska and Chanhassen to Eden Prairie.

In addition to completing this gap, the project will provide 2 pedestrian underpasses of Hwy 10 to facilitate connections to this RBTN Tier 2 Corridor. One of these underpasses exists today but is in such a state of disrepair that many residents do not know it exists. The project will reconstruct this facility at Ridge Ln and construct a new underpass just west of Ravoux Rd. The at-grade crossing of Hwy 10 will be maintained at Ravoux Rd with enhanced pedestrian crossing amenities including a pedestrian refuge, crosswalk improvements, and wayfinding signage. The addition of a pedestrian underpass at Ravoux Rd is a safety improvement that will specifically allow more children to walk or bike to school and was incorporated into the project through public feedback.

Reconstruction of the highway corridor will also improve access for commuters accessing US 212 and for those utilizing the SouthWest Transit East Creek Transit Station located less than a half mile north of the project area. Downtown Chaska is an employment destination for much of the Hispanic/Latino population in the area including at the Brandondale Manufactured Home neighborhood. This project will improve motorized and non-motorized access to this employment center and community destinations downtown.

The planning process included targeted outreach to property owners and stakeholders as identified in Measure A to mitigate any potential negative impacts. This outreach and subsequent adjustments to the project concept show how the project team has worked to address any negative impacts and to create community partnerships for a successful project. No adverse impacts are expected with this reconstruction and modernization project.

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

Measure C: Affordable Housing Access

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

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

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

There are 677 units of affordable housing served by the ½ mile buffer of the project area including East Creek Carriage Homes, Carver Ridge Townhomes, Creek Run Townhomes, Village Townhomes, Crosstown Commons and the Brandondale Manufactured Home neighborhood. In addition, 8 Habitat for Humanity housing units are under construction at the southeast corner of the CSAH 10/TH 41 intersection. Additional affordability details for each location including number of units, number of bedrooms per unit, level of affordability, funding restrictions, voucher status, and fair housing plan status are listed in the attached documentation. In addition to the Brandondale Manufactured Home neighborhood units, 121 units are listed at 30% AMI, 102 units at 50% AMI and another 80 at 60% AMI, all within a ½ mile of the project.

Response:

The Brandondale Manufactured Home neighborhood is a significant affordable housing development containing 430 properties and is served sole access via Highway 10 at Brandon Boulevard within the project area. With space for up to 493 households, the Brandondale neighborhood is generally affordable to those at less than 30% of AMI. The development access does not have adequate turn lane capacity today and lacks direct trail connection to area transit, Chaska School Campus, Chaska Community Center, and commercial areas. The project will connect the development to by filling the existing trail gap on Highway 10. Turn lanes will be designed to provide safe maneuver and storage areas for vehicles entering the site.

The project will improve the transportation system for these residents by improving reliability and delay, enhancing pedestrian amenities where there currently are none, adding a pedestrian underpass

for connectivity, and better connecting to schools, parks, transit station, and jobs in the community and region. These multimodal network improvements will also improve the connection north to the SouthWest Transit East Creek Transit Station less than half a mile from the project area.

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

Measure D: BONUS POINTS

Project is located in an Area of Concentrated Poverty:	
Projects census tracts are above the regional average for population in poverty or population of color (Regional Environmental Justice Area):	Yes
Project located in a census tract that is below the regional average for population in poverty or populations of color (Regional Environmental Justice Area):	
Upload the Socio-Economic Conditions map used for this measure.	1649952747381_CSAH10E_SocioEcon_affordable housing combined.pdf

Measure A: Year of Roadway Construction

Year of Original Roadway Construction or Most Recent Reconstruction	Segment Length	Calculation	Calculation 2
1978	0.5	989.0	1412.857
1995	0.2	399.0	570.0
	1	**1388**	**1983**

Total Project Length

Total Project Length (as entered in "Project Information" form)	0.7

Average Construction Year

Weighted Year	1982

Total Segment Length (Miles)

Total Segment Length	0.7

Measure B: Geometric, Structural, or Infrastructure Improvements

Improved roadway to better accommodate freight movements: Yes

Response:

The existing two-lane undivided roadway is expected to become overwhelmed by area traffic growth which is expected to double traffic volumes by 2040. Implementing an urban divided section increases the capacity to provide for this growth, incorporates access management, and maintains regional mobility. The project adds or improves turn lane designs to move turning traffic out of the through lanes and increases mobility and safety for all vehicles. This project directly connects to designated Regional Truck Tiers on both ends.

(Limit 700 characters; approximately 100 words)

Improved clear zones or sight lines: Yes

Response:

Urbanizing the existing rural section reduces the needed clear zones in this heavily wooded and hilly area where many objects are within the clear zone. The raised center median also protects from run off road crashes.

(Limit 700 characters; approximately 100 words)

Improved roadway geometrics: Yes

Response:

The proposed two-lane urban and divided section is guided by Carver County preferred typical sections and has been adjusted to balance these design preferences with potential impacts to the area topography. A standard shoulder width is proposed and is more appropriate than the existing 10-12 foot shoulders. Adequate clear distance from the face of curb is provided for the high-speed areas of the alignment. Minor profile and alignment adjustments are included to best accommodate pedestrian underpass locations.

(Limit 700 characters; approximately 100 words)

Access management enhancements: Yes

Response:

Several sidestreet accesses within the project area feature inadequate turn lanes or lack them altogether. The project adds left and right turn lanes at Ridge Lane, improved turn lanes at Brandon Boulevard, and a new right turn lane at Ravoux Road. These turn lane improvements increase safety to mainline and sidestreet traffic by separating turning and through movements at intersections. The corridor will become a divided highway, which will implement access management with full access at local roadway connections.

(Limit 700 characters; approximately 100 words)

Vertical/horizontal alignment improvements: Yes

Response:

Minor alignment adjustments are included between Ravoux Road and Brandon Boulevard where the existing double curve is signed with an advisory speed of 40 miles per hour. Vertical profile adjustments to accommodate the new pedestrian underpass west of Ravoux Road are likely to minimize grading impacts. Design details of these alignment adjustments will be better defined during the next design phase.

(Limit 700 characters; approximately 100 words)

Improved stormwater mitigation: Yes

Response:

The existing roadway drains stormwater into ditches on the north side of the roadway and onto the hillside south of the roadway. Chaska Creek, which drains into the Minnesota River, carries all of the stormwater in the project area. Improving the roadway to an urban section allows for urban drainage and treatment/retention of stormwater before discharging. Further evaluation of ponding areas will be performed during the next phase of design.

(Limit 700 characters; approximately 100 words)

Signals/lighting upgrades: Yes

Response:

The project will reconstruct the existing traffic signal at the intersection of Highways 10 and 15 to feature APS pedestrian push buttons and countdown indications. LED lighting and other upgrades will be made in comparison to the existing signal system. Intersection lighting will be added to all local street intersections as well as pedestrian scale lighting in both of the underpass areas.

(Limit 700 characters; approximately 100 words)

Other Improvements

Yes

Response:

The existing pedestrian underpass at Ridge Lane is of substandard design, creating an uncomfortable and unsafe space and resulting in years of no use. The project will upgrade this facility to an ADA-compliant multi-use space with proper drainage and lighting for a more comfortable experience. A new pedestrian underpass near Ravoux Road will feature a similar design and will eliminate the need for trail users to cross over 50 feet of pavement in a high-speed area where sightlines due to horizontal roadway curvature are limited.

(Limit 700 characters; approximately 100 words)

Measure A: Congestion Reduction/Air Quality

Total Peak Hour Delay Per Vehicle Without The Project (Seconds/ Vehicle)	Total Peak Hour Delay Per Vehicle With The Project (Seconds/ Vehicle)	Total Peak Hour Delay Per Vehicle Reduced by Project (Seconds/ Vehicle)	Volume without the Project (Vehicles per hour)	Volume with the Project (Vehicles Per Hour):	Total Peak Hour Delay Reduced by the Project:	Total Peak Hour Delay Reduced by the Project:	EXPLANATION of methodology used to calculate railroad crossing delay, if applicable.	Synchro or HCM Reports

26.0	15.0	11.0	1139	1139	12529.0	12529.0	N/A	1649787852318_CSAH 10E_Existing-Proposed Conditions_PM Peak - Report_combined.pdf
						12529		

Vehicle Delay Reduced

Total Peak Hour Delay Reduced	12529.0
Total Peak Hour Delay Reduced	12529.0

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

Total (CO, NOX, and VOC) Peak Hour Emissions without the Project (Kilograms):	Total (CO, NOX, and VOC) Peak Hour Emissions with the Project (Kilograms):	Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):
2.83	2.53	0.3
3	**3**	**0**

Total

Total Emissions Reduced:	0.3
Upload Synchro Report	1649787979056_CSAH 10E_Existing-Proposed Conditions_PM Peak - Report_combined.pdf

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

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

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

Total Parallel Roadway

Emissions Reduced on Parallel Roadways	0

Upload Synchro Report

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

New Roadway Portion:

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

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

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

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

Crash Modification Factor Used:	CMF ID 2219 - Install Raised Median was utilized in calculations.
(Limit 700 Characters; approximately 100 words)	
Rationale for Crash Modification Selected:	The major safety benefit posed by the project is the installation of a hardened and raised centerline in the form of raised median. The median reduces the opportunity for dangerous sideswipe opposing and head on collisions. Further, curb and gutter on the shoulders helps reduce the opportunity for run-off-road collisions and adds protection to objects in the clear zone. Pedestrian underpasses and dedicated trail facilities greatly reduce and eliminate pedestrian to exposure to traffic within the project area. No CMF was applied for these countermeasures as no non-motorized collisions are reported in the last three years. Added and improved turn lane designs also help in reducing the opportunity for rear end collisions in addition to improving corridor operations.
(Limit 1400 Characters; approximately 200 words)	
Project Benefit ($) from B/C Ratio	$2,884,419.00
Total Fatal (K) Crashes:	0
Total Serious Injury (A) Crashes:	0
Total Non-Motorized Fatal and Serious Injury Crashes:	0
Total Crashes:	8
Total Fatal (K) Crashes Reduced by Project:	0
Total Serious Injury (A) Crashes Reduced by Project:	0
Total Non-Motorized Fatal and Serious Injury Crashes Reduced by Project:	0
Total Crashes Reduced by Project:	2
Worksheet Attachment	1649952172505_CSAH10E_safety packaged.pdf
Please upload attachment in PDF form.	

Roadway projects that include railroad grade-separation elements:

Current AADT volume:	0
Average daily trains:	0

Crash Risk Exposure eliminated:	0

Measure A: Pedestrian Safety

Determine if these measures do not apply to your project. *Does the project match either of the following descriptions?*
If either of the items are checked yes, then ***score for entire pedestrian safety measure is zero****. Applicant does not need to respond to the sub-measures and can proceed to the next section.*

Project is primarily a freeway (or transitioning to a freeway) and does not provide safe and comfortable pedestrian facilities and crossings.	No
Existing location lacks any pedestrian facilities (e.g., sidewalks, marked crossings, wide shoulders in rural contexts) and project does not add pedestrian elements (e.g., reconstruction of a roadway without sidewalks, that doesnt also add pedestrian crossings and sidewalk or sidepath on one or both sides).	No

SUB-MEASURE 1: Project-Based Pedestrian Safety Enhancements and Risk Elements
To receive maximum points in this category, pedestrian safety countermeasures selected for implementation in projects should be, to the greatest extent feasible, consistent with the countermeasure recommendations in the Regional Pedestrian Safety Action Plan and state and national best practices. Links to resources are provided on the Regional Solicitation Resources web page.
Please answer the following two questions with as much detail as possible based on the known attributes of the proposed design. If any aspect referenced in this section is not yet determined, describe the range of options being considered, to the greatest extent available. If there are project elements that may increase pedestrian risk, describe how these risks are being mitigated.
1. Describe how this project will address the safety needs of people crossing the street at signalized intersections, unsignalized intersections, midblock locations, and roundabouts.
Treatments and countermeasures should be well-matched to the roadways context (e.g., appropriate for the speed, volume, crossing distance, and other location attributes). Refer to the Regional Solicitation Resources web page for guidance links.

Response:

The project adds several major pedestrian safety components to improve and upgrade the existing rural highway section to fit its urban context. In the east project limit at the Highway 15 intersection the project reconstructs the existing signal systems to feature APS components and making all pedestrian facilities fully ADA compliant. No widening is proposed at this intersection so pedestrian exposure to traffic is not increased.

The full project area currently lacks pedestrian facilities forcing non-motorized traffic to use paved shoulders next to traffic often traveling at or above 50 mph. The project will create a separated pedestrian and bike area via a multi-use trail separated from the roadway by a grass boulevard and curb and gutter. The completion of a 0.7 mile trail gap in this topographically challenging area is a key project benefit. The existing gap is a missing link in the local pedestrian network, limiting east-west mobility between Hwys 15, 41, and 61. Connecting the trail gap on Hwy 10 will increase quality of life for residents in the Brandondale Manufactured Home neighborhood (430 existing households) providing direct access and community connection to the Chaska Community Center and school campus. This project will complete the largest remaining gap in the city's pedestrian network and provide connection to the existing trail network, specifically the trail networks east of the project area including the MN River Bluffs Regional Trail which links Chaska and Chanhassen to Eden Prairie.

In addition to completing this gap, the project will provide 2 pedestrian underpasses of Hwy 10 to facilitate connections to this RBTN Tier 2 Corridor between neighborhoods, Lions Park, and downtown Chaska. One of these underpasses exists today but is in such a state of disrepair that many residents do not know it exists. The project

will reconstruct this facility at Ridge Ln and construct a new underpass just west of Ravoux Rd. The at-grade crossing of Hwy 10 will be maintained at Ravoux Rd with enhanced pedestrian crossing amenities including a pedestrian refuge, crosswalk improvements, and wayfinding signage. The addition of a pedestrian underpass at Ravoux Rd. is a safety improvement that will specifically allow more children to walk or bike to school and was incorporated into the project through public feedback.

The proposed project will reconstruct this segment of Highway 10 to a divided urban section, which will reduce the overall width of the roadway by no longer having to cross rural ditch areas. The addition of a median will create a more urban environment and encourage lower speeds through the corridor.

(Limit 2,800 characters; approximately 400 words)

Is the distance in between signalized intersections increasing (e.g., removing a signal)?

Select one: No

If yes, describe what measures are being used to fill the gap between protected crossing opportunities for pedestrians (e.g., adding High-Intensity Activated Crosswalk beacons to help motorists yield and help pedestrians find a suitable gap for crossing, turning signal into a roundabout to slow motorist speed, etc.).

Response:

(Limit 1,400 characters; approximately 200 words)

Will your design increase the crossing distance or crossing time across any leg of an intersection? (e.g., by adding turn or through lanes, widening lanes, using a multi-phase crossing, prohibiting crossing on any leg of an intersection, pedestrian bridge requiring length detour, etc.). This does not include any increases to crossing distances solely due to the addition of bike lanes (i.e., no other through or turn lanes being added or widened).

Select one: No

If yes,
How many intersections will likely be affected?

Response: 0

Describe what measures are being used to reduce exposure and delay for pedestrians (e.g., median crossing islands, curb bulb-outs, etc.)

Response:

The existing at-grade crossing of Highway 10 at Ravoux Road will be improved with the crossing distance actually decreasing from the existing. The existing crossing crosses two lanes of traffic but due to its skew the crossing distance from edge of pavement to edge of pavement is over 50 feet. The proposed crossing will cross two through lanes and a right turn lane but features a wide center median providing pedestrian refuge and allowing for a two-stage crossing. The new crossing squares up the crossing alignment, so the crossing distance is reduced from the existing condition. The crossing distance at Audubon Rd. not changing from the existing condition.

(Limit 1,400 characters; approximately 200 words)

If grade separated pedestrian crossings are being added and increasing crossing time, describe any features that are included that will reduce the detour required of pedestrians and make the separated crossing a more appealing option (e.g., shallow tunnel that doesnt require much elevation change instead of pedestrian bridge with numerous switchbacks).

Response:

The proposed new pedestrian underpass near Ravoux Road is expected to largely serve pedestrian traffic between Highway 10 and Lions Park where the existing trail comes from the wooded area south of the highway and would not increase travel time. The purpose of the new underpass is to better connect across Highway 10 for access to the Chaska School Campus and the Chaska Community Center. The underpass was added to the project based on strong community input and feedback for this improvement and will supplement the also improved, enhanced at-grade pedestrian crossing. The proposed trail alignment minimizes the added distance required to travel the underpass. Using the at-grade crossing will still be an option; however, depending on origin or destination, could add travel distance in comparison to using the grade separated route. This is why the public preferred the underpass option. The Ridge Lane underpass is existing and will be modernized with an improved connection to trail facilities. Pedestrian ramps and wayfinding signage will be designed to provide guidance to pedestrians regarding underpass and at-grade crossing options.

(Limit 1,400 characters; approximately 200 words)

If mid-block crossings are restricted or blocked, explain why this is necessary and how pedestrian crossing needs and safety are supported in other ways (e.g., nearest protected or enhanced crossing opportunity).

Response:

No mid-block grade crossings are removed or restricted by the project that exist today.

(Limit 1,400 characters; approximately 200 words)

2. Describe how motorist speed will be managed in the project design, both for through traffic and turning movements. *Describe any project-related factors that may affect speed directly or indirectly, even if speed is not the intended outcome (e.g., wider lanes and turning radii to facilitate freight movements, adding turn lanes to alleviate peak hour congestion, etc.). Note any strategies or treatments being considered that are intended to help motorists drive slower (e.g., visual narrowing, narrow lanes, truck aprons to mitigate wide turning radii, etc.) or protect pedestrians if increasing motorist speed (e.g., buffers or other separation from moving vehicles, crossing treatments appropriate for higher speed roadways, etc.).*

Response:

The pavement area available to vehicles is reduced by the project compared to the existing condition via narrower shoulders and divided roadway section with a median. This, combined with the addition of curb and gutter, the raised center median, and roadside trail will create a more urban environment and provide a calming effect to traffic. Turn lanes are added at strategic locations, however, the physical separation of pedestrians to traffic added by the project?s dedicated pedestrian crossings and multi-use trail will make the corridor increasingly pedestrian friendly and a comfortable space for all users. Today pedestrians travel on the roadway shoulder area on this rural highway section located in an urban context to access the Chaska school campus and Chaska community center. The roadway will be modernized with pedestrian safety facilities including dedicated pedestrian crossings and a multi-use trail.

(Limit 2,800 characters; approximately 400 words)

If known, what are the existing and proposed design, operation, and posted speeds? Is this an increase or decrease from existing conditions?

Response:

The existing posted speed limit is 50 mph and it is likely to remain 50 mph with the proposed project and potentially decrease based on speed study, per MnDOT requirements.

(Limit 1,400 characters; approximately 200 words)

SUB-MEASURE 2: Existing Location-Based Pedestrian Safety Risk Factors

These factors are based on based on trends and patterns observed in pedestrian crash analysis done for the Regional Pedestrian Safety Action Plan. Check off how many of the following factors are present. Applicants receive more points if more risk factors are present.

Existing road configuration is a One-way, 3+ through lanes or	
Existing road configuration is a Two-way, 4+ through lanes	
Existing road has a design speed, posted speed limit, or speed study/data showing 85th percentile travel speeds in excess of 30 MPH or more	Yes
Existing road has AADT of greater than 15,000 vehicles per day	
List the AADT	

SUB-MEASURE 3: Existing Location-Based Pedestrian Safety Exposure Factors

These factors are based on based on trends and patterns observed in pedestrian crash analysis done for the Regional Pedestrian Safety Action Plan. Check off how many of the following existing location exposure factors are present. Applicants receive more points if more risk factors are present.

Existing road has transit running on or across it with 1+ transit stops in the project area (If flag-stop route with no fixed stops, then 1+ locations in the project area where roadside stops are allowed. Do not count portions of transit routes with no stops, such as non-stop freeway sections of express or limited-stop routes. If service was temporarily reduced for the pandemic but is expected to return to 2019 levels, consider 2019 service for this item.)

Existing road has high-frequency transit running on or across it and 1+ high-frequency stops in the project area (high-frequency defined as service at least every 15 minutes from 6am to 7pm weekdays and 9am to 6pm Saturdays. If service frequency was temporarily reduced for the pandemic but is expected to return to 2019 levels, consider 2019 frequency for this item.)

Existing road is within 500 of 1+ shopping, dining, or entertainment destinations (e.g., grocery store, restaurant)

Yes

If checked, please describe:

The eastern project limit connects to Chaska industrial park, offices, and downtown Chaska. The western project limit there is a gas station and other retail uses. The project also directly connects to the Chaska Community Campus which features Chaska Middle Schools East and West, La Academia Spanish Emersion Elementary School, and Chaska Community Center. These facilities host daily school, athletics, community education and outreach events for all ages. The Brandondale community features a large amount of affordable housing and is served via only one access to Highway 10 at Brandon Boulevard. The project also connects to Lion's Park and two nearby churches.

(Limit 1,400 characters; approximately 200 words)

Existing road is within 500 of other known pedestrian generators (e.g., school, civic/community center, senior housing, multifamily housing, regulatorily-designated affordable housing)

Yes

If checked, please describe:

The western project limit is nearby the Chaska Community Campus which features Chaska Middle Schools East and West, La Academia Spanish Emersion Elementary School, and Chaska Community Center. These facilities host daily school, athletics, community education and outreach events for all ages. The Brandondale community features a large amount of affordable housing and is served via only one access to Highway 10 at Brandon Boulevard. The project also connects to Lion's Park and two nearby churches.

(Limit 1,400 characters; approximately 200 words)

Measure A: Multimodal Elements and Existing Connections

Response:

The project adds several major multimodal components to improve and upgrade the existing rural highway section to fit its urban context. The project fills a critical existing trail gap between Highway 15 and Ridge Lane along an RBTN Tier 2 corridor. This facility connects to an existing RBTN Tier 1 alignment, the MN River Bluffs Trail, at the Highway 15 intersection. The new multi-use trail traverses an identified stream Bicycle Barrier at the Chaska Creek. The project improves the multimodal environment to connect to the Chaska Public School campus (Chaska Middle School East, Chaska Middle School West, La Academia, Eastern Carver County Athletic Plaza) and Chaska Community Center.

The project area currently lacks pedestrian facilities forcing non-motorized traffic to use paved shoulders next to traffic often traveling at or above 50 mph. The project greatly improves these conditions by implementing a multi-use trail separated from the roadway. The completion of this 0.7 mile trail gap in this topographically challenging area is a key project benefit. The existing gap limits east-west mobility between Hwys 15, 41, and 61. This project will complete the largest remaining gap in the city's pedestrian network and provide connection to the existing trail network, specifically the trail networks east of the project area including the MN River Bluffs Regional Trail which links Chaska and Chanhassen to Eden Prairie.

In addition to completing this gap, the project will provide 2 pedestrian underpasses of Hwy 10 to facilitate connections to this RBTN Tier 2 Corridor between neighborhoods, Lions Park, and downtown Chaska. One of these underpasses exists today but is in such a state of disrepair that many residents do not know it exists. The project will reconstruct this facility at Ridge Ln and construct a new underpass just west of Ravoux Rd.

The at-grade crossing of Hwy 10 will be maintained at Ravoux Rd with enhanced pedestrian crossing amenities including a pedestrian refuge, crosswalk improvements, and wayfinding signage. The addition of a pedestrian underpass at Ravoux Rd. is a safety improvement that will specifically allow more children to walk or bike to school and was incorporated into the project through public feedback. In the east project limit, at the Highway 15 intersection the existing signal systems will be upgraded to feature APS components and making all pedestrian facilities fully ADA compliant. All pedestrian infrastructure will be upgraded to ADA compliant whereas almost none of the existing pedestrian infrastructure is ADA compliant.

The project provides a trail connection to Highway 41, which accesses the Southwest Transit East Creek Transit Station with three transit routes, less than half a mile north of the project area.

(Limit 2,800 characters; approximately 400 words)

Transit Projects Not Requiring Construction

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

Check Here if Your Transit Project Does Not Require Construction

Measure A: Risk Assessment - Construction Projects

1.Public Involvement (20 Percent of Points)

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

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

100%

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

50%

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

50%

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

25%

No outreach has led to the selection of this project.

0%

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

Response:

This project was developed as part of a full corridor study planning approach, Highway 10 Corridor Study, with project partners including MnDOT and the City of Chaska. The public engagement and outreach efforts included focus groups, online surveys and interactive comment tool, public open houses, specific outreach to target population groups, neighborhood meetings, and property owner meetings. Public meetings began in November 2018 with the most recent being an online open house in April-May 2020. Stakeholder outreach and neighborhood outreach included specific meetings with Chaska Police, Fire, Public Works, and Emergency Services, Chaska Vet, ISD 112, Laketown Township, The Lodge Senior Center, Brandondale manufactured home neighborhood, Valley Evangelical Free Church, Shepherd of the Hill Church, Crest Dr. neighborhood, and the White Oak neighborhood. In person open houses were held on August 21, 2019 (50+ participants) and December 19, 2019 (50+ participants) with a virtual open house held in March-April 2020 (60+ participants). In addition, approximately 70 online comments were submitted via the online interactive comment map.

All parents of students at the Chaska school campus, which includes Chaska Middle School East, Chaska Middle School West, and La Academia, were sent a survey regarding the project and how multimodal facilities could be improved for access to the school. 247 parents responding regarding the pedestrian environment and how the area can be improved to allow children to walk or bike to school.

Residents were notified of public open houses and general public or neighborhood meetings via direct postcard mailing. The mailing list for each open house included over 4,000 addresses. Meeting information was also shared on social media

including Facebook and Twitter and sent out via a project e-bulletin email with a project specific subscriber list of 234.

Partner agencies met at least monthly throughout the planning process with the most recent meeting on May 6, 2020 and regularly presented study information to elected officials at public meetings. The most recent presentation to the Chaska City Council was on May 4, 2020.

(Limit 2,800 characters; approximately 400 words)

2.Layout (25 Percent of Points)

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

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

100%

Yes

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

100%

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

75%

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

50%

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

25%

Layout has not been started

0%

Attach Layout

1649800434232_001_CSAH 10_East_Proposed.pdf

Please upload attachment in PDF form.

Additional Attachments

1649800866051_Carver Co Layout Letter_CSAH 10 Reconstruction.pdf

Please upload attachment in PDF form.

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

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

Yes

100%

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

100%

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

80%

Historic/archeological property impacted; determination of adverse effect anticipated

40%

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

0%

Project is located on an identified historic bridge

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

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

100%

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

50%

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

Yes

25%

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

0%

5.Railroad Involvement (15 Percent of Points)

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

Yes

100%

Signature Page

Please upload attachment in PDF form.

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

50%

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

0%

Measure A: Cost Effectiveness

Total Project Cost (entered in Project Cost Form):	$6,810,000.00
Enter Amount of the Noise Walls:	$0.00
Total Project Cost subtract the amount of the noise walls:	$6,810,000.00
Enter amount of any outside, competitive funding:	$0.00
Attach documentation of award:	
Points Awarded in Previous Criteria	
Cost Effectiveness	$0.00

Other Attachments

File Name	Description	File Size
001_CSAH 10_East_Proposed.pdf	Proposed Layout - Highway 10 Reconstruction	327 KB
002_CSAH 10_East_Existing.pdf	Existing Conditions Aerial - Highway 10 Reconstruction	273 KB
003_CSAH 10E Existing Conditions.pdf	Existing Conditions Pictures - Highway 10 Reconstruction	400 KB
004_CSAH 10_East_Context.pdf	Project Reference Map - Highway 10 Reconstruction	245 KB
Carver County Resolution 23-22 - signed.pdf	Carver County Resolution - Highway 10 Reconstruction	368 KB
Chaska LOS-Engler Reconstruction_Pages from 20220405111140359-2.pdf	City of Chaska Letter of Support - Highway 10 Reconstruction	540 KB
One Page Description Highway 10 Modernization Project.pdf	Project Summary - Highway 10 Reconstruction	259 KB

Regional Economy

Roadway Reconstruction/Modernization Project: Highway 10 Chaska Corridor Reconstruction | Map ID: 16498549634

Results

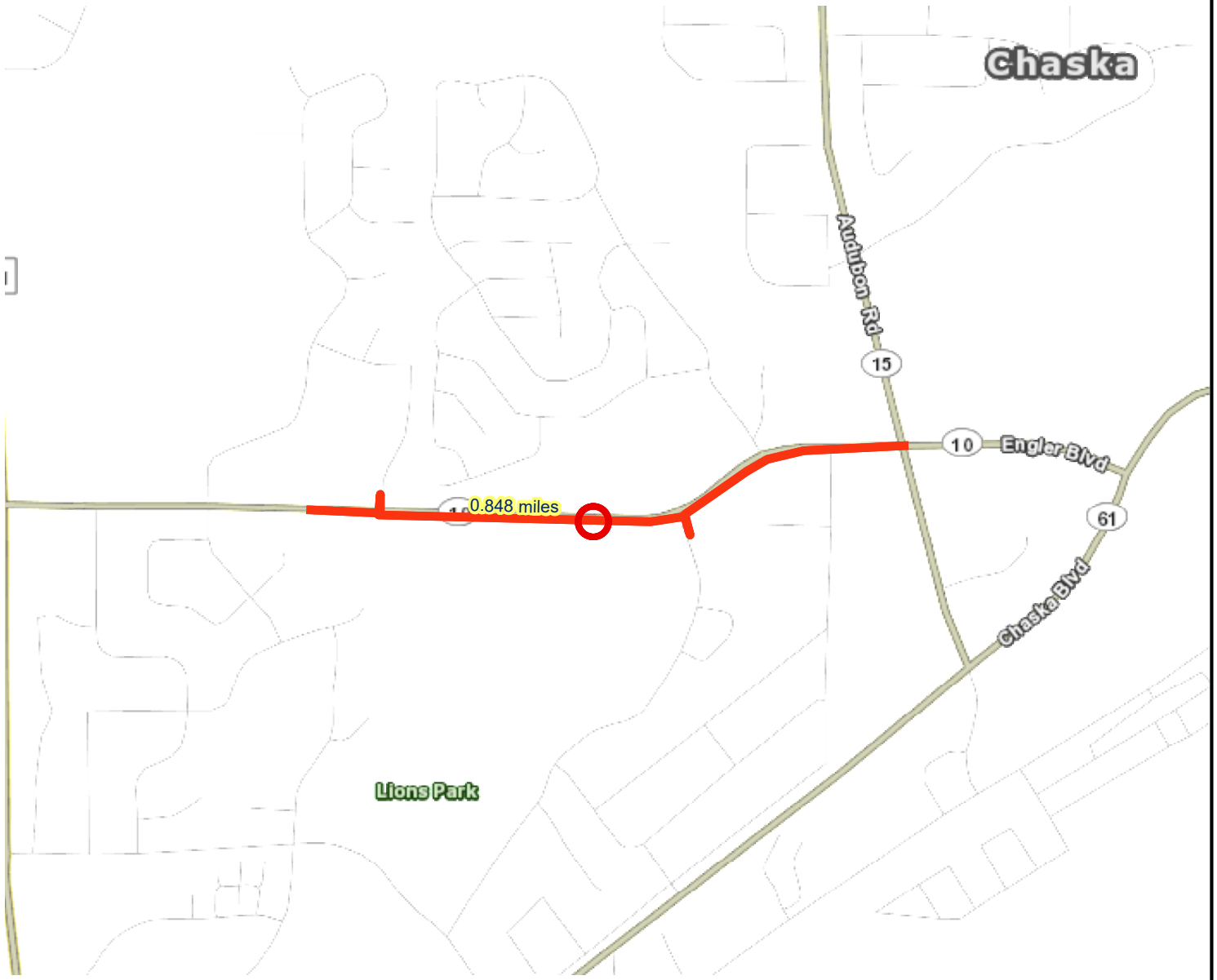
WITHIN ONE MI of project:
Postsecondary Students: 0

Totals by City:

Chanhassen
Population: 2503
Employment: 1323
Mfg and Dist Employment: 264

Chaska
Population: 10063
Employment: 4850
Mfg and Dist Employment: 2172

Jackson Twp.
Population: 737
Employment: 241
Mfg and Dist Employment: 26



Project Points
Project
Manfacturing/Distribution Centers
Job Concentration Centers

0 0.1 0.2 0.4 0.6 0.8 Miles

Created: 4/13/2022
LandscapeRSA5

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

METROPOLITAN COUNCIL

Transit Connections

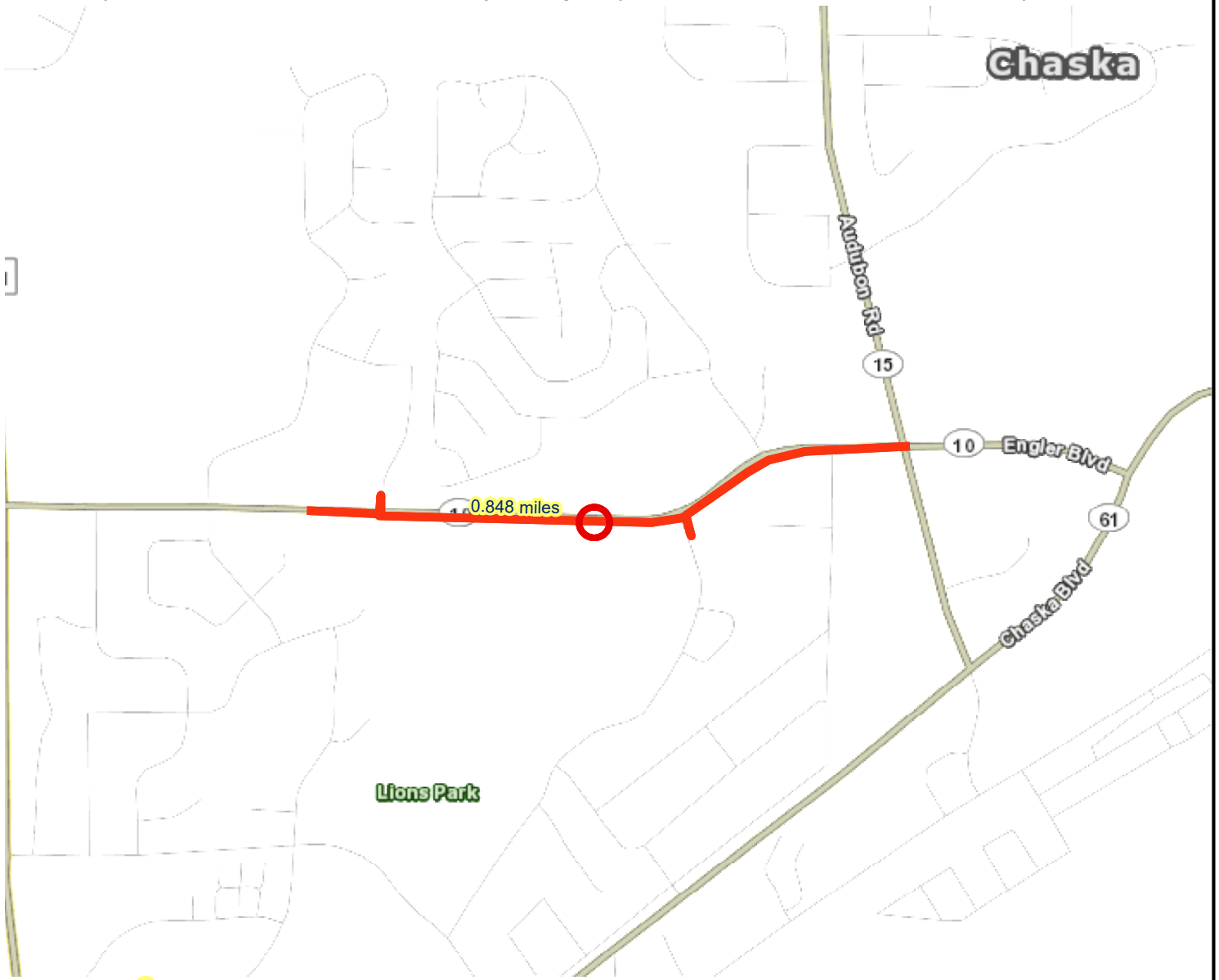
Roadway Reconstruction/Modernization Project: Highway 10 Chaska Corridor Reconstruction | Map ID: 1649854963

Results

Transit with a Direct Connection to project:
-- NONE --

**indicates Planned Alignments*

Transit Market areas: 9



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

0 0.1 0.2 0.4 0.6 0.8 Miles

Created: 4/13/2022
LandscapeRSA3

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

METROPOLITAN COUNCIL

Socio-Economic Conditions

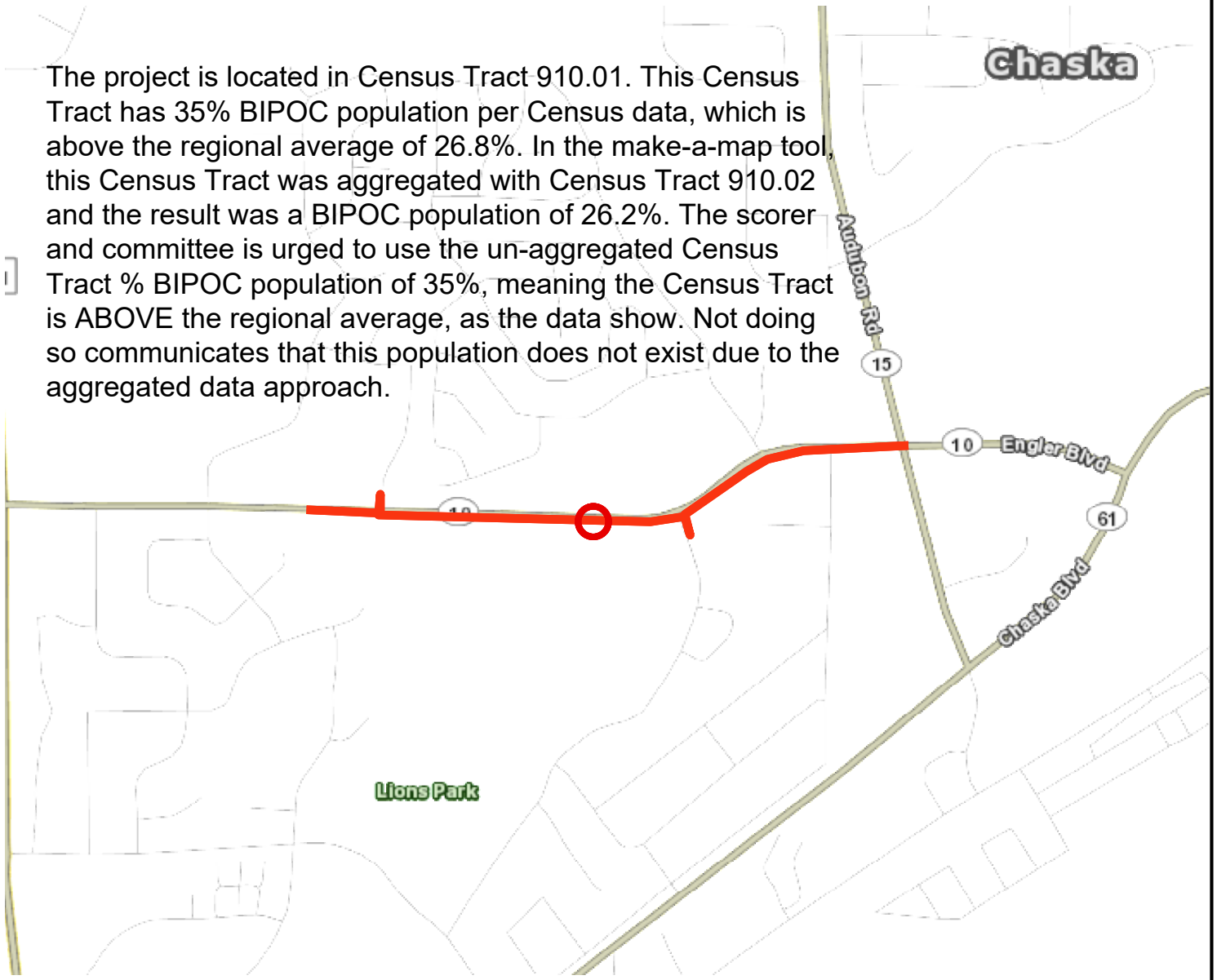
Roadway Reconstruction/Modernization Project: Highway 10 Chaska Corridor Reconstruction | Map ID: 1649854963481

Results

Total of publicly subsidized rental housing units in census tracts within 1/2 mile: 677

Project located in census tracts that are BELOW the regional average for population in poverty or population of color.

The project is located in Census Tract 910.01. This Census Tract has 35% BIPOC population per Census data, which is above the regional average of 26.8%. In the make-a-map tool, this Census Tract was aggregated with Census Tract 910.02 and the result was a BIPOC population of 26.2%. The scorer and committee is urged to use the un-aggregated Census Tract % BIPOC population of 35%, meaning the Census Tract is ABOVE the regional average, as the data show. Not doing so communicates that this population does not exist due to the aggregated data approach.



Points
Area of Concentrated Poverty
Lines

0 0.1 0.2 0.4 0.6 0.8 Miles

Created: 4/13/2022
LandscapeRSA2

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

METROPOLITAN COUNCIL

Socio-Economic Conditions

Roadway Reconstruction/Modernization Project: Highway 10 Reconstruction | Map ID: 1646796566886

Results

Total of publicly subsidized rental housing units in census tracts within 1/2 mile: 677

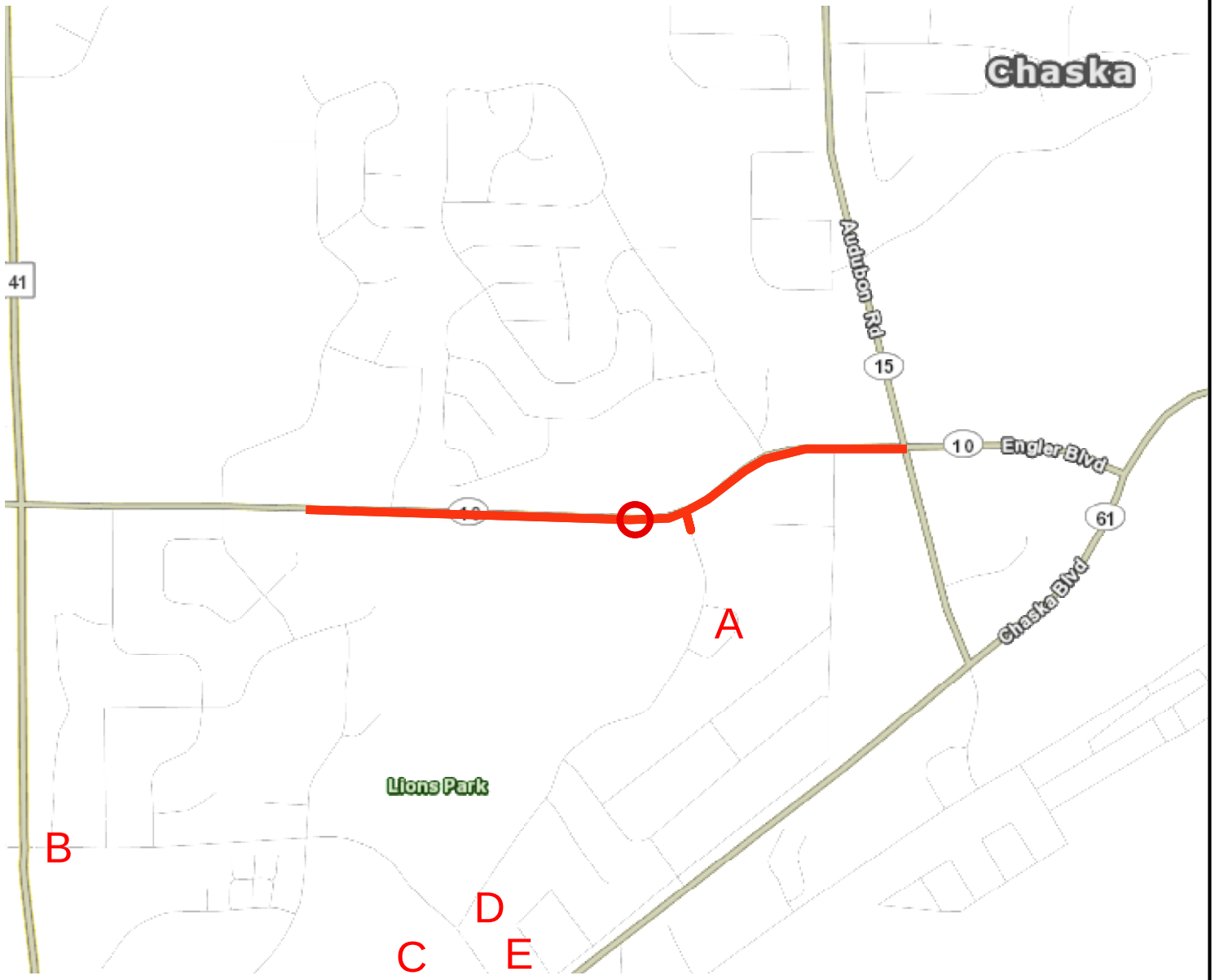
Project located in census tracts that are BELOW the regional average for population in poverty or population of color.

Affordable Housing *(w/in current projected map area)*

Properties: 7
Total Units: 315
30% AMI: 121
50% AMI: 102
60% AMI: 80
Total Affordable Units: 305

A - East Creek Carriage Homes
B - Carver Ridge Townhomes
C - Creek Run Townhomes
D - Village Townhomes
E - Crosstown Commons
F - Carver County (scattered)

*see attached for more property details



Points
Area of Concentrated Poverty
Lines

0 0.1 0.2 0.4 0.6 0.8 Miles

Created: 3/8/2022
LandscapeRSA2

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

METROPOLITAN COUNCIL

HousingLink

Streams

Return to main site

Property Detail

About Streams

East Creek Carriage Homes

Multiple addresses listed at bottom of page

Funding Categories

Public Housing
Tax Credit
Subsidized-Other
Tax Credit (LIHTC 9%)

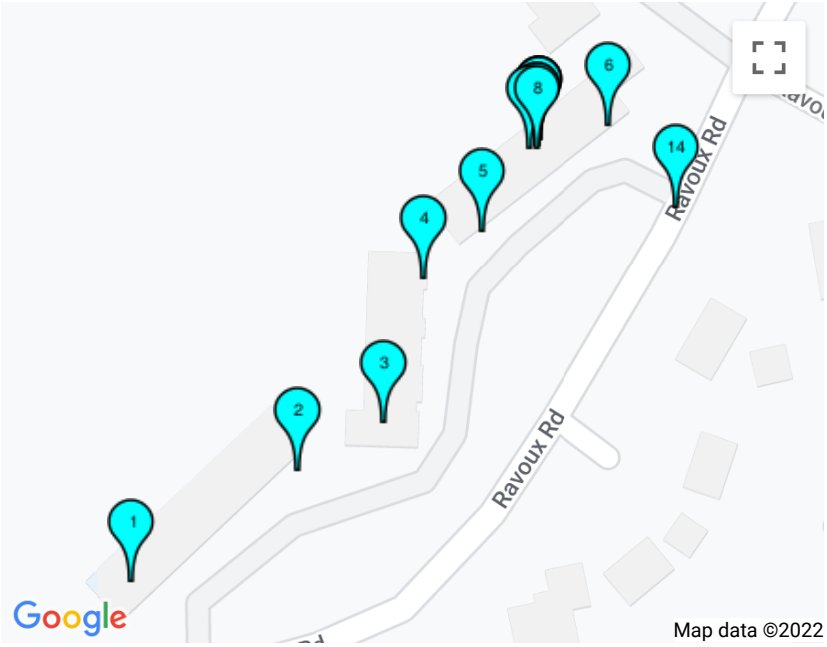
Property Information

Year Built:
Building Type:
Groups Served: Family
Total Units: 39
Affordable Units: 39

Affordable Units by Bedroom

Units by Area Median Income

30%: 39



Housing+Transit Cost Walk Score®: 25 Send us feedback

Listing Summary

BR Size	1st Listing	Last Listing	Low Rent	High Rent	Last Rent
2	09/01/2017	09/01/2017	$1,064	None	$1,064
3	02/22/2007	08/01/2015	$1,075	None	$1,130

Known Property Addresses

1	700 Ravoux Rd	Chaska
2	714 Ravoux Rd	Chaska
3	716 Ravoux Rd	Chaska
4	726 Ravoux Rd	Chaska
5	730 Ravoux Rd	Chaska
6	742 Ravoux Rd	Chaska
7	744 Ravoux Rd	Chaska
8	746 Ravoux Rd	Chaska
9	756 Ravoux Rd	Chaska
10	758 Ravoux Rd	Chaska
11	768 Ravoux Rd	Chaska
12	770 Ravoux Rd	Chaska
13	774 Ravoux Rd	Chaska
14	780 Ravoux Rd	Chaska

Funding Dates & Programs

First known closing: 1/1/1995
Most recent closing: 10/28/1999
Earliest expiration: 1/1/2025
Last Activity: New Construction

HUDPH: Public Housing
Close Date: 12/31/1997

MHFA: LHIA
Close Date: 10/28/1999

MHFA: Housing Tax Credits
Close Date: 1/1/1995
Estimated Expiration: 1/1/2025

MHFA: Housing Tax Credits 9%
Close Date: 1/1/1997
Expiration: 1/1/2027

Known Property Identifiers

HousingLink: 11220
HUDPH: MN002000009
MHFA: D0298
HUDLIHTC9: MNA1997040

HousingLink

Streams

Return to main site

Property Detail

About Streams

Carver Ridge Townhomes (fka Northcreek Townhomes)

Multiple addresses listed at bottom of page

Funding Categories

Tax Credit (LIHTC 4%)

Tax Credit (LIHTC 9%)

Property Information

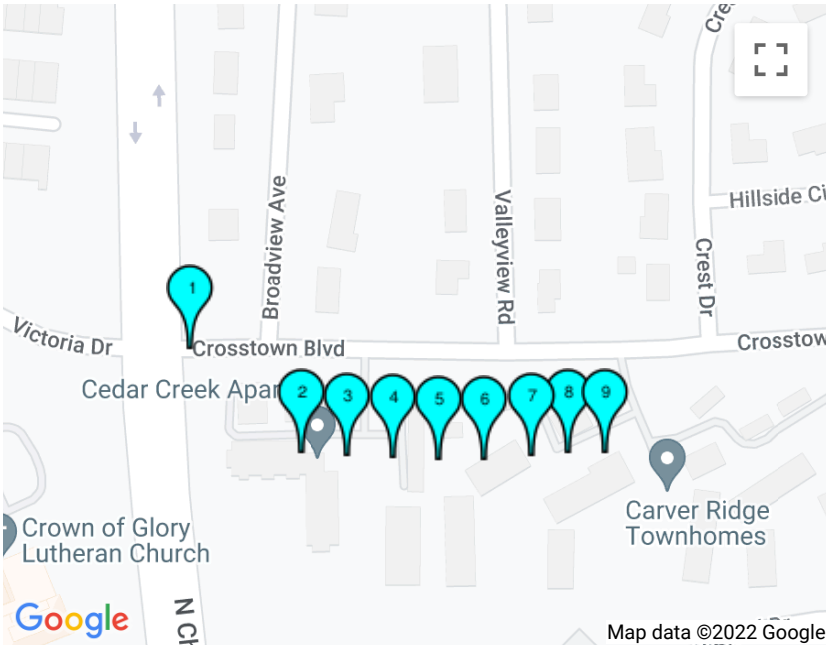
Year Built:
Building Type: Townhome
Groups Served:
Total Units: 92
Affordable Units: 82

Affordable Units by Bedroom

1 BR: 4
2 BR: 69
3 BR: 9

Units by Area Median Income

60%: 82



Housing+Transit Cost Walk Score®: 37 Send us feedback

Known Property Addresses

1	205 Crosstown Blvd	Chaska
2	225 Crosstown Blvd	Chaska
3	245 Crosstown Blvd	Chaska
4	265 Crosstown Blvd	Chaska
5	285 Crosstown Blvd	Chaska
6	305 Crosstown Blvd	Chaska
7	325 Crosstown Blvd	Chaska
8	345 Crosstown Blvd	Chaska
9	365 Crosstown Blvd	Chaska

Funding Dates & Programs

First known closing: 1/1/1999
Most recent closing: 1/1/1999
Earliest expiration: 1/1/2029
Last Activity: Preservation

MHFA: Housing Tax Credits 4%

MHFA: Housing Tax Credits 9%

Close Date: 1/1/1999
Expiration: 1/1/2029

Known Property Identifiers

HousingLink: 6466
MHFATC4: D3014
HUDLIHTC9: MNA1999025
HUDLIHTC4: MNA1999025

HousingLink

Streams

Return to main site

Property Detail

About Streams

Creeks Run Townhomes

Chaska, MN

Funding Categories

Tax Credit

Tax Credit (LIHTC 9%)

Property Information

Year Built:
Building Type: Townhome
Groups Served: Family
Total Units: 40
Affordable Units: 40

Affordable Units by Bedroom

2 BR: 7
3 BR: 25
4 BR: 8

Units by Area Median Income

30%: 4
50%: 36

Send us feedback

Known Property Addresses

1		Chaska

Funding Dates & Programs

First known closing: 1/1/2013
Most recent closing: 1/1/2014
Earliest expiration: 1/1/2043
Last Activity: New Construction

MHFA: Housing Tax Credits

MHFA: Housing Tax Credits 9%
Close Date: 1/1/2013
Estimated Expiration: 1/1/2043

Known Property Identifiers

HousingLink: 10352
MHFATC9: D6715
HUDLIHTC: MNA2014035
HUDLIHTC9: MNA20171010

HousingLink

Streams

Return to main site

Property Detail

About Streams

Village Townhouses

Multiple addresses listed at bottom of page

Funding Categories

Project-Based Subsidy

Property Information

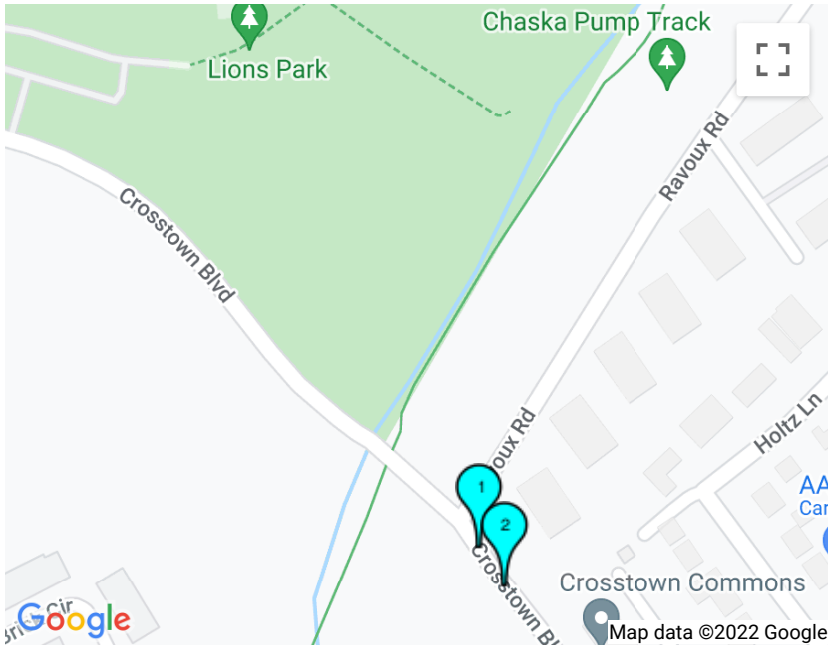
Year Built: 1981
Building Type: Townhome
Groups Served: Family
Total Units: 28
Affordable Units: 28

Affordable Units by Bedroom

2 BR: 20
3 BR: 8

Units by Area Median Income

30%: 28



Housing+Transit Cost Walk Score®: 44 Send us feedback

Listing Summary

BR Size	1st Listing	Last Listing	Low Rent	High Rent	Last Rent
2	01/23/2016	01/23/2016	Subsidized	Subsidized	Subsidized
3	12/17/2019	12/17/2019	Subsidized	Subsidized	Subsidized

Known Property Addresses

1	1111 Crosstown Blvd	Chaska
2	1131 Crosstown Blvd	Chaska

Funding Dates & Programs

First known closing:
Most recent closing: 2/19/1981
Earliest expiration: 2/18/2021
Last Activity: Preservation

HUD: Section 8 (PBA)
Close Date: 2/19/1981
Expiration: 2/18/2021

Known Property Identifiers

HousingLink: 3631
HUD: 800011342

HousingLink

Streams

Return to main site

Property Detail

About Streams

Crosstown Commons

Multiple addresses listed at bottom of page

Funding Categories

Tax Credit (LIHTC 4%)

Property Information

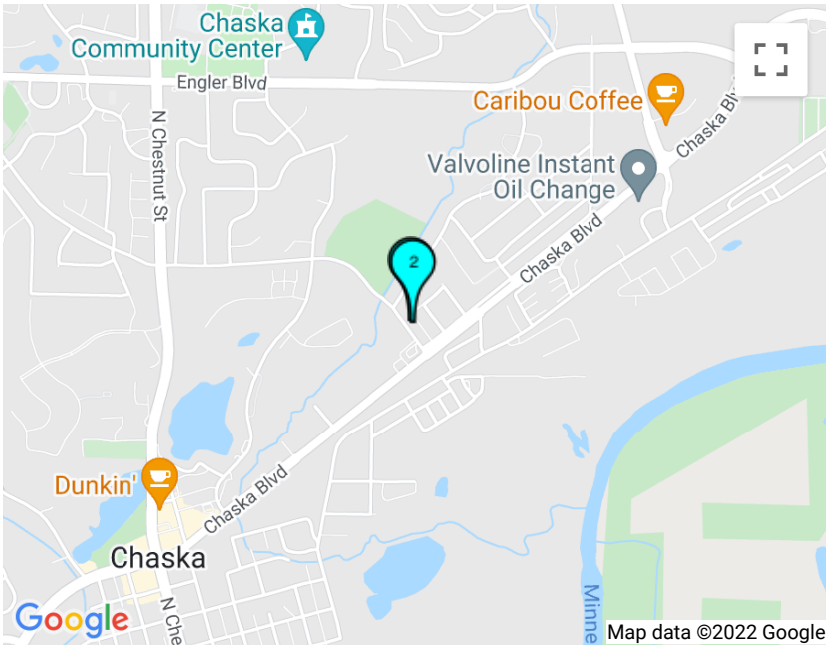
Year Built: 1969
Building Type: Townhome
Groups Served: Family, Elderly, Disabled
Total Units: 34
Affordable Units: 34

Affordable Units by Bedroom

1 BR: 22
2 BR: 12

Units by Area Median Income

50%: 34



Housing+Transit Cost Walk Score®: 36 Send us feedback

Listing Summary

BR Size	1st Listing	Last Listing	Low Rent	High Rent	Last Rent
1	04/15/2007	05/28/2008	$700	None	$700
2	12/01/2006	12/01/2019	$750	$1,062	$915

Known Property Addresses

1	1200 Crosstown Blvd	Chaska
2	1212 Crosstown Blvd	Chaska

Funding Dates & Programs

First known closing: 1/1/2003
Most recent closing: 1/1/2003
Earliest expiration: 1/1/2033
Last Activity: Preservation

MHFA: Housing Tax Credits 4%
Close Date: 1/1/2003
Estimated Expiration: 1/1/2033

Known Property Identifiers

HousingLink: 6079
MHFATC4: D3735
HUDLIHTC4: MNA2004045

HousingLink

Streams

Return to main site

Property Detail

About Streams

Carver County - Scattered

Waconia, MN

Funding Categories

Public Housing

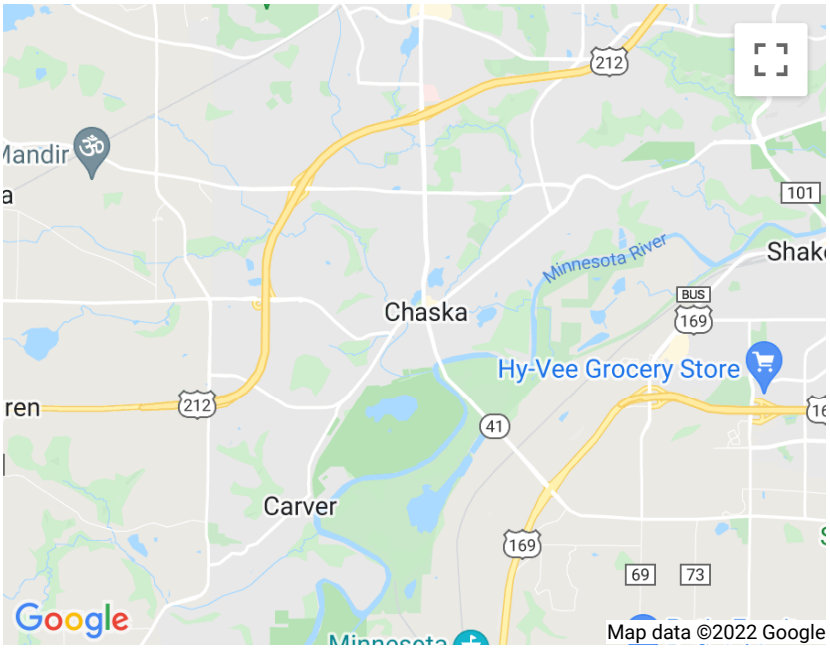
Property Information

Year Built:
Building Type:
Groups Served:
Total Units: 46
Affordable Units: 46

Affordable Units by Bedroom

Units by Area Median Income

30%: 46



Send us feedback

Known Property Addresses

1		Waconia

Funding Dates & Programs

First known closing: 7/31/2003
Most recent closing: 7/31/2003
Earliest expiration:
Last Activity: Preservation

HUDPH: Public Housing
Close Date: 7/31/2003

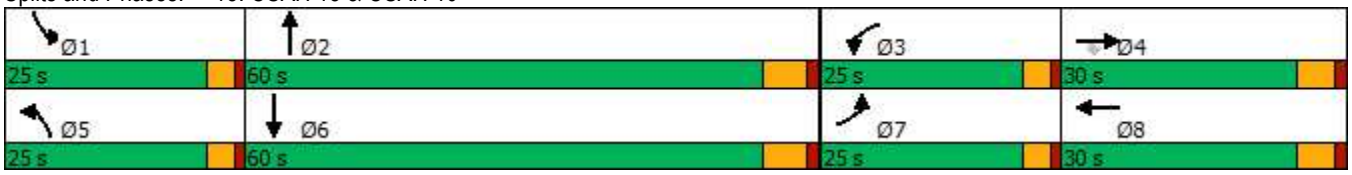
Known Property Identifiers

HousingLink: 11337
HUDPH: MN211000001

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	25	60	25	30	25	60	25	30
Maximum Split (%)	17.9%	42.9%	17.9%	21.4%	17.9%	42.9%	17.9%	21.4%
Minimum Split (s)	13	33.5	11.5	27.5	11.5	32	11.5	27.5
Yellow Time (s)	3	4.5	3	4	3	4.5	3	4
All-Red Time (s)	1	1.5	1	1.5	1	1.5	1	1.5
Minimum Initial (s)	7	15	7	10	7	15	7	10
Vehicle Extension (s)	3	4	3	4	3	4	3	4
Minimum Gap (s)	0.2	2	0.2	0.2	0.2	2	0.2	0.2
Time Before Reduce (s)	0	20	0	0	0	20	0	0
Time To Reduce (s)	0	20	0	0	0	20	0	0
Walk Time (s)		7		7		7		7
Flash Dont Walk (s)		19		15		19		15
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	25	85	110	0	25	85	110
End Time (s)	25	85	110	0	25	85	110	0
Yield/Force Off (s)	21	79	106	134.5	21	79	106	134.5
Yield/Force Off 170(s)	21	60	106	119.5	21	60	106	119.5
Local Start Time (s)	115	0	60	85	115	0	60	85
Local Yield (s)	136	54	81	109.5	136	54	81	109.5
Local Yield 170(s)	136	35	81	94.5	136	35	81	94.5

Intersection Summary	
Cycle Length	140
Control Type	Actuated-Uncoordinated
Natural Cycle	90

Splits and Phases: 15: CSAH 15 & CSAH 10



15: CSAH 15 & CSAH 10

Direction	All
Future Volume (vph)	1139
Total Delay / Veh (s/v)	26
CO Emissions (kg)	1.98
NOx Emissions (kg)	0.39
VOC Emissions (kg)	0.46

Network Totals

Number of Intersections	1
Total Delay / Veh (s/v)	26
CO Emissions (kg)	1.98
NOx Emissions (kg)	0.39
VOC Emissions (kg)	0.46
Performance Index	10.0

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBTL	NBL	SBTL	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	13	37	12	28	12	38	12	28
Maximum Split (%)	14.4%	41.1%	13.3%	31.1%	13.3%	42.2%	13.3%	31.1%
Minimum Split (s)	13	33.5	11.5	27.5	11.5	32	11.5	27.5
Yellow Time (s)	3	4.5	3	4	3	4.5	3	4
All-Red Time (s)	1	1.5	1	1.5	1	1.5	1	1.5
Minimum Initial (s)	7	15	7	10	7	15	7	10
Vehicle Extension (s)	3	4	3	4	3	4	3	4
Minimum Gap (s)	0.2	2	0.2	0.2	0.2	2	0.2	0.2
Time Before Reduce (s)	0	20	0	0	0	20	0	0
Time To Reduce (s)	0	20	0	0	0	20	0	0
Walk Time (s)		7		7		7		7
Flash Dont Walk (s)		19		15		19		15
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	13	50	62	0	12	50	62
End Time (s)	13	50	62	0	12	50	62	0
Yield/Force Off (s)	9	44	58	84.5	8	44	58	84.5
Yield/Force Off 170(s)	9	25	58	69.5	8	25	58	69.5
Local Start Time (s)	77	0	37	49	77	89	37	49
Local Yield (s)	86	31	45	71.5	85	31	45	71.5
Local Yield 170(s)	86	12	45	56.5	85	12	45	56.5

Intersection Summary	
Cycle Length	90
Control Type	Actuated-Uncoordinated
Natural Cycle	90

Splits and Phases: 15: CSAH 15 & CSAH 10

15: CSAH 15 & CSAH 10

Direction	All
Future Volume (vph)	1139
Total Delay / Veh (s/v)	15
CO Emissions (kg)	1.77
NOx Emissions (kg)	0.35
VOC Emissions (kg)	0.41

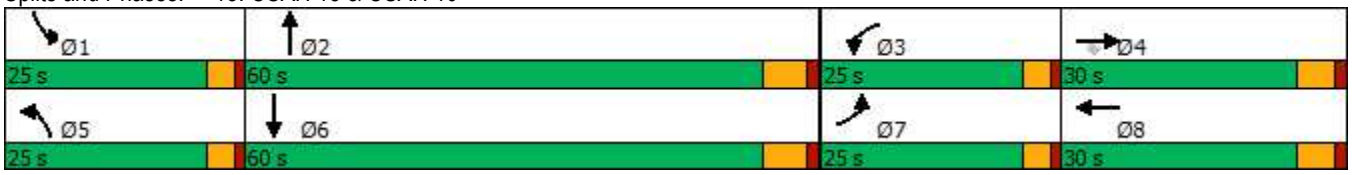
Network Totals

Number of Intersections	1
Total Delay / Veh (s/v)	15
CO Emissions (kg)	1.77
NOx Emissions (kg)	0.35
VOC Emissions (kg)	0.41
Performance Index	6.6

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	25	60	25	30	25	60	25	30
Maximum Split (%)	17.9%	42.9%	17.9%	21.4%	17.9%	42.9%	17.9%	21.4%
Minimum Split (s)	13	33.5	11.5	27.5	11.5	32	11.5	27.5
Yellow Time (s)	3	4.5	3	4	3	4.5	3	4
All-Red Time (s)	1	1.5	1	1.5	1	1.5	1	1.5
Minimum Initial (s)	7	15	7	10	7	15	7	10
Vehicle Extension (s)	3	4	3	4	3	4	3	4
Minimum Gap (s)	0.2	2	0.2	0.2	0.2	2	0.2	0.2
Time Before Reduce (s)	0	20	0	0	0	20	0	0
Time To Reduce (s)	0	20	0	0	0	20	0	0
Walk Time (s)		7		7		7		7
Flash Dont Walk (s)		19		15		19		15
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	25	85	110	0	25	85	110
End Time (s)	25	85	110	0	25	85	110	0
Yield/Force Off (s)	21	79	106	134.5	21	79	106	134.5
Yield/Force Off 170(s)	21	60	106	119.5	21	60	106	119.5
Local Start Time (s)	115	0	60	85	115	0	60	85
Local Yield (s)	136	54	81	109.5	136	54	81	109.5
Local Yield 170(s)	136	35	81	94.5	136	35	81	94.5

Intersection Summary	
Cycle Length	140
Control Type	Actuated-Uncoordinated
Natural Cycle	90

Splits and Phases: 15: CSAH 15 & CSAH 10



15: CSAH 15 & CSAH 10

Direction	All
Future Volume (vph)	1139
Total Delay / Veh (s/v)	26
CO Emissions (kg)	1.98
NOx Emissions (kg)	0.39
VOC Emissions (kg)	0.46

Network Totals

Number of Intersections	1
Total Delay / Veh (s/v)	26
CO Emissions (kg)	1.98
NOx Emissions (kg)	0.39
VOC Emissions (kg)	0.46
Performance Index	10.0

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBTL	NBL	SBTL	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	13	37	12	28	12	38	12	28
Maximum Split (%)	14.4%	41.1%	13.3%	31.1%	13.3%	42.2%	13.3%	31.1%
Minimum Split (s)	13	33.5	11.5	27.5	11.5	32	11.5	27.5
Yellow Time (s)	3	4.5	3	4	3	4.5	3	4
All-Red Time (s)	1	1.5	1	1.5	1	1.5	1	1.5
Minimum Initial (s)	7	15	7	10	7	15	7	10
Vehicle Extension (s)	3	4	3	4	3	4	3	4
Minimum Gap (s)	0.2	2	0.2	0.2	0.2	2	0.2	0.2
Time Before Reduce (s)	0	20	0	0	0	20	0	0
Time To Reduce (s)	0	20	0	0	0	20	0	0
Walk Time (s)		7		7		7		7
Flash Dont Walk (s)		19		15		19		15
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	13	50	62	0	12	50	62
End Time (s)	13	50	62	0	12	50	62	0
Yield/Force Off (s)	9	44	58	84.5	8	44	58	84.5
Yield/Force Off 170(s)	9	25	58	69.5	8	25	58	69.5
Local Start Time (s)	77	0	37	49	77	89	37	49
Local Yield (s)	86	31	45	71.5	85	31	45	71.5
Local Yield 170(s)	86	12	45	56.5	85	12	45	56.5

Intersection Summary	
Cycle Length	90
Control Type	Actuated-Uncoordinated
Natural Cycle	90

Splits and Phases: 15: CSAH 15 & CSAH 10

15: CSAH 15 & CSAH 10

Direction	All
Future Volume (vph)	1139
Total Delay / Veh (s/v)	15
CO Emissions (kg)	1.77
NOx Emissions (kg)	0.35
VOC Emissions (kg)	0.41

Network Totals

Number of Intersections	1
Total Delay / Veh (s/v)	15
CO Emissions (kg)	1.77
NOx Emissions (kg)	0.35
VOC Emissions (kg)	0.41
Performance Index	6.6

Traffic Safety Benefit-Cost Calculation

Highway Safety Improvement Program (HSIP) Reactive Project

DEPARTMENT OF TRANSPORTATION

A. Roadway Description

Route	CSAH 10	**District**	Metro	**County**	Carver
Begin RP		**End RP**		**Miles**	0.795
Location	CSAH 10 (Engler Blvd) between Park Ridge Dr and CSAH 15 (Audubon Rd)				

B. Project Description

Proposed Work	Reconstruction of CSAH 10 to 2-lane divided urban section, turn lane additions, trail and		
Project Cost*	$6,810,000	**Installation Year**	2026
Project Service Life	20 years	**Traffic Growth Factor**	2.0%

** exclude Right of Way from Project Cost*

C. Crash Modification Factor

0.29	**Fatal (K) Crashes**	**Reference**	ID 2219
0.29	**Serious Injury (A) Crashes**		
0.29	**Moderate Injury (B) Crashes**	**Crash Type**	All (Install Raised Median)
0.29	**Possible Injury (C) Crashes**		
0.29	**Property Damage Only Crashes**		www.CMFclearinghouse.org

D. Crash Modification Factor (optional second CMF)

	Fatal (K) Crashes	**Reference**	
	Serious Injury (A) Crashes		
	Moderate Injury (B) Crashes	**Crash Type**	
	Possible Injury (C) Crashes		
	Property Damage Only Crashes		www.CMFclearinghouse.org

E. Crash Data

Begin Date	1/1/2019	**End Date**	12/31/2021	3 years
Data Source	MnDOT			

Crash Severity	**All (Install Raised Median)**	**< optional 2nd CMF >**
K crashes	0	
A crashes	0	
B crashes	2	
C crashes	0	
PDO crashes	6	

F. Benefit-Cost Calculation

$2,884,419	**Benefit (present value)**	**B/C Ratio = 0.43**
$6,810,000	**Cost**	

Proposed project expected to reduce 2 crashes annually, 0 of which involving fatality or serious injury.

F. Analysis Assumptions

Crash Severity	Crash Cost
K crashes	$1,500,000
A crashes	$750,000
B crashes	$230,000
C crashes	$120,000
PDO crashes	$13,000

Link: mndot.gov/planning/program/appendix_a.html

Real Discount Rate	0.7%
Traffic Growth Rate	2.0%
Project Service Life	20 years

G. Annual Benefit

Crash Severity	Crash Reduction	Annual Reduction	Annual Benefit
K crashes	0.00	0.00	$0
A crashes	0.00	0.00	$0
B crashes	1.42	0.47	$108,867
C crashes	0.00	0.00	$0
PDO crashes	4.26	1.42	$18,460
			$127,327

H. Amortized Benefit

Year	Crash Benefits	Present Value
2026	$127,327	$127,327
2027	$129,873	$128,970
2028	$132,471	$130,635
2029	$135,120	$132,322
2030	$137,822	$134,030
2031	$140,579	$135,760
2032	$143,391	$137,513
2033	$146,258	$139,288
2034	$149,183	$141,086
2035	$152,167	$142,908
2036	$155,210	$144,753
2037	$158,315	$146,621
2038	$161,481	$148,514
2039	$164,711	$150,431
2040	$168,005	$152,373
2041	$171,365	$154,340
2042	$174,792	$156,333
2043	$178,288	$158,351
2044	$181,854	$160,395
2045	$185,491	$162,466
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0

Total = $2,884,419

CMF / CRF Details

CMF ID: 2219

Install raised median

Description:

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

Category: Access management

Study: ***Correlating Access Management to Crash Rate, Severity, and Collision Type*****, Schultz et al., 2008**

Star Quality Rating:	★★★★☆

Crash Modification Factor (CMF)	
Value:	0.29
Adjusted Standard Error:	
Unadjusted Standard Error:	0.184

Crash Reduction Factor (CRF)	
Value:	70.77 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	

Unadjusted Standard Error:	18.37

Applicability

Crash Type:	All
Crash Severity:	All
Roadway Types:	Principal Arterial Other
Number of Lanes:	
Road Division Type:	
Speed Limit:	
Area Type:	Urban
Traffic Volume:	1390 to 51200 *Average Daily Traffic (ADT)*
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:	2002 to 2004
Municipality:	
State:	UT

Country:	
Type of Methodology Used:	7
Sample Size Used:	525

Other Details

Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Dec-01-2009
Comments:	

This site is funded by the U.S. Department of Transportation Federal Highway Administration and maintained by the University of North Carolina Highway Safety Research Center

Crash Case Listing

CSAH 10 - Park Ridge to CSH 15

Report Version 1.0
February 2020

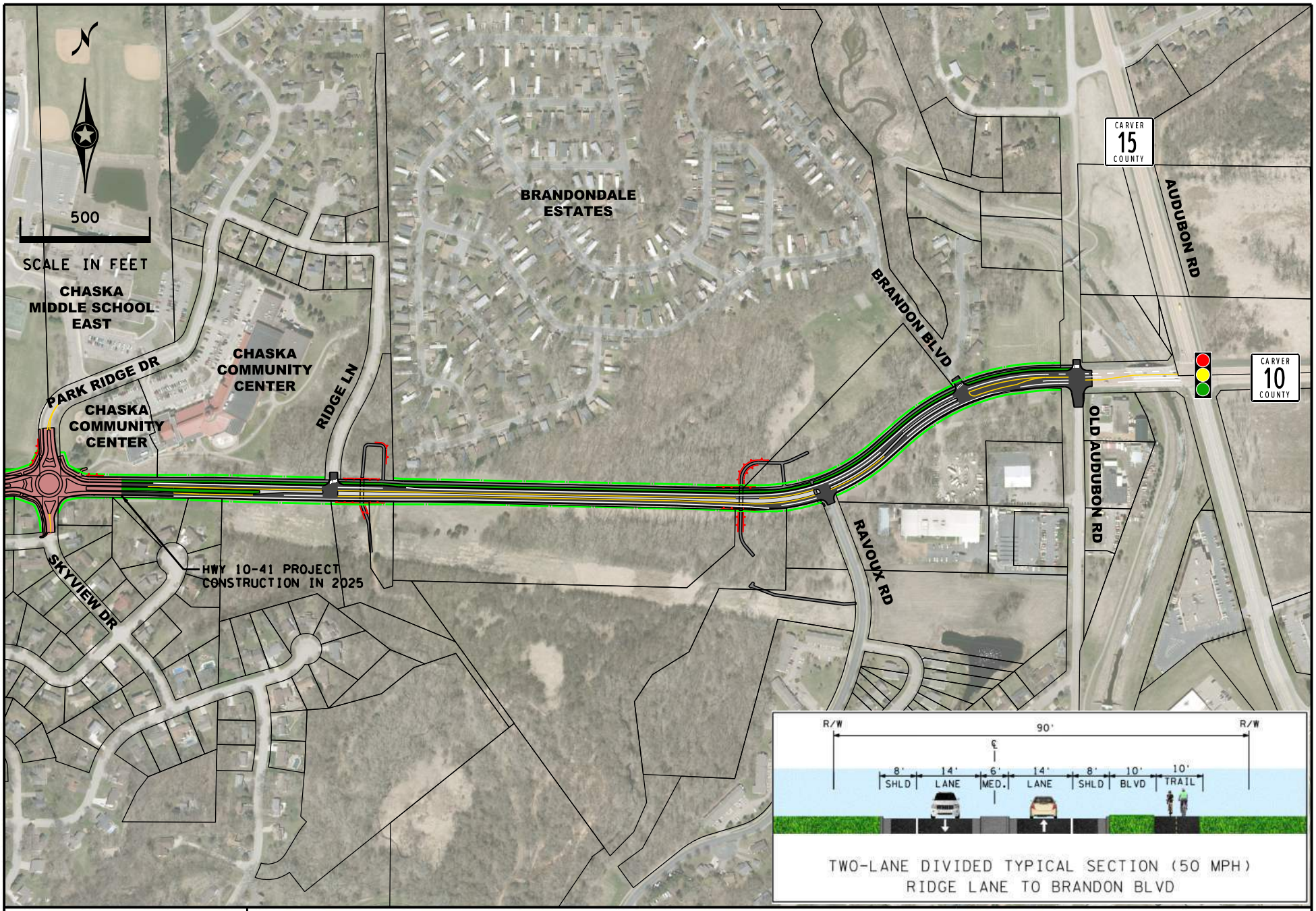
Route System	Route Number	Measure	Co	City	Incident Number	Date	Time	Day of Week	Basic Type	Num Veh	Sev
04-CSAH	10	23.213	10	Chaska	00758339	10/30/19	1918	WED	Other	1	N
04-CSAH	10	23.647	10	Chaska	00973765	11/15/21	1432	MON	Angle	2	N
04-CSAH	10	23.814	10	Chaska	00935135	08/19/21	0457	THU	Angle	2	C
04-CSAH	15	0.275	10	Chaska	00819795	07/15/20	1435	WED	Rear End	2	N
04-CSAH	15	0.278	10	Chaska	00942525	09/23/21	2051	THU	Head On	2	C
04-CSAH	15	0.277	10	Chaska	00984537	12/29/21	1713	WED	Angle	2	N
10-MUN	258	0000	10	Chaska	00976540	11/30/21	1624	TUE	Angle	2	N
21-PRIV	9	0.003	10	Chaska	00700919	03/30/19	2050	SAT	Angle	2	N

Selection Filter:

WORK AREA: County('659455') - FILTER: Year('2019','2020','2021') - SPATIAL FILTER APPLIED

Analyst: Jacob Bongard

Notes:



BOLTON & MENK

PROPOSED CONDITIONS

HIGHWAY 10 MODERNIZATION PROJECT - PARK RIDGE DR TO AUDUBON RD

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Carver County
Public Works
11360 Highway 212, Suite 1
Cologne, MN 55322

April 12, 2022

Elaine Koutsoukos
TAB Coordinator
METROPOLITAN COUNCIL
390 Robert St. N
St. Paul, MN 55101

SUBJECT: Highway 10 Chaska Corridor Reconstruction Project Risk Assessment Layout Approval Letter

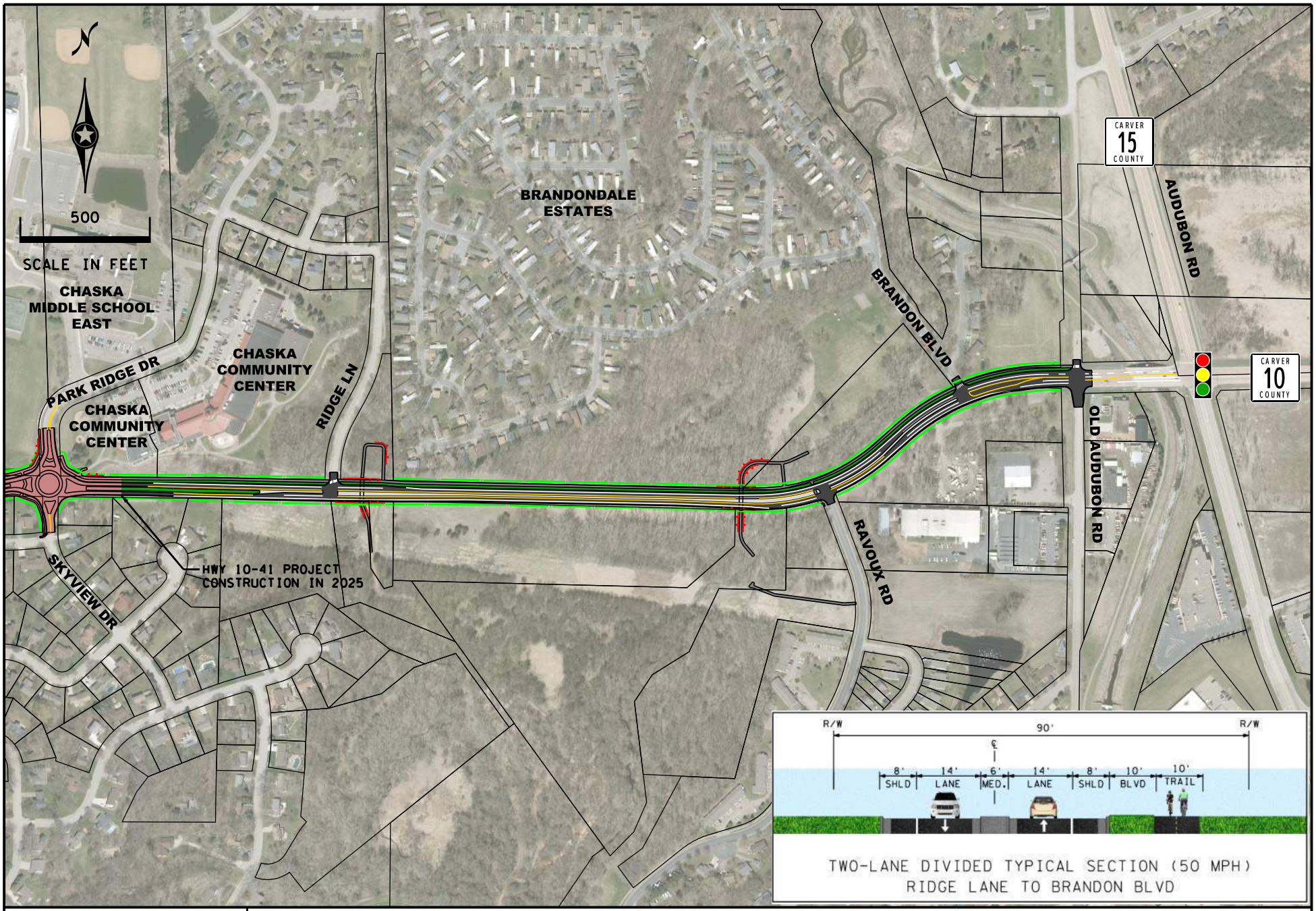
Dear Ms. Koutsoukos:

This letter is to confirm the County's agreement with and approval to date of the attached layout for the Highway 10 Chaska Corridor Reconstruction Project between Ridge Ln. and Audubon Rd. The project has undergone substantial study and coordination with project partners. The County led and partnered on the development of the layout with the City of Chaska through the Highway 10 Corridor Study planning process and is aware of the details specified in the application attachment. The County and City both adopted the Highway 10 Corridor Study, which identifies this project concept.

The City of Chaska provided a letter of support for the project. The County is committed to working with project partners to complete the final layout approval engineering process for the Highway 10 Chaska Corridor Reconstruction Project in the coming months.

Sincerely,

Lyndon Robjent, P.E.
Public Works Director/County Engineer



BOLTON & MENK

PROPOSED CONDITIONS

HIGHWAY 10 MODERNIZATION PROJECT - PARK RIDGE DR TO AUDUBON RD

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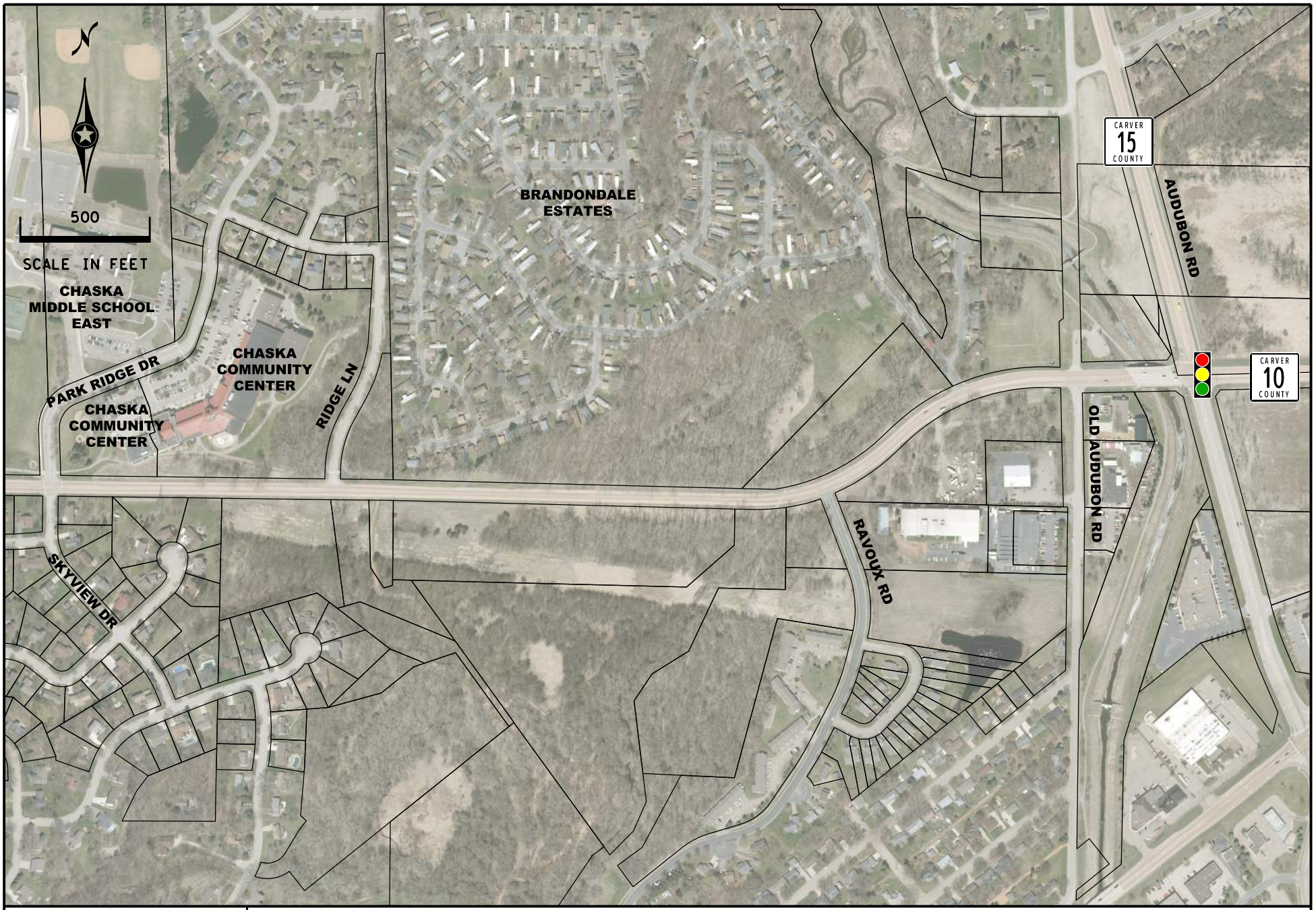

BOLTON & MENK

EXISTING CONDITIONS

HIGHWAY 10 MODERNIZATION PROJECT - PARK RIDGE DR TO AUDUBON RD

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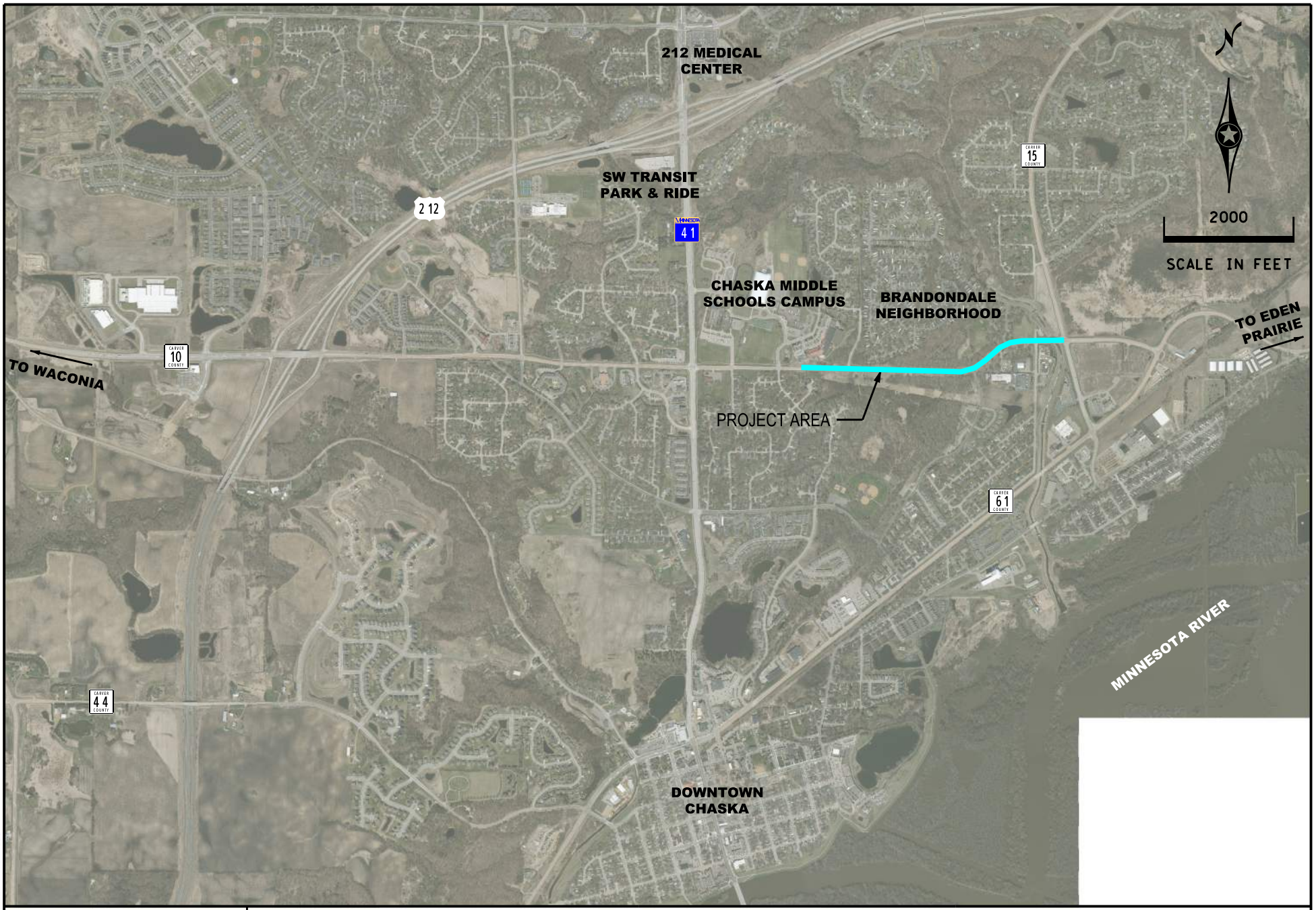
CSAH 10 Existing Conditions – Looking east at Ridge Lane

CSAH 10 Existing Conditions – Existing overgrown pedestrian underpass at Ridge Lane

CSAH 10 at Ravoux Road and Chaska Creek Existing Conditions – Looking west



BOLTON & MENK

PROJECT AREA CONTEXT MAP

HIGHWAY 10 MODERNIZATION PROJECT - PARK RIDGE DR TO AUDBON RD

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CITY OF CHASKA
ONE CITY HALL PLAZA / CHASKA MN 55318-1962

April 5, 2022

Lyndon Robjent, P.E.
Public Works Director, County Engineer
Carver County Public Works
11360 Highway 212, Suite 1, Cologne, MN 55322

Dear Mr. Robjent,

The City of Chaska is pleased to support Carver County's application for the Highway 10 Chaska Corridor Reconstruction Improvement under the Roadway Reconstruction and Modernization category of the Metropolitan Council's 2022 Regional Solicitation for federal transportation funding. The proposed improvement includes reconstruction of County State Aid Highway (CSAH) 10 (Engler Blvd.) from east of Park Ridge Dr. to CSAH 15 (Audubon Rd.) including bicycle and pedestrian improvements throughout the corridor.

The project will retrofit a 2-lane rural highway section to a 2-lane urban divided section, implement access management strategies, and most notably address a critical gap in the bicycle and pedestrian infrastructure. The addition of a multi-use regional trail along this segment of CSAH 10 will provide a connection for disadvantaged populations to connect to the Chaska school and community center complex and will connect to existing trail facilities along Audubon Rd., the Minnesota River Bluffs Regional Trail, and along Highway 41.

The City of Chaska partnered with Carver County, the Minnesota Department of Transportation (MnDOT), and the City of Victoria, on the Highway 10 Corridor Study to identify coordinated roadway improvements to address significant existing transportation mobility, safety, and access issues on the CSAH 10 (Engler Blvd.) corridor through Chaska. The Highway 10 Corridor Study included a robust technical analysis, concept development, concept evaluation, and a diversified and broad public engagement strategy to identify and build consensus for short and long-term roadway concepts and recommendations. The proposed project is consistent with the study, which was adopted by the City and County in 2021.

The City of Chaska supports the County's application for the Highway 10 Chaska Corridor Reconstruction Improvement to the Metropolitan Council's 2022 Regional Solicitation funding program and acknowledges potential City cost-share in the project.

Sincerely,

Mark Windschitl, Mayor
City of Chaska

Highway 10 Chaska Corridor Reconstruction Project

Carver County

Primary Contact:

Angie Stenson
Sr. Transportation Planner
11360 Hwy 212, Suite 1, Cologne, MN 55322
612.360.7422
astenson@co.carver.mn.us

Location & Route:

Highway 10 – Ridge Lane to Highway 15
Chaska, MN

Application Category:

Roadways including Multimodal Elements – **Roadway Reconstruction/Modernization**

Funding Information:

Requested Award Amount: $5,448,000
Local Match: $1,362,000
Project Total: $6,810,000

Match $ Sources:

- Carver County
- City of Chaska

Corridor Fast Facts:

- 0.7 miles of RBTN Tier 2 Regional Trail gap filled by project
- 2 pedestrian underpasses proposed
- Connection to 3 schools and 1 community center provided

2022 *Award* → 2024-25 *Design* → 2026-27 *Construction*

Carver County

Project Description

The Highway 10 Chaska Corridor Reconstruction Project revitalizes and upgrades an existing two-lane rural highway into an urban multi-modal corridor within the heart of Chaska. The existing section has served its purpose for decades as a primary east-west route between the then rural and suburbanizing area of Carver County. Today, this area is well populated and still growing at significant rates. The outdated facility will not only be under capacity due to this forecasted growth in the coming years but lacks any real pedestrian accommodations and is identified as the primary pedestrian network gap within the City.

The project will fill this gap by constructing multi-use trail throughout the project area as well as two pedestrian underpasses crossing Highway 10 and providing connection to area parks, neighborhoods, and Downtown Chaska. The roadway will be updated to a two-lane divided urban section to improve clear zone safety, calm traffic speeds, and add urban drainage and water treatment opportunities. Intersection and pedestrian scale lighting are included at key locations as well as a rebuilt traffic signal at Highway 15.

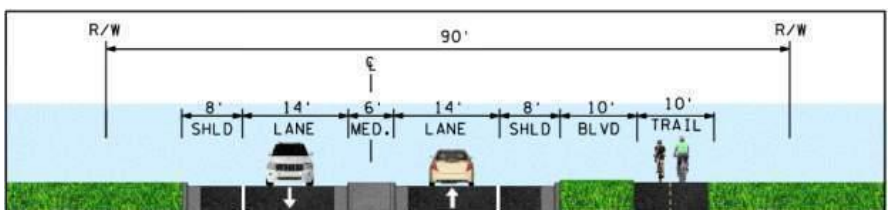
Project Benefits/Regional Significance

The project completes the first link of regional trail connecting the Minnesota River Bluffs Regional Trail to the planned regional trail following the Highway 10 alignment between Chaska and Waconia, with linking branches connecting Victoria and Carver to the planned network. This segment of Highway 10 carries high volumes of commuter traffic which utilizes the Highway 101 River crossing between Shakopee and Carver County and will become the first of many bottlenecks along the corridor if no improvements are made. Highway 10 is the premier east-west non-trunk highway roadway in Carver County making investment in this key section of the roadway a forward-thinking commitment.

Existing typical section – between Ravoux Rd. and Ridge Ln.

Part of a Bigger Picture

A corridor study of Highway 10 identified this segment of Highway 10 as a priority pedestrian network gap. Completing this gap has proven elusive due to topography and potential impacts as well as no identified vision. The study performed extensive outreach to all stakeholders before determining the vision for this segment of Highway 10. This vision was approved by both Carver County and the City of Chaska who have partnered in pursuit of funding to complete this important project.



Proposed typical section