Application

17063 - 2022 Roadway Modernization

17624 - Fairview Avenue Reconstruction (Edgcumbe Rd to Ford Pkwy)

Regional Solicitation - Roadways Including Multimodal Elements

Status:	Submitted
Submitted Date:	04/14/2022 11:07 AM

Primary Contact

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

Organization Information

Name:	ST PAUL, CITY OF

Jurisdictional Agency (if different):

Organization Type: City

Organization Website:

Address: DEPT OF PUBLIC WORKS-CITY HALL ANNEX

25 W 4TH ST #1500

*	ST PAUL	Minnesota	55101
	City	State/Province	Postal Code/Zip

County: Ramsey

Phone:* 651-266-9700 Ext.

Fax:

PeopleSoft Vendor Number 0000003222A22

Project Information

Project Name Fairview Avenue Reconstruction

Primary County where the Project is Located Ramsey

Cities or Townships where the Project is Located: Saint Paul

Jurisdictional Agency (If Different than the Applicant):

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

The City of Saint Paul is planning multimodal roadway improvements on Fairview Avenue between Ford Parkway and Edgecumbe Road. The Fairview Avenue corridor is classified as an A-Minor Arterial Augmentor and is currently a mix of two-lane and three-lane roadway sections. The proposed project will maintain the two-lane and three-lane configurations but will make improvements including full-depth reconstruction of pavement structure, adding on-street bike lanes along the entire corridor; traffic signal revisions; reconstruct new, wider sidewalks on both sides of the street; add a grass boulevard between the roadway and the sidewalk; include a new signal at Montreal Avenue/Fairview Avenue; and make ADA improvements at intersections. ADA improvements will include new curb ramps, APS buttons, and detectable warning surfaces/truncated domes. The project connects directly to the A Line BRT corridor, which has stations located at the north end of the project corridor at Ford Parkway/Fairview Avenue. A separate City project is planned at the south extent of the project - at the intersection of Fairview Avenue/Edgcumbe Road. This project, scheduled for 2022, includes expanding the Zeilingold Triangle Park, realigning and narrowing the roadways, adding a sidewalk on the west side of Edcumbe Road, reducing curb radii to reduce traffic speeds, and adding curb extensions on the eastern portion of the intersection.

(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.

Fairview Ave (MSAS #132) from Edgcumbe Rd to Ford Pkwy (0.53 mi.), Roadway reconstruction (pavement, subgrade, curb/gutter), ADA Improvements, sidewalk, landscaping, drainage, signage/striping, signals, lighting, retaining walls, and stormwater management

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

Project Length (Miles)

0.5

to the nearest one-tenth of a mile

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 $6,500,042.00

Match Amount $1,625,010.00

Minimum of 20% of project total

Project Total $8,125,052.00

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 City of Saint Paul

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: 2027

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

Additional Program Years:

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

Project Information-Roadways

County, City, or Lead Agency City of Saint Paul

Functional Class of Road A-Minor Arterial Augmentor

Road System MSAS

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

Road/Route No. 132

i.e., 53 for CSAH 53

Name of Road Fairview Avenue

Example; 1st ST., MAIN AVE

Zip Code where Majority of Work is Being Performed 55104

(Approximate) Begin Construction Date 04/12/2027

(Approximate) End Construction Date 11/26/2027

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

From:
(Intersection or Address) Ford Parkway

To:
(Intersection or Address) Edgcumbe Road

DO NOT INCLUDE LEGAL DESCRIPTION

Or At

Miles of Sidewalk (nearest 0.1 miles)	1.0
Miles of Trail (nearest 0.1 miles)	0.5
Miles of Trail on the Regional Bicycle Transportation Network (nearest 0.1 miles)	0.5
Primary Types of Work	AGG BASE, BITUMINOUS BASE, BITUMINOUS SURFACE, SIDEWALK, LIGHTING, BIKE LANES, PED RAMPS, CURB AND GUTTER

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

BRIDGE/CULVERT PROJECTS (IF APPLICABLE)

Old Bridge/Culvert No.:

New Bridge/Culvert No.:

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

Requirements - All Projects

All Projects

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

Goal B - Safety and Security: The regional transportation system is safe and secure for all users. (Chapter 2, Page 2.5)

o B1. Regional transportation partners will incorporate safety and security considerations for all modes and users throughout the processes of planning, funding, construction, and operation.

o B6. Regional transportation partners will use best practices to provide and improve facilities for safe walking and bicycling, since pedestrians and bicyclists are the most vulnerable users of the transportation system.

Goal C. Access to Destinations: A reliable, affordable, and efficient multimodal transportation system supports the prosperity of people and businesses by connecting them to destinations throughout the region and beyond. (Chapter 2, Page 2.10)

o Objectives D: Increase the number and share of trips taken using transit, carpools, bicycling, and walking.
o Objective E: Improve the availability of and quality of multimodal travel options for people of all ages and abilities to connect to jobs and other opportunities, particularly for historically under-represented populations.

o Strategy C1. Regional transportation partners will continue to work together to plan and implement transportation systems that are multimodal and provide connections between modes. The Metropolitan Council will prioritize regional projects that are multimodal and cost-effective and encourage investments to include appropriate provisions for bicycle and pedestrian travel.

o Strategy C15. Regional transportation partners

should focus investments on completing Regional Bicycle Transportation Network alignments and their direct connections with local bicycle networks

Goal D. Competitive Economy: The regional transportation system supports the economic competitiveness, vitality, and prosperity of the region and state. (Chapter 2, Page 2.26)

o Objective A. Improve multimodal access to regional job concentrations identified in Thrive MSP 2040.
Goal E. Healthy and Equitable Communities: The regional transportation system advances equity and contributes to communities? livability and sustainability while protecting the natural, cultural, and developed environments. (Chapter 2, Page 2.30)

o Objective A. Reduce transportation-related air emissions.

o Objective C. Increase the availability and attractiveness of transit, bicycling, and walking to encourage healthy communities through the use of active transportation options.

Limit 2,800 characters, approximately 400 words

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

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

Saint Paul Bicycle Plan, pp. 112-113, 115

https://www.stpaul.gov/sites/default/files/Media%20Root/Public%20Works/Saint%20Paul%20Bicycle%20Plan.pdf

Saint Paul Pedestrian Plan, pp. 7, 27, 68-69

https://www.stpaul.gov/sites/default/files/Media%20Root/Public%20Works/Saint%20Paul%20Pedestrian%20Plan%206.13.19%20Compressed.pdf

Saint Paul 2040 Comprehensive Plan, pp. 82-83, 98

https://www.stpaul.gov/sites/default/files/2022-01/CSP_2040_CompPlan_FinalAdopted_101521.pdf

Limit 2,800 characters, approximately 400 words

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

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

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

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

6.Applicants must not submit an application for the same project 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: 01/13/2016

Link to plan: https://www.stpaul.gov/sites/default/files/Media%20Root/ADA%20Transiton%20Plan%20for%20Public%20Works_2016.pdf

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

Date self-evaluation completed:

Link to plan:

Upload plan or self-evaluation if there is no link

Upload as PDF

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

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

11.The owner/operator of the facility must operate and maintain the project year-round for the useful life of the improvement, 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.

Requirements - Roadways Including Multimodal Elements

Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	$300,000.00
Removals (approx. 5% of total cost)	$436,995.00
Roadway (grading, borrow, etc.)	$594,369.00
Roadway (aggregates and paving)	$1,375,737.00
Subgrade Correction (muck)	$0.00
Storm Sewer	$412,500.00
Ponds	$0.00

Concrete Items (curb & gutter, sidewalks, median barriers)	$370,267.50
Traffic Control	$172,500.00
Striping	$83,828.26
Signing	$36,556.50
Lighting	$506,100.00
Turf - Erosion & Landscaping	$239,156.26
Bridge	$0.00
Retaining Walls	$1,032,150.00
Noise Wall (not calculated in cost effectiveness measure)	$0.00
Traffic Signals	$375,000.00
Wetland Mitigation	$0.00
Other Natural and Cultural Resource Protection	$0.00
RR Crossing	$0.00
Roadway Contingencies	$1,666,347.31
Other Roadway Elements	$0.00
Totals	**$7,601,506.83**

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	**Cost**
Path/Trail Construction	$0.00
Sidewalk Construction	$523,545.00
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	$0.00
Streetscaping	$0.00
Wayfinding	$0.00
Bicycle and Pedestrian Contingencies	$0.00
Other Bicycle and Pedestrian Elements	$0.00
Totals	**$523,545.00**

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	$8,125,051.83
Construction Cost Total	$8,125,051.83
Transit Operating Cost Total	$0.00

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

Existing Employment within 1 Mile:	6548
Existing Manufacturing/Distribution-Related Employment within 1 Mile:	157
Existing Post-Secondary Students within 1 Mile:	4277
Upload Map	1649821346159_Regional Economy Map.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:

None of the tiers: Yes

Measure A: Current Daily Person Throughput

Location Fairview Ave, south of Montreal Ave

Current AADT Volume 8800

Existing Transit Routes on the Project 921-METRO A Line

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

Upload Transit Connections Map 1649821438753_Transit Connections Map.pdf

Please upload attachment in PDF form.

Response: Current Daily Person Throughput

Average Annual Daily Transit Ridership 0

Current Daily Person Throughput 11440.0

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: 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:

Response:

The project is located in multiple census tracts. The census tract on the southwest corner of the project corridor (southwest of Montreal Ave/Fairview Ave) has a low-income population of 28%, and 35% are people of color. These groups will benefit from the proposed bicycle and pedestrian safety improvements. Bicycle improvements include adding dedicated on-street bike lanes along the entire corridor, and pedestrian safety improvements include reconstructing all sidewalks on the corridor and adding a boulevard space between the roadway and the sidewalks.

Several of the proposed improvements were identified in various City of Saint Paul planning documents, including the Saint Paul Bicycle Plan, the Saint Paul 2040 Comprehensive Plan, and the Saint Paul Pedestrian Plan. Development of each of these plans involved numerous public engagement opportunities aimed at reaching all areas of the city to engage residents that are representative of Saint Paul's demographic diversity. The Saint Paul Bicycle Plan, adopted in 2015, identified the Fairview Ave corridor as a planned bikeway. The Bike Plan is currently being updated. Numerous public engagement activities were conducted in the Fall of 2021 as a part of planning process. The Fairview Ave corridor was ranked in the top 10 streets/routes in the entire city identified for improved bike connections. The City received 1,700 responses to an online bike plan update survey. Ninety-six of these respondents mentioned the Fairview Avenue.

As part of the City's Comprehensive Plan, City Staff focused on reaching diverse communities. During the first phase of community engagement, staff spoke with more than 2,200 people at 67 events, generating more than 3,700 comments. At least

one event was held in each of Saint Paul's 17 planning districts and at least 25 people were engaged at each event. On average, there were three events and 100 people per district. During the big engagement push from May-September 2016, the 800+ people of color engaged represented approximately 50% of the total participants compared to a city-wide population proportion of 40% (in 2010). The age of participants was also mostly representative of the city-wide population, if somewhat older.

Outreach was done at local community events, through mailed questionnaires, and online surveys. Staff identified nine community priorities that were heard most through the public input process, two of which include public safety and road safety for pedestrians and bicyclists. Proposed improvements on Fairview Ave will help meet those community member priorities, including reconstructing the sidewalks on the corridor, adding boulevard space between the sidewalks and the roadway, full replacement of streetlights, and ADA improvements.

(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 provide pedestrian and bicycle safety improvements that will benefit equity populations that do not drive a motor vehicle for transportation. Many of the equity populations listed cannot drive a motor vehicle due to age, disability, or costs, including low-income populations, children, people with disabilities, youth, and older adults. As stated earlier, the census tract on the southwest corner of the project has a low-income population of 28%, and 35% are people of color. The project will make it easier, safer, and more comfortable to walk and bike along the Fairview Ave corridor, and will make it easier to access the A Line BRT station located at the north end of the corridor.

Today, there are no bike facilities along Fairview Ave, so bicyclists are forced to ride on the shoulder of a relatively high-volume roadway with 8,800 vehicles per day. The proposed project will greatly improve bicyclist safety with the addition of dedicated on-street bike lanes on both sides of the road throughout the corridor. Both of the A Line BRT stations (westbound and eastbound) have bicycle racks at the station, allowing riders to bike along the Fairview Ave corridor, park their bike at the station, and continue their journey on the BRT route. These multimodal improvements will help enhance travel options for all users, particularly equity populations.

The existing sidewalks are narrow and located at the back of curb (no buffer space). Back of curb sidewalks cannot be adequately maintained in winter due to snow getting plowed on them, making them challenging to navigate in winter ? impacting residents trying to reach transit. The proposed design will add a boulevard that will improve safety, comfort, and winter maintainability. These improvements benefit those who rely on walking

the most.

(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.

Response:

There are 576 publicly subsidized rental housing units in census tracts within 1/2 mile of the project corridor. Specifically, the YWCA Cleveland-Saunders Supportive Housing complex is located only 0.47 miles away from the southern end of the project area. Cleveland Hi-Rise is another affordable housing development within ½ mile of the project corridor and has 144 units. There are many destinations near the project area that affordable housing residents will have improved access to, including schools, restaurants, parks, and businesses. In addition, affordable housing residents will have access to the A Line BRT route on Ford Parkway Avenue, which has a station area on the north end of the project corridor. The proposed project will make it easier to access the A Line Station area on Ford Pkwy/Fairview Ave by adding on-street bike lanes along the corridor, as well as improving sidewalks on Fairview Ave, and making ADA improvements.

(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):	
Project located in a census tract that is below the regional average for population in poverty or populations of color (Regional Environmental Justice Area):	Yes
Upload the Socio-Economic Conditions map used for this measure.	1649821669518_Socio-Economic Conditions Map.pdf

Measure A: Year of Roadway Construction

Year of Original Roadway Construction or Most Recent Reconstruction	Segment Length	Calculation	Calculation 2
1990	0.5	995.0	1990.0
	1	**995**	**1990**

Total Project Length

Total Project Length (as entered in "Project Information" form)	0.5

Average Construction Year

Weighted Year	1990

Total Segment Length (Miles)

Total Segment Length	0.5

Measure B: Geometric, Structural, or Infrastructure Improvements

Improved roadway to better accommodate freight movements:	Yes
Response:	The project will improve roadway load capacity and will verify that truck turning movements can be accommodated at key intersections.

(Limit 700 characters; approximately 100 words)

Improved clear zones or sight lines:	Yes

Response:

A clear zone improvement includes adding a boulevard/buffer space between the sidewalks and the roadway on both sides of the street. Adding dedicated bike lanes will make it easier for motorists to see bicyclists along the corridor.

(Limit 700 characters; approximately 100 words)

Improved roadway geometrics:

Yes

Response:

Several roadway geometric improvements are proposed that will improve safety for all roadway users, particularly people biking and walking. Improvements include the addition of on-street bike lanes throughout the corridor, widened sidewalks, and added boulevard space between the sidewalk and roadway. The project will also ensure that lane widths meet current standards and that the storage length of left-turn lanes at intersections is appropriate for the given traffic volumes.

(Limit 700 characters; approximately 100 words)

Access management enhancements:

Yes

Response:

Prior to final design, the project team will review all driveways along the corridor and ensure they meet city standards regarding width and geometry.

(Limit 700 characters; approximately 100 words)

Vertical/horizontal alignment improvements:

Response:

(Limit 700 characters; approximately 100 words)

Improved stormwater mitigation:

Yes

Response:

The project will meet watershed requirements for storage and treatment of stormwater and will include underground stormwater storage and treatment.

(Limit 700 characters; approximately 100 words)

Signals/lighting upgrades:

Yes

Response:

Street lighting will be upgraded to City standard lighting levels along the entire corridor, which will improve safety and comfort for pedestrians and motorists.

(Limit 700 characters; approximately 100 words)

Other Improvements	Yes
Response:	ADA improvements at intersections such new curb ramps, APS buttons, and detectable warning surfaces/truncated domes.

(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
18.5	18.5	0	4142	4142	0	0	n/a	1649863583920_Fairview Ave Existing (and Build) PM - Synchro Report.pdf
						0		

Vehicle Delay Reduced

Total Peak Hour Delay Reduced	0
Total Peak Hour Delay Reduced	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):
7.8	7.8	0
8	**8**	**0**

Total

Total Emissions Reduced:	0
Upload Synchro Report	1649865103760_Fairview Ave Existing (and Build) PM - Synchro Report.pdf

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

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

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

Total Parallel Roadway

Emissions Reduced on Parallel Roadways	0
Upload Synchro Report	

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

New Roadway Portion:

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

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

Cruise speed in miles per hour without the project:	0

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

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

Crash Modification Factor Used: *(Limit 700 Characters; approximately 100 words)*	Resurface pavement and Left Turn Phase Improvement
Rationale for Crash Modification Selected: *(Limit 1400 Characters; approximately 200 words)*	The Resurface Pavement CMF was used, as it would improve driving conditions on the Fairview Avenue (would apply to two previous crashes). The Left Turn Phase Improvement CMF applies to the three crashes (1 coded on Fairview and 2 coded on Ford Parkway) at the intersection of Fairview Ave and Ford Pkwy, which is expected to receive traffic signal revisions.
Project Benefit ($) from B/C Ratio	$52,786.00
Total Fatal (K) Crashes:	
Total Serious Injury (A) Crashes:	
Total Non-Motorized Fatal and Serious Injury Crashes:	
Total Crashes:	4
Total Fatal (K) Crashes Reduced by Project:	
Total Serious Injury (A) Crashes Reduced by Project:	
Total Non-Motorized Fatal and Serious Injury Crashes Reduced by Project:	

Total Crashes Reduced by Project: 1

Worksheet Attachment 1649947075029_Fairvie Ave_Measure 6A Attachments.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 will include improvements at both signalized intersections on the corridor - Montreal Avenue and Ford Parkway ? and will include new crosswalks, curb ramps, APS buttons, and detectable warning surfaces/truncated domes.

(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: n/a

(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: n/a

(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: n/a

(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 project includes adding on-street bicycle lanes, which will visually narrow the roadway and may help reduce motor vehicle speeds on the corridor. In addition, the project will add grass boulevards between the sidewalks and roadway which will increase safety and comfort for pedestrians along the corridor.

(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 posted speed limit is 25 mph. The design speed is 30 mph. These speeds match the posted speed and design speed of existing conditions.

(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	8800

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.)	Yes
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.)	Yes
Existing road is within 500 of 1+ shopping, dining, or entertainment destinations (e.g., grocery store, restaurant)	
If checked, please describe:	

(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:	There are several multifamily housing units located within 500? of the project area on Ford Parkway. There is also a daycare center located approximately 300? from the intersection of Fairview Ave/Ford Parkway.

(Limit 1,400 characters; approximately 200 words)

Measure A: Multimodal Elements and Existing Connections

Response:

The project includes many multimodal transportation enhancements along the corridor. First, on-street bike lanes are being added to the entire project corridor, which currently does not have any dedicated bike facilities. This is consistent with Saint Paul's Bicycle Plan that identified Fairview Ave as a planned bikeway. Fairview Ave is also identified by the Met Council as a Tier 1 RBTN alignment, so the project will fill an important gap in the regional and local bikeway systems. The project also connects to an RBTN Tier 2 corridor on Montreal Ave, which runs between Fairview Ave and Cleveland Ave.

Pedestrian improvements incorporated through the project include new, wider sidewalks, grass boulevards between the sidewalk and roadway, and ADA improvements at intersections. The boulevards provide a wider buffer space from the road for pedestrians, and also provide a much-needed snow storage area in the winter which helps ensure the sidewalks are accessible year-round. These pedestrian improvements are supported by the Saint Paul Pedestrian Plan, which identifies the project corridor as a high priority area for walking investments.

The A Line BRT runs along Ford Parkway and intersects with Fairview Ave on the northern edge of the project corridor. The A Line BRT has two stops at the intersection of Fairview Ave and Ford Parkway. The walking and biking improvements on the Fairview Ave corridor will improve access and connectivity to these BRT stations. The A Line BRT goes between Rosedale Center in Roseville and the 46th Street station in Minneapolis, providing transit riders near the project corridor access to many different jobs and destinations. There are also bike parking racks at each BRT station,

making it convenient for bicyclists to ride up Fairview Ave and lock their bikes before riding the BRT.

The Ford/Highland Bridge redevelopment site is located just ¾ mile to the west of the project area. The Fairview Ave corridor will improve access to the Ford site by making it easier to walk or bike to the A Line BRT station, which also has a stop at the redevelopment site at Ford Parkway/ Woodlawn Ave.

(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.

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.

Yes

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:

There have been no specific meetings or community outreach for this project to date, however, the City has done significant public engagement through the Saint Paul Comprehensive Plan, Saint Paul Bicycle Plan, and Saint Paul Pedestrian Plan which resulted in recommendations for this corridor. Several elements that are being implemented in this project were a result of the recommendations in those planning efforts, including adding the bike lanes, increasing sidewalk widths, and adding boulevards between the street and sidewalks.

For the Saint Paul Pedestrian Plan, staff held targeted outreach meetings to ensure a full spectrum of Saint Paul residents participated in the processes, beyond those who responded to project surveys. Staff held meetings with teens, public housing residents, people learning English as a second language and elders. In total, over 4,000 people provided input for the Pedestrian Plan through in-person events and online surveys.

(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.

Yes

100%

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

100%

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

75%

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

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 1649874298060_Fairview Ave Exhibit_20220413.pdf

Please upload attachment in PDF form.

Additional Attachments

Please upload attachment in PDF form.

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

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

100%

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

100%

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

80%

Historic/archeological property impacted; determination of adverse effect anticipated

40%

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

0%

Project is located on an identified historic bridge

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

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

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

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

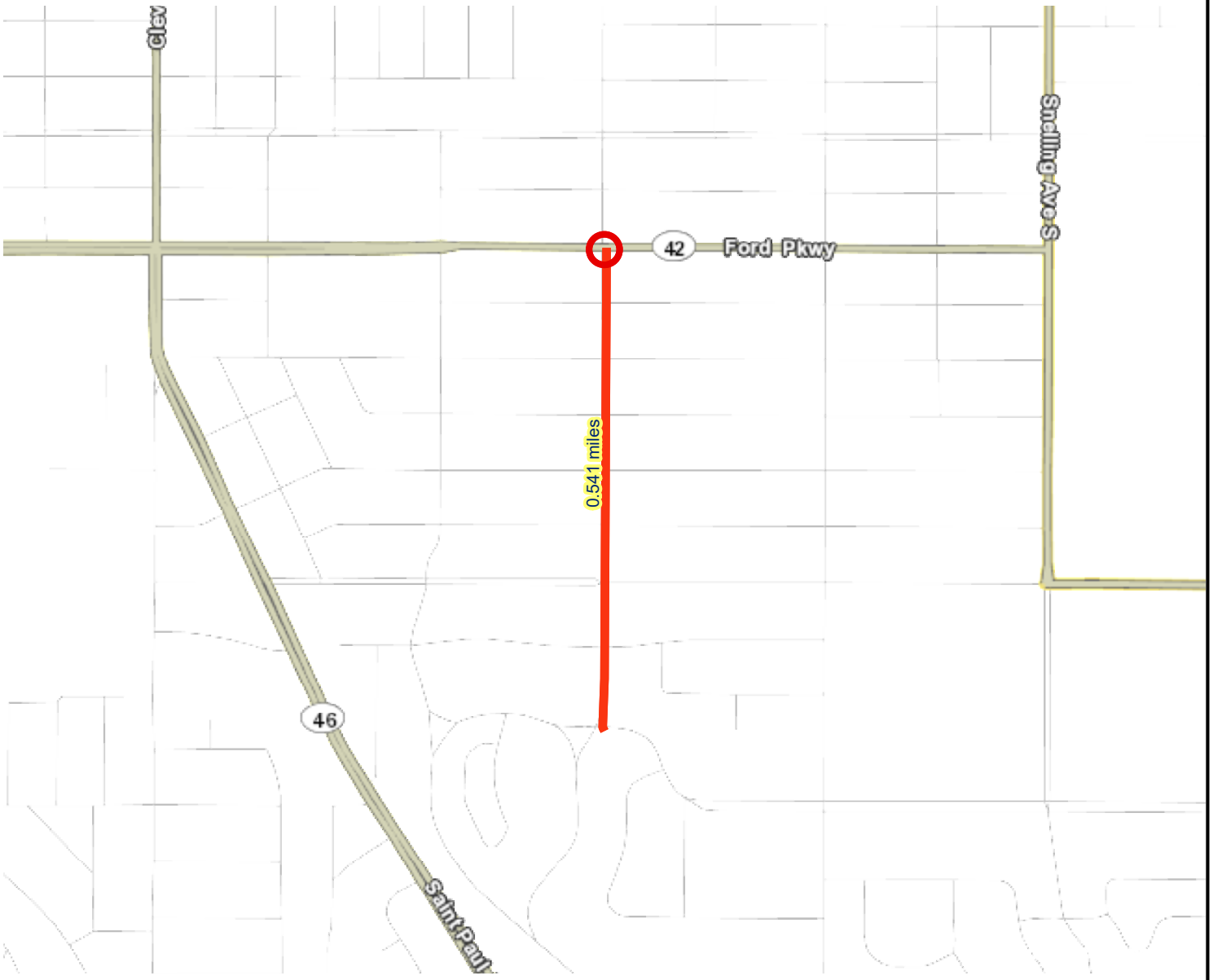
Total Project Cost (entered in Project Cost Form):	$8,125,051.83
Enter Amount of the Noise Walls:	$0.00
Total Project Cost subtract the amount of the noise walls:	$8,125,051.83
Enter amount of any outside, competitive funding:	$0.00
Attach documentation of award:	
Points Awarded in Previous Criteria	
Cost Effectiveness	$0.00

Other Attachments

File Name	Description	File Size
Fairview Ave Reconstruction_One Page Summary.pdf	One page project summary	326 KB
Fairview Avenue - Existing Conditions Photos.pdf	Existing conditions photos	920 KB
Level of Congestion Map.pdf	Level of congestion map	4.7 MB
Project Area Map_Fairview Ave Reconstruction.pdf	Project area map	725 KB
Regional Economy Map.pdf	Regional economy map	1.4 MB
RES 22-334 Regional Solicitation Projects.pdf	Resolution from City of Saint Paul	96 KB
Socio-Economic Conditions Map.pdf	Socio-economic conditions map	1.4 MB
Transit Connections Map.pdf	Transit connections map	1.4 MB

Regional Economy

Roadway Reconstruction/Modernization Project: Fairview Ave Improvements | Map ID: 1648065898443



Results

WITHIN ONE MI of project:
Postsecondary Students: 4277

Totals by City:
St. Paul
Population: 27210
Employment: 6548
Mfg and Dist Employment: 157

Project Points
Project
Manfacturing/Distribution Centers
Job Concentration Centers

0 0.1 0.2 0.4 0.6 0.8 Miles

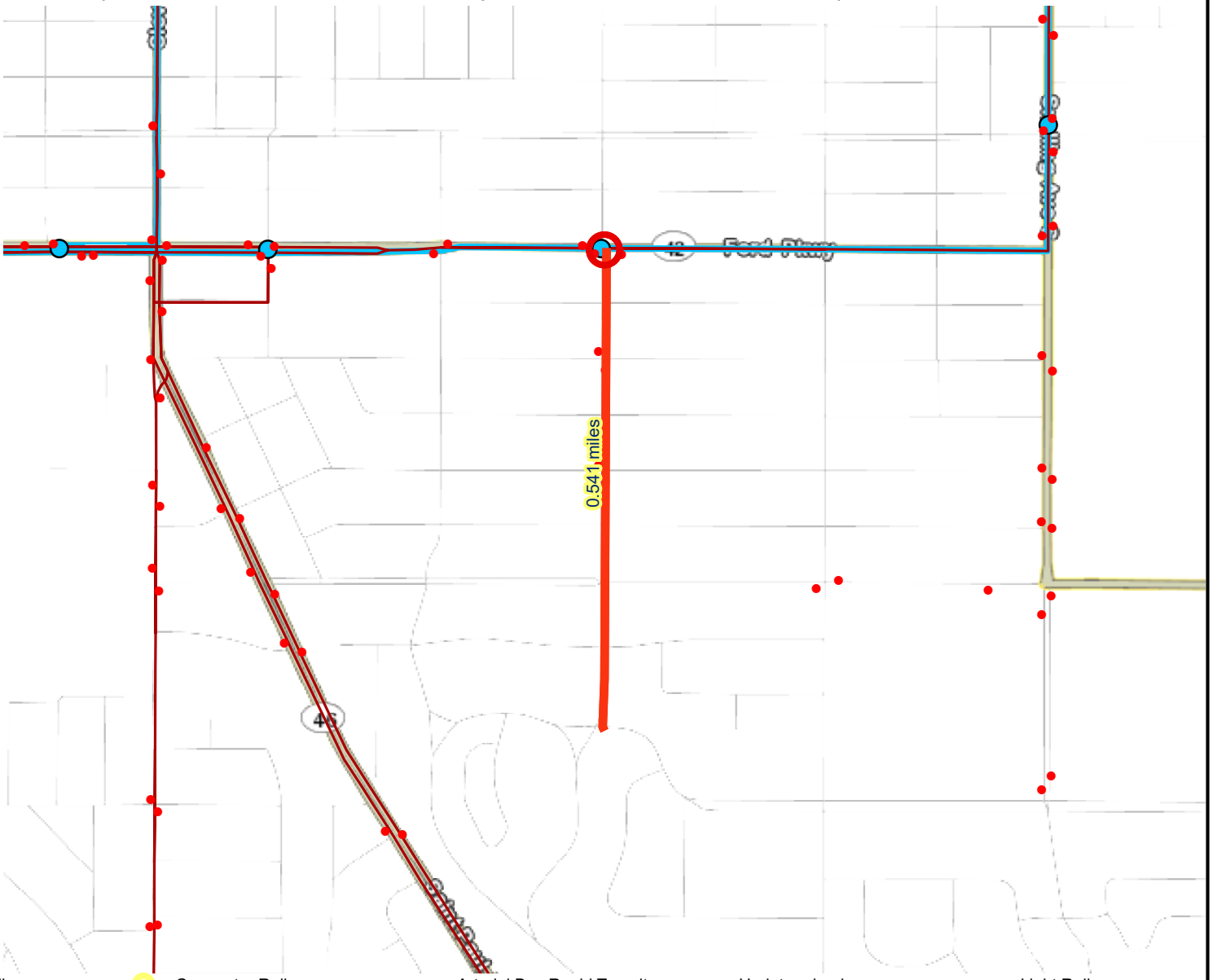
Created: 3/23/2022
LandscapeRSA5

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

METROPOLITAN COUNCIL

Transit Connections

Roadway Reconstruction/Modernization Project: Fairview Ave Improvements | Map ID: 1648065898443



Results

Transit with a Direct Connection to project:
921

**indicates Planned Alignments*

Transit Market areas: 2

Project Points
Project
Project Area
Active Stop
Arterial Bus Rapid Transit

Commuter Rail
Dedicated Bus Rapid Transit
Highway Bus Rapid Transit
Light Rail
Arterial Bus Rapid Transit

Commuter Rail
Dedicated Bus Rapid Transit
Highway Bus Rapid Transit
Light Rail
Transit Routes

Arterial Bus Rapid Transit
Dedicated Bus Rapid Transit
Highway Bus Rapid Transit
Light Rail
Modern Streetcar

Undetermined
Arterial Bus Rapid Transit
Commuter Rail
Dedicated Bus Rapid Transit
Highway Bus Rapid Transit

Light Rail
Modern Streetcar
Undetermined

0 0.1 0.2 0.4 0.6 0.8 Miles

Created: 3/23/2022
LandscapeRSA3

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

METROPOLITAN COUNCIL

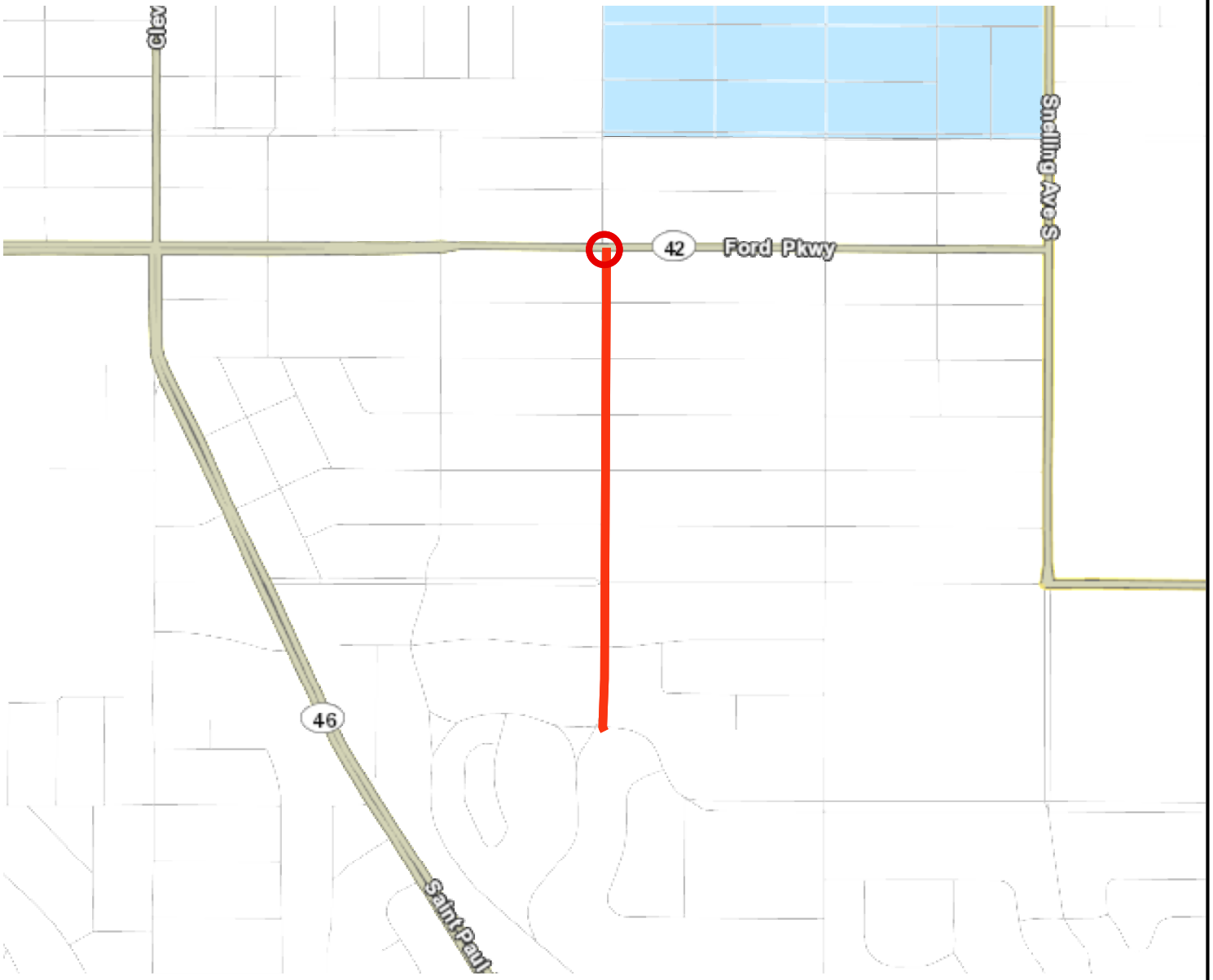
Socio-Economic Conditions

Roadway Reconstruction/Modernization Project: Fairview Ave Improvements | Map ID: 1648065898443

Results

Total of publicly subsidized rental housing units in census tracts within 1/2 mile: 576

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



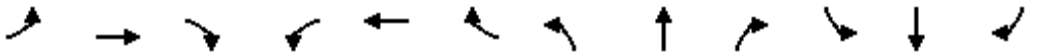
Points
Lines
Area of Concentrated Poverty
Regional Environmental Justice Area

0 0.1 0.2 0.4 0.6 0.8 Miles

Created: 3/23/2022
LandscapeRSA2

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

METROPOLITAN COUNCIL

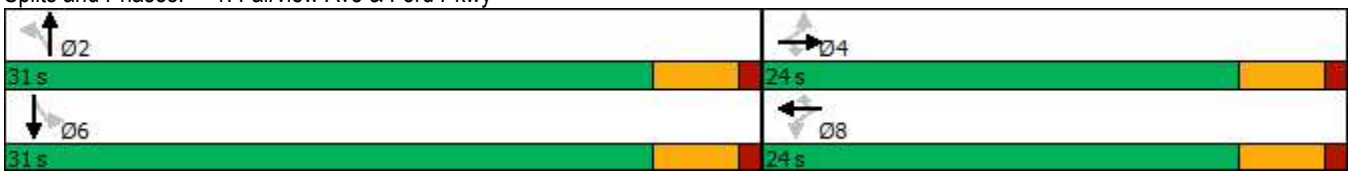


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	144	403	51	33	415	32	51	579	29	51	567	118
Future Volume (vph)	144	403	51	33	415	32	51	579	29	51	567	118
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		150	230		150	160		0	160		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.993			0.974	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1850	0	1770	1814	0
Flt Permitted	0.287			0.304			0.181			0.246		
Satd. Flow (perm)	535	1863	1583	566	1863	1583	337	1850	0	458	1814	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			55			35		6			26	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1241			1453			2002			1170	
Travel Time (s)		28.2			33.0			45.5			26.6	
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)	157	438	55	36	451	35	55	629	32	55	616	128
Shared Lane Traffic (%)												
Lane Group Flow (vph)	157	438	55	36	451	35	55	661	0	55	744	0
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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	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	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
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	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		

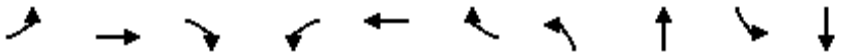
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4	8	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5		22.5	22.5	
Total Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	31.0	31.0		31.0	31.0	
Total Split (%)	43.6%	43.6%	43.6%	43.6%	43.6%	43.6%	56.4%	56.4%		56.4%	56.4%	
Maximum Green (s)	19.5	19.5	19.5	19.5	19.5	19.5	26.5	26.5		26.5	26.5	
Yellow Time (s)	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	
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												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None	None	Max	Max		Max	Max	
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)	17.3	17.3	17.3	17.3	17.3	17.3	26.6	26.6		26.6	26.6	
Actuated g/C Ratio	0.33	0.33	0.33	0.33	0.33	0.33	0.50	0.50		0.50	0.50	
v/c Ratio	0.90	0.72	0.10	0.20	0.74	0.06	0.33	0.71		0.24	0.81	
Control Delay	69.4	23.2	4.7	15.5	24.2	5.3	15.5	16.4		11.8	20.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	69.4	23.2	4.7	15.5	24.2	5.3	15.5	16.4		11.8	20.8	
LOS	E	C	A	B	C	A	B	B		B	C	
Approach Delay		32.8			22.3			16.4			20.2	
Approach LOS		C			C			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 53			
Natural Cycle: 55			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 22.6		Intersection LOS: C	
Intersection Capacity Utilization 83.5%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 1: Fairview Ave & Ford Pkwy



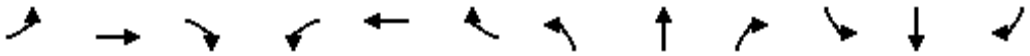
Queues
1: Fairview Ave & Ford Pkwy



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	157	438	55	36	451	35	55	661	55	744
v/c Ratio	0.90	0.72	0.10	0.20	0.74	0.06	0.33	0.71	0.24	0.81
Control Delay	69.4	23.2	4.7	15.5	24.2	5.3	15.5	16.4	11.8	20.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.4	23.2	4.7	15.5	24.2	5.3	15.5	16.4	11.8	20.8
Queue Length 50th (ft)	46	118	0	8	122	0	10	159	10	189
Queue Length 95th (ft)	#140	202	18	26	#211	15	37	#280	31	#389
Internal Link Dist (ft)		1161			1373			1922		1090
Turn Bay Length (ft)	230		150	230		150	160		160	
Base Capacity (vph)	197	688	619	209	688	607	169	932	229	924
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.64	0.09	0.17	0.66	0.06	0.33	0.71	0.24	0.81

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	403	51	33	415	32	51	579	29	51	567	118
Future Volume (veh/h)	144	403	51	33	415	32	51	579	29	51	567	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	157	438	55	36	451	35	55	629	32	55	616	128
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	663	562	273	663	562	218	850	43	282	724	150
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	910	1870	1585	904	1870	1585	716	1764	90	774	1502	312
Grp Volume(v), veh/h	157	438	55	36	451	35	55	0	661	55	0	744
Grp Sat Flow(s),veh/h/ln	910	1870	1585	904	1870	1585	716	0	1854	774	0	1814
Q Serve(g_s), s	8.2	10.9	1.3	1.9	11.3	0.8	4.0	0.0	15.8	3.4	0.0	19.8
Cycle Q Clear(g_c), s	19.5	10.9	1.3	12.8	11.3	0.8	23.8	0.0	15.8	19.2	0.0	19.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.05	1.00		0.17
Lane Grp Cap(c), veh/h	267	663	562	273	663	562	218	0	893	282	0	874
V/C Ratio(X)	0.59	0.66	0.10	0.13	0.68	0.06	0.25	0.00	0.74	0.20	0.00	0.85
Avail Cap(c_a), veh/h	267	663	562	273	663	562	218	0	893	282	0	874
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.9	15.0	11.9	20.3	15.1	11.7	23.0	0.0	11.5	19.2	0.0	12.5
Incr Delay (d2), s/veh	3.4	2.4	0.1	0.2	2.8	0.0	2.8	0.0	5.5	1.5	0.0	10.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	4.4	0.4	0.4	4.7	0.3	0.8	0.0	6.5	0.7	0.0	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.3	17.4	11.9	20.6	17.9	11.8	25.7	0.0	16.9	20.7	0.0	22.7
LnGrp LOS	C	B	B	C	B	B	C	A	B	C	A	C
Approach Vol, veh/h		650			522			716			799	
Approach Delay, s/veh		19.3			17.7			17.6			22.6	
Approach LOS		B			B			B			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		31.0		24.0		31.0		24.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		26.5		19.5		26.5		19.5				
Max Q Clear Time (g_c+I1), s		25.8		21.5		21.8		14.8				
Green Ext Time (p_c), s		0.3		0.0		2.3		1.3				

Intersection Summary												
HCM 6th Ctrl Delay			19.5									
HCM 6th LOS			B									

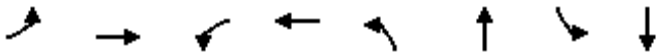
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	119	10	34	187	68	17	575	33	65	522	28
Future Volume (vph)	13	119	10	34	187	68	17	575	33	65	522	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	90		0	100		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988			0.960			0.992			0.992	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1840	0	1770	1788	0	1770	1848	0	1770	1848	0
Flt Permitted	0.469			0.668			0.350			0.304		
Satd. Flow (perm)	874	1840	0	1244	1788	0	652	1848	0	566	1848	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			36			8			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1199			1324			896			2002	
Travel Time (s)		27.3			30.1			20.4			45.5	
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)	14	129	11	37	203	74	18	625	36	71	567	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	140	0	37	277	0	18	661	0	71	597	0
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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	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	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
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	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	22.6	22.6		22.6	22.6		32.4	32.4		32.4	32.4	
Total Split (%)	41.1%	41.1%		41.1%	41.1%		58.9%	58.9%		58.9%	58.9%	
Maximum Green (s)	18.1	18.1		18.1	18.1		27.9	27.9		27.9	27.9	
Yellow Time (s)	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	
Lost Time Adjust (s)	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	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	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	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	12.1	12.1		12.1	12.1		29.3	29.3		29.3	29.3	
Actuated g/C Ratio	0.24	0.24		0.24	0.24		0.58	0.58		0.58	0.58	
v/c Ratio	0.07	0.31		0.12	0.61		0.05	0.61		0.22	0.55	
Control Delay	14.2	15.8		14.7	20.2		6.6	11.0		8.6	10.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	14.2	15.8		14.7	20.2		6.6	11.0		8.6	10.0	
LOS	B	B		B	C		A	B		A	A	
Approach Delay		15.6			19.6			10.9			9.8	
Approach LOS		B			B			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 50.4			
Natural Cycle: 55			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 12.4		Intersection LOS: B	
Intersection Capacity Utilization 69.6%		ICU Level of Service C	
Analysis Period (min) 15			

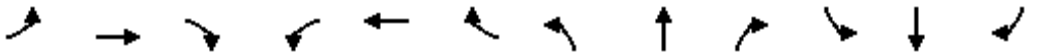
Splits and Phases: 2: Fairview Ave & Montreal Ave

Queues
2: Fairview Ave & Montreal Ave



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	14	140	37	277	18	661	71	597
v/c Ratio	0.07	0.31	0.12	0.61	0.05	0.61	0.22	0.55
Control Delay	14.2	15.8	14.7	20.2	6.6	11.0	8.6	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.2	15.8	14.7	20.2	6.6	11.0	8.6	10.0
Queue Length 50th (ft)	3	30	8	60	2	103	8	89
Queue Length 95th (ft)	13	65	25	116	11	257	34	219
Internal Link Dist (ft)		1119		1244		816		1922
Turn Bay Length (ft)	90		90		100		100	
Base Capacity (vph)	314	667	448	667	379	1078	329	1077
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.21	0.08	0.42	0.05	0.61	0.22	0.55

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	119	10	34	187	68	17	575	33	65	522	28
Future Volume (veh/h)	13	119	10	34	187	68	17	575	33	65	522	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	129	11	37	203	74	18	625	36	71	567	30
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	228	360	31	338	277	101	485	1043	60	441	1049	55
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	1102	1699	145	1249	1308	477	821	1751	101	774	1760	93
Grp Volume(v), veh/h	14	0	140	37	0	277	18	0	661	71	0	597
Grp Sat Flow(s),veh/h/ln	1102	0	1844	1249	0	1785	821	0	1852	774	0	1854
Q Serve(g_s), s	0.6	0.0	3.0	1.2	0.0	6.8	0.6	0.0	10.5	3.0	0.0	9.0
Cycle Q Clear(g_c), s	7.3	0.0	3.0	4.3	0.0	6.8	9.6	0.0	10.5	13.5	0.0	9.0
Prop In Lane	1.00		0.08	1.00		0.27	1.00		0.05	1.00		0.05
Lane Grp Cap(c), veh/h	228	0	391	338	0	379	485	0	1103	441	0	1104
V/C Ratio(X)	0.06	0.00	0.36	0.11	0.00	0.73	0.04	0.00	0.60	0.16	0.00	0.54
Avail Cap(c_a), veh/h	420	0	713	556	0	690	485	0	1103	441	0	1104
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.6	0.0	15.7	17.5	0.0	17.2	8.5	0.0	6.0	10.2	0.0	5.6
Incr Delay (d2), s/veh	0.1	0.0	0.6	0.1	0.0	2.7	0.1	0.0	2.4	0.8	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.2	0.3	0.0	2.7	0.1	0.0	3.2	0.5	0.0	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.7	0.0	16.3	17.7	0.0	19.9	8.7	0.0	8.4	11.0	0.0	7.5
LnGrp LOS	C	A	B	B	A	B	A	A	A	B	A	A
Approach Vol, veh/h		154			314			679			668	
Approach Delay, s/veh		16.7			19.7			8.4			7.9	
Approach LOS		B			B			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		32.4		14.4		32.4		14.4				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		27.9		18.1		27.9		18.1				
Max Q Clear Time (g_c+I1), s		12.5		9.3		15.5		8.8				
Green Ext Time (p_c), s		4.2		0.4		3.6		1.2				

Intersection Summary												
HCM 6th Ctrl Delay			10.9									
HCM 6th LOS			B									

1: Fairview Ave & Ford Pkwy

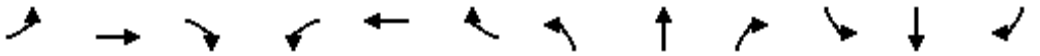
Direction	EB	WB	NB	SB	All
Future Volume (vph)	598	480	659	735	2472
Control Delay / Veh (s/v)	33	22	16	20	23
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	33	22	16	20	23
Total Delay (hr)	5	3	3	4	16
Stops / Veh	0.76	0.79	0.73	0.72	0.75
Stops (#)	456	378	480	531	1845
Average Speed (mph)	14	18	22	17	18
Total Travel Time (hr)	10	7	11	10	38
Distance Traveled (mi)	141	132	250	163	685
Fuel Consumed (gal)	12	10	15	13	50
Fuel Economy (mpg)	11.4	13.6	16.5	12.9	13.8
CO Emissions (kg)	0.86	0.68	1.06	0.89	3.48
NOx Emissions (kg)	0.17	0.13	0.21	0.17	0.68
VOC Emissions (kg)	0.20	0.16	0.25	0.21	0.81
Unserved Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

2: Fairview Ave & Montreal Ave

Direction	EB	WB	NB	SB	All
Future Volume (vph)	142	289	625	614	1670
Control Delay / Veh (s/v)	16	20	11	10	12
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	16	20	11	10	12
Total Delay (hr)	1	2	2	2	6
Stops / Veh	0.71	0.72	0.63	0.59	0.64
Stops (#)	101	207	394	362	1064
Average Speed (mph)	19	18	20	25	22
Total Travel Time (hr)	2	4	5	9	21
Distance Traveled (mi)	32	72	106	233	444
Fuel Consumed (gal)	2	5	8	13	28
Fuel Economy (mpg)	13.8	13.7	13.4	18.2	15.6
CO Emissions (kg)	0.16	0.37	0.55	0.90	1.98
NOx Emissions (kg)	0.03	0.07	0.11	0.17	0.39
VOC Emissions (kg)	0.04	0.09	0.13	0.21	0.46
Unserved Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

Network Totals

Number of Intersections	2
Control Delay / Veh (s/v)	18
Queue Delay / Veh (s/v)	0
Total Delay / Veh (s/v)	18
Total Delay (hr)	21
Stops / Veh	0.70
Stops (#)	2909
Average Speed (mph)	19
Total Travel Time (hr)	59
Distance Traveled (mi)	1129
Fuel Consumed (gal)	78
Fuel Economy (mpg)	14.4
CO Emissions (kg)	5.46
NOx Emissions (kg)	1.06
VOC Emissions (kg)	1.27
Unserved Vehicles (#)	0
Vehicles in dilemma zone (#)	0
Performance Index	29.4

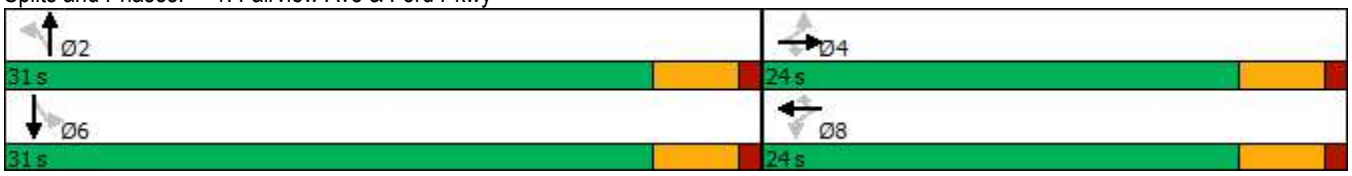


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	144	403	51	33	415	32	51	579	29	51	567	118
Future Volume (vph)	144	403	51	33	415	32	51	579	29	51	567	118
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		150	230		150	160		0	160		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.993			0.974	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1850	0	1770	1814	0
Flt Permitted	0.287			0.304			0.181			0.246		
Satd. Flow (perm)	535	1863	1583	566	1863	1583	337	1850	0	458	1814	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			55			35		6			26	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1241			1453			2002			1170	
Travel Time (s)		28.2			33.0			45.5			26.6	
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)	157	438	55	36	451	35	55	629	32	55	616	128
Shared Lane Traffic (%)												
Lane Group Flow (vph)	157	438	55	36	451	35	55	661	0	55	744	0
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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	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	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
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	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		

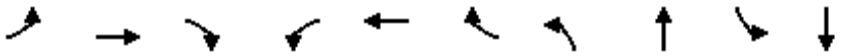
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4	8	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5		22.5	22.5	
Total Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	31.0	31.0		31.0	31.0	
Total Split (%)	43.6%	43.6%	43.6%	43.6%	43.6%	43.6%	56.4%	56.4%		56.4%	56.4%	
Maximum Green (s)	19.5	19.5	19.5	19.5	19.5	19.5	26.5	26.5		26.5	26.5	
Yellow Time (s)	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	
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												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None	None	Max	Max		Max	Max	
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)	17.3	17.3	17.3	17.3	17.3	17.3	26.6	26.6		26.6	26.6	
Actuated g/C Ratio	0.33	0.33	0.33	0.33	0.33	0.33	0.50	0.50		0.50	0.50	
v/c Ratio	0.90	0.72	0.10	0.20	0.74	0.06	0.33	0.71		0.24	0.81	
Control Delay	69.4	23.2	4.7	15.5	24.2	5.3	15.5	16.4		11.8	20.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	69.4	23.2	4.7	15.5	24.2	5.3	15.5	16.4		11.8	20.8	
LOS	E	C	A	B	C	A	B	B		B	C	
Approach Delay		32.8			22.3			16.4			20.2	
Approach LOS		C			C			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 53			
Natural Cycle: 55			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 22.6		Intersection LOS: C	
Intersection Capacity Utilization 83.5%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 1: Fairview Ave & Ford Pkwy



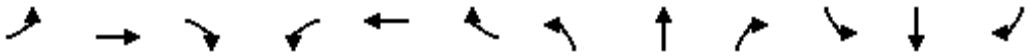
Queues
1: Fairview Ave & Ford Pkwy



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	157	438	55	36	451	35	55	661	55	744
v/c Ratio	0.90	0.72	0.10	0.20	0.74	0.06	0.33	0.71	0.24	0.81
Control Delay	69.4	23.2	4.7	15.5	24.2	5.3	15.5	16.4	11.8	20.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.4	23.2	4.7	15.5	24.2	5.3	15.5	16.4	11.8	20.8
Queue Length 50th (ft)	46	118	0	8	122	0	10	159	10	189
Queue Length 95th (ft)	#140	202	18	26	#211	15	37	#280	31	#389
Internal Link Dist (ft)		1161			1373			1922		1090
Turn Bay Length (ft)	230		150	230		150	160		160	
Base Capacity (vph)	197	688	619	209	688	607	169	932	229	924
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.64	0.09	0.17	0.66	0.06	0.33	0.71	0.24	0.81

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	403	51	33	415	32	51	579	29	51	567	118
Future Volume (veh/h)	144	403	51	33	415	32	51	579	29	51	567	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	157	438	55	36	451	35	55	629	32	55	616	128
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	663	562	273	663	562	218	850	43	282	724	150
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	910	1870	1585	904	1870	1585	716	1764	90	774	1502	312
Grp Volume(v), veh/h	157	438	55	36	451	35	55	0	661	55	0	744
Grp Sat Flow(s),veh/h/ln	910	1870	1585	904	1870	1585	716	0	1854	774	0	1814
Q Serve(g_s), s	8.2	10.9	1.3	1.9	11.3	0.8	4.0	0.0	15.8	3.4	0.0	19.8
Cycle Q Clear(g_c), s	19.5	10.9	1.3	12.8	11.3	0.8	23.8	0.0	15.8	19.2	0.0	19.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.05	1.00		0.17
Lane Grp Cap(c), veh/h	267	663	562	273	663	562	218	0	893	282	0	874
V/C Ratio(X)	0.59	0.66	0.10	0.13	0.68	0.06	0.25	0.00	0.74	0.20	0.00	0.85
Avail Cap(c_a), veh/h	267	663	562	273	663	562	218	0	893	282	0	874
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.9	15.0	11.9	20.3	15.1	11.7	23.0	0.0	11.5	19.2	0.0	12.5
Incr Delay (d2), s/veh	3.4	2.4	0.1	0.2	2.8	0.0	2.8	0.0	5.5	1.5	0.0	10.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	4.4	0.4	0.4	4.7	0.3	0.8	0.0	6.5	0.7	0.0	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.3	17.4	11.9	20.6	17.9	11.8	25.7	0.0	16.9	20.7	0.0	22.7
LnGrp LOS	C	B	B	C	B	B	C	A	B	C	A	C
Approach Vol, veh/h		650			522			716			799	
Approach Delay, s/veh		19.3			17.7			17.6			22.6	
Approach LOS		B			B			B			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		31.0		24.0		31.0		24.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		26.5		19.5		26.5		19.5				
Max Q Clear Time (g_c+I1), s		25.8		21.5		21.8		14.8				
Green Ext Time (p_c), s		0.3		0.0		2.3		1.3				

Intersection Summary												
HCM 6th Ctrl Delay			19.5									
HCM 6th LOS			B									

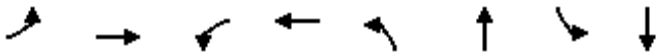
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	119	10	34	187	68	17	575	33	65	522	28
Future Volume (vph)	13	119	10	34	187	68	17	575	33	65	522	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	90		0	100		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988			0.960			0.992			0.992	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1840	0	1770	1788	0	1770	1848	0	1770	1848	0
Flt Permitted	0.469			0.668			0.350			0.304		
Satd. Flow (perm)	874	1840	0	1244	1788	0	652	1848	0	566	1848	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			36			8			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1199			1324			896			2002	
Travel Time (s)		27.3			30.1			20.4			45.5	
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)	14	129	11	37	203	74	18	625	36	71	567	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	140	0	37	277	0	18	661	0	71	597	0
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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	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	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
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	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	22.6	22.6		22.6	22.6		32.4	32.4		32.4	32.4	
Total Split (%)	41.1%	41.1%		41.1%	41.1%		58.9%	58.9%		58.9%	58.9%	
Maximum Green (s)	18.1	18.1		18.1	18.1		27.9	27.9		27.9	27.9	
Yellow Time (s)	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	
Lost Time Adjust (s)	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	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	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	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	12.1	12.1		12.1	12.1		29.3	29.3		29.3	29.3	
Actuated g/C Ratio	0.24	0.24		0.24	0.24		0.58	0.58		0.58	0.58	
v/c Ratio	0.07	0.31		0.12	0.61		0.05	0.61		0.22	0.55	
Control Delay	14.2	15.8		14.7	20.2		6.6	11.0		8.6	10.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	14.2	15.8		14.7	20.2		6.6	11.0		8.6	10.0	
LOS	B	B		B	C		A	B		A	A	
Approach Delay		15.6			19.6			10.9			9.8	
Approach LOS		B			B			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 50.4			
Natural Cycle: 55			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 12.4		Intersection LOS: B	
Intersection Capacity Utilization 69.6%		ICU Level of Service C	
Analysis Period (min) 15			

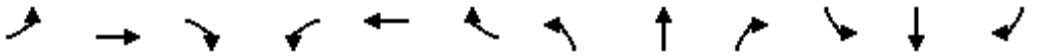
Splits and Phases: 2: Fairview Ave & Montreal Ave

Queues
2: Fairview Ave & Montreal Ave



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	14	140	37	277	18	661	71	597
v/c Ratio	0.07	0.31	0.12	0.61	0.05	0.61	0.22	0.55
Control Delay	14.2	15.8	14.7	20.2	6.6	11.0	8.6	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.2	15.8	14.7	20.2	6.6	11.0	8.6	10.0
Queue Length 50th (ft)	3	30	8	60	2	103	8	89
Queue Length 95th (ft)	13	65	25	116	11	257	34	219
Internal Link Dist (ft)		1119		1244		816		1922
Turn Bay Length (ft)	90		90		100		100	
Base Capacity (vph)	314	667	448	667	379	1078	329	1077
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.21	0.08	0.42	0.05	0.61	0.22	0.55

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	119	10	34	187	68	17	575	33	65	522	28
Future Volume (veh/h)	13	119	10	34	187	68	17	575	33	65	522	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	129	11	37	203	74	18	625	36	71	567	30
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	228	360	31	338	277	101	485	1043	60	441	1049	55
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	1102	1699	145	1249	1308	477	821	1751	101	774	1760	93
Grp Volume(v), veh/h	14	0	140	37	0	277	18	0	661	71	0	597
Grp Sat Flow(s),veh/h/ln	1102	0	1844	1249	0	1785	821	0	1852	774	0	1854
Q Serve(g_s), s	0.6	0.0	3.0	1.2	0.0	6.8	0.6	0.0	10.5	3.0	0.0	9.0
Cycle Q Clear(g_c), s	7.3	0.0	3.0	4.3	0.0	6.8	9.6	0.0	10.5	13.5	0.0	9.0
Prop In Lane	1.00		0.08	1.00		0.27	1.00		0.05	1.00		0.05
Lane Grp Cap(c), veh/h	228	0	391	338	0	379	485	0	1103	441	0	1104
V/C Ratio(X)	0.06	0.00	0.36	0.11	0.00	0.73	0.04	0.00	0.60	0.16	0.00	0.54
Avail Cap(c_a), veh/h	420	0	713	556	0	690	485	0	1103	441	0	1104
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.6	0.0	15.7	17.5	0.0	17.2	8.5	0.0	6.0	10.2	0.0	5.6
Incr Delay (d2), s/veh	0.1	0.0	0.6	0.1	0.0	2.7	0.1	0.0	2.4	0.8	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.2	0.3	0.0	2.7	0.1	0.0	3.2	0.5	0.0	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.7	0.0	16.3	17.7	0.0	19.9	8.7	0.0	8.4	11.0	0.0	7.5
LnGrp LOS	C	A	B	B	A	B	A	A	A	B	A	A
Approach Vol, veh/h		154			314			679			668	
Approach Delay, s/veh		16.7			19.7			8.4			7.9	
Approach LOS		B			B			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		32.4		14.4		32.4		14.4				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		27.9		18.1		27.9		18.1				
Max Q Clear Time (g_c+I1), s		12.5		9.3		15.5		8.8				
Green Ext Time (p_c), s		4.2		0.4		3.6		1.2				

Intersection Summary												
HCM 6th Ctrl Delay			10.9									
HCM 6th LOS			B									

1: Fairview Ave & Ford Pkwy

Direction	EB	WB	NB	SB	All
Future Volume (vph)	598	480	659	735	2472
Control Delay / Veh (s/v)	33	22	16	20	23
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	33	22	16	20	23
Total Delay (hr)	5	3	3	4	16
Stops / Veh	0.76	0.79	0.73	0.72	0.75
Stops (#)	456	378	480	531	1845
Average Speed (mph)	14	18	22	17	18
Total Travel Time (hr)	10	7	11	10	38
Distance Traveled (mi)	141	132	250	163	685
Fuel Consumed (gal)	12	10	15	13	50
Fuel Economy (mpg)	11.4	13.6	16.5	12.9	13.8
CO Emissions (kg)	0.86	0.68	1.06	0.89	3.48
NOx Emissions (kg)	0.17	0.13	0.21	0.17	0.68
VOC Emissions (kg)	0.20	0.16	0.25	0.21	0.81
Unserved Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

2: Fairview Ave & Montreal Ave

Direction	EB	WB	NB	SB	All
Future Volume (vph)	142	289	625	614	1670
Control Delay / Veh (s/v)	16	20	11	10	12
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	16	20	11	10	12
Total Delay (hr)	1	2	2	2	6
Stops / Veh	0.71	0.72	0.63	0.59	0.64
Stops (#)	101	207	394	362	1064
Average Speed (mph)	19	18	20	25	22
Total Travel Time (hr)	2	4	5	9	21
Distance Traveled (mi)	32	72	106	233	444
Fuel Consumed (gal)	2	5	8	13	28
Fuel Economy (mpg)	13.8	13.7	13.4	18.2	15.6
CO Emissions (kg)	0.16	0.37	0.55	0.90	1.98
NOx Emissions (kg)	0.03	0.07	0.11	0.17	0.39
VOC Emissions (kg)	0.04	0.09	0.13	0.21	0.46
Unserved Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

Network Totals

Number of Intersections	2
Control Delay / Veh (s/v)	18
Queue Delay / Veh (s/v)	0
Total Delay / Veh (s/v)	18
Total Delay (hr)	21
Stops / Veh	0.70
Stops (#)	2909
Average Speed (mph)	19
Total Travel Time (hr)	59
Distance Traveled (mi)	1129
Fuel Consumed (gal)	78
Fuel Economy (mpg)	14.4
CO Emissions (kg)	5.46
NOx Emissions (kg)	1.06
VOC Emissions (kg)	1.27
Unserved Vehicles (#)	0
Vehicles in dilemma zone (#)	0
Performance Index	29.4

Traffic Safety Benefit-Cost Calculation

Highway Safety Improvement Program (HSIP) Reactive Project

DEPARTMENT OF TRANSPORTATION

A. Roadway Description

Route	Fairview Avenue	**District**	Metro	**County**	Ramsey
Begin RP	0.45	**End RP**	0.99	**Miles**	0.540
Location	Edgcumbe Road to Ford Parkway				

B. Project Description

Proposed Work	Fairview Avenue Safety Improvements		
Project Cost*	$8,125,052	**Installation Year**	2027
Project Service Life	20 years	**Traffic Growth Factor**	1.0%

** exclude Right of Way from Project Cost*

C. Crash Modification Factor

0.89	**Fatal (K) Crashes**	**Reference**	Resurface Pavement
0.89	**Serious Injury (A) Crashes**		
0.89	**Moderate Injury (B) Crashes**	**Crash Type**	All on Fairview
0.89	**Possible Injury (C) Crashes**		
0.93	**Property Damage Only Crashes**		www.CMFclearinghouse.org

D. Crash Modification Factor (optional second CMF)

0.85	**Fatal (K) Crashes**	**Reference**	Left Turn Phase Improvement
0.85	**Serious Injury (A) Crashes**		
0.85	**Moderate Injury (B) Crashes**	**Crash Type**	Fairview/Ford intersection crashes
0.85	**Possible Injury (C) Crashes**		
0.96	**Property Damage Only Crashes**		www.CMFclearinghouse.org

E. Crash Data

Begin Date	1/1/2019	**End Date**	12/31/2021	3 years
Data Source	MnCMAT2			

Crash Severity	All on Fairview	Fairview/Ford intersection crashes
K crashes	0	0
A crashes	0	0
B crashes	0	0
C crashes	0	0
PDO crashes	2	3

F. Benefit-Cost Calculation

$23,361	**Benefit (present value)**	**B/C Ratio = 0.01**
$8,125,052	**Cost**	

Proposed project expected to reduce 1 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%	Default
Traffic Growth Rate:	1.0%	**Revised**
Project Service Life:	20 years	**Revised**

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	0.00	0.00	$0
C crashes	0.00	0.00	$0
PDO crashes	0.26	0.09	$1,135
			$1,135

H. Amortized Benefit

Year	Crash Benefits	Present Value
2027	$1,135	$1,135
2028	$1,147	$1,139
2029	$1,158	$1,142
2030	$1,170	$1,146
2031	$1,181	$1,149
2032	$1,193	$1,152
2033	$1,205	$1,156
2034	$1,217	$1,159
2035	$1,229	$1,163
2036	$1,242	$1,166
2037	$1,254	$1,170
2038	$1,267	$1,173
2039	$1,279	$1,177
2040	$1,292	$1,180
2041	$1,305	$1,184
2042	$1,318	$1,187
2043	$1,331	$1,191
2044	$1,345	$1,194
2045	$1,358	$1,198
2046	$1,372	$1,201
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 = $23,361

NOTE:
This calculation relies on the real discount rate, which accounts for inflation. No further discounting is necessary.

INCIDENTID	RTESYSCOD	RTENUMBE	MEASURE	COUNTY_S	CITY_NAMI	TOWNSHIP	MNDOT_DI	STATE_PAT
913104	5	132	0.621	62	Saint Paul		M	24
703465	5	132	0.993	62	Saint Paul		M	24
683350	4	42	1.152	62	Saint Paul		M	24
910850	4	42	1.179	62	Saint Paul		M	24

TRIBAL_GC	LOCALID	ACCIDENT_	CRASH_MC	CRASH_DA	CRASH_YE/	CRASH_DA	CRASH_HO	DIVIDEDRD
	21124564	2.12E+08	6	19	2021	Sat	13	98
	19074180	1.91E+08	4	12	2019	Fri	11	98
	19025016	1.9E+08	2	4	2019	Mon	15	98
	21116520	2.12E+08	6	8	2021	Tue	20	

CRASHSEVE	NUMBERKI	NUMBERO	MANNERO	FIRSTHARM	RELATIONT	LIGHTCONI	WEATHERP	WEATHERS
5	0	2	5	10	10	1	1	
5	0	3	5	10	3	1	4	2
5	0	2		11	2	1	1	
5	0	2	10	10	3	7	1	

RDWYSURF	WORKZON	ROADWAY	INTERSECT	ROUTE_ID	BASIC_TYP
1	98	S FAIRVIEW AVE		050002396	10
2	98	S FAIRVIEW	W FORD PK	050002396	10
5	98	W FORD PKWY		040000659	90
1	98	W FORD PK	S FAIRVIEW	040000659	5

CMF / CRF Details

CMF ID: 3947

Left turn phase improvement

Description: None

Prior Condition: Unknown

Category: Intersection traffic control

Study: *A full Bayes multivariate intervention model with random parameters among matched pairs for before-after safety evaluation*, El-Basyouny and Sayed, 2011

Star Quality Rating:	Stars [View score details]

Crash Modification Factor (CMF)	
Value:	0.96
Adjusted Standard Error:	
Unadjusted Standard Error:	

Crash Reduction Factor (CRF)	
Value:	4 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	
Unadjusted Standard Error:	

Applicability

Crash Type:	All
Crash Severity:	O (property damage only)
Roadway Types:	Not Specified
Number of Lanes:	
Road Division Type:	
Speed Limit:	
Area Type:	Urban
Traffic Volume:	
Time of Day:	All

If countermeasure is intersection-based

Intersection Type:	Roadway/roadway (not interchange related)
Intersection Geometry:	Not specified
Traffic Control:	Signalized
Major Road Traffic Volume:	
Minor Road Traffic Volume:	

Development Details

Date Range of Data Used:	2001 to 2008
Municipality:	
State:	
Country:	Canada
Type of Methodology Used:	2

Sample Size Used:	Site-years
Before Sample Size Used:	27 Site-years
After Sample Size Used:	22 Site-years

Other Details

Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Jun-04-2012
Comments:	The number of crashes in the after period were not reported in this study, however, they have been recorded as 300 to give 10 points as a beneift of doubt for one or more of the following: (1) number of miles/sites in the reference/treatment group, (2) number of crashes in the references/treatment group, (3) reporting AADTs for the aggregate dataset but not for the disaggragate dataset used for CMF development.

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

CMF / CRF Details

CMF ID: 3945

Left turn phase improvement

Description: None

Prior Condition: Unknown

Category: Intersection traffic control

Study: *A full Bayes multivariate intervention model with random parameters among matched pairs for before-after safety evaluation*, El-Basyouny and Sayed, 2011

Star Quality Rating:	[View score details]

Crash Modification Factor (CMF)	
Value:	0.85
Adjusted Standard Error:	
Unadjusted Standard Error:	

Crash Reduction Factor (CRF)	
Value:	15 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	
Unadjusted Standard Error:	

Applicability

Crash Type:	All
Crash Severity:	K (fatal),A (serious injury),B (minor injury),C (possible injury)
Roadway Types:	Not Specified
Number of Lanes:	
Road Division Type:	
Speed Limit:	
Area Type:	Urban
Traffic Volume:	
Time of Day:	All

If countermeasure is intersection-based

Intersection Type:	Roadway/roadway (not interchange related)
Intersection Geometry:	Not specified
Traffic Control:	Signalized
Major Road Traffic Volume:	
Minor Road Traffic Volume:	

Development Details

Date Range of Data Used:	2001 to 2008
Municipality:	
State:	
Country:	Canada
Type of Methodology Used:	2

Sample Size Used:	Site-years
Before Sample Size Used:	27 Site-years
After Sample Size Used:	22 Site-years

Other Details

Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Jun-04-2012
Comments:	The number of crashes in the after period were not reported in this study, however, they have been recorded as 300 to give 10 points as a beneift of doubt for one or more of the following: (1) number of miles/sites in the reference/treatment group, (2) number of crashes in the references/treatment group, (3) reporting AADTs for the aggregate dataset but not for the disaggragate dataset used for CMF development.

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

CMF / CRF Details

CMF ID: 9290

Resurface pavement

Description:

Prior Condition: *No Prior Condition(s)*

Category: Roadway

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

Star Quality Rating:	[View score details]

Crash Modification Factor (CMF)	
Value:	0.894
Adjusted Standard Error:	
Unadjusted Standard Error:	0.05

Crash Reduction Factor (CRF)	
Value:	10.6 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	
Unadjusted Standard Error:	5

Applicability

Crash Type:	All
Crash Severity:	K (fatal),A (serious injury),B (minor injury),C (possible injury)
Roadway Types:	Principal Arterial Other
Number of Lanes:	1-4
Road Division Type:	
Speed Limit:	25mph to 65mph
Area Type:	Urban
Traffic Volume:	2100 to 40500 *Annual Average Daily Traffic (AADT)*
Time of Day:	Not specified

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:	2004 to 2013
Municipality:	
State:	FL
Country:	USA
Type of Methodology Used:	1

Sample Size Used:	

Other Details

Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Jun-17-2018
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

wsb

HAMPSHIRE AVE

EDGCUMBE RD

YORKSHIRE AVE

MONTREAL AVE

W ROME AVE

SCALE IN FEET
0 50 100

7' BIKE LANE

6' WALK

VARIES

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

← 11' THRU
→ 11' THRU

FAIRVIEW AVE

← 11' THRU
11' LTL
→ 11' THRU

INTERSECTION RECONSTRUCTION AND PEDESTRIAN SAFETY IMPROVEMENTS SCHEDULED FOR 2022 IN SEPARATE CITY PROJECT

LEGEND

- BITUMINOUS ROADWAY
- CONCRETE CURB & GUTTER
- CONCRETE DRIVEWAY
- CONCRETE SIDEWALK
- TURF
- EXISTING SIGNAL
- PROPOSED TRAFFIC DIRECTION
- PROPERTY LINES

Date: Printed: 4/13/2022
W:\SB Filename: K:\022083-000\Cad\Exhibits\022083-000_exhibits_fairview_1.dgn

SAINT PAUL
MINNESOTA

Fairview Avenue Reconstruction
City of Saint Paul

Figure 1
Sheet 1 of 2
DRAFT CONCEPT - NOT FOR CONSTRUCTION
SUBJECT TO CHANGE IN DESIGN PHASE

wsb

SCALE IN FEET
0 50 100

W SAUNDERS AVE
BEECHWOOD AVE
BOHLAND AVE
HILLCREST AVE
FORD PKWY

7' BIKE LANE
6' WALK
VARIES

25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

← 11' THRU
→ 11' THRU
11' LTL
11' TWLTL

FAIRVIEW AVE

LEGEND

- BITUMINOUS ROADWAY
- CONCRETE CURB & GUTTER
- CONCRETE DRIVEWAY
- CONCRETE SIDEWALK
- TURF
- EXISTING SIGNAL
- PROPOSED TRAFFIC DIRECTION
- PROPERTY LINES

SAINT PAUL
MINNESOTA

Fairview Avenue Reconstruction
City of Saint Paul

Figure 2
Sheet 2 of 2
DRAFT CONCEPT - NOT FOR CONSTRUCTION
SUBJECT TO CHANGE IN DESIGN PHASE

Date: Printed: 4/13/2022
WSB Filename: K:\020083-000\Cad\Exhibits\020083-000_exhibits_fairview_2.dgn

Project Overview: Fairview Avenue Reconstruction

Applicant: City of Saint Paul
Project Location: Fairview Ave (Ford Parkway to Edgecumbe Rd)
Total Project Cost: $8,125,052
Requested Federal Award Amount: $6,500,042
Local Match: $1,625,010

The City of Saint Paul is planning multimodal roadway improvements on Fairview Avenue between Ford Parkway and Edgecumbe Road. The Fairview Avenue corridor is classified as an A-Minor Arterial Augmentor and is currently a mix of two-lane and three-lane roadway sections. The proposed project will maintain the two-lane and three-lane configurations but will make improvements including full-depth reconstruction of pavement structure, adding on-street bike lanes along the entire corridor; traffic signal revisions; reconstruct new, wider sidewalks on both sides of the street; add a grass boulevard between the roadway and the sidewalk; and make ADA improvements at intersections. ADA improvements will include new curb ramps, APS buttons, and detectable warning surfaces/truncated domes. The project connects directly to the A Line BRT corridor, which has stations located at the north end of the project corridor at Ford Parkway/Fairview Avenue. A separate City project is planned at the south extent of the project - at the intersection of Fairview Avenue/Edgcumbe Road. This project, scheduled for 2022, includes expanding the Zeilingold Triangle Park, realigning and narrowing the roadways, adding a sidewalk on the west side of Edcumbe Road, reducing curb radii to reduce traffic speeds, and adding curb extensions on the eastern portion of the intersection.

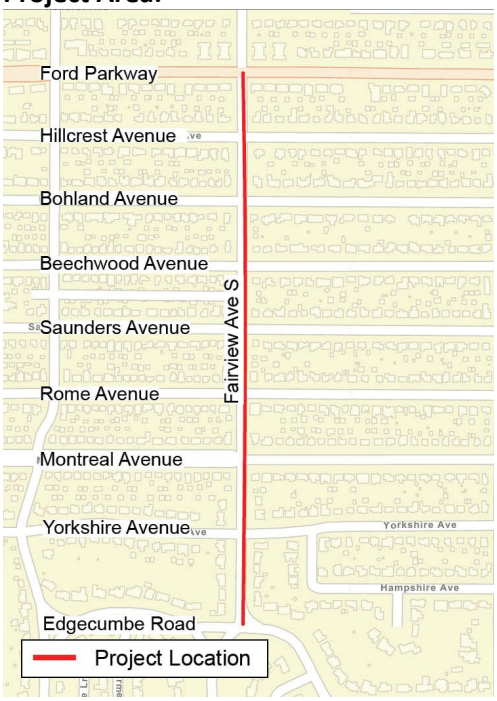
Project Benefits:

- On-street bike lanes added to fill local and regional bikeway gap
- Increased pedestrian safety and comfort through wider sidewalks and added boulevard space on both sides
- Reduces risk of crashes and conflicts between bicyclists, pedestrians, and vehicles
- Traffic signal revisions

Key Connections:

- Connections to Metro A Line BRT on Ford Parkway
- Located near the Ford redevelopment site and Highland Village, with connections via A Line BRT
- Located on a RBTN Tier 1 Alignment
- Connects to an RBTN Tier 2 Corridor on Montreal Avenue
- Nearby access to St. Catherine University

Project Area:

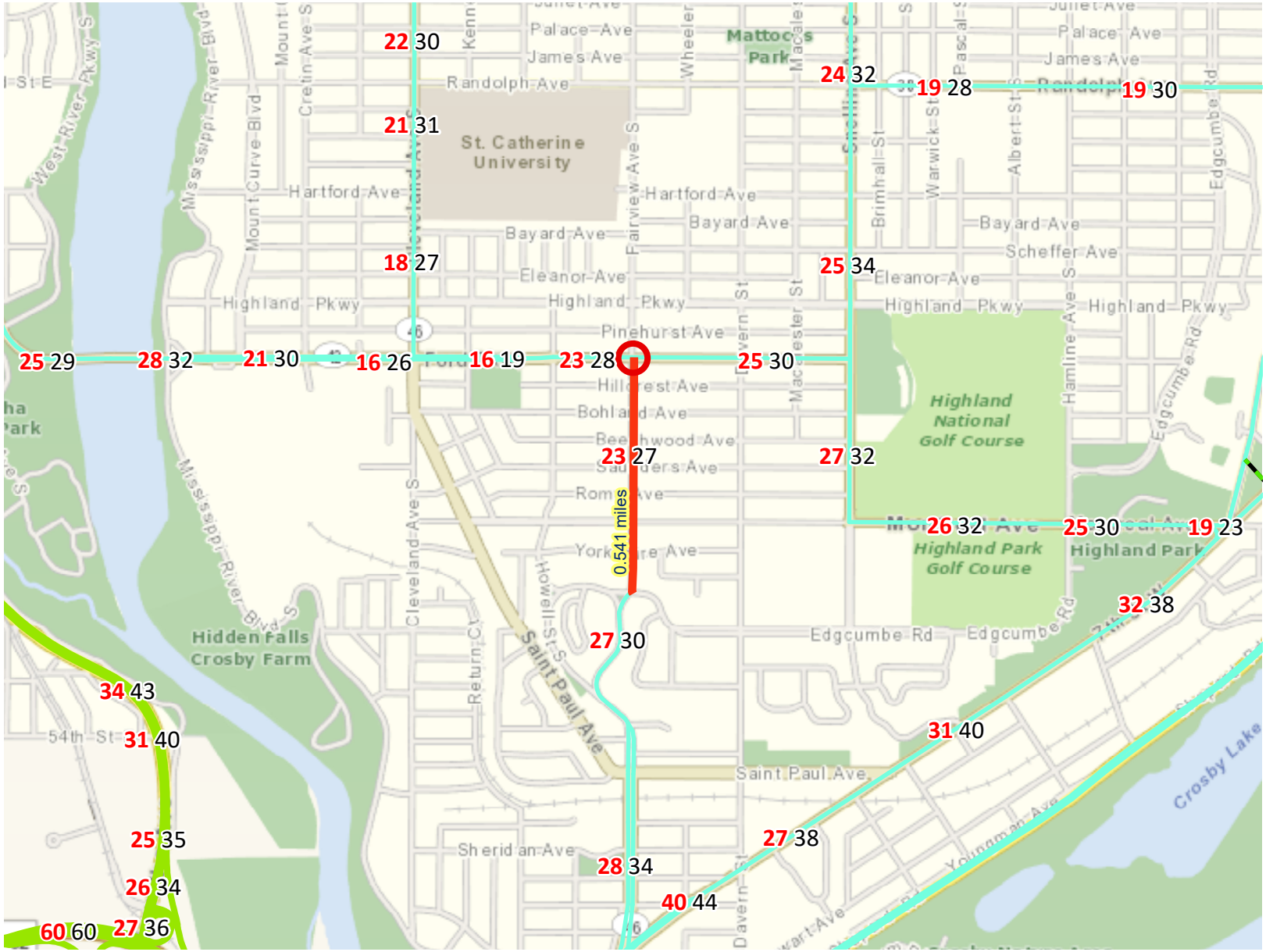


Existing Conditions:

Fairview Avenue - Existing Conditions

Level of Congestion

Roadway Reconstruction/Modernization Project: Fairview Ave Improvements | Map ID: 1648065898443



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

0 0.2 0.4 0.8 1.2 1.6 Miles

Created: 3/23/2022
LandscapeRSA1

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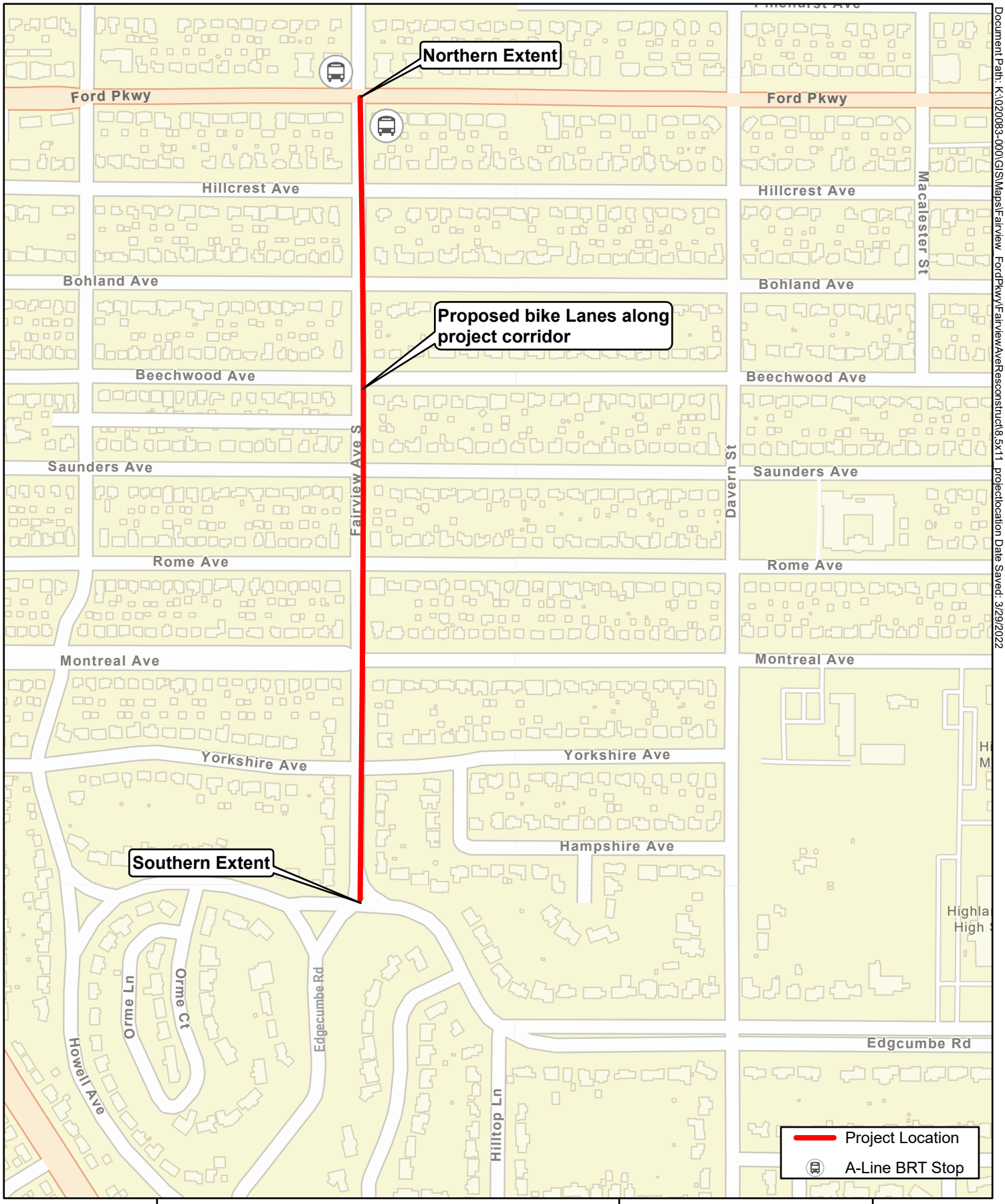


SAINT PAUL
MINNESOTA

Figure 1 - Project Location

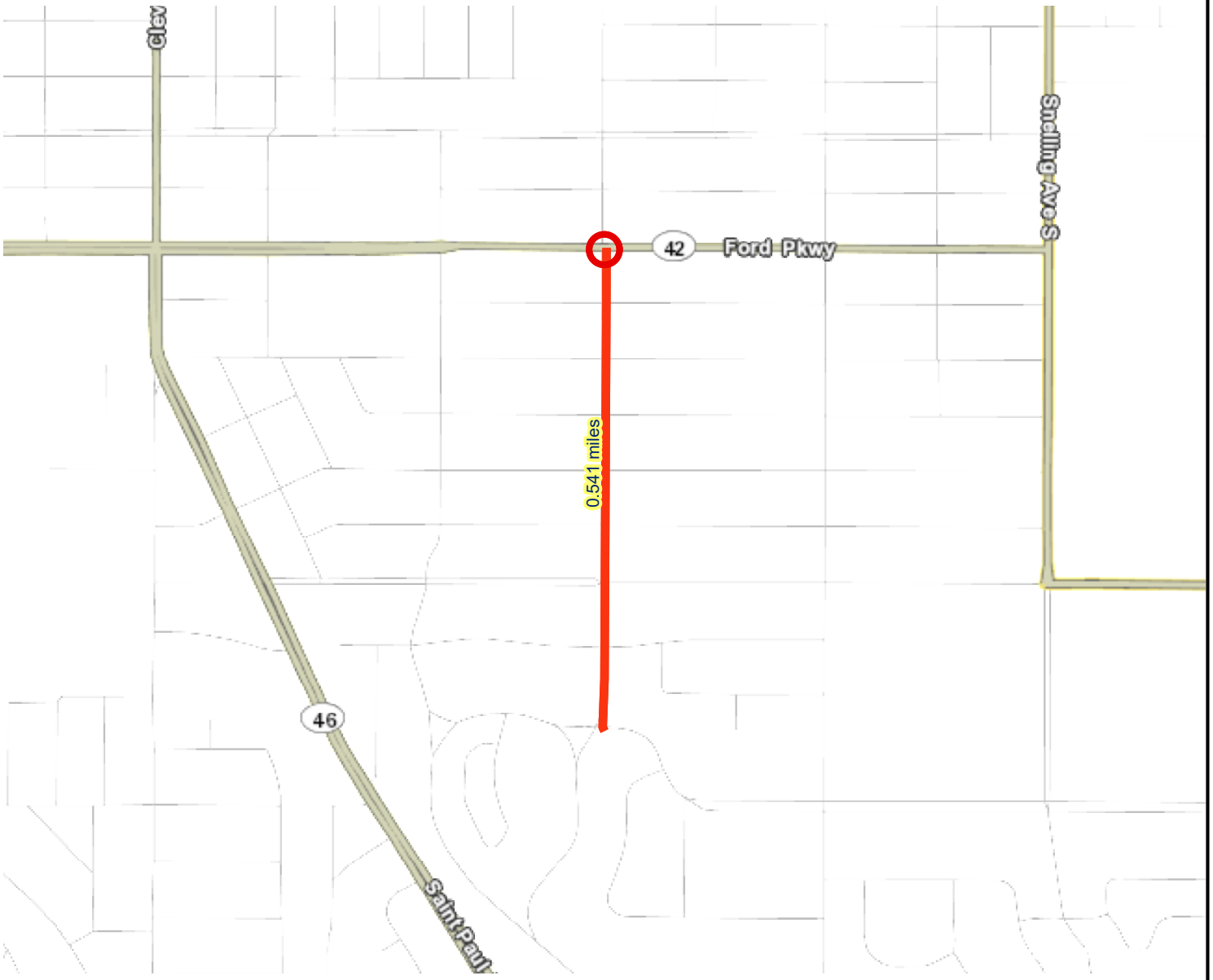
Fairview Avenue Reconstruction
City of Saint Paul

N
0
500
Feet

wsb

Regional Economy

Roadway Reconstruction/Modernization Project: Fairview Ave Improvements | Map ID: 1648065898443



Results

WITHIN ONE MI of project:
Postsecondary Students: 4277

Totals by City:
St. Paul
Population: 27210
Employment: 6548
Mfg and Dist Employment: 157

Project Points
Project
Manfacturing/Distribution Centers
Job Concentration Centers

0 0.1 0.2 0.4 0.6 0.8 Miles

Created: 3/23/2022
LandscapeRSA5

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METROPOLITAN COUNCIL

City of Saint Paul

Signature Copy

Resolution: RES 22-334

City Hall and Court House
15 West Kellogg Boulevard
Phone: 651-266-8560

File Number: RES 22-334

Authorizing the Departments of Public Works and Parks and Recreation to submit project applications for federal funding into the 2022 Metropolitan Council Regional Solicitation Program and to authorize the commitment of a twenty percent local funding match plus engineering for any project that is awarded federal funding.

WHEREAS, the Departments of Public Works and Parks and Recreation are proposing to submit twelve project applications for federal funding into the 2022 Metropolitan Council Regional Solicitation Program for funding in years 2026 and 2027; and

WHEREAS, there is a required twenty percent local funding match to any project awarded to an agency under the Regional Solicitation Program; and

WHEREAS, the City commits to ensuring that all sidewalks and bikeways included in these project applications will be fully open for use and cleared of snow throughout the winter, either by City staff or by adjacent property owners per existing City ordinances; and

WHEREAS, the projects to be submitted by the City under the Metropolitan Council Regional Solicitation are as follows:

- Wabasha Street Reconstruct - 7th to 11th (Roadways)
- Minnehaha Avenue Reconstruct - Payne to 7th (Roadways)
- Fairview Avenue Reconstruct - Edgcumbe to Ford (Roadways)
- Cretin Avenue Reconstruct - I94 to Marshall (Roadways)
- Maryland Avenue Traffic Signal Modernization - Dale to White Bear (Traffic Management)
- Capital City Bikeway - Kellogg from W. 7th to John Ireland (Multiuse Trails)
- Capital City Bikeway - St. Peter/12th from 10th to John Ireland (Multiuse Trails)
- Point Douglas Regional Trail Phase 1 Construction (Multiuse Trails)
- Payne Avenue - Phalen Blvd to Maryland (Pedestrian Facilities)
- Arlington Avenue Sidewalk Infill - I35E to Edgerton (Pedestrian Facilities)
- Chelsea Heights Safe Routes to School (Safe Routes to School)
- Evie Carshare Expansion (Unique Projects 2024/2025 funding)

WHEREAS, these projects fall within appropriate funding categories and meet the conditions and requirements specified for eligibility of federal funding; now, therefore be it

RESOLVED, that the Council of the City of Saint Paul authorizes submission of the project applications for possible award of federal transportation funds through the Metropolitan Council Regional Solicitation Program; and be it finally

RESOLVED, that the Council of the City of Saint Paul authorizes the commitment of local funds on

a twenty percent match basis plus engineering for any project awarded federal funding under the Regional Solicitation Program.

ResolutionRES 22-334PassedMayor's OfficepassedSigned4/8/20224/6/2022Signed|DAYTHAt a meeting of the on , this Resolution was Signed.

Yea: 4 Councilmember Noecker, Councilmember Prince, Councilmember Jalali, and Councilmember Yang

Nay: 0

Absent: 3 Councilmember Brendmoen, Councilmember Thao, and Councilmember Tolbert

Vote Attested by Council Secretary Shari Moore **Date** 4/6/2022

Approved by the Mayor Melvin Carter III **Date** 4/8/2022

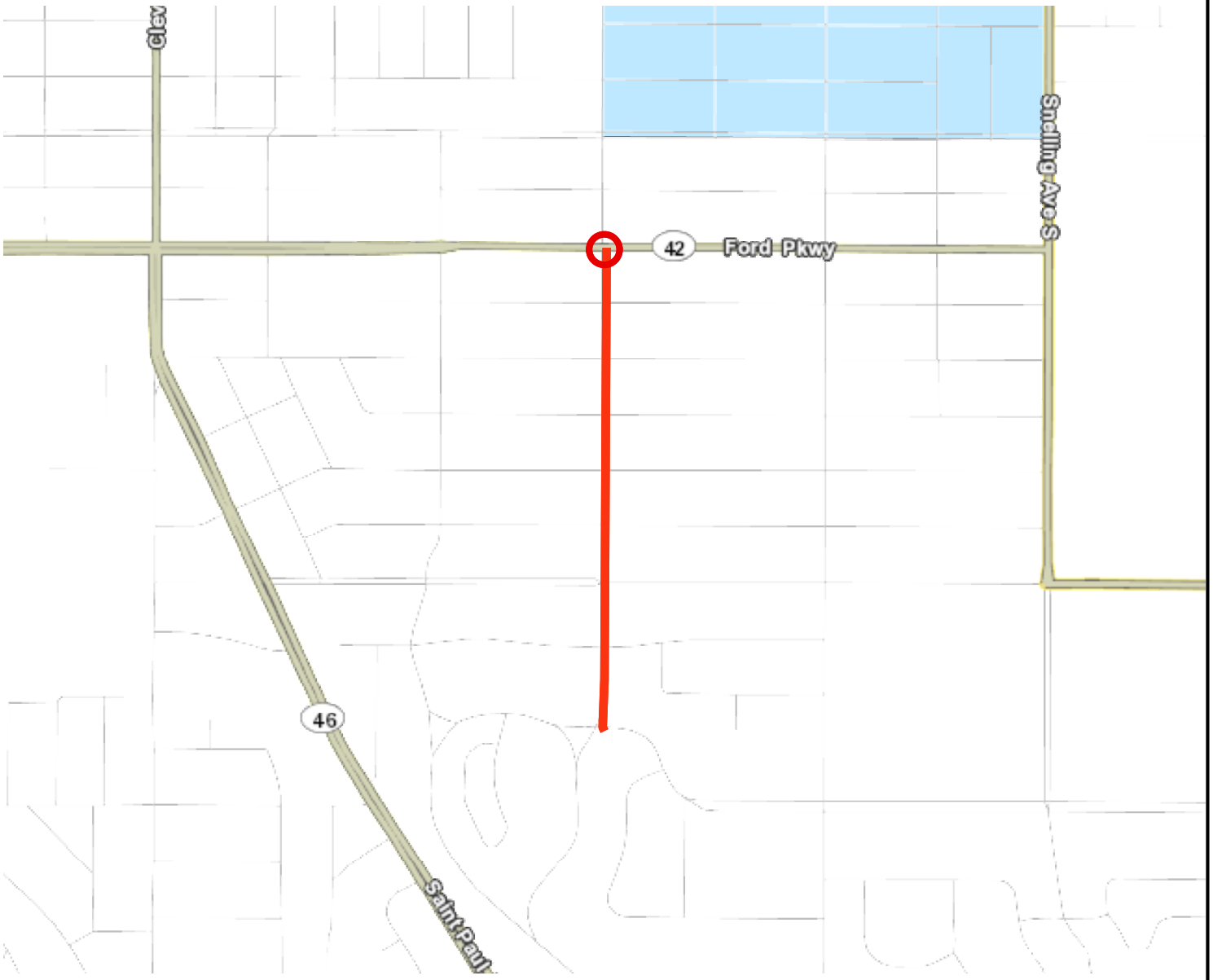
Socio-Economic Conditions

Roadway Reconstruction/Modernization Project: Fairview Ave Improvements | Map ID: 1648065898443

Results

Total of publicly subsidized rental housing units in census tracts within 1/2 mile: 576

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



Points
Lines
Area of Concentrated Poverty
Regional Environmental Justice Area

0 0.1 0.2 0.4 0.6 0.8 Miles

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LandscapeRSA2

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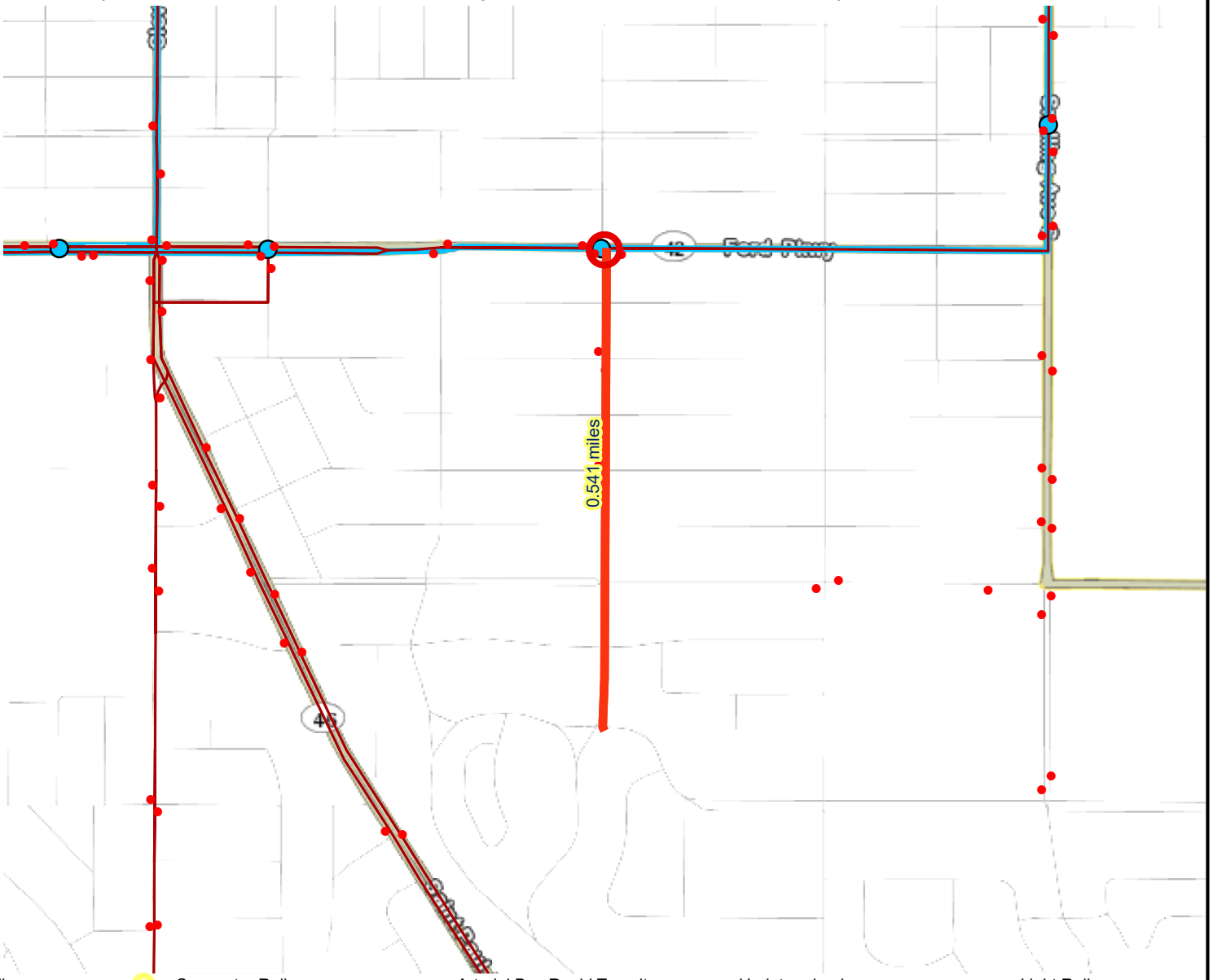
Transit Connections

Roadway Reconstruction/Modernization Project: Fairview Ave Improvements | Map ID: 1648065898443



Results

Transit with a Direct Connection to project:
921

**indicates Planned Alignments*

Transit Market areas: 2

Project Points
Project
Project Area
Active Stop
Arterial Bus Rapid Transit

Commuter Rail
Dedicated Bus Rapid Transit
Highway Bus Rapid Transit
Light Rail
Arterial Bus Rapid Transit

Commuter Rail
Dedicated Bus Rapid Transit
Highway Bus Rapid Transit
Light Rail
Transit Routes

Arterial Bus Rapid Transit
Dedicated Bus Rapid Transit
Highway Bus Rapid Transit
Light Rail
Modern Streetcar

Undetermined
Arterial Bus Rapid Transit
Commuter Rail
Dedicated Bus Rapid Transit
Highway Bus Rapid Transit

Light Rail
Modern Streetcar
Undetermined

0 0.1 0.2 0.4 0.6 0.8 Miles

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LandscapeRSA3

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