



Application

10353 - 2018 Roadway Expansion

10972 - Troutbrook Road: Kittson Street to University Avenue

Regional Solicitation - Roadways Including Multimodal Elements

Status: Submitted
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Primary Contact

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***** Saint Paul Minnesota 55102-1660
City State/Province Postal Code/Zip

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Fax:

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

Troutbrook Road: Kittson Street to University Avenue

Primary County where the Project is Located

Ramsey

Cities or Townships where the Project is Located:

City of Saint Paul

Jurisdictional Agency (If Different than the Applicant):

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

This project will create 0.29 miles of new Principal Arterial roadway from the U.S. Highway 52/Kittson Street off ramp and the University Avenue(MSAS137)/Lafayette Road(MSAS 113)intersection in St. Paul, Minnesota. The project will also create a section of the Troutbrook Regional Trail via a new off-street shared use trail between U.S. Highway 52 and University Avenue.

(Limit 2,800 characters; approximately 400 words)

TIP Description [Guidance](#) (will be used in TIP if the project is selected for funding)

Troutbrook Road, St. Paul; US52 to University/Lafayette/MSAS134/MSAS113; New roadway

Project Length (Miles)

0.3

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 \$4,500,000.00

Match Amount \$1,200,000.00

Minimum of 20% of project total

Project Total \$5,700,000.00

Match Percentage 21.05%

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: 2023

Select 2020 or 2021 for TDM projects only. For all other applications, select 2022 or 2023.

Additional Program Years:

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

Project Information: Roadway Projects

County, City, or Lead Agency City of Saint Paul, Minnesota

Functional Class of Road A-Minor

Road System City Street and this road will be included as part of the City's MSAS system.

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

Road/Route No.

i.e., 53 for CSAH 53

Name of Road The roadway, once operational, will be called Troutbrook Road.

Example; 1st ST., MAIN AVE

Zip Code where Majority of Work is Being Performed 55102

(Approximate) Begin Construction Date 04/01/2023

(Approximate) End Construction Date 12/31/2023

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

From:
(Intersection or Address) 0.1 miles east of switch back for northbound US52 off-ramp

To:
(Intersection or Address) University Avenue (MSAS 137)/Lafayette Road (MSAS113) intersection (inclusive of work in intersectio

DO NOT INCLUDE LEGAL DESCRIPTION

Or At

Primary Types of Work

Grading, agg. base, bit. base & wear, curb & gutter, sidewalk, stormsewer, traffic signal(s), street lighting, shared use path, guardrails, ped. ramps

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 (2015), the 2040 Regional Parks Policy Plan (2015), and the 2040 Water Resources Policy Plan (2015).

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

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

Chapter 2

Goal A (Transportation System Stewardship),
Objective B, page 17

Goal C (Access to Destinations), objectives A - E
page 24; strategies C1- C3 pages 24 - 26, strategy
C8 & C9 pages 31 - 32, strategy C15 - C17 on
pages 36 - 37, strategy C19 on page 37

Goal D (Competitive Economy), objectives A - C
page 38; strategies D1 ? D5, pages 38 - 41

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

Goal E (Healthy Environment), Objectives A ? D
page 42; strategies E2 on page 43, E4 - E7 pages
44 - 47

Chapter 7 Regional Bicycle Transportation
Network; Guiding principles as stated on pages 6 -
7; Regional Bicycle Network pages 11 - 18;
Implementing the Regional Bicycle Transportation
Network pages 17 - 20

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.

Question 3

The Troutbrook Road project is consistent with the City's Council Adopted Comprehensive plan. More specifically, Appendix T-A (page T-29) identifies the Kittson Extension project, which has been renamed Troutbrook Road, as a specific project that meets strategy T-2.4 on page T-10.

List the applicable documents and pages:

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.

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

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

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

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

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

7. The requested funding amount must be more than or equal to the minimum award and less than or equal to the maximum award. The cost of preparing a project for funding authorization can be substantial. For that reason, minimum federal amounts apply. Other federal funds may be combined with the requested funds for projects exceeding the maximum award, but the source(s) must be identified in the application. Funding amounts by application category are listed below.

Roadway Expansion: \$1,000,000 to \$7,000,000

Roadway Reconstruction/ Modernization Modernization and Spot Mobility: \$1,000,000 to \$7,000,000

Traffic Management Technologies (Roadway System Management): \$250,000 to \$7,000,000

Bridges Rehabilitation/ Replacement: \$1,000,000 to \$7,000,000

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

8. The project must comply with the Americans with Disabilities Act (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, or be substantially working towards, completing 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 applicant is a public agency that employs 50 or more people and has an adopted ADA transition plan that covers the public right of way/transportation. Yes

04/21/2010

Date plan adopted by governing body

The applicant is a public agency that employs 50 or more people and is currently working towards completing an ADA transition plan that covers the public rights of way/transportation.

Date process started

Date of anticipated plan completion/adoption

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

Date self-evaluation completed

The applicant is a public agency that employs fewer than 50 people and is working towards completing an ADA self-evaluation that covers the public rights of way/transportation.

Date process started

Date of anticipated plan completion/adoption

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

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.

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 Expansion 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.

Bridge Rehabilitation/Replacement projects only:

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

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

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

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

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

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

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

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

Roadway Expansion, Reconstruction/Modernization and Spot Mobility, 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.

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)	\$280,000.00
Removals (approx. 5% of total cost)	\$100,000.00
Roadway (grading, borrow, etc.)	\$450,000.00
Roadway (aggregates and paving)	\$425,000.00
Subgrade Correction (muck)	\$0.00
Storm Sewer	\$400,000.00
Ponds	\$100,000.00
Concrete Items (curb & gutter, sidewalks, median barriers)	\$225,000.00
Traffic Control	\$150,000.00
Striping	\$15,000.00
Signing	\$5,000.00
Lighting	\$220,000.00
Turf - Erosion & Landscaping	\$375,000.00
Bridge	\$0.00
Retaining Walls	\$1,300,000.00
Noise Wall (not calculated in cost effectiveness measure)	\$0.00
Traffic Signals	\$450,000.00
Wetland Mitigation	\$0.00
Other Natural and Cultural Resource Protection	\$0.00
RR Crossing	\$0.00
Roadway Contingencies	\$900,000.00
Other Roadway Elements	\$0.00
Totals	\$5,395,000.00

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Path/Trail Construction	\$270,000.00
Sidewalk Construction	\$0.00
On-Street Bicycle Facility Construction	\$0.00
Right-of-Way	\$0.00
Pedestrian Curb Ramps (ADA)	\$0.00

Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	\$0.00
Pedestrian-scale Lighting	\$0.00
Streetscaping	\$35,000.00
Wayfinding	\$0.00
Bicycle and Pedestrian Contingencies	\$0.00
Other Bicycle and Pedestrian Elements	\$0.00
Totals	\$305,000.00

Specific Transit and TDM Elements

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

Transit Operating Costs

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

Totals

Total Cost	\$5,700,000.00
Construction Cost Total	\$5,700,000.00
Transit Operating Cost Total	\$0.00

Congestion on adjacent Parallel Routes:

Adjacent Parallel Corridor	MSAS113/Lafayette Road
Adjacent Parallel Corridor Start and End Points:	
Start Point:	MNTH5/East 7th Street
End Point:	MSAS137/University Avenue
Free-Flow Travel Speed:	31
<i>The Free-Flow Travel Speed is black number.</i>	
Peak Hour Travel Speed:	10
<i>The Peak Hour Travel Speed is red number.</i>	
Percentage Decrease in Travel Speed in Peak Hour Compared to Free-Flow:	67.74%
Upload Level of Congestion Map:	1531148827701_LevelOfCongestion.pdf

Principal Arterial Intersection Conversion Study:

Proposed interchange or at-grade project that reduces delay at a High Priority Intersection:

(80 Points)

Proposed at-grade project that reduces delay at a Medium Priority Intersection:

(60 Points)

Proposed at-grade project that reduces delay at a Low Priority Intersection:

(50 Points)

Proposed interchange project that reduces delay at a Medium Priority Intersection:

(40 Points)

Proposed interchange project that reduces delay at a Low Priority Intersection:

(0 Points)

Not listed as a priority in the study: Yes

(0 Points)

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

Existing Employment within 1 Mile:	72624
Existing Manufacturing/Distribution-Related Employment within 1 Mile:	3424
Existing Post-Secondary Students within 1 Mile:	8879
Upload Map	1531148974029_RegionalEconomy.pdf

Please upload attachment in PDF form.

Measure C: Current Heavy Commercial Traffic

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

Along Tier 1:

Along Tier 2:

Along Tier 3:

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

None of the tiers:

Measure A: Current Daily Person Throughput

Location	Troutbrook Road
Current AADT Volume	6600
Existing Transit Routes on the Project	64, 74
<i>For New Roadways only, list transit routes that will likely be diverted to the new proposed roadway (if applicable).</i>	
Upload Transit Connections Map	1531259893654_TransitConnections.pdf

Please upload attachment in PDF form.

Response: Current Daily Person Throughput

Average Annual Daily Transit Ridership	17380.0
Current Daily Person Throughput	25960.0

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 7800

OR

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

Forecast (2040) ADT volume

Measure A: Connection to disadvantaged populations and projects benefits, impacts, and mitigation

Select one:

Project located in Area of Concentrated Poverty with 50% or more of residents are people of color (ACP50): Yes

(up to 100% of maximum score)

Project located in Area of Concentrated Poverty:

(up to 80% of maximum score)

Projects census tracts are above the regional average for population in poverty or population of color:

(up to 60% of maximum score)

Project located in a census tract that is below the regional average for population in poverty or populations of color or includes children, people with disabilities, or the elderly:

(up to 40% of maximum score)

1.(0 to 3 points) A successful project is one that has actively engaged low-income populations, people of color, children, persons with disabilities, and the elderly during the project's development with the intent to limit negative impacts on them and, at the same time, provide the most benefits.

Describe how the project has encouraged or will engage the full cross-section of community in decision-making. Identify the communities to be engaged and where in the project development process engagement has occurred or will occur. Elements of quality engagement include: outreach to specific communities and populations that are likely to be directly impacted by the project; techniques to reach out to populations traditionally not involved in the community engagement related to transportation projects; residents or users identifying potential positive and negative elements of the project; and surveys, study recommendations, or plans that provide feedback from populations that may be impacted by the proposed project. If relevant, describe how NEPA or Title VI regulations will guide engagement activities.

Response:

The City will use a variety of communications techniques, both new and old, to notify the community about the Troutbrook Road project. The City will hold community meetings with notification completed electronically and via print media including resident mailings, local newspapers, Ward e-Newsletters and District Council e-Newsletters. Additional outreach will be completed using surveys, the City's Web Site, Twitter, Facebook, YouTube and other social media accounts. In addition, links will be provided by various local groups and media outlets to the City's site, or to other social media sites, and open houses will be held as needed.

(Limit 1,400 characters; approximately 200 words)

2.(0 to 7 points) Describe the project's benefits to low-income populations, people of color, children, people with disabilities, and the elderly. Benefits could relate to safety; public health; access to destinations; travel time; gap closure; leveraging of other beneficial projects and investments; and/or community cohesion. Note that this is not an exhaustive list.

Difficulty arises when trying to answer this question in the context of isolating the benefits or disbenefits to a specific population (low-income, people of color, etc.) from the rest of the population using the system. The benefits/disbenefits to people of differing demographics are/could be the same for people of modest means. For example, with implementation of the proposed project there will be improved access from US52 to University Avenue as it will be more direct than what currently exists. The more direct access will allow easier access to neighborhoods, both of lower income and those of more modest means. The Project would connect areas of income disparity throughout an east/west corridor that begins in the western part of the City and ends at the City's southern border of the West Side. A corridor that connects with job concentration centers downtown via Lafayette Road and East 7th Street as well as along University Avenue, along Lafayette Road, in the West Midway area, and manufacturing/distribution centers and the light industrial areas, inclusive of a BNSF Intermodal Facility west end of the City.

Response:

With implementation of a shared use trail as part of the project, a continuation of a trail adjacent to US52 will be provided and a new connection to Lafayette Road/University Avenue will be created. The new connection, and the expansion of an existing one, will be a benefit for all people, including the elderly and those with disabilities. People will be able to more easily access the metro area transit system, the regions extensive trail system, and local destinations such as Trillium Nature Sanctuary and Swede Hollow. The new connection will enable those without a vehicle to more easily travel to and from job centers such as those referenced above. The new connections will provide improved continuity between the neighborhoods east such as Daytons Bluff, Downtown, the West Side, and Payne-Phalen to

those in the west such as Frog Town, Hamline-Midway, Summit-University and Union Park. The connection will provide easier access to the recently completed light rail line, shops along University (just west of downtown), shops developed predominantly by Hmong and Karin immigrants, easier access to shops and business of the West Side with a significant population of Latino and East European descent.

(Limit 2,800 characters; approximately 400 words)

3.(-3 to 0 points) Describe any negative externalities created by the project along with measures that will be taken to mitigate them. Negative externalities can result in a reduction in points, but mitigation of externalities can offset reductions.

Below is a list of negative impacts. Note that this is not an exhaustive list.

Increased difficulty in street crossing caused by increased roadway width, increased traffic speed, wider turning radii, or other elements that negatively impact pedestrian access.

Increased noise.

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

Project elements that are detrimental to location-based air quality by increasing stop/start activity at intersections, creating vehicle idling areas, directing an increased number of vehicles to a particular point, etc.

Increased speed and/or cut-through traffic.

Removed or diminished safe bicycle access.

Inclusion of some other barrier to access to jobs and other destinations.

Displacement of residents and businesses.

Construction/implementation impacts such as dust; noise; reduced access for travelers and to businesses; disruption of utilities; and eliminated street crossings. These tend to be temporary.

Other

Response:

As for disbenefits to the socio-economic fabric of the area, implementing the Project will be accompanied with a temporary disruption to the existing travel patterns of the public. This would include the potential for increased truck traffic through neighborhoods, disruption to existing bicycle and pedestrian facilities, etc. These impacts would be mitigated by City Staff responsible for approving detours, verifying contractor compliance with the MN MUTCD, actively pursuing a neighborhood involvement program through the life of the Project, actively pursuing communication through social media, etc.

(Limit 2,800 characters; approximately 400 words)

Upload Map

1531183368498_SocioEconomicConditions.pdf

Measure B: Affordable Housing

City	Segment Length (For stand-alone projects, enter population from Regional Economy map) within each City/Township	Segment Length/Total Project Length	Score	Housing Score Multiplied by Segment percent
St. Paul	0.29	1.0	100.0	100.0

Total Project Length

Total Project Length (as entered in the "Project Information" form) 0.3

Affordable Housing Scoring

Total Project Length (Miles) or Population 0.29
 Total Housing Score 100.0

Affordable Housing Scoring

Measure A: Infrastructure Age

Year of Original Roadway Construction or Most Recent Reconstruction	Segment Length	Calculation	Calculation 2
1901.0	0.25	475.25	819.397
1901.0	0.15	285.15	491.638
2014.0	0.18	362.52	625.034
	1	1123	1936

Average Construction Year

Weighted Year 1936.069

Total Segment Length (Miles)

Total Segment Length 0.58

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 (Vehicles per hour)	Total Peak Hour Delay Reduced by the Project:	EXPLANATION of methodology used to calculate railroad crossing delay, if applicable.	Synchro or HCM Reports
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Vehicle Delay Reduced

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):
0	0	0
0	0	0

Total

Total Emissions Reduced: 0

Upload Synchro Report

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

0	0	0
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)

New roadway. No modeling available.

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: Benefit of Crash Reduction

Crash Modification Factor Used:

(Limit 700 Characters; approximately 100 words)

Rationale for Crash Modification Selected:

(Limit 1400 Characters; approximately 200 words)

Project Benefit (\$) from B/C Ratio: 3345054.0

Worksheet Attachment

1531490358687_TroutbrookBenefitCostWorksheet-aug2015-revised.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: Multimodal Elements and Existing Connections

The Troutbrook Road project will provide a critical link in the Trout Brook Regional Trail as shown in the attached figure. Based on the Master Plan as developed by the City's Department of Parks and Recreation, the entire Trout Brook Regional Trail will link Lake McCarron's County Park to the Lower Phalen Creek Valley area, including the Bruce Vento Nature Sanctuary and terminate at the Mississippi River, within the City of Saint Paul's Lower Landing Park. This trail corridor will provide connections of regional significance between the Mississippi River, Sam Morgan Regional Trail, Bruce Vento Regional Trail, the Gateway State Trail, downtown St. Paul.

The 2006 "Ramsey County Parks and Recreation System Plan" identifies the existing portion of the Trout Brook Trail as being designated by the Metropolitan Council as a regional trail.

Response:

This System Plan also identified a search area to link the trail to the existing Bruce Vento Regional Trail in Saint Paul. Currently the trail begins at McCarrons Lake, within the City of Roseville near St. Paul's northern boundary. The existing trail corridor connects 2 major open space sites, Lake McCarrons and Arlington/Jackson Pond, along the historic path of Trout Brook to where it ends at the intersection with the Gateway State Trail on L'Orient Avenue. The proposed corridor will expand the existing trail south from the Arlington Jackson Pond site via railroad right-of-way through the Trillium Nature Sanctuary and then it will utilize the proposed Gateway State Trail expansion along the western edge of 35E to Phalen Boulevard. From here, the trail will follow Phalen Boulevard east and curve beneath Westminster Junction bridge to minimize vehicular and pedestrian conflict. The trail will then proceed along the western side of railroad right-of-way and along proposed Trout Brook

Boulevard, a city of St. Paul Department of Public Works initiative to connect University Avenue to Warner Road.

For the section nearest the proposed Troutbrook Road, from L'Orient Street the trail corridor follows the existing trail along Phalen Boulevard then ramps down to cross beneath Phalen Boulevard at Westminster Junction bridge. From there the trail stays to the west of the rail lines behind Lafayette office park on city owned right of way. Beginning just south of Lafayette Road the trail will be built in conjunction with the proposed Trout Brook Boulevard from University Avenue to Warner Road. The trail will terminate in Lower Landing Park and intersect with the Sam Morgan Regional Trail.

(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)Layout (30 Percent of Points)

Layout should include proposed geometrics and existing and proposed right-of-way boundaries.

Layout approved by the applicant and all impacted jurisdictions (i.e., cities/counties that the project goes through or agencies that maintain the roadway(s)). A PDF of the layout must be attached along with letters from each jurisdiction to receive points.

100%

Attach Layout

Please upload attachment in PDF form.

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

Yes

50%

Attach Layout

1531347403046_TroutbrookAlignment.pdf

Please upload attachment in PDF form.

Layout has not been started

0%

Anticipated date or date of completion

2)Review of Section 106 Historic Resources (20 Percent of Points)

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

100%

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

100%

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

80%

Historic/archeological property impacted; determination of adverse effect anticipated

40%

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

0%

Project is located on an identified historic bridge

3)Right-of-Way (30 Percent of Points)

Right-of-way, permanent or temporary easements either not required or all have been acquired

100%

Right-of-way, permanent or temporary easements required, plat, legal descriptions, or official map complete

50%

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

25%

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

0%

Anticipated date or date of acquisition

4)Railroad Involvement (20 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%

Anticipated date or date of executed Agreement

Measure A: Cost Effectiveness

Total Project Cost (entered in Project Cost Form):	\$5,700,000.00
Enter Amount of the Noise Walls:	\$0.00
Total Project Cost subtract the amount of the noise walls:	\$5,700,000.00
Points Awarded in Previous Criteria	
Cost Effectiveness	\$0.00

Other Attachments



avscriptvoid(0)

GOOGLE street view photo at University facing east.

3.9 MB



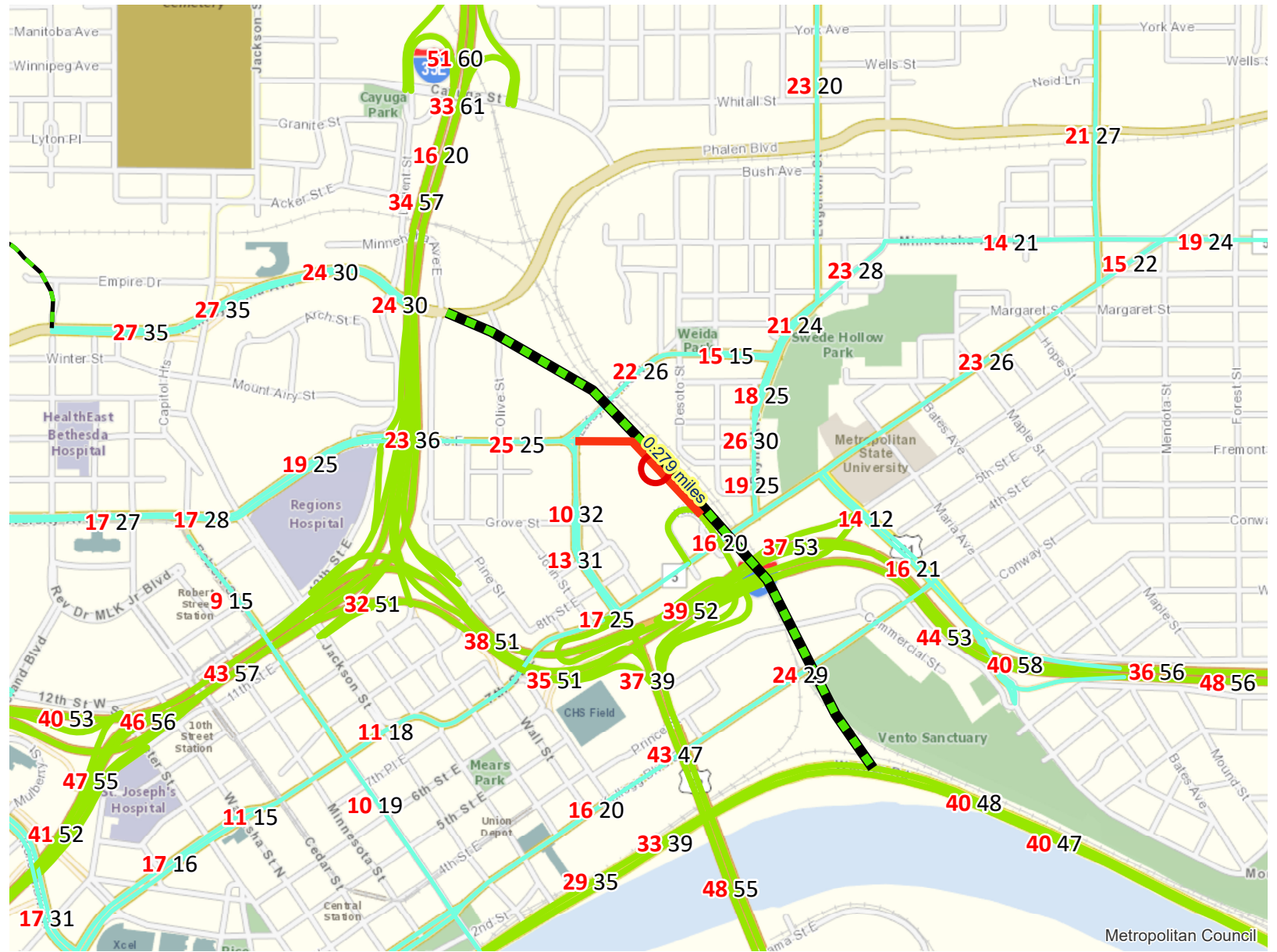
GOOGLE street view of from the US52 off ramp looking west.

3.4 MB

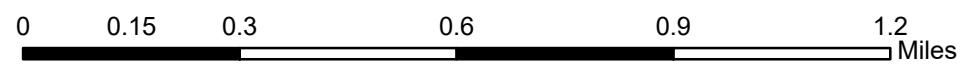
File Name	Description	File Size
10972_RE_SaintPaul_Troutbrook Road-attachProjectSummary-pdf.pdf	Project Summary PDF	11 KB
10972_RE_SaintPaul_Troutbrook Road_Streetview PDF.pdf	Google Streetview in PDF	291 KB
2015MnDOTSafetyHandbook-PgA23.pdf	2015MnDOTSafetyHandbook-PgA23 used for CRF.	103 KB
Project Summary.docx	Project Summary	15 KB
RES 18-803.pdf	Resolution on 7/12/18 City Council agenda authorizing the City's Public Works and Parks & Recreation Departments submit applications for the current round of Regional Solicitations.	65 KB
Road Expansion Model Results edited.pdf	Met Council 2040 model of proposed roadway.	2.8 MB
TransPlanAppendixStrategy2Pg10.pdf	Page T-10 from the Transportation Chapter of the City's Comprehensive Plan.	176 KB
TransPlanAppendixT-APg29.pdf	Appendix T-4, page 29, of the Transportation Chapter of the City's Comprehensive Plan.	144 KB
Troutbrook Road Connection Map.pdf	Troutbrook Road Location Map	1.2 MB
TroutbrookAlignment8.5x11.pdf	Troutbrook Road Preliminary Alignment	7.2 MB
TroutBrookTrailMasterPlanCorridor.pdf	Trout Brook Trail Master Plan Exhibit	420 KB

Level of Congestion

Roadway Expansion Project: Troutbrook | Map ID: 1530054477799



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



Created: 6/26/2018
LandscapeRSA1



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



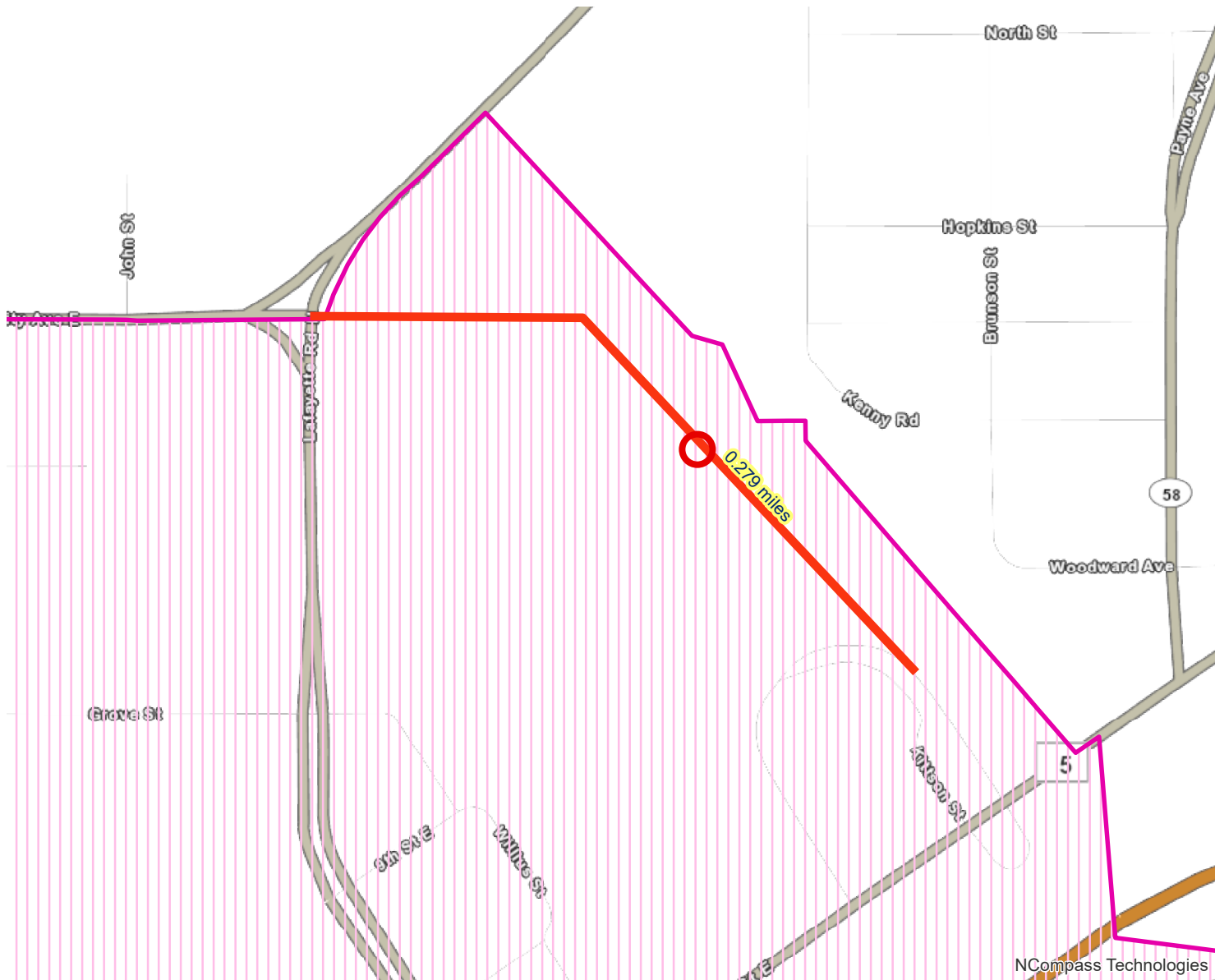
Regional Economy

Roadway Expansion Project: Troutbrook | Map ID: 1530054477799

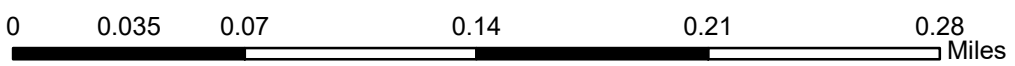
Results

WITHIN ONE MI of project:
Postsecondary Students: 8879

Totals by City:
St. Paul
Population: 33924
Employment: 72624
Mfg and Dist Employment: 3424



- Project Points
- Manufacturing/Distribution Centers
- Project
- Job Concentration Centers



Created: 6/26/2018
LandscapeRSA5

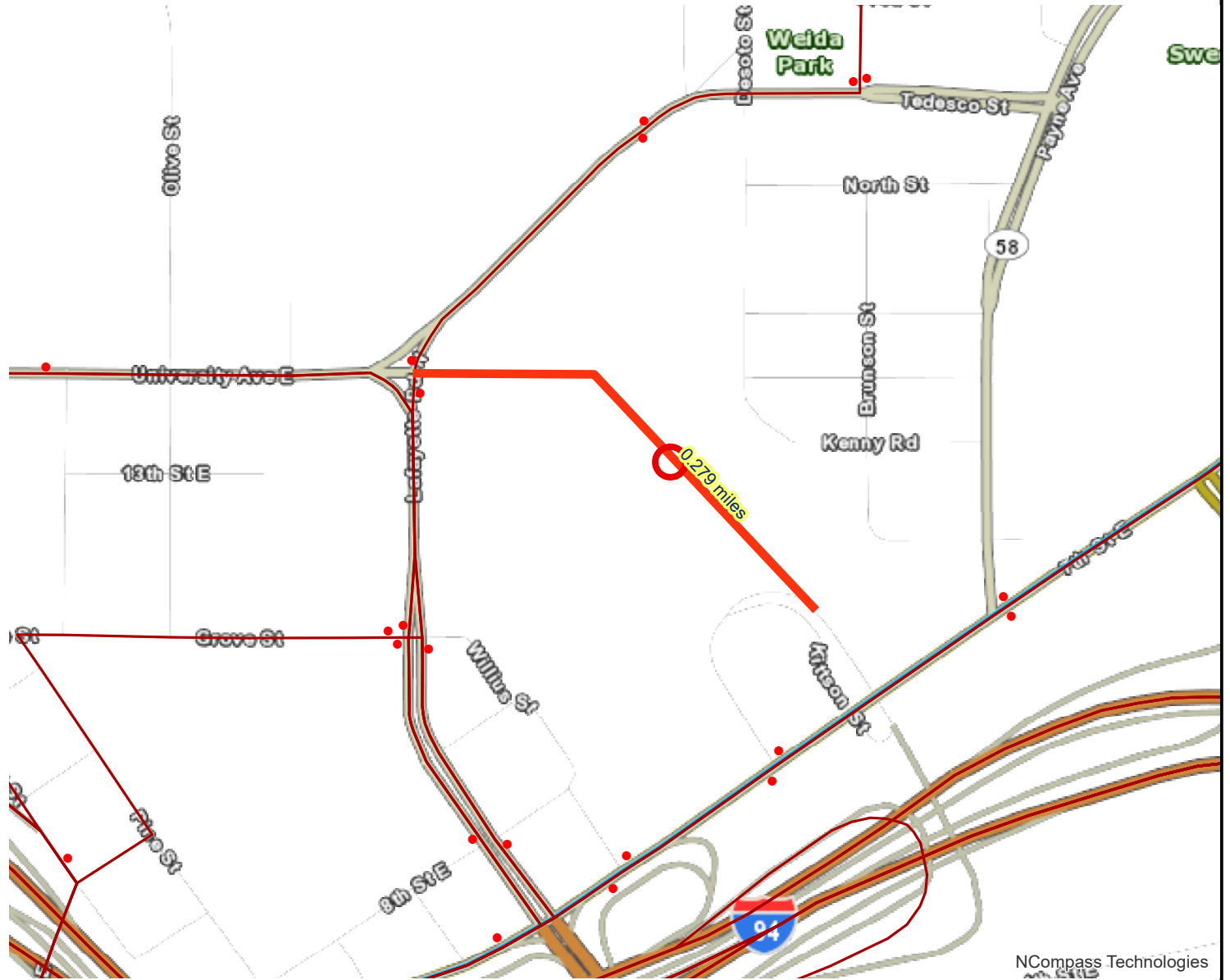


For complete disclaimer of accuracy, please visit <http://giswebsite.metc.state.mn.us/gissitenew/notice.aspx>



Transit Connections

Roadway Expansion Project: Troutbrook | Map ID: 1530054477799



Results

Transit with a Direct Connection to project:

355 365 375 452 53 54 61 64 74 860

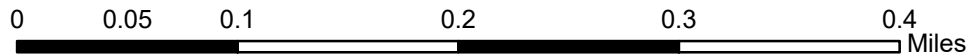
*East 7th

*indicates Planned Alignments

NCompass Technologies

○ Project Points ● Active Stop **Planned Transitway Alignments**

— Project — Transit Routes — Arterial BRT



Created: 6/26/2018
LandscapeRSA3



For complete disclaimer of accuracy, please visit
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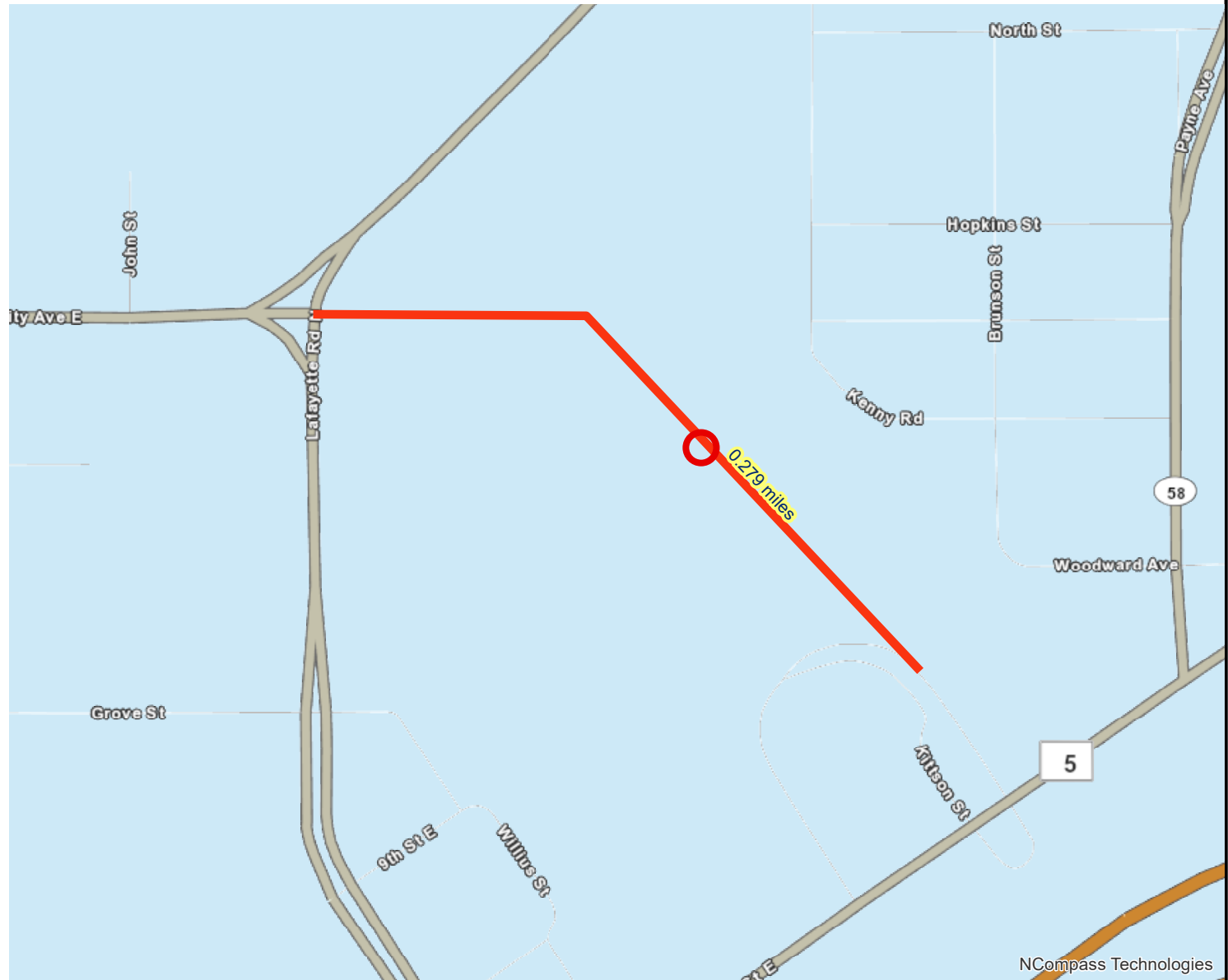


Socio-Economic Conditions

Roadway Expansion Project: Troutbrook | Map ID: 1530054477799

Results

Project located **IN**
Area of Concentrated Poverty
with 50% or more of residents
are people of color (ACP50):
(0 to 30 Points)



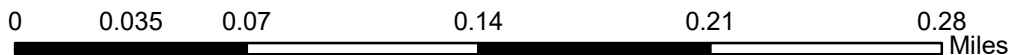
Project Points

Project

Area of Concentrated Poverty > 50% residents of color

Area of Concentrated Poverty

Above reg'l avg conc of race/poverty



Created: 6/26/2018
LandscapeRSA2

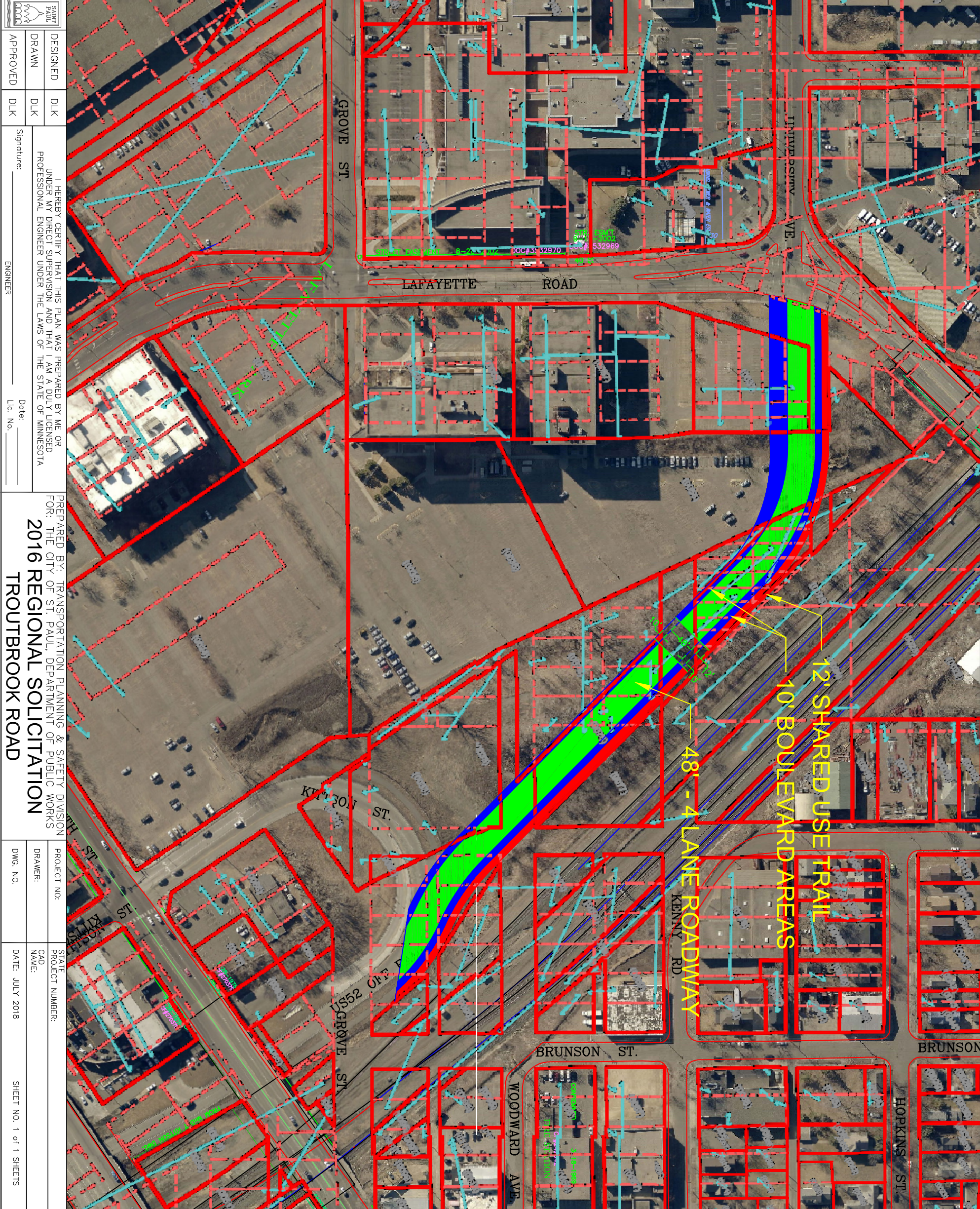


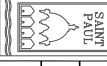
For complete disclaimer of accuracy, please visit
<http://giswebsite.metc.state.mn.us/gissitenew/notice.aspx>



NCompass Technologies

HSIP worksheet		Control Section	T.H. / Roadway	Location			Beginning Ref. Pt.	Ending Ref. Pt.	State, County, City or Township	Study Period Begins	Study Period Ends
			Lafayette Rd	Frm: TH5/East 7th to University Ave./MSAS 134			TH5/0+00	Univ. Ave/17+30	Ramsey Co.	1/1/2013	12/31/2015
		Description of Proposed Work		Construct Westbound auxiliary lane between Portland and Nicollet							
Accident Diagram Codes	1 Rear End		2 Sideswipe Same Direction		3 Left Turn Main Line	5 Right Angle	4,7 Ran off Road		8, 9 Head On/ Sideswipe - Opposite Direction		6, 90, 99
									Pedestrian	Other	Total
Study Period: Number of Crashes	Fatal	F									
	Personal Injury (PI)	A				1					1
		B						1	1		2
		C			2	2			1		1
	Property Damage	PD	9	5	4	10				3	31
% Change in Crashes	Fatal	F									
	PI	A				-25%					
		B					-25%	-25%			
		C	-25%		-25%	-25%		-25%		-25%	
	Property Damage	PD	-25%	-25%	-25%	-25%				-25%	
Change in Crashes <small>= No. of crashes X % change in crashes</small>	Fatal	F									
	PI	A				-0.25					-0.25
		B					-0.25	-0.25			-0.50
		C			-0.50	-0.50		-0.25		-0.25	-1.50
	Property Damage	PD	-2.25	-1.25	-1.00	-2.50				-0.75	-7.75
Year (Safety Improvement Construction)		2018									
Project Cost (exclude Right of Way and Trail)		\$ 5,400,000	Type of Crash	Study Period: Change in Crashes	Annual Change in Crashes	Cost per Crash	Annual Benefit	<div style="border: 1px solid black; padding: 5px; display: inline-block;">B/C= 0.62</div> <i>Using present worth values,</i> B= \$ 3,345,054 C= \$ 5,400,000 <i>See "Calculations" sheet for amortization.</i>			
Right of Way Costs (optional)			F			\$ 1,140,000					
Traffic Growth Factor		0.5%	A	-0.25	-0.08	\$ 570,000	\$ 47,543				
Capital Recovery			B	-0.50	-0.17	\$ 170,000	\$ 28,359				
1. Discount Rate		2%	C	-1.50	-0.50	\$ 83,000	\$ 41,538				
2. Project Service Life (n)		30	PD	-7.75	-2.59	\$ 7,600	\$ 19,651				
			Total				\$ 137,092	Office of Traffic, Safety and Technology August 2015			





 DESIGNED: DLK

 DRAWN: DLK

 APPROVED: DLK

 Signature: _____

 Date: _____

 Lic. No. _____

 I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

 ENGINEER

PREPARED BY: TRANSPORTATION PLANNING & SAFETY DIVISION

 FOR: THE CITY OF ST. PAUL, DEPARTMENT OF PUBLIC WORKS

2016 REGIONAL SOLICITATION

TROUTBROOK ROAD

PROJECT NO: _____

 DRAWER: _____

 STATE PROJECT NUMBER: _____

 CAD NAME: _____

 DATE: JULY 2018

 SHEET NO. 1 of 1 SHEETS

NOT TO SCALE



NORTH

LEGEND

SHARED USE TRAIL

ROADWAY

BOULEVARD

PROJECT SUMMARY

Project Name: Troutbrook Road

Applicant: City of Saint Paul, Minnesota

Project Location

NE ¼ SW ¼ Sec. 32 T29 R22

County: Ramsey

City: Saint Paul

Route: from 0.1 miles east of switch back for northbound US52 off-ramp to University Avenue (MSAS 137)/Lafayette Road (MSAS113) intersection (inclusive of work in intersection). See enclosed route map.

Total Project Cost: \$5,700,000.00

Requested Award Amount: \$4,500, 000.00

Project Purpose

The project proposed within this application will provide a new four lane roadway between two major roadways. One, the off-ramp to a Principle Arterial, the recently reconstructed US52 bridge, and the other an A-Minor arterial called University Avenue/MSAS 134. The project will provide a more direct connection between the highway (US52) and a major east/west arterial that runs the entire width of the City. The proposed project includes an off-street shared use trail that is a component of a larger trail system being pursued by the City and the region.

It should be noted that the recently reconstructed off-ramp from US52 was designed to accommodate the project as proposed in this application. There was even consideration of making the connection as part of the US52 project. The Troutbrook Road project, which has been planned since 1980, is considered Phase 1 of a multiphase project that will eventually connect to Warner Road/Ramsey County 36 adjacent to the Mississippi River. The purpose of the connection would be to create a downtown bypass, primarily for trucks. The future phase(s) will also provide a benefit of adding additional sections to the Trout Brook regional shared use trail.

In addition making truck access easier from US52 into the core of the city, a direct connection between the highway and University Avenue will also provide many other less tangible, but no less important, benefits such as: easy access to job centers, easier access to the many cultural destinations along University Avenue, improved access to light rail, easier access to the soon-to-be completed Minnesota United Soccer stadium, and easier access to numerous colleges such as Metropolitan State and Saint Paul College.

One last item to note: due to the unavailability of a completed traffic model, questions 5A and 5B were left without answers.

Google recommends using Chrome
Try a fast, secure browser with updates built in

NO THANKS YES

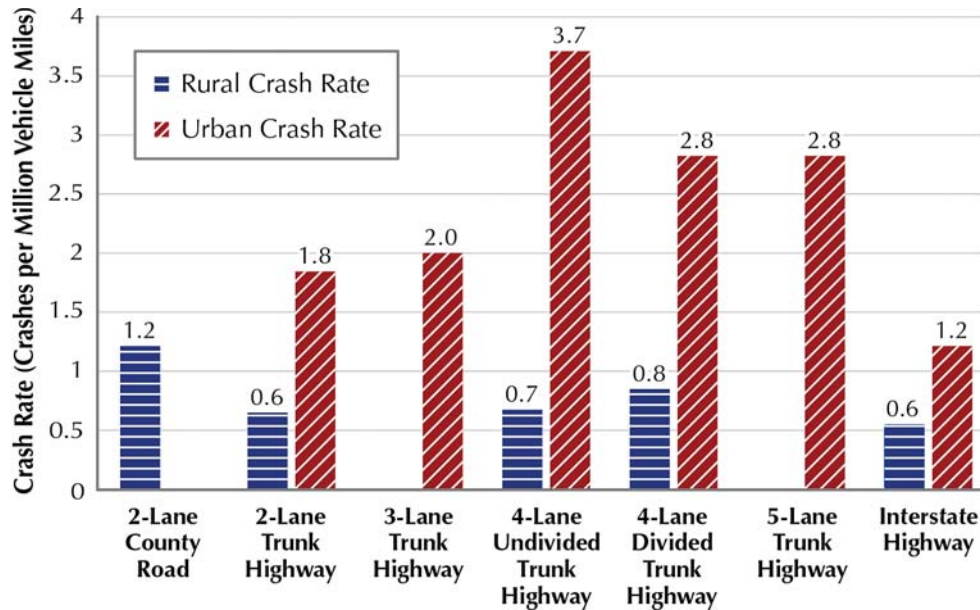


Google recommends using Chrome
Try a fast, secure browser with updates built in

NO THANKS YES



Roadway Segment Crash Rates Facility Type by Rural vs. Urban



Minnesota County Road Safety Plans, Data 2007-2011
2013 MnDOT Crash Data Toolkit, 2009-2013

Highlights

- Average crash rates vary by location (rural vs. urban) and type of facility.
- Freeways have the lowest crash rates and are the safest roadway system in the state.
- Rural roadways as identified in the Toolkit have lower crash rates than similar urban roads.
- Urban conventional roadways (not freeways or expressways) – often minor arterials which serve both a mobility and land access function – have the highest crash rates.
- Four-lane undivided roadways have the highest crash rate; these facilities are usually found in commercial areas with high turning volumes and with little or no management of access. Over the years, the average has been lowered (from a rate of 8.0 in 1990) due to MnDOT's efforts to convert the worst segments to either three-lane, four-lane divided, or five-lane roads. The addition of left turn lanes to segments of urban conventional roadways typically reduces crashes by 25% to 40%.
- The distribution of crash rates by facility type points to the following relationship between access density and safety: highways with low levels of access (freeways) have low crash rates, and highways with higher levels of access (conventional roads) have comparatively higher crash rates.



Legislation Text

File #: RES 18-803, Version: 1

Authorizing the Departments of Public Works and Parks and Recreation to submit eleven project applications for federal funding into the 2018 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 eleven project applications for federal funding into the 2018 Metropolitan Council Regional Solicitation Program; 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:

- Kellogg/3rd Street Bridge Replacement
- Capital City Bikeway - Kellogg Boulevard from Jackson to St. Peter
- Troutbrook Road Connection - Kittson to Lafayette
- West Side Signalized Intersection Control Enhancements
- Sidewalk In-Fill Project - south side of Front Street from Dale to Mackubin
- Safe Routes to School Project - Bruce Vento Elementary School
- Sam Morgan Regional Trail Segment 1 Reconstruction
- Fish Hatchery Trail Stabilization and Reconstruction
- Point Douglas Regional Trail Phase 1 Construction
- Robert Piram Regional Trail Grade Separation at Barge Channel Rd
- HourCAR Expansion and Electrification

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

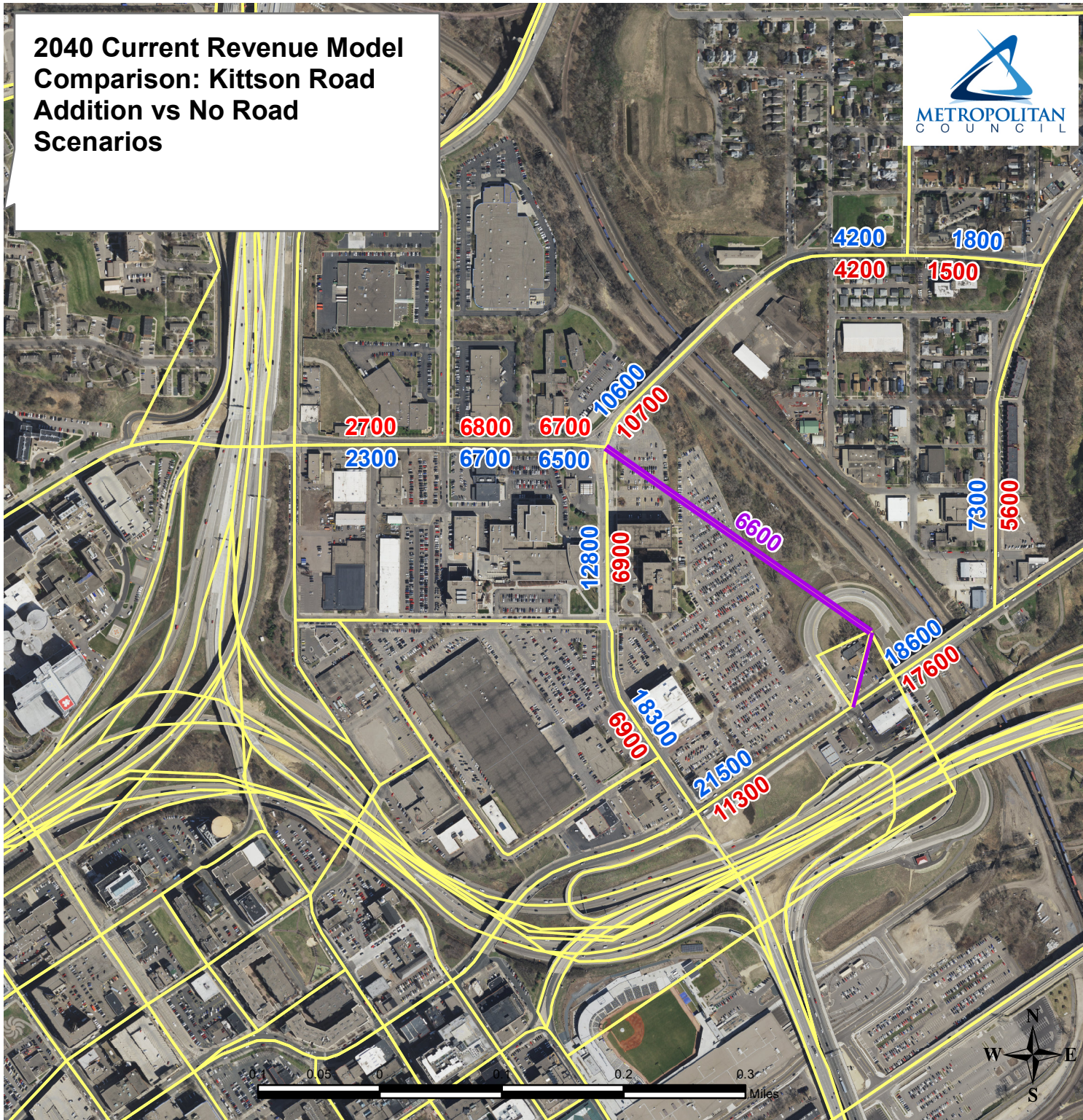
FURTHER RESOLVED, that the Council of the City of Saint Paul authorizes the commitment of local funds on a twenty percent match basis plus engineering for any project awarded federal funding under the Regional Solicitation Program.

2040 Current Revenue Model Comparison: Kittson Road Addition vs No Road Scenarios



Legend

- Road Expansion (*model link shape)
- network links
- 2040 volume with road expansion
- 2015 volume



Strategy 2: Provide Balance and Choice

In order to provide an excellent transportation system, there must be balance and choice. Transit-oriented development is growing in popularity and considers a range for travel modes, compact land use oriented towards the street, and a focus on walkability. A more balanced system spurs new opportunities for infill housing and economic development that can be served predominantly by modes other than the single-occupancy automobile. Mixed-use development also helps to reduce overall travel trips by bringing more destinations to a compact, walkable area. Transportation choice can maximize the efficiency of the existing system by providing options that better utilize the existing road infrastructure and transit investments. In addition, working to build seamless transitions between various types of transportation strengthens the flexibility of the system to best serve future demands.

COORDINATED TRANSPORTATION AND LAND USE

2.1 Create true transportation choices for residents, workers, and visitors in every part of the city. 🚶🌿💰

A more balanced transportation system should improve access to a range of travel modes and facilities, as well as increase the capacity of the regional transportation system. The City should create places to live, work, play, and conduct business that do not depend principally on the automobile for access, but rather accommodate all modes of transportation.

2.2 Support transit-oriented design through zoning and design guidelines. 🌿

Compact, street-oriented design should be emphasized to promote walkability and transit use, especially in commercial corridors. Standards for building placement and design based primarily on the needs of the pedestrian should be enforced and expanded.

2.3 Promote creative in-fill housing near transit corridors to increase transit-supportive density and housing choices. 🚶🌿

This may include the addition of accessory units and live-work opportunities in lower-density neighborhoods near transit corridors.

2.4 Develop a strategy for investing in a broad range of infrastructure projects, including, but not limited to, street and traffic improvements to support the growth of existing employment, services, parks, and schools. 💰

To support the development of mixed-use employment, study connections that would open access to under-developed land, and integrate land use and transportation decisions. The City should coordinate with partner agencies to address shared goals of mitigating congestion, increasing person throughput and cost-effectiveness, creating maintenance-friendly design, and improving pedestrian and bicycle access (see Appendix T-A).



Figure T-B. The Central Corridor Development Strategy envisions a corridor of walkability, transit-oriented development, and enhanced streetscape. This image shows one possible scenario for an improved pedestrian realm along Fourth Street in Downtown Saint Paul.

Person Throughput is a measurement of street capacity and effectiveness that takes into account the total number of people using the road, rather than just the number of vehicles. This measure more accurately reflects the potential of transit improvements and ridesharing to expand system capacity.

Appendix T-A

PROJECTS

Policy T-1.4 Recommended Projects:

- a. Lafayette Bridge Reconstruction;
- b. Dale Street Bridge over I-94;
- c. Reconstruction of I-35E from Downtown to South of Maryland Avenue;
- d. Green Staircase (Channel Street Stairs) Reconstruction;
- e. Intersection Improvements with Maryland Avenue at Arkwright, Payne/Edgerton and Clarence/Prosperity;
- f. Intersection Improvements with Maryland Avenue at Dale and Rice Streets;
- g. Intersection Improvements with White Bear Avenue at Seventh Street and Old Hudson Road;
- h. Warner Road Bridge Reconstruction; and
- i. Traffic calming elements along Snelling Avenue to improve aesthetics, reduce speeding, and increase safety. Focus on intersections with high accident rates, including:
 - Spruce Tree Street
 - University Avenue
 - Saint Anthony Avenue
 - Selby Avenue
 - Concordia Avenue

Policy T-2.4 Recommended Projects:

- a. Kittson Extension;
- b. Pierce Butler Route Extension. Extend Pierce Butler Route eastward to intersect with I-35E and connect with Phalen Boulevard;
- c. Northwest Quadrant Study;
- d. Reconstruction of I-35E from Downtown to South of Maryland Avenue, with ramps at Cayuga;
- e. Ayd Mill Redevelopment Project, subject to a Supplemental Environmental Impact Statement (EIS) process involving a community task force;
- f. Shepard & I-35E Connection Environmental Impact Statement; and
- g. Improvements to McKnight Road and Ruth Street at I-94.

For Metropolitan and regional highway investment priorities, also see Tables 4-9 through 4-12 of the Metropolitan Council's 2030 Transportation Policy Plan.

Policy T-2.9 Recommended Corridors:

- a. Riverview Corridor serving the East Side and Downtown Saint Paul, and connecting to the Minneapolis-Saint Paul International Airport and Bloomington;
- b. Snelling Avenue & Ford Parkway;
- c. Rush Line Corridor to Hinckley serving Union Depot, Downtown Saint Paul, the East Side, and Maplewood;

Trout Brook Roadway Connection

New Roadway Connection from University at Albany to Kirtson Street

30 MPH Curve

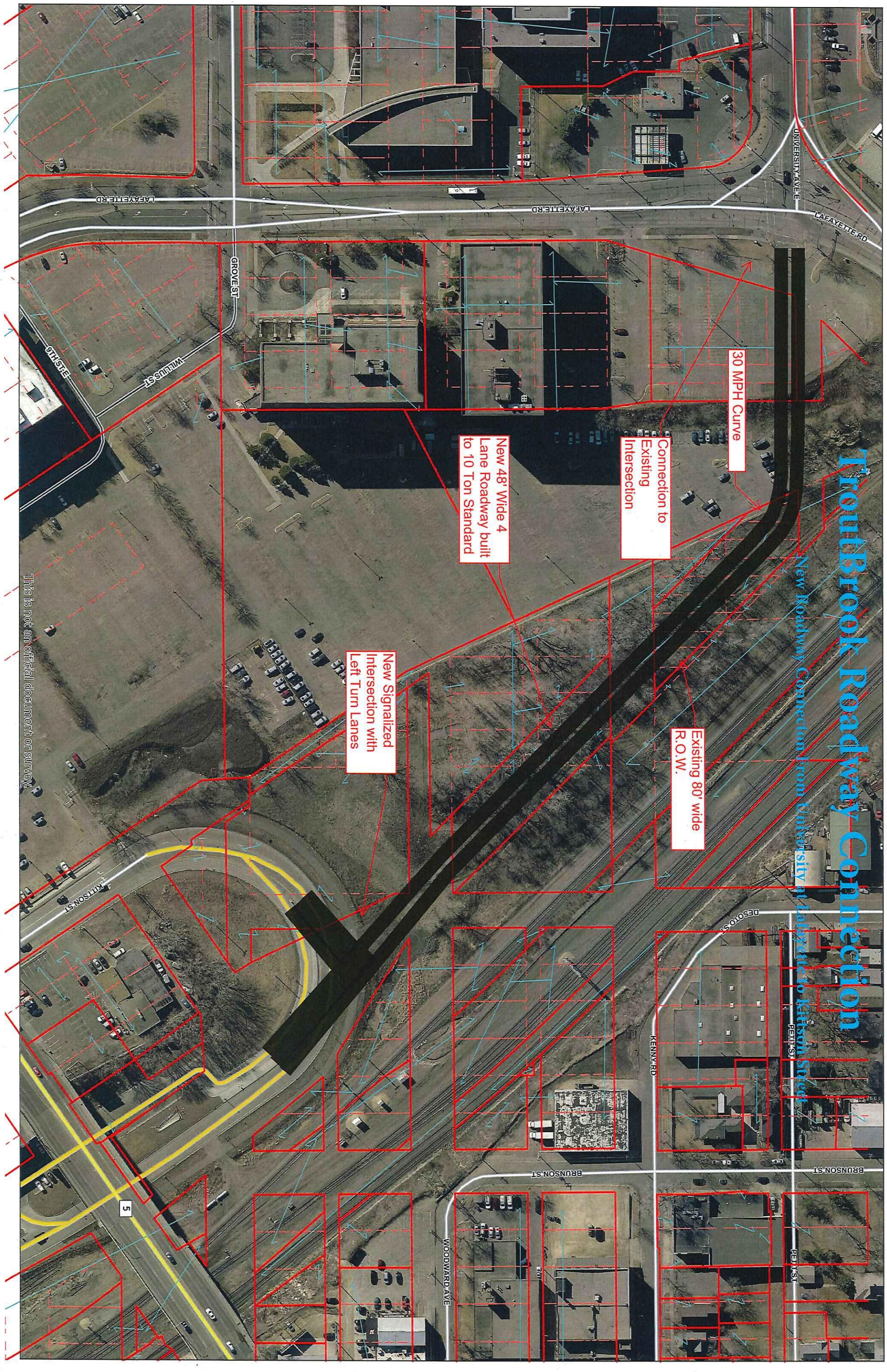
Connection to Existing Intersection

New 48' Wide 4 Lane Roadway built to 10 Ton Standard

Existing 80' wide R.O.W.

New Signalized Intersection with Left Turn Lanes

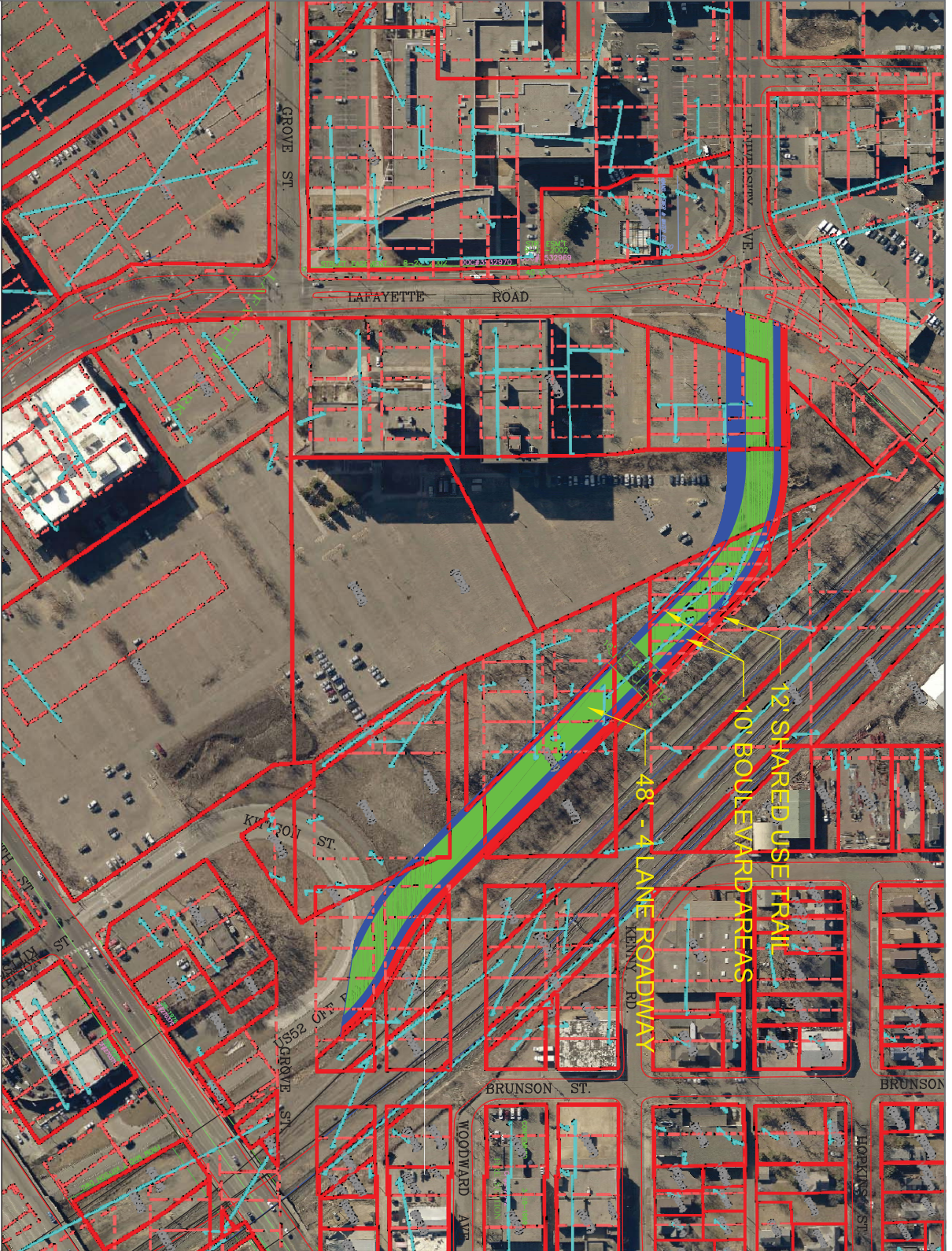
This is not an official document or survey.



DESIGNED	DLK	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA Signature: _____ ENGINEER
DRAWN	DLK	
APPROVED	DLK	

PREPARED BY: TRANSPORTATION PLANNING & SAFETY DIVISION
 FOR: THE CITY OF ST. PAUL, DEPARTMENT OF PUBLIC WORKS
2016 REGIONAL SOLICITATION
TROUTBROOK ROAD

PROJECT NO.:	STATE PROJECT NUMBER:
DRAWER:	NAME:
DWG. NO.:	DATE: JULY 2018
SHEET NO. 1 of 1 SHEETS	



NOT TO SCALE



NORTH

LEGEND

	SHARED USE TRAIL
	ROADWAY
	BOULEVARD

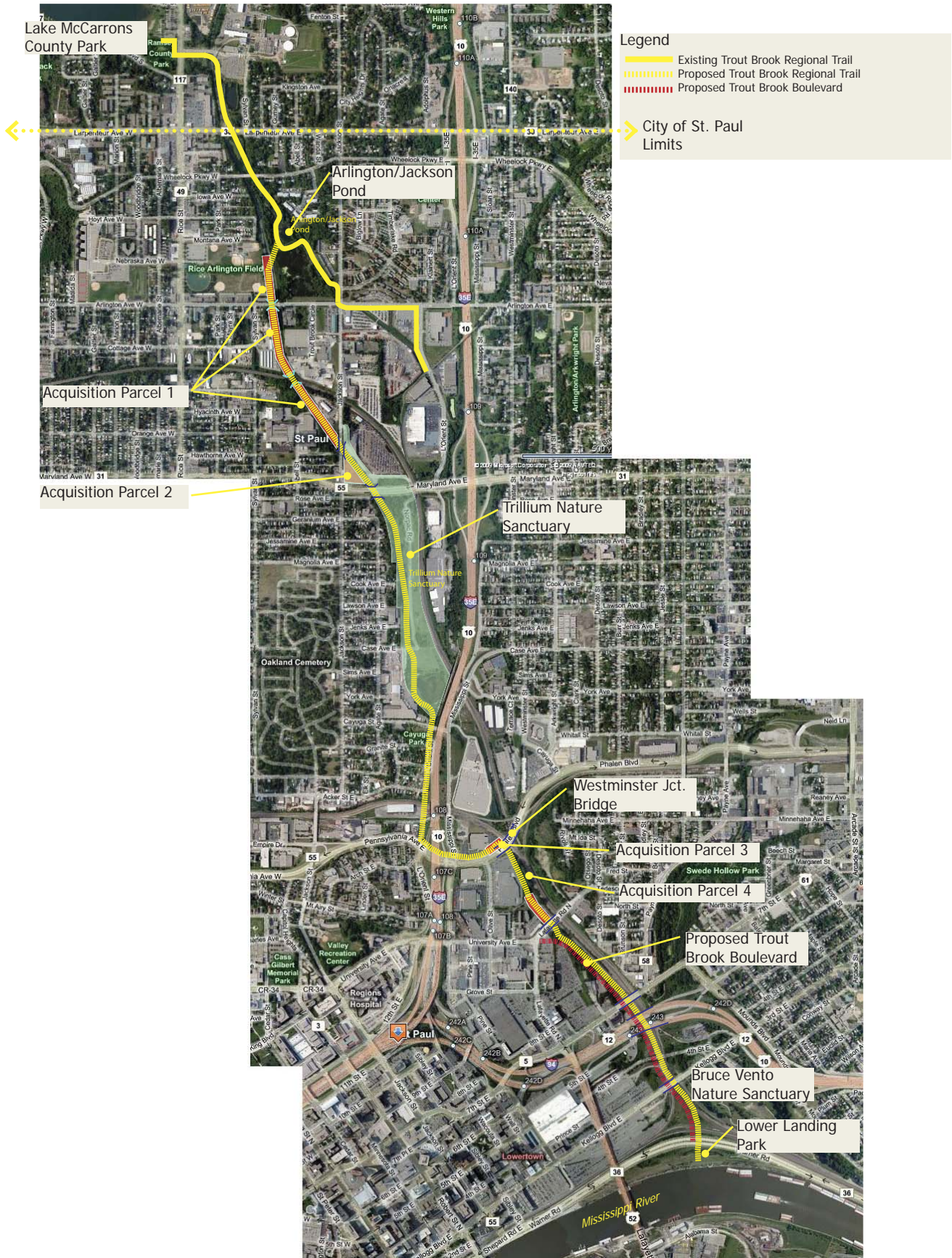


Figure A: Proposed Trout Brook Regional Trail Corridor