Application

04774 - 2016 Roadway Modernization

05237 - Highway 10/169 Improvements - Fairoak Area | City of Anoka

Regional Solicitation - Roadways Including Multimodal Elements

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

Organization Information

Name:	ANOKA, CITY OF

Jurisdictional Agency (if different):	
Organization Type:	City
Organization Website:	www.ci.anoka.mn.us
Address:	2015 1ST AVE N

*	ANOKA	Minnesota	55303
	City	State/Province	Postal Code/Zip

County:	Anoka
Phone:*	763-576-2700 Ext.
Fax:	
PeopleSoft Vendor Number	0000020920A2

Project Information

Project Name	Highway 10/169 Improvements - Fairoak Area | City of Anoka
Primary County where the Project is Located	Anoka
Jurisdictional Agency (If Different than the Applicant):	

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

The Highway 10/169 Improvements project is a lower-cost/high-benefit project that will drastically improve reliability, safety, local connectivity, and walkability along Highway 10/169, a non-freeway Principal Arterial. This project is the first of two projects that will remove signalized intersections in the City of Anoka on Highway 10/169 and provide a grade-separated local connection.

Project Area Highway 10/169 Statistics:

- 59,000+ daily cars and trucks

- 4-Lane Expressway

- WB traffic backups exceed 1-mile daily, greater with incidents

- Avg peak hour speeds are 19 mph,60 mph posted speed

- 3X the crash rate and over 4X the severity rate for similar facilities

- The past 10 years have seen 800 crashes, 4 fatal, including 1 pedestrian fatality

Acceptable access and operations cannot be maintained with at-grade improvements. With the signal removal, access management, and redistribution of local trips, the project will reduce crashes by almost 50% and eliminate all pedestrian crashes at the Highway 10/169 and Fairoak Ave intersection.

For residents, Highway 10/169 is a significant barrier. Limited crossing locations, minimal pedestrian facilities and lengthy signal delays result

in pedestrians running across the highway or walking on the shoulder (see existing photos attachment). Many project area residents rely on non-motorized transportation as their only mode of travel.

Extension of Main St (south frontage road) to Cutters Grove, along with the Fairoak underpass, provides a local connection between Fairoak and Main that does not exist today. This new connection will tie highway commercial properties to downtown Anoka and greatly enhance livability of the area while reducing local trips on the arterial highway.

The Main St interchange will include longer ramps to provide standard deceleration/acceleration as well as roundabouts at the ramp terminals. Speeds entering the highway and downtown will be better managed with these improvements.

In 2014, the needs on Highway 10/169 were reassessed with the MnDOT Highway 10 Access Planning Study. The study took a fresh look at the problem and identified high priority/right-sized improvements. Past freeway visions included significant community impacts with high costs. The Highway 10 Access Planning Study received support from MnDOT, Met Council, Anoka County, City of Ramsey, and City of Anoka (see attached support letters).

Removal of the Fairoak traffic signal, is the top Highway 10/169 priority in the study. The City of Anoka has since refined the overall vision ("Anoka Solution" attached) in partnership with MnDOT and Anoka County. This project, as submitted, is true to

the Highway 10 Access Planning Study by correcting safety and congestion issues while yielding a strong return on investment.

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

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

Project Length (Miles) 0.57

Project Funding

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

If yes, please identify the source(s)

Federal Amount $7,000,000.00

Match Amount $19,000,000.00

Minimum of 20% of project total

Project Total $26,000,000.00

Match Percentage 73.08%

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

Source of Match Funds City of Anoka Funds

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: 2021

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

Additional Program Years:

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

Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	$1,100,000.00
Removals (approx. 5% of total cost)	$530,000.00
Roadway (grading, borrow, etc.)	$1,650,000.00
Roadway (aggregates and paving)	$2,840,000.00
Subgrade Correction (muck)	$0.00
Storm Sewer	$680,000.00

Ponds	$200,000.00
Concrete Items (curb & gutter, sidewalks, median barriers)	$840,000.00
Traffic Control	$340,000.00
Striping	$30,000.00
Signing	$60,000.00
Lighting	$200,000.00
Turf - Erosion & Landscaping	$860,000.00
Bridge	$2,740,000.00
Retaining Walls	$8,520,000.00
Noise Wall (do not include in cost effectiveness measure)	$0.00
Traffic Signals	$0.00
Wetland Mitigation	$0.00
Other Natural and Cultural Resource Protection	$0.00
RR Crossing	$0.00
Roadway Contingencies	$3,710,000.00
Other Roadway Elements	$1,020,000.00
Totals	**$25,320,000.00**

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	**Cost**
Path/Trail Construction	$0.00
Sidewalk Construction	$190,000.00
On-Street Bicycle Facility Construction	$0.00
Right-of-Way	$0.00
Pedestrian Curb Ramps (ADA)	$50,000.00
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	$0.00
Pedestrian-scale Lighting	$200,000.00
Streetscaping	$200,000.00
Wayfinding	$0.00
Bicycle and Pedestrian Contingencies	$40,000.00
Other Bicycle and Pedestrian Elements	$0.00
Totals	**$680,000.00**

Specific Transit and TDM Elements

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

Transit Operating Costs

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

Totals

Total Cost	$26,000,000.00
Construction Cost Total	$26,000,000.00
Transit Operating Cost Total	$0.00

Requirements - All Projects

All Projects

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

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

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

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

The project aligns with the following 2040 Transportation Policy Plan goals and strategies:

A.Transportation System Stewardship - A1: The project has been strategically designed to retain the existing Highway 10/169 bridge over Main Street as well as tie into the existing profile at a location where the Thurston Avenue area improvements can be constructed with limited overlap from this project.(Page 2.6)

B.Safety and Security - B1, B4, and B6: These strategies highlight key points of the project including incorporating "safety and security considerations for all modes" of transportation, supporting the state of Minnesota's "vision of moving toward zero traffic fatalities and serious injuries", and using "best practices to provide and improve facilities for safe walking and bicycling". These key points are addressed in our project through the installation of grade-separated facilities for pedestrians and additional trail connections. Signal removal will greatly reduce the number of crashes and risk of fatal or serious injury collisions.(Page 2.7)

C.Access to Destinations - C2, C7, C8, C10, and C16: Installation of the Fairoak Avenue underpass and south frontage road to Main Street will provide continuous local connection from downtown Anoka to the businesses and residences along both sides of the highway for all users. Efficiency and safety of highway traffic will be greatly increased due to 4 highway access closures within the 0.57 mile project length. Pedestrians and bicyclists are being accommodated along with vehicle traffic on the underpass and new frontage system - Highway 10/169 will no longer be a barrier to pedestrians or neighborhoods in this area. Additionally, person throughput and capacity will greatly increase on this high-priority corridor.(Pages 2.8-2.10)

D.Competitive Economy - D1, D2, and D5: Removal of the Fairoak Avenue signal will greatly reduce congestion in the area and increase travel time reliability. Less congestion will allow Highway 10 to better facilitate freight along this key corridor.(Page 2.11)

E.Healthy Environment - E1 and E2: This project is expected to provide significant reduction to greenhouse gas and air pollutant emissions by minimizing idling, starting and stopping all associated with congestion.(Page 2.12)

F.Leveraging Transportation Investments to Guide Land Use - F3 and F6: The local roadway connections achieved as a part of this project greatly enhance the livability of the local area surrounding Highway 10/169.

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.

MnDOT Highway 10 Access Planning Study; Study Report; September 12, 2014 (Pages 58-59, 61, 81, 86, 107-108)
http://www.dot.state.mn.us/metro/projects/hwy10study/pdfs/hwy10accessstudy.pdf

Anoka Solution; 2016

https://www.bolton-menk.com/clients/anoka/hwy10/index.html

Anoka 2030 Comprehensive Plan; (Pages 200, 205)

http://www.ci.anoka.mn.us/vertical/sites/%7B213A9A90-C8E1-49AA-AC02-51D3C4882D33%7D/uploads/%7BBE1EB6A1-2FB5-4F4E-9703-B9CEC81CE912%7D.PDF

List the applicable documents and pages:

Anoka County 2030 Transportation Plan (Pages 3.9-3.11, 3.28-3.29, 3.32)

http://www.anokacounty.us/DocumentCenter/Home/View/354

Anoka County Highway Department; Five-Year Highway Improvement Plan 2011-2015 (Pages 38-39)
https://www.anokacounty.us/DocumentCenter/View/633

Greens of Anoka Redevelopment Master Plan; 2012 (Pages 9, 12, 15)

http://www.ci.anoka.mn.us/vertical/sites/%7B213A9A90-C8E1-49AA-AC02-51D3C4882D33%7D/uploads/FINAL(1).pdf

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

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

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

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

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

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

7.The requested funding amount must be more than or equal to the minimum award and less than or equal to the maximum award. The cost of preparing a project for funding authorization can be substantial. For that reason, minimum federal amounts apply. Other federal funds may be combined with the requested funds for projects exceeding the maximum award, but the source(s) must be identified in the application. Funding amounts by application category are listed below.
***Roadway Expansion:** $1,000,000 to $7,000,000*
***Roadway Reconstruction/ Modernization:** $1,000,000 to $7,000,000*
***Roadway System Management** $250,000 to $7,000,000*
***Bridges Rehabilitation/ Replacement:** $1,000,000 to $7,000,000*

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

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

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

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

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

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

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

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

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

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

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

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

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

Roadways Including Multimodal Elements

1.All roadway and bridge projects must be identified as a Principal Arterial (Non-Freeway facilities only) or A-Minor Arterial as shown on the latest TAB approved roadway functional classification map.

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

Roadway Expansion and Reconstruction/Modernization projects only:

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

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

Bridge Rehabilitation/Replacement projects only:

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

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

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

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

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

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

6. The bridge must have a sufficiency rating less than 80 for rehabilitation projects and less than 50 for replacement projects. Additionally, the bridge must also be classified as structurally deficient or functionally obsolete.

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

Requirements - Roadways Including Multimodal Elements

Project Information-Roadways

County, City, or Lead Agency	City of Anoka
Functional Class of Road	Non-Freeway Principal Arterial
Road System	U.S. Highway
TH, CSAH, MSAS, CO. RD., TWP. RD., CITY STREET	
Road/Route No.	10
i.e., 53 for CSAH 53	
Name of Road	U.S. Highway 10/169
Example; 1st ST., MAIN AVE	
Zip Code where Majority of Work is Being Performed	55303
(Approximate) Begin Construction Date	05/03/2021
(Approximate) End Construction Date	10/31/2022

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

From: **(Intersection or Address)**	Cutters Lane/Highway 10/169
To: **(Intersection or Address)**	West Main Street
DO NOT INCLUDE LEGAL DESCRIPTION	
Or At	
Primary Types of Work	GRADE, AGG BASE, BIT BASE, BIT SURF, SIDEWALK, CURB AND GUTTER, STORM SEWER, LIGHTING, GUARDRAIL, PED RAMPS, BRIDGE
Examples: GRADE, AGG BASE, BIT BASE, BIT SURF, SIDEWALK, CURB AND GUTTER,STORM SEWER, SIGNALS, LIGHTING, GUARDRAIL, BIKE PATH, PED RAMPS, BRIDGE, PARK AND RIDE, ETC.	

BRIDGE/CULVERT PROJECTS (IF APPLICABLE)

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

Expander/Augmentor/Connector/Non-Freeway Principal Arterial

Select one:	Non-Freeway Principal Arterial
Area	0.637
Project Length	0.57
Average Distance	1.1175
Upload Map	1467753556779_Roadway Area Definition.pdf

Reliever: Relieves a Principal Arterial that is a Freeway Facility

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

Reliever: Relieves a Principal Arterial that is a Non-Freeway Facility

Facility being relieved	
Number of hours per day volume exceeds capacity (based on the table below)	9.0

Non-Freeway Facility Volume/Capacity Table

Hour	NB/EB Volume	SB/WB Volume	Capacity	Volume exceeds capacity
12:00am - 1:00am	89	162	1600.0	No
1:00am - 2:00am	120	106	1600.0	No
2:00am - 3:00am	94	74	1600.0	No
3:00am - 4:00am	188	79	1600.0	No
4:00am - 5:00am	476	207	1600.0	No
5:00am - 6:00am	1356	595	1600.0	No
6:00am - 7:00am	2695	1264	1600.0	Yes
7:00am - 8:00am	2771	1975	1600.0	Yes
8:00am - 9:00am	1997	1513	1600.0	Yes
9:00am - 10:00am	1617	1270	1600.0	Yes
10:00am - 11:00am	1511	1201	1600.0	No
11:00am - 12:00pm	1450	1350	1600.0	No
12:00pm - 1:00pm	1530	1429	1600.0	No
1:00pm - 2:00pm	1478	1490	1600.0	No
2:00pm - 3:00pm	1681	1980	1600.0	Yes
3:00pm - 4:00pm	1982	2293	1600.0	Yes
4:00pm - 5:00pm	2199	2133	1600.0	Yes
5:00pm - 6:00pm	1859	1945	1600.0	Yes
6:00pm - 7:00pm	1325	1775	1600.0	Yes
7:00pm - 8:00pm	853	1340	1600.0	No
8:00pm - 9:00pm	681	1055	1600.0	No
9:00pm - 10:00pm	554	769	1600.0	No
10:00pm - 11:00pm	398	471	1600.0	No
11:00pm - 12:00am	224	344	1600.0	No

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

Existing Employment within 1 Mile:	11873
Existing Manufacturing/Distribution-Related Employment within 1 Mile:	2746
Existing Students:	2891
Upload Map	1466356915609_Regional Economy Map.pdf

Measure C: Current Heavy Commercial Traffic

Location:	Between TH 10 at Fairoak and TH 10 at Main Street
Current daily heavy commercial traffic volume:	2570
Date heavy commercial count taken:	2016

Measure D: Freight Elements

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

Highway 10/169 is an important freight corridor and is designated as part of the National Truck Network and as a High Priority Interregional Corridor connecting the Minneapolis/St Paul to St. Cloud metropolitan areas. Today, the highway carries up to 2570 heavy vehicles a day through the area consisting of regional and locally destined trips.

The Highway 10/169 Improvement project will improve the efficiency and safety of moving freight along this regional corridor in the following ways:

- Signal removal and grade-separation of Fairoak will allow freight more reliable connectivity through this congested segment of Highway 10. Heavy vehicles currently traveling this route experience extremely unreliable travel times due to signal delays, congestion due to long back-ups, and frequent crashes. Average pm peak hour speeds range from 19 to 48 MPH. The project will increase reliability thereby reducing idling and frequent starting/stopping. Haulers will benefit from better fuel economy.
- The acceleration lane for NB Main Street to WB Highway 10 entrance will be lengthened from 300' to 1100' to allow heavy vehicles to merge into traffic at proper speeds.

- The connection of a continuous south frontage road and the planned access closures will remove local heavy vehicle traffic and corresponding conflict points from the highway.

Measure A: Current Daily Person Throughput

Location	Between TH 10 at Fairoak and TH 10 at Main Street
Current AADT Volume	59000
Existing Transit Routes on the Project	3
For New Roadways only, list transit routes that will be moved to the new roadway	
Upload Transit Map	1467312699453_Transit Connections Map.pdf

Response: Current Daily Person Throughput

Average Annual Daily Transit Ridership	0
Current Daily Person Throughput	76700.0

Measure B: 2040 Forecast ADT

Use Metropolitan Council model to determine forecast (2040) ADT volume	Yes
If checked, METC Staff will provide Forecast (2040) ADT volume	
OR	
Identify the approved county or city travel demand model to determine forecast (2040) ADT volume	
Forecast (2040) ADT volume	

Measure A: Project Location and Impact to Disadvantaged Populations

Select one:

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

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

Majority of the residential areas adjacent to the highway (north and south), are higher density including several multiple dwellings, apartments, and townhouses. The neighborhood to the north of the project is in fair to poor condition and consists of approximately half single family properties and half multi-family properties. According to city data the project area is home to a 20% non-white race population. The project area also is the community for many elderly residents.

The unemployment rate in the project area is 6% with 15% of residents below the poverty level. Many residents in the project area rely heavily on non-motorized transportation and transit as sole means of transportation. The populations and housing types coupled with the commercial destinations on both the north and south sides of Highway 10/169 within the project area result in a high-level of bicycle and foot traffic despite existing nonconducive conditions.

Today, no pedestrian facilities exist along Highway 10/169 within the project area and very limited facilities exist on local connecting roadways. The lack of pedestrian routes along Highway 10/169 to connect destinations and origins deter pedestrians from making longer walks to either Fairoak Avenue or Thurston Avenue to utilize the controlled traffic signal crossings. A significant number of pedestrians choose to dart across the highway, accepting dangerous gaps which have led to eight pedestrian crashes (1 fatal) within the project area in the past ten years.

Several fast food restaurants, as well as Super America and the municipal liquor store, are destinations on both sides of Highway 10/169 that generate a lot of foot traffic within the project area. These destinations are heavily focused around the

Fairoak Avenue intersection. The existing at-grade intersection requires a pedestrian to cross six lanes of traffic (over 100' of exposure) and often results in inconvenient wait times as the traffic signal gives priority to the mainline.

The lack of continuous pedestrian routes and safe, convenient crossings of Highway 10/169 makes access to transit stops in the project area difficult. Two Metro Transit bus stops are located within the project area. Both are located on the north side of Highway 10/169 along Jacob Lane, resulting in severed access to transit for the many high density residential areas south of the highway.

The Highway 10/169 Improvement project will not only provide continuous pedestrian routes between destinations and origins within the project area but also provide congestion relief and increased safety on the highway to increase the reliability of transit on Highway 10/169. Current average pm peak hour speeds are 19 mph in a 60 mph posted speed zone.

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

Upload Map 1467753593538_Socio-Economic Conditions.pdf

Measure B: Affordable Housing

City/Township	Segment Length in Miles (Population)
Anoka	0.57
	1

Total Project Length

Total Project Length (Total Population) 0.57

Affordable Housing Scoring - To Be Completed By Metropolitan Council Staff

City/Township	Segment Length (Miles)	Total Length (Miles)	Score	Segment Length/Total Length	Housing Score Multiplied by Segment percent
		0	0	0	0

Affordable Housing Scoring - To Be Completed By Metropolitan Council Staff

Total Project Length (Miles)	0.57
Total Housing Score	0

Measure A: Year of Roadway Construction

Year of Original Roadway Construction or Most Recent Reconstruction	Segment Length	Calculation	Calculation 2
1964	0.57	1119.48	1964.0
	1	**1119**	**1964**

Average Construction Year

Weighted Year	1964

Total Segment Length (Miles)

Total Segment Length	0.57

Measure B: Geometric, Structural, or Infrastructure Improvements

Improving a non-10-ton roadway to a 10-ton roadway:

Response (Limit 700 characters; approximately 100 words)

Improved clear zones or sight lines:	Yes

Currently, westbound Highway 10/169 vehicles approach the Fairoak Avenue traffic signal on a sharp horizontal curve, disrupting sightline of the intersection from less than 1000' back. 133 rear-end crashes (2013-2015) have occurred here. Grade separation of Fairoak Ave will eliminate this issue.

Response (Limit 700 characters; approximately 100 words)

Closing 4 highway access points will address difficult sightlines between frontage road traffic and highway traffic. Close proximity of the highway and south frontage road (25?) makes it difficult for frontage road traffic to see vehicles turning off the highway. Likewise, at high speeds it is difficult for traffic turning off the highway to see if vehicles or pedestrians are present.

Improved roadway geometrics:

Yes

At-grade intersections and access points on Highway 10/169 cause several issues including poor sightlines, largely differing vehicle speeds, and short acceleration and weaving conditions. This project will remove 4 highway access points within 0.57 miles.

Response (Limit 700 characters; approximately 100 words)

The eastbound exit ramp to Main Street will be extended from 800' to 1100' for increased deceleration leading into the new south interchange roundabout. This will provide speed control in an area that typically sees speeds exceeding the posted limit into downtown.

The acceleration lane for westbound Highway 10/169 entrance ramp will be extended from 300' to 1100', an appropriate length for vehicles to safely merge into 60 mph+ traffic.

Access management enhancements:

Yes

Response (Limit 700 characters; approximately 100 words)

Highway 10/169 has numerous access points that cumulatively degrade the safety and performance of the corridor. The Main Street (south frontage road) extension will connect the gap in the local system between businesses south of the highway and downtown Anoka, allowing for closure of several highway access points and grade-separation of Fairoak Avenue. Closure of 4 highway access points as part of this project will reduce crashes up to 50% in the project area.

Ultimately, the project will result in the elimination of all access in this segment of Highway 10/169, limiting access to only the Main Street interchange and Thurston Avenue.

Vertical/horizontal alignments improvements:

Yes

The proposed Highway 10/169 profile will tie into and preserve the existing Main Street bridge. Similarly, the future Highway 10/169 Thurston Avenue overpass will tie in to the west end of this project, resulting in minimal disruption to this project.

Response (Limit 700 characters; approximately 100 words)

Use of concrete center barrier and guardrail enables narrowing the highway footprint, allowing room for the Main Street (south frontage road) extension and limiting community impacts.

Lengthening the eastbound exit ramp from 800' to 1100' provides better deceleration distance for the posted speed, resolving the current issue of vehicles continuing into downtown Anoka at high speeds (also aided by the roundabout intersection).

Improved stormwater mitigation:

Yes

Response (Limit 700 characters; approximately 100 words)

Stormwater management will consider all potential threats to the Mississippi and the Rum Rivers, floodplains, wetlands, and local drainage ways. Open spaces between the ramps and highway will be utilized for stormwater management. Stormwater runoff will be conveyed from the roadway to the stormwater management system via curb and gutter and storm sewer.

Given the tight project limits, innovative stormwater management will be used to construct linear bioretention features to infiltrate stormwater, reduce pollutants and provide flood control. Native seeding will increase runoff volume retention, maximize nutrient uptake and help stormwater drain like it did before urbanization.

Signals/lighting upgrades:

Yes

Response (Limit 700 characters; approximately 100 words)

Lighting will be upgraded throughout the project including the Highway 10/169 corridor, Fairoak Avenue underpass, south frontage road and the roundabout interchange intersections from existing high pressure sodium lights to exceptional energy efficient LED lights. The most recognizable lighting improvements will be along the local connections such as Fairoak Avenue, the south frontage road and West Main Street where limited lighting exists today. Reconstruction of these local connections include upgrading to an urban design that involves pedestrian scale lighting and lighting levels that accommodate high levels of pedestrian activities.

Other Improvements

Yes

The safety and mobility improvements achieved by the Highway 10/169 Improvements project cannot be overemphasized. With almost 800 crashes on this segment of Highway 10 in the last ten years, the result is a crash rate more than 3x that of similar metro area facilities.

Response (Limit 700 characters; approximately 100 words)

The City of Anoka is committed to building a local network that supports needed improvements to the arterial highway. To set up a local system in preparation of the Highway 10/169 Improvement project, the city will already have invested approximately $6 million in city funds for $8.2 million in construction for completion of 3 out of 8 projects identified in the Anoka Solution (see attached Construction Phase plan).

Measure A: Congestion Reduction/Air Quality

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

27.5	0	27.5	5024	138160.0	No modeling was done for Build scenario as access at TH 10 and Fairoak is removed under Build. Intersection delay assumed to be zero with underpass. Additionally, no results were determined for Build emissions as Synchro does not provide emissions results for unsignalized intersections.	1466430666171_Existing PM - Report.pdf

Total Delay

Total Peak Hour Delay Reduced	138160.0

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

Total (CO, NOX, and VOC) Peak Hour Emissions Per Vehicle without the Project (Kilograms):	Total (CO, NOX, and VOC) Peak Hour Emissions Per Vehicle with the Project (Kilograms):	Total (CO, NOX, and VOC) Peak Hour Emissions Reduced Per Vehicle by the Project (Kilograms):	Volume (Vehicles Per Hour):	Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):
0.003	0	0.003	5024.0	15.072
0	**0**		**5024**	**15**

Total

Total Emissions Reduced:	15.072
Upload Synchro Report	1467214854157_Existing PM - Report.pdf

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

Total Parallel Roadways

Emissions Reduced on Parallel Roadways	0
Upload Synchro Report	

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)	

Transit Projects Not Requiring Construction

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

Check Here if Your Transit Project Does Not Require Construction

Measure A: Risk Assessment

1)Project Scope (5 Percent of Points)

Meetings or contacts with stakeholders have occurred	Yes

100%

Stakeholders have been identified

40%

Stakeholders have not been identified or contacted

0%

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

Layout or Preliminary Plan completed	Yes

100%

Layout or Preliminary Plan started

50%

Layout or Preliminary Plan has not been started

0%

Anticipated date or date of completion

3)Environmental Documentation (5 Percent of Points)

EIS

EA Yes

PM

Document Status:

Document approved (include copy of signed cover sheet)

100%

Document submitted to State Aid for review

75% date submitted

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

50%

Document not started Yes

0%

Anticipated date or date of completion/approval 12/31/2018

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

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

100%

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

80%

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

40%

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

0%

Anticipated date or date of completion of historic/archeological review: 12/31/2018

Project is located on an identified historic bridge

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

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

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

100%

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

100%

Section 4f resources present within the project area, but no known adverse effects	Yes
80%	
Project impacts to Section 4f/6f resources likely coordination/documentation has begun	
50%	
Project impacts to Section 4f/6f resources likely coordination/documentation has not begun	
30%	
Unsure if there are any impacts to Section 4f/6f resources in the project area	
0%	

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

Right-of-way, permanent or temporary easements not required	
100%	
Right-of-way, permanent or temporary easements has/have been acquired	
100%	
Right-of-way, permanent or temporary easements required, offers made	
75%	
Right-of-way, permanent or temporary easements required, appraisals made	
50%	
Right-of-way, permanent or temporary easements required, parcels identified	Yes
25%	
Right-of-way, permanent or temporary easements required, parcels not identified	
0%	
Right-of-way, permanent or temporary easements identification has not been completed	
0%	
Anticipated date or date of acquisition	12/31/2019

7)Railroad Involvement (25 Percent of Points)

No railroad involvement on project	Yes
100%	
Railroad Right-of-Way Agreement is executed (include signature page)	100%
Railroad Right-of-Way Agreement required; Agreement has been initiated	
60%	

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

40%

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

0%

Anticipated date or date of executed Agreement

8)Interchange Approval (15 Percent of Points)*

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

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

100%

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

100%

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

0%

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

Construction plans completed/approved (include signed title sheet)

100%

Construction plans submitted to State Aid for review

75%

Construction plans in progress; at least 30% completion

50%

Construction plans have not been started — Yes

0%

Anticipated date or date of completion — 12/31/2019

10)Letting

Anticipated Letting Date — 02/01/2021

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

Crash Modification Factor Used: — 0.58

Rationale for Crash Modification Selected:

The crash modification methodology was based on several different factors. Since each portion of the project involved a different reduction in crashes based on the improvement, each portion was looked at separately before combining into an overall Crash Modification Factor (CMF).

Removing the traffic signal at Fairoak Ave and converting the full access intersection to an underpass implies that crossing and turning crash types will no longer occur due to the grade separation. These crash types were removed from the TH 10 and Fairoak Ave intersection (CMF = 0.00).

The reported crashes at both side-street stop controlled ramps (Main Street) were modified using CMF 227 for converting a minor road stop to a roundabout (speed reduction/circular geometry). This CMF is 0.56.

The project extends the freeway portion of TH 10 to Cutters Lane. The analysis assumed that EB TH 10 from Cutters Lane to Fairoak would revert to the average freeway crash rate of 1.15 crashes/MVM from 1.72 and likewise for WB TH 10 (just east of the 7th Ave exit to Fairoak) from 1.99 to 1.15. WB TH 10 was analyzed to 7th Ave due to normal queues extending this distance during afternoon peak hours, causing an increase in crashes. The parallel acceleration lane extension will also help normalize crashes.

The overall CMF was computed by comparing the number of crashes before and after these reductions were taken.

(Limit 1400 Characters; approximately 200 words)

Project Benefit ($) from B/C Ratio	$20,620,291.00
Worksheet Attachment	1467138131371_B-C Worksheet.xls

Roadway projects that include railroad grade-separation elements:

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

Measure A: Multimodal Elements and Existing Connections

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

Highway 10/169 is a challenging corridor for non-motorized travelers due to high traffic volumes and speeds. Currently no pedestrian facilities exist along the highway within the project area. Still pedestrians frequently walk in the ditches and alongside the highway, running across the highway at un-signalized and unmarked locations. This is caused by adjacent pedestrian destinations and land uses conducive to non-motorized travel. Many pedestrians do not cross Highway 10/169 properly due to delays or inconvenience. There have been 8 pedestrian and bicycle crashes (1 fatal) in the project area within the last 10 years.

This Highway 10/169 Improvement project pedestrian system enhancement elements:

- The Fairoak Avenue underpass will include 8' sidewalks on each side and provide a grade-separated crossing of Highway 10/169.

- Continuous walkway along the south frontage road will connect new and existing pedestrian facilities along Fairoak Avenue to an existing walkway on West Main Street, establishing a connected route into the downtown core business district.

- The south ramp terminal roundabout will provide safe and convenient pedestrian facilities that connect into the south frontage road trail and the trail on West Main Street providing another grade-separated underpass of Highway 10/169.

- Elevating Highway 10/169, adding a center barrier and a perimeter fence alongside Highway 10/169 in the project area will eliminate the ability for pedestrians to continue running across the highway at unmarked at-grade locations.

This segment of Highway 10/169 includes several transit routes; two bus routes and the Northstar Commuter Rail Line. The Northstar Commuter Rail offers service between Big Lake and downtown Minneapolis stopping at Elk River, Ramsey, Anoka, Coon Rapids and Fridley. Existing transit routes connect commuters to the almost 12,000 jobs in the area and to the Anoka Hennepin Technical College campus, located just west of the project.

Improved mobility in the project area will increase reliability of transit. Average speeds on Highway 10/169 during the peak hours are much lower than the posted speed of 60 mph. Eastbound traffic averages 32 mph and 35 mph in the morning and evening peak periods. Westbound traffic averages 48 mph in the morning peak and 19 mph in the evening peak period. Cross street delays average over 87 seconds in the morning and 144 seconds in the evening peak periods. Westbound traffic is frequently delayed over 4 minutes in the evening peak. Consistent crashes only further contribute to delays, congestion and unreliability of efficient transit. New pedestrian facilities will reduce delays and provide opportunity for future transit stops within the project area.

Measure A: Cost Effectiveness

Total Project Cost (entered in Project Cost Form):	$26,000,000.00
Enter Amount of the Noise Walls:	$0.00
Total Project Cost subtract the amount of the noise walls:	$26,000,000.00
Points Awarded in Previous Criteria	
Cost Effectiveness	$0.00

Other Attachments

File Name	Description	File Size
Construction Phase Graphic.pdf	Construction Phase Map	8.2 MB
Existing Conditions Photos.pdf	Project Area Existing Conditions Photos	332 KB
Hwy 10 Graphic_REV for funding app_6-30-2016.pdf	Anoka Solution Graphic - 2016	8.9 MB
Hwy 10 Interchange improvements MnDOT letter of support.pdf	MnDOT 2016 Support Letter	106 KB
Important Letters of Support for Planning Study.pdf	Met Council and MnDOT 2014 Letters of Support for Highway 10 Planning Access Study	778 KB

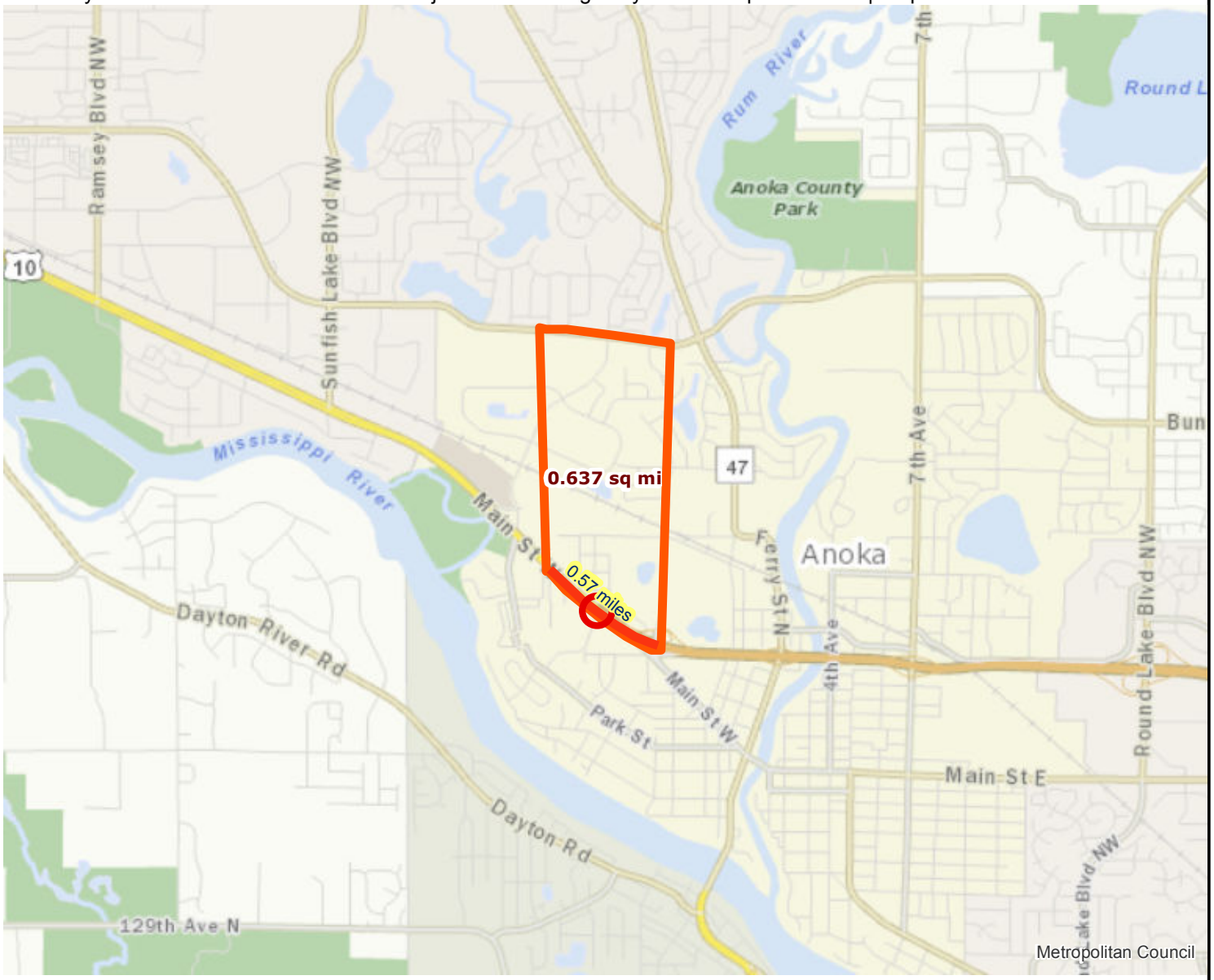
Roadway Area Definition

Roadway Reconstruction/Modernization Project: Phase I Highway 10/169 Improvements | Map ID: 1467752889512

Results

Project Length: 0.57 miles

Project Area: 0.637 sq mi



Project Points
Project
Project Area
Principal Arterials
A Minor Arterials
Principal Arterials Planned
A Minor Arterials Planned

0 0.425 0.85 1.7 2.55 3.4 Miles

Created: 7/5/2016
LandscapeRSA1

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

METROPOLITAN COUNCIL

Regional Economy

Roadway Reconstruction/Modernization Project: Fairoak Avenue Signal Removal | Map ID: 1466177070923

Results

WITHIN ONE MI of project:

Totals by City:

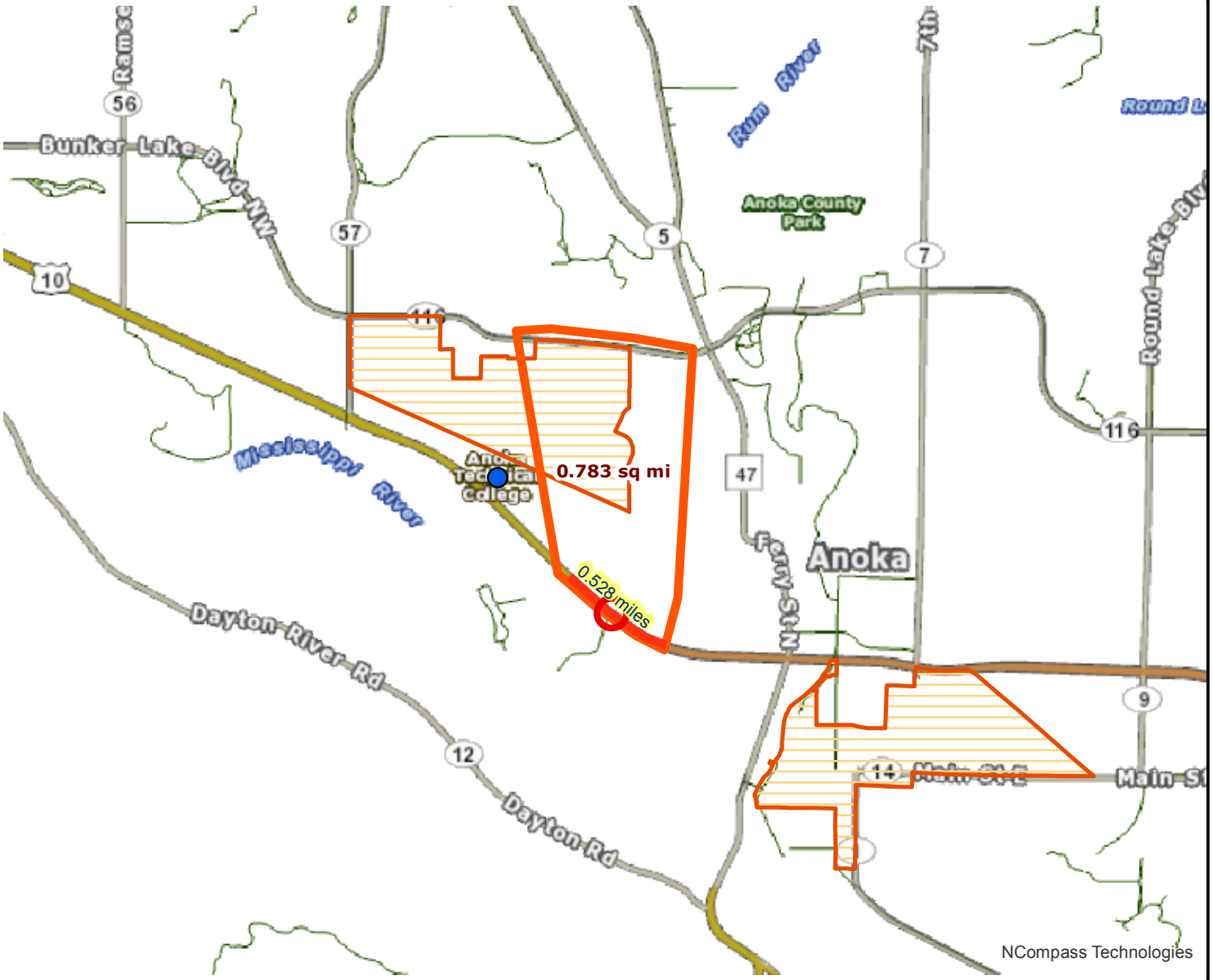
Anoka
Population: 9988
Employment: 10128
Mfg and Dist Employment: 2014

Champlin
Population: 2179
Employment: 73
Mfg and Dist Employment: 3

Dayton
Population: 2107
Employment: 221
Mfg and Dist Employment: 9

Ramsey
Population: 1022
Employment: 1415
Mfg and Dist Employment: 720

Postsecondary Students:
2891



Project Points
Project
Project Area
PostSecondary Education Centers
Manfacturing/Distribution Centers
Job Concentration Centers

0 0.425 0.85 1.7 2.55 3.4 Miles

Created: 6/17/2016
LandscapeRSA5

For complete disclaimer of accuracy, please visit
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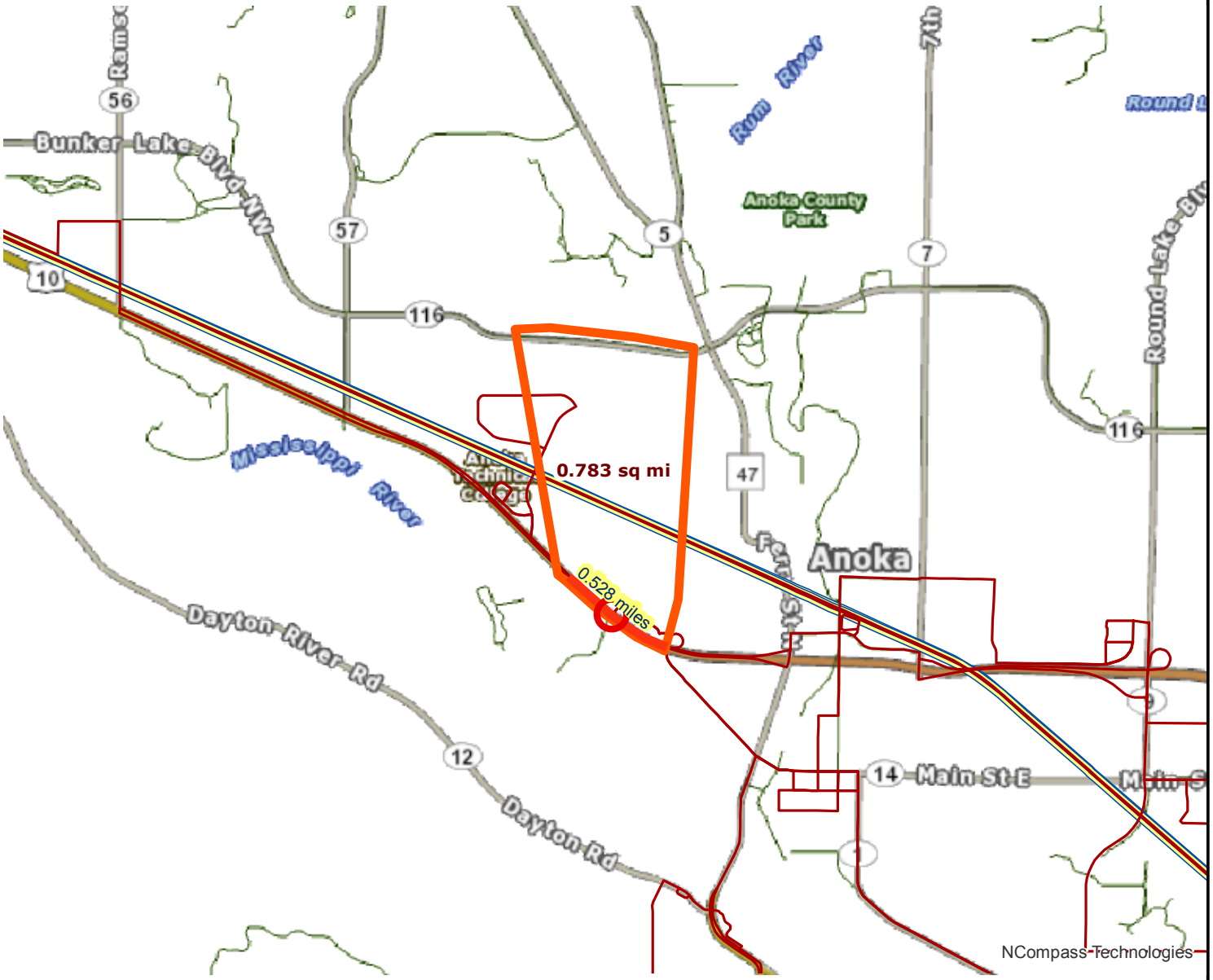
METROPOLITAN COUNCIL

Transit Connections

Roadway Reconstruction/Modernization Project: Fairoak Avenue Signal Removal | Map ID: 1466177070923



Results

Transit with a Direct Connection to project:
850 852 887

**indicates Planned Alignments*

Project Points | Project Area | **Transitway**

Project | Transit Routes | Northstar Line

0 0.425 0.85 1.7 2.55 3.4 Miles

Created: 6/17/2016
LandscapeRSA3

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

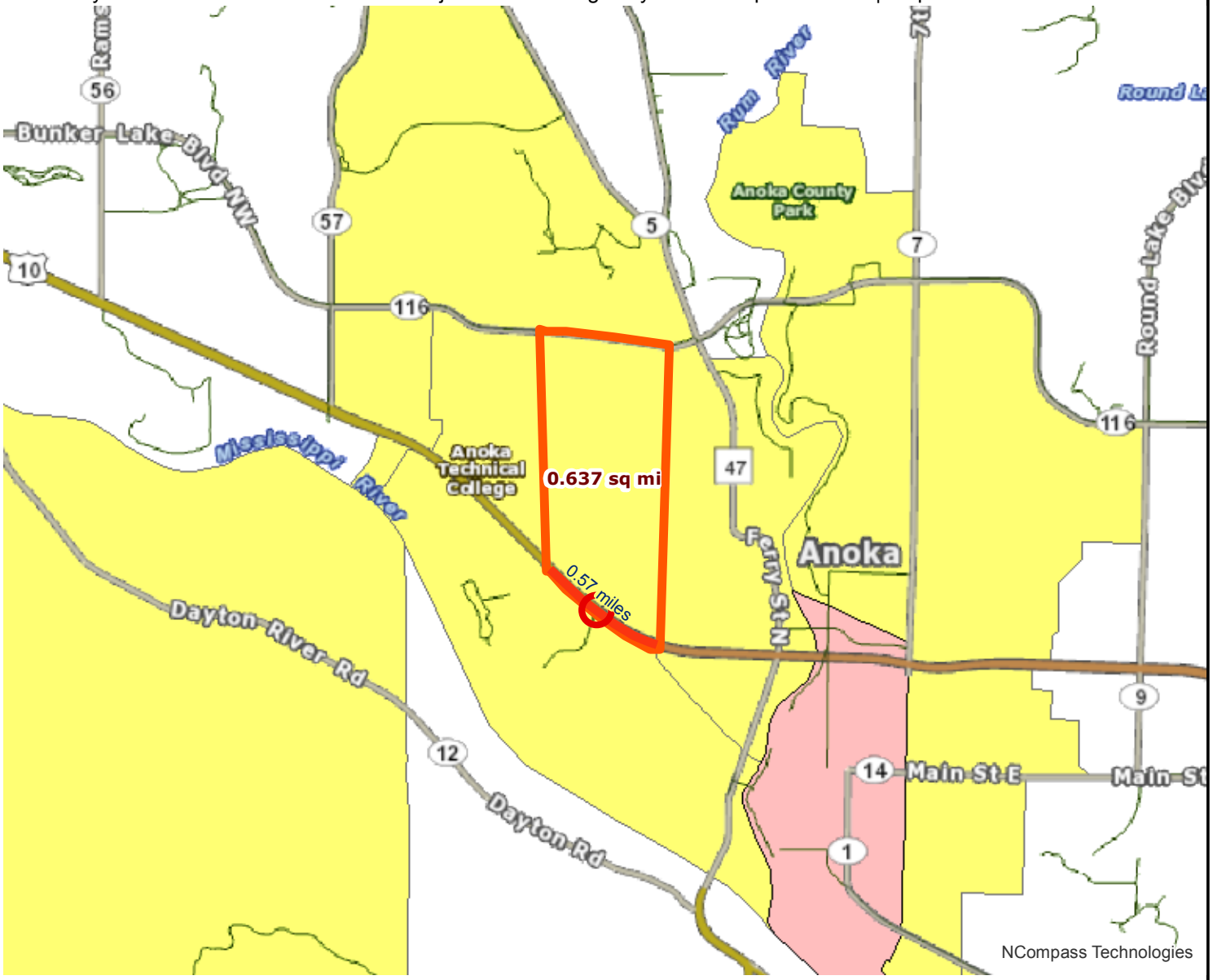
METROPOLITAN COUNCIL

Socio-Economic Conditions

Roadway Reconstruction/Modernization Project: Phase I Highway 10/169 Improvements | Map ID: 1467752889512

Results

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



Project Points
Project
Project Area

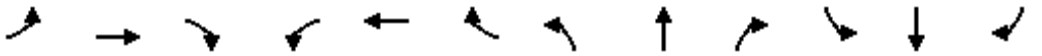
Area of Concentrated Povertry > 50% residents of color
Area of Concentrated Poverty
Above reg'l avg conc of race/poverty

0 0.425 0.85 1.7 2.55 3.4 Miles

Created: 7/5/2016
LandscapeRSA2

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

METROPOLITAN COUNCIL



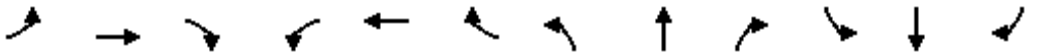
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	2263	17	60	2064	7	38	9	100	31	69	337
Future Volume (vph)	29	2263	17	60	2064	7	38	9	100	31	69	337
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	800		200	300		300	0		100	0		0
Storage Lanes	1		1	1		1	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950				0.961			0.985	
Satd. Flow (prot)	*1780	*4170	1583	*1780	*4000	1583	0	1790	1583	0	1835	1583
Flt Permitted	0.950			0.950				0.742			0.901	
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	0	1382	1583	0	1678	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			73			73			127			127
Link Speed (mph)		60			60			30			30	
Link Distance (ft)		2032			2008			973			803	
Travel Time (s)		23.1			22.8			22.1			18.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	32	2460	18	65	2243	8	41	10	109	34	75	366
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	2460	18	65	2243	8	0	51	109	0	109	366
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	*0.88	1.00	1.00	*0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	56	100	20	56	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2			6	8		8	4		4

Lanes, Volumes, Timings
24: Fairoak Avenue & TH 10 6/20/2016

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6	6	8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	9.5	58.0	58.0	9.5	58.0	58.0	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (%)	10.6%	64.4%	64.4%	10.6%	64.4%	64.4%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Maximum Green (s)	5.0	53.5	53.5	5.0	53.5	53.5	18.0	18.0	18.0	18.0	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	0
Act Effct Green (s)	5.0	56.4	56.4	5.2	54.5	54.5		17.0	17.0		17.0	17.0
Actuated g/C Ratio	0.06	0.63	0.63	0.06	0.61	0.61		0.19	0.19		0.19	0.19
v/c Ratio	0.33	0.94	0.02	0.64	0.93	0.01		0.20	0.27		0.34	0.91
Control Delay	50.1	25.9	0.1	70.8	24.7	0.0		32.2	6.3		34.6	51.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	50.1	25.9	0.1	70.8	24.7	0.0		32.2	6.3		34.6	51.9
LOS	D	C	A	E	C	A		C	A		C	D
Approach Delay		26.0			25.9			14.6			47.9	
Approach LOS		C			C			B			D	
Stops (vph)	30	1769	0	53	1665	0		39	13		84	202
Fuel Used(gal)	1	81	0	3	74	0		1	1		2	7
CO Emissions (g/hr)	94	5647	16	197	5173	6		62	67		125	474
NOx Emissions (g/hr)	18	1099	3	38	1006	1		12	13		24	92
VOC Emissions (g/hr)	22	1309	4	46	1199	1		14	16		29	110
Dilemma Vehicles (#)	0	121	0	0	112	0		0	0		0	0

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay: 27.5		Intersection LOS: C	
Intersection Capacity Utilization 93.3%		ICU Level of Service F	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 24: Fairoak Avenue & TH 10



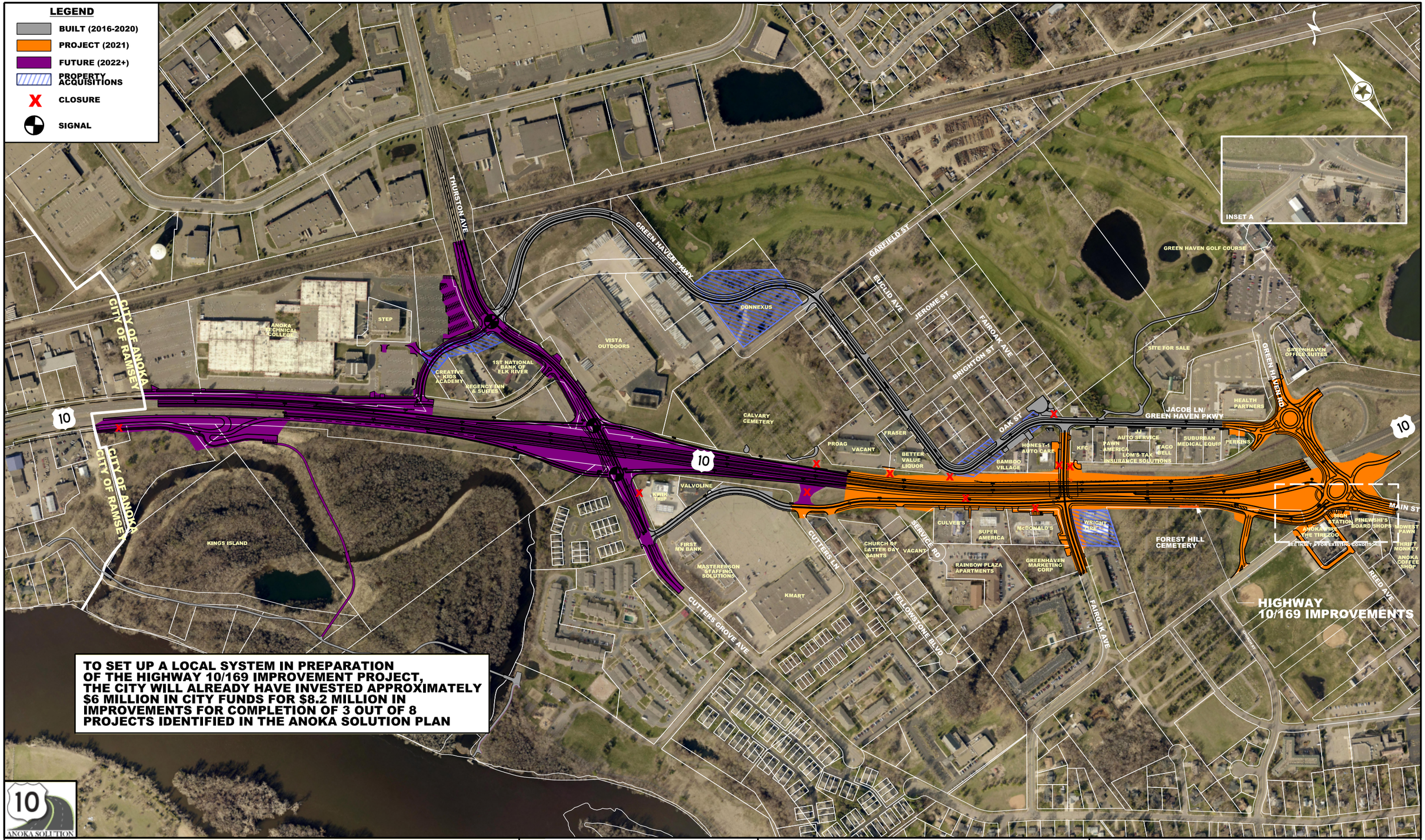
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	2263	17	60	2064	7	38	9	100	31	69	337
Future Volume (vph)	29	2263	17	60	2064	7	38	9	100	31	69	337
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	800		200	300		300	0		100	0		0
Storage Lanes	1		1	1		1	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950				0.961			0.985	
Satd. Flow (prot)	*1780	*4170	1583	*1780	*4000	1583	0	1790	1583	0	1835	1583
Flt Permitted	0.950			0.950				0.742			0.901	
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	0	1382	1583	0	1678	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			73			73			127			127
Link Speed (mph)		60			60			30			30	
Link Distance (ft)		2032			2008			973			803	
Travel Time (s)		23.1			22.8			22.1			18.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	32	2460	18	65	2243	8	41	10	109	34	75	366
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	2460	18	65	2243	8	0	51	109	0	109	366
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	*0.88	1.00	1.00	*0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	56	100	20	56	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2			6	8		8	4		4

Lanes, Volumes, Timings
24: Fairoak Avenue & TH 10 6/20/2016

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6	6	8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	9.5	58.0	58.0	9.5	58.0	58.0	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (%)	10.6%	64.4%	64.4%	10.6%	64.4%	64.4%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Maximum Green (s)	5.0	53.5	53.5	5.0	53.5	53.5	18.0	18.0	18.0	18.0	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	0
Act Effct Green (s)	5.0	56.4	56.4	5.2	54.5	54.5		17.0	17.0		17.0	17.0
Actuated g/C Ratio	0.06	0.63	0.63	0.06	0.61	0.61		0.19	0.19		0.19	0.19
v/c Ratio	0.33	0.94	0.02	0.64	0.93	0.01		0.20	0.27		0.34	0.91
Control Delay	50.1	25.9	0.1	70.8	24.7	0.0		32.2	6.3		34.6	51.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	50.1	25.9	0.1	70.8	24.7	0.0		32.2	6.3		34.6	51.9
LOS	D	C	A	E	C	A		C	A		C	D
Approach Delay		26.0			25.9			14.6			47.9	
Approach LOS		C			C			B			D	
Stops (vph)	30	1769	0	53	1665	0		39	13		84	202
Fuel Used(gal)	1	81	0	3	74	0		1	1		2	7
CO Emissions (g/hr)	94	5647	16	197	5173	6		62	67		125	474
NOx Emissions (g/hr)	18	1099	3	38	1006	1		12	13		24	92
VOC Emissions (g/hr)	22	1309	4	46	1199	1		14	16		29	110
Dilemma Vehicles (#)	0	121	0	0	112	0		0	0		0	0

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay: 27.5		Intersection LOS: C	
Intersection Capacity Utilization 93.3%		ICU Level of Service F	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 24: Fairoak Avenue & TH 10



0 250 500
SCALE FEET

ANOKA
REAL. CLASSIC.

CONSTRUCTION PHASING

HIGHWAY 10/169 IMPROVEMENTS
FAIROAK AREA | CITY OF ANOKA

Existing Project Area Conditions

1+ mile backups at Fairoak Avenue signal occur daily during pm peak hour

Close proximity (25') of south frontage road.

Sidestreet backups turning onto the highway.

Ped running across highway and stopping traffic.

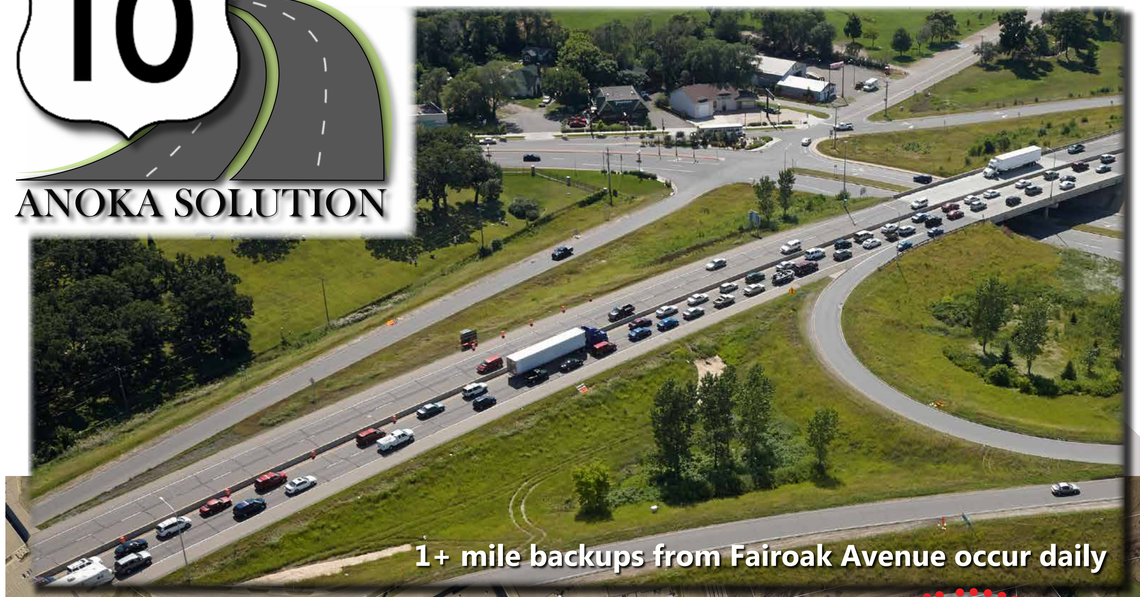
Ped attempting dangerous gap in highway traffic.

Ped walking along shoulder of highway.

Anoka Solution

ANOKA REAL. CLASSIC.

ANOKA SOLUTION



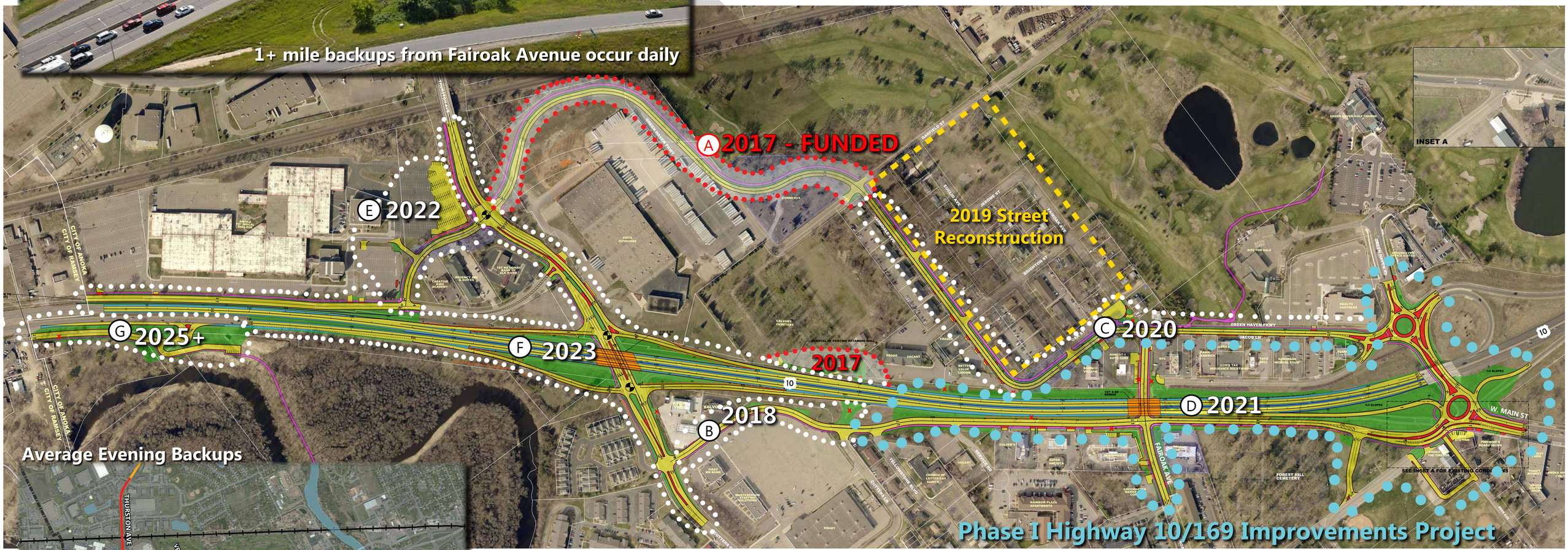
To reduce crashes and improve mobility issues, it is reasonable and responsible to implement lower cost, high benefit measures that incrementally improve safety and operations for all users of the Highway 10 corridor.

Existing Issues

- 50,000-60,000 vehicles per day
- Principal Arterial moves regional freight
- 1+ mile back-ups during peak hour
- 19 mph avg. peak hour speed (60 mph posted)
- 785 crashes in past ten years (4 fatal)
- Crash Rate 3x, Severity Rate 4x (state average)
- Segmented local network forces local highway trips

Investment Results

- **≥ 75% delay reduction**
- **≥ 67% crash reduction**
- Local trips on local network
- Safe and efficient movement of goods and services



ROW Acquisition - $5.5M
Project Development - $12.8M
Construction - $60.3M

Total Funding Needed: $78.8M

The City of Anoka is continuing to work closely with MnDOT, Metropolitan Council, Anoka County, and the City of Ramsey to plan, design, and implement <u>fiscally responsible</u> safety and operation improvements to benefit all Highway 10 corridor users.

Anoka Solution

ANOKA REAL. CLASSIC.

These are high benefit projects that are fiscally responsible

Each project is identified as a standalone project which has independent vitality. The City of Anoka is actively furthering the study and outreach for all components of this vision. The city is actively pursuing the necessary right-of-way. Numerous parcels are already in city possession. The City of Anoka is also considering and seeking all potential funding sources. The city looks forward to the continued partnership with MnDOT, Metropolitan Council, Anoka County, and the City of Ramsey to further plan, obtain funding, design, and implement the Anoka Solution.

A.Green Haven Parkway Phase I

- Local trips are forced onto Highway 10 to circulate this area of the community
- Introduces a public connection between Thurston Avenue and Garfield Street
- Allows local trips to circulate between Thurston Avenue and Main Street on the local street network
- The City is in process of reaching agreements on the needed right-of-way

FUNDED

$3.1M / 2017 Construction

B. South Frontage Road Phase I

- Many travelers cut through the existing private parking lot to circulate
- Provides a public connection from Cutters Grove to the existing frontage road
- Allows public circulation south of Highway 10 between access points

$1.4M / 2018 Anticipated Construction

C. Green Haven Parkway Phase II

- Provides a new connection between Verndale Avenue and Fairoak Avenue
- Closes Verndale Avenue access on Highway 10
- Provides bike and pedestrian accommodations
- City is in process of acquiring needed right-of-way

$3.7M / 2020 Anticipated Construction

D. South Frontage Road Phase II (Phase I Highway 10/169 Improvements Project)

- Today, there is no local connection between Fairoak and Main Street to the south of Highway 10
- Provides a new local connection from Fairoak to Main Street
- Reconfigures the Main Avenue interchange intersections to roundabouts
- Ties Highway 10 commercial properties to Downtown Anoka

*Combined project with Fairoak Avenue Signal Removal

D. Fairoak Avenue Signal Removal (Phase I Highway 10/169 Improvements Project)

- This intersection causes the most delay/safety issues in the region
- Removes the signal at the root of many of the problems in this segment
- Closes the Fairoak Access on Highway 10
- Provides local street underpass / community connectivity
- Elevates Highway 10 fourteen feet and lowers Fairoak Avenue eight feet
- Safe bike/pedestrian crossings of Highway 10

South Frontage Road Phase II + Fairoak Avenue Signal Removal

$33.3M / 2021 Anticipated Construction

E. Green Haven Parkway Phase III

- Provides a new local street connection tying into existing frontage road
- Removal of All-Way-Stop near Highway 10 signal causing operational issues
- Pulls primary intersection away from Highway 10
- Provides significant improvements for mobility along Thurston Avenue, a major collector roadway within the city

$3.6M / 2022 Anticipated Construction

F. Thurston Avenue Signal Removal

- This intersection causes the 2nd most delay/safety issues in the region
- Removes the signal at the root of many of the problems in this segment
- Provides grade separation with access
- Includes shifting Highway 10 south to allow for frontage road extension into Ramsey
- Elevates Highway 10 twenty feet and lowers Thurston Avenue two feet

$31.9M / 2023 Anticipated Construction

G. Riverdale Drive Extension

- Provides south side frontage to Highway 10
- Ties in with City of Ramsey's plans
- Eliminates numerous access points from Highway 10

$1.8M / 2025+ Anticipated Construction

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

July 15, 2016

Greg Lee
Anoka City Manager/Public Services Director/City Engineer
City of Anoka
2015 First Ave N
Anoka, MN 55303

RE: Regional Solicitation Application for TH 10/Fairoak Ave Interchange project

Dear Mr. Lee:

Thank you for requesting a letter of support from MnDOT for the Metropolitan Council/Transportation Advisory Board (TAB) 2016 Regional Solicitation. Your application for an interchange, frontage roads, and pedestrian improvements at trunk highway (TH) 10 and Fairoak Ave impacts MnDOT right of way on trunk highway (TH) 10.

MnDOT, as the agency with jurisdiction over TH 10, would allow the improvements included in the application for the interchange project. Details of a future maintenance agreement with the City would be determined during project development to define how the improvements will be maintained for the project's useful life.

While this project currently has no funding from MnDOT, MnDOT does appreciate the leadership provided by the City in supporting the Hwy 10 Access Management plan. The Metro District currently has no discretionary funding in year 2020 of the State Transportation Improvement Program (STIP) or year 2021 of the Capital Highway Investment Plan (CHIP) to assist with construction or assist with MnDOT services such as the design or construction engineering of the project. Please continue to work with MnDOT Area staff to assist in identifying additional project funding if needed.

Sincerely,

Scott McBride, P.E.
Metro District Engineer

Cc: Elaine Koustsoukos, Metropolitan Council
Sheila Kauppi, MnDOT Metro District – North Area Manager

Minnesota Department of Transportation
Metro District
1500 County Road B2 W
Roseville, MN 55113-3174

August 15, 2014

Re: MnDOT Support for Highway 10 Access Planning Study

The Highway 10 Access Planning Study responds to corridor and community needs—and to the fiscal reality that MnDOT and our partner agencies face.

The study shows we can achieve 90% of the safety and operational benefit of a freeway, for less than 50% of the cost. Pursuing lower-cost, high-benefit investments is consistent with MnDOT's commitment to serve the public by Enhancing Financial Effectiveness. It also supports the Metropolitan Council's call for transportation strategies that are realistic, innovative, flexible, and focused.

The study benefitted from extensive outreach that helped us better understand issues and tailor solutions to community expectations. Outreach included public open houses, business and property owner workshops, City Council workshops, a study advisory committee with representatives from several agencies, and a design charette.

The study's implementation plan prioritizes study recommendations with a focus on right-sized, fundable-scale projects. Improvements can be made incrementally as funding becomes available, rather than doing nothing while waiting to fund a megaproject. The study is consistent with the Metropolitan Council's Transportation Policy Plan, thereby improving eligibility for regional funding. While the hard work of securing funding remains, with this study MnDOT and our partners are much better positioned to address the challenges along Highway 10 than before.

MnDOT supports the recommendations of the Highway 10 Access Planning Study. We are committed to working with our partner agencies to pursue funding for these projects from a variety of sources. The recommendations include improvements on Highway 10 itself and improvements to the supporting network of local connections. State, Federal, County and City funding will all have roles to play in making the improvements. Projects will require MnDOT leadership as well as local leadership. MnDOT is eager to continue the momentum of this study by working with our partners to secure funding and deliver projects.

Scott McBride
Metro District Engineer

An Equal Opportunity Employer

August 21, 2014

Paul Jung
Minnesota Department of Transportation
Metro Division
1500 West CO Rd B-2
Roseville, MN 55113

Dear Mr. Jung:

The Metropolitan Transportation Services division of the Metropolitan Council wishes to express its support of the Highway 10 Access Planning Study recently conducted by the Minnesota Department of Transportation in partnership with Anoka County , the cities of Ramsey and Anoka, and the Council. The philosophy upon which the study approach was based is in keeping with the lower cost/high benefit policy expressed in the Council's Transportation Policy Plan.

The study should be considered a "role model" by other corridors in the region. The approach of considering less traditional improvement strategies to balance funding limitation realities with the need to find solutions resulted in a series of smaller, implementable projects with large positive impacts. The program of projects outlined in the study combine to provide 90% to 95% of the safety and mobility benefits of the previous freeway proposal for roughly a third of the cost.

This letter of support does not predispose any future required Council review of projects. Specifically, all interchange projects on Highway 10 will need a joint MnDOT/Metropolitan Council Highway Interchange Request committee review. Specific projects may also be subject to the Metropolitan Council controlled access highway approval as outlined in Minnesota statute 473.166.

The Council appreciates the efforts by all study partners and looks forward to the eventual implementation of the projects identified in the Highway 10 Access Planning Study.

Sincerely,

Arlene McCarthy

Arlene McCarthy
Director, Metropolitan Transportation Services

Cc: Lona Schreiber, Metropolitan Council District 15
Edward Reynoso, Metropolitan Council District 9
Mark Filipi, MTS Manager

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