Application

13860 - 2020 Roadway Expansion

14030 - TH 252 / Brookdale Drive Interchange

Regional Solicitation - Roadways Including Multimodal Elements

Status:	Submitted
Submitted Date:	05/13/2020 2:26 PM

Primary Contact

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

Organization Information

Name:	BROOKLYN PARK, CITY OF

Jurisdictional Agency (if different):	
Organization Type:	City
Organization Website:	
Address:	5200 85TH AVE N

*	BROOKLYN PARK	Minnesota	55443
	City	State/Province	Postal Code/Zip

County:	Hennepin
Phone:*	763-493-8185 Ext.
Fax:	
PeopleSoft Vendor Number	0000020926A1

Project Information

Project Name	TH 252/Brookdale Drive Interchange
Primary County where the Project is Located	Hennepin
Cities or Townships where the Project is Located:	Brooklyn Park
Jurisdictional Agency (If Different than the Applicant):	MnDOT

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

The proposed TH 252 /Brookdale Drive interchange project will improve roadway safety and mobility along TH 252 through the Cities of Brooklyn Park and Brooklyn Center. The project will provide regional access to the area with the construction of a diamond interchange at TH 252. Furthermore, local traffic operations, mobility and safety for all modes of transportation at the project intersection will be improved while connecting the neighborhoods divided by TH 252.

TH 252 is a high-speed high-volume north-south connection between I-94/I-694 and TH 610. It is a MnDOT Trunk Highway that serves as an important Principal Arterial roadway linking communities in the northern area of the Twin Cities. It is currently an expressway design that varies between four and six lanes with at-grade signalized intersections approximately every ½ mile.

As part of the TH 252 Corridor Study (2016), Mn/DOT, Hennepin County, Metropolitan Council, Metro Transit and the Cities of Brooklyn Park and Brooklyn Center worked together to establish the long-term vision ?that a freeway was the best alternative to safely accommodate future traffic volumes and allow TH 252 to serve its function as a Principal Arterial?. Building towards the ultimate vision of a freeway, the ongoing environmental review identified the construction of a diamond interchange at Brookdale Drive. The proposed conversion of the TH 252/Brookdale Drive at-grade signalized intersection to an interchange will:

- Be consistent with the long-term vision and phasing of TH 252 to a freeway facility

- Improve vehicular safety with the reduction of

intersection crashes; specifically rear-end crashes

- Reduce heavy delays and congestion during peak hour conditions at an intersection that currently operates with the second worst overall level of service along the study corridor

- Improve pedestrian and bicycle mobility and safety across TH 252; under current conditions, long green times allocated to TH 252 make it difficult to cross

- Improve community connectivity with removing the TH 252 barrier

- Improve transit operations with the elimination of an at-grade intersection to provide more reliable travel times for transit buses along TH 252

- Enhance pedestrian and bicycle travel along the Brookdale Drive corridor with additional trail improvements east and west of the newly constructed interchange

- Provide underserved residents with improved access to the area?s jobs and transit as the project is located in a census tract that is above the regional average for population in poverty or population of color

(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.

TH 252 at Brookdale Drive; construct interchange, Brookdale Drive from Humboldt Avenue to West River Road; construct trail on north and south sides

Project Length (Miles) 0.8

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 $10,000,000.00

Match Amount $23,215,015.00

Minimum of 20% of project total

Project Total $33,215,015.00

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

Match Percentage 69.89%

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

Source of Match Funds City of Brooklyn Park and Corridors of Commerce

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: 2025

Select 2022 or 2023 for TDM projects only. For all other applications, select 2024 or 2025.

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 Brooklyn Park

Functional Class of Road Principal Arterial

Road System TH, MSAS

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

Road/Route No. 252101

i.e., 53 for CSAH 53

Name of Road TH 252, Brookdale Drive

Example; 1st ST., MAIN AVE

Zip Code where Majority of Work is Being Performed 55444

(Approximate) Begin Construction Date 04/01/2025

(Approximate) End Construction Date 10/30/2026

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

From: (Intersection or Address)	0.3 miles north of Brookdale Drive
To: (Intersection or Address)	0.3 miles south of Brookdale Drive
DO NOT INCLUDE LEGAL DESCRIPTION	
Or At	Brookdale Drive-Humboldt Avenue to West River Road
Miles of Sidewalk (nearest 0.1 miles)	0
Miles of Trail (nearest 0.1 miles)	1.6
Miles of Trail on the Regional Bicycle Transportation Network (nearest 0.1 miles)	0.4
Primary Types of Work	GRADE, AGG BASE, BIT BASE, BIT SURF, CONC PAV'T, SIGNALS, LIGHTING, GUARDRAIL, ADA, MULTIUSE TRAILS, PED RAMPS, BRIDGE, RETAINING WALLS, INTERCHANGE
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):	TH 252 over Brookdale Drive

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 A: Transportation System Stewardship, Strategy A1; page 2.6

Goal B: Safety and Security, Strategies B1 and B6; page 2.7

Goal C: Access to Destinations, Strategies C1, C7, C10 and C16; pages 2.8-2.10

Goal D: Competitive Economy, Strategies D1 and D3; page 2.10

Goal E: Healthy Environment, Strategies E2, E3, E4, E5 and E7; pages 2.12-2.13

Goal F: Leveraging Transportation Investments to Guide Land Use, Strategies F1, F3 and F7; pages 2.14-2.16

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.

Brooklyn Park 2030 Comprehensive Plan; Chapter 5 Transportation; Pages 21, 22, 24

Brooklyn Park DRAFT 2040 Comprehensive Plan; Chapter 5 Transportation; Pages 22, 26

MnDOT Highway 252 / I-94 Environmental Review; http://www.dot.state.mn.us/metro/projects/hwy252study/index.html

Metropolitan Council?s 2020-2023 Transportation Improvement Program; Table A-6, page A-33 and Table 16, page 40

List the applicable documents and pages:

Metropolitan Council?s Principal Arterial Intersection Conversion Study Final Report (February 2017); Pages 54-55

Metropolitan Council?s 2040 Transportation Policy Plan; October 2018 Update; Appendix C: Long Range; Page C. 41

Metropolitan Council's Regional Bicycle Barriers Study; May 20, 2019 Technical Addendum Update; Figure 2. Page 8; Figure 3, Page 15 Figure 4, Page 17

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.

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

5.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.
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): *$250,000 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
Date plan completed:	12/03/2018
Link to plan:	https://www.brooklynpark.org/wp-content/uploads/2020/03/181127-Brooklyn-Park-ADA-Transition-Plan.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.

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. 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 must equal or 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)	$395,000.00
Removals (approx. 5% of total cost)	$426,750.00
Roadway (grading, borrow, etc.)	$4,671,400.00
Roadway (aggregates and paving)	$873,000.00
Subgrade Correction (muck)	$0.00
Storm Sewer	$1,976,000.00
Ponds	$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	$1,149,900.00
Traffic Control	$160,000.00
Striping	$18,000.00
Signing	$520,000.00
Lighting	$240,000.00
Turf - Erosion & Landscaping	$791,000.00
Bridge	$7,650,000.00
Retaining Walls	$7,966,050.00
Noise Wall (not calculated in cost effectiveness measure)	$2,140,000.00
Traffic Signals	$520,000.00
Wetland Mitigation	$0.00
Other Natural and Cultural Resource Protection	$0.00
RR Crossing	$0.00
Roadway Contingencies	$2,961,000.00
Other Roadway Elements	$100,000.00
Totals	**$32,558,100.00**

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	**Cost**
Path/Trail Construction	$501,500.00
Sidewalk Construction	$0.00
On-Street Bicycle Facility Construction	$0.00
Right-of-Way	$0.00
Pedestrian Curb Ramps (ADA)	$44,000.00
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	**$545,500.00**

Specific Transit and TDM Elements

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

Transit Operating Costs

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

Totals

Total Cost	$33,103,600.00
Construction Cost Total	$33,103,600.00
Transit Operating Cost Total	$0.00

Congestion within Project Area:

The measure will analyze the level of congestion within the project area. Council staff will provide travel speed data on the "Level of Congestion" map. The analysis will compare the peak hour travel speed within the project area to fee-flow conditions.

Free-Flow Travel Speed:	53

Peak Hour Travel Speed:	29
Percentage Decrease in Travel Speed in Peak Hour compared to Free-Flow:	45.28%
Upload Level of Congestion map:	1588877258263_Levels of Congestion Map.pdf

Congestion on adjacent Parallel Routes:

Adjacent Parallel Corridor	East River Road

Adjacent Parallel Corridor Start and End Points:

Start Point:	I-694
End Point:	TH 610
Free-Flow Travel Speed:	38

The Free-Flow Travel Speed is black number.

Peak Hour Travel Speed:	31

The Peak Hour Travel Speed is red number.

Percentage Decrease in Travel Speed in Peak Hour Compared to Free-Flow:	18.42%
Upload Level of Congestion Map:	1588877258263_Levels of Congestion Map.pdf

Principal Arterial Intersection Conversion Study:

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

(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:

(0 Points)

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

Existing Employment within 1 Mile:	4709
Existing Manufacturing/Distribution-Related Employment within 1 Mile:	1422
Existing Post-Secondary Students within 1 Mile:	0
Upload Map	1588878085501_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 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:	Yes
Miles:	0.8
(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:	

Measure A: Current Daily Person Throughput

Location	TH 252 at Brookdale Drive
Current AADT Volume	58500
Existing Transit Routes on the Project	722, 763, 765, 766, 768, 850, 865, 887

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

Upload Transit Connections Map	1588878181464_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	76050.0

Measure B: 2040 Forecast ADT

Use Metropolitan Council model to determine forecast (2040) ADT volume	No
If checked, METC Staff will provide Forecast (2040) ADT volume	
OR	
Identify the approved county or city travel demand model to determine forecast (2040) ADT volume	City of Brooklyn Park Travel Demand Model
Forecast (2040) ADT volume	68000

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

*1.**Sub-measure**: Equity Population Engagement: A successful project is one that is the result of active engagement of low-income populations, people of color, persons with disabilities, youth and the elderly. Engagement should occur prior to and during a projects development, with the intent to provide direct benefits to, or solve, an expressed transportation issue, while also limiting and mitigating any negative impacts. Describe and map the location of any low-income populations, people of color, disabled populations, youth or the elderly within a ½ mile of the proposed project. Describe how these specific populations were engaged and provided outreach to, whether through community planning efforts, project needs identification, or during the project development process. Describe what engagement methods and tools were used and how the input is reflected in the projects purpose and need and design. Elements of quality engagement include: outreach and engagement 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 community engagement related to transportation projects; feedback from these populations identifying potential positive and negative elements of the proposed project through engagement, 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 project is in an area above the regional average for population in poverty or population of color. Within ½ mile of the project, there is an area of concentrated poverty greater than 50 percent residents of color. Throughout the project?s development, there has been significant outreach to low-income populations, people of color, persons with disabilities, youth and elderly within a ½ mile of the proposed project (see attached map).

The TH 252 Corridor Study (2016) included four open houses and a project website to inform and gather feedback. The TH 252 Conversion Study (2017) provided two additional open houses.

A Community Engagement Plan (2018) was developed to guide the TH 252 / I-94 Environmental Review community engagement. Methods and tools included:

- A pop-up activity with the Riverview Apartment residents in December 2019 where feedback was received from approximately 40 residents.

- Three public engagement sessions between September 2018 and November 2019.

- Two community workshops, 25 pop-up events, six open houses, three online surveys, a listening session, and three door-knocking outings at apartments along Brookdale Drive.

- Paid community and multicultural communications, social media and earned media (print, television, online).

Future opportunities will involve these populations during the NEPA EIS process.

(Limit 2,800 characters; approximately 400 words)

*2.**Sub-measure**: Equity Population Benefits and Impacts: A successful project is one that has been designed to provide direct benefits to low-income populations, people of color, persons with disabilities, youth and the elderly. All projects must mitigate potential negative benefits as required under federal law. Projects that are designed to provide benefits go beyond the mitigation requirement to proactively provide transportation benefits and solve transportation issues experienced by Equity populations.*
a.Describe the projects benefits to low-income populations, people of color, children, people with disabilities, and the elderly. Benefits could relate to pedestrian and bicycle safety improvements; public health benefits; direct access improvements for residents or improved access to destinations such as jobs, school, health care or other; travel time improvements; gap closures; new transportation services or modal options, leveraging of other beneficial projects and investments; and/or community connection and cohesion improvements. Note that this is not an exhaustive list.

Response:

The project is in an area above the regional average for population in poverty or people of color. Within ½ mile, there is an area of concentrated poverty greater than 50 percent residents of color. The project provides pedestrian/bicycle safety, access, travel time, community connectivity, public health and investment benefits to the City?s low-income populations, people of color, children, people with disabilities, and the elderly.

Safety: TH 252 is challenging to cross as a pedestrian or bicyclists. There are safety concerns related to TH 252 crossings, a high-speed expressway. In addition, the high vehicular volume results in long delays for pedestrians/bicyclists waiting to cross. These concerns also impact transit riders who must cross TH 252 on at least one end of their trip. The project provides transportation benefits for these equity populations where access to a vehicle is limited, placing pressure on transit and other non-motorized transportation modes.

Access: The proposed improvements provide a vital link between neighborhoods, school/park facilities, and services for people living to the east and west. The Brookdale Drive trails provide improved access for families traveling from their neighborhoods to Monroe elementary school, parks, daycare and transit stops.

Travel Time: Heavy peak hour delays along a facility with at-grade intersections increases the travel time for motorists and buses using the facility for daily work trips. The proposed interchange provides more reliable travel times for motorists and buses with the elimination of an at-grade intersection along the TH 252 corridor.

Community Connectivity: TH 252 effectively creates a barrier to connecting residents to the east side of TH 252 with the school and park facilities on the west side. This barrier also limits connections between east and west neighborhoods and to the Mississippi River trail, which parallels the Mississippi River on the east side. The proposed interchange will improve community connectivity by removing the TH 252 barrier.

Public Health: Trail corridors provide an important transportation mode while promoting exercise and family development. The project?s trail improvements on both sides of Brookdale Drive improves public health for all underserved communities.

Beneficial Investments: High-quality public infrastructure projects such as the proposed TH 252/Brookdale Drive interchange is an essential ingredient for fostering competitive economic areas. Investments in public infrastructure is one of the best strategies available to create jobs and drive temporary construction-related money and long-term property investments into low-income areas.

(Limit 2,800 characters; approximately 400 words)

b. Describe any negative impacts to low-income populations, people of color, children, people with disabilities, and the elderly created by the project, along with measures that will be taken to mitigate them. Negative impacts that are not adequately mitigated can result in a reduction in points.

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.

Mitigation of temporary construction/implementation impacts such as dust; noise; reduced access for travelers and to businesses; disruption of utilities; and eliminated street crossings.

Other

Response:

The proposed project is not expected to result in negatives impacts to disadvantaged populations relying on walking or biking as their method of transportation. The TH 252 and Brookdale Drive interchange will significantly improve pedestrian and bicycle access, connectivity and safety compared to the existing at-grade signalized intersection. The current difficulty in crossing TH 252 due to its roadway width, high speeds and volumes will be eliminated. In addition, heavy congestion and delays associated with the idling of vehicles at the at-grade intersection will be reduced, resulting in the improvement in air quality for these pedestrians and bicyclists.

As with most interchange projects, adverse impacts are typically short-term and related to construction impacts such as noise, dust, vibration, traffic congestion, and general inconvenience to roadway mobility and frequently changing access to neighborhood businesses. Roadway users who rely on Brookdale Drive to access TH 252 will be directed to other alternate routes. The project construction will incorporate proper noise, dust, and traffic mitigation and will not negatively impact disadvantaged populations present in the project area by maintaining access to businesses, housing, and minimizing construction nuisances.

Although the Environmental Review Process has begun, specific project impacts have not been defined. For instance, right of way impacts have not identified at this time. However, an effort will be made to minimize right of way acquisitions to preserve existing land uses surrounding the intersection. MnDOT, County, and Brooklyn Park staff will continue to work together to determine any right of way acquisitions required for the project.

The proposed interchange may also require noise walls to mitigate the noise of increased traffic volumes and speed on TH 252. This will present opportunities to involve the neighborhood and community in place-making discussions and decisions. The aesthetic design of the noise walls necessitated by the project should reflect the values, culture and history of the neighborhood. Future public engagement on the issues of noise walls is planned as the fourth phase of the Community Engagement Plan.

The proposed project may also impact transit access to underserved populations in the area. As part of the Environmental Review Process, transit route and stop modifications are being discussed and evaluated. In response to any potential transit impacts, Metro Transit continues to collaborate with project partners to determine mitigation measures for transit routes servicing this area that would maintain local and express bus service consistent with existing ridership needs.

(Limit 2,800 characters; approximately 400 words)

Select one:

*3.**Sub-measure: Bonus Points** Those projects that score at least 80% of the maximum total points available through sub-measures 1 and 2 will be awarded bonus points based on the geographic location of the project. These points will be assigned as follows, based on the highest-scoring geography the project contacts:*
a.25 points to projects within an Area of Concentrated Poverty with 50% or more people of color
b.20 points to projects within an Area of Concentrated Poverty
c.15 points to projects within census tracts with the percent of population in poverty or population of color above the regional average percent
d.10 points for all other areas

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

(up to 40% of maximum score)

Upload the "Socio-Economic Conditions" map used for this measure. The second map created for sub measure A1 can be uploaded on the Other Attachments Form, or can be combined with the "Socio-Economic Conditions" map into a single PDF and uploaded here.

Upload Map 1588878703086_Socio-Economic Map.pdf

Measure B: Part 1: Housing Performance Score

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
Brooklyn Park	0.8	1.0	100.0	100.0

Total Project Length

Total Project Length 0.8

Project length entered on the Project Information - General form.

Housing Performance Score

Total Project Length (Miles) or Population 0.8

Total Housing Score 100.0

Affordable Housing Scoring

Part 2: Affordable Housing Access

Reference Access to Affordable Housing Guidance located under Regional Solicitation Resources for information on how to respond to this measure and create the map.
If text box is not showing, click Edit or "Add" in top right of page.

Response:

The project will improve access for the following affordable housing residents within ½ mile of the project (see attached map):

- River View Apartments, 8150 West River Road, Brooklyn Park

o Existing, 254 units

o 152 - 1BR, 102 - 2BR

o 100 percent occupancy

o Section 8 vouchers accepted

o Affordable rents per - https://metrocouncil.org/Communities/Services/Livable-Communities-Grants/2017-Ownership-and-Rent-Affordability-Limits.aspx

- Evergreen Park Manor Apartments, 7212 Camden Avenue, Brooklyn Center

o Existing - 80 units
o Section 8 vouchers accepted

o 1BR/2BR rent - 50/60 percent income, 3BR rent - 50 percent income

o Affordable rents per - https://metrocouncil.org/Communities/Services/Livable-Communities-Grants/2017-Ownership-and-Rent-Affordability-Limits.aspx

Affordable housing slightly outside the ½ mile area include the River Glen, Carrington Drive, Humboldt Square, Lynwood Pointe, and Emerson Chalet

apartments; Section 8 vouchers accepted. These residents south of the project rely on multimodal access to TH 252 for work, school and other daily activities.

Met Council data indicates most Brooklyn Park households experiencing housing cost burden earn less than 50 percent AMI for a family of four. The City has a Fair Housing Policy to ensure fair housing opportunities are available to all persons regardless of race, color, religion, sex, sexual orientation, marital status, public assistance status, creed, familial status, national origin, or disability.

Brooklyn Center's 2040 Comp Plan indicates one-third of their housing units are in multi-family residential buildings where stock includes some of the lowest rental rates in the Metropolitan area. The City has discussed a formal housing plan to understand cost-burdened households, eviction rates/policies, home-ownership racial disparities, and housing stock gaps.

The proposed project and trail improvements along Brookdale Drive will improve access for all transportation modes, especially those residents with limited access to a car to travel to work, school, parks, daycare and transit stops.

(Limit 2,100 characters; approximately 300 words)

Upload map: 1588879643529_Socio-Economic Map.pdf

Measure A: Infrastructure Age

Year of Original Roadway Construction or Most Recent Reconstruction	Segment Length	Calculation	Calculation 2
1986.0	0.4	794.4	1986.0
	0	**794**	**1986**

Average Construction Year

Weighted Year	1986.0

Total Segment Length (Miles)

Total Segment Length	0.4

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
125.0	0	125.0	6116	0	764500.0	0	N/A	1588936603328_Traffic Analysis.pdf
0	10.0	-10	0	2115	0	-21150	N/A	1588936678859_Traffic Analysis.pdf
0	20.0	-20	0	1595	0	-31900	N/A	1588936796673_Traffic Analysis.pdf
						-53050		

Vehicle Delay Reduced

Total Peak Hour Delay Reduced	764500.0
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):
25.6	3.7	21.9
26	**4**	**22**

Total

Total Emissions Reduced:	21.9
Upload Synchro Report	1588962781616_Traffic Analysis.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	1588962781616_Traffic Analysis.pdf

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: Benefit of Crash Reduction

Crash Modification Factor Used:

(Limit 700 Characters; approximately 100 words)

Convert at-grade intersection to a grade separated interchange and engineering judgement to assume mainline rear end crashes are eliminated with removal of the at grade intersection.

Rationale for Crash Modification Selected:

The CMF used was found to be the most applicable for the intersection improvements. Engineering judgement was used to determine that mainline rear end crashes will no longer occur once the at grade intersection is removed. This was determined since the traffic signal is no longer stopping mainline movements and they are free-flowing, rear end crashes associated with the signal will be eliminated and a CMF of 0.00 can be used.

(Limit 1400 Characters; approximately 200 words)

Project Benefit ($) from B/C Ratio:	$19,322,842.00
Total Fatal (K) Crashes:	0
Total Serious Injury (A) Crashes:	1
Total Non-Motorized Fatal and Serious Injury Crashes:	0
Total Crashes:	60
Total Fatal (K) Crashes Reduced by Project:	0
Total Serious Injury (A) Crashes Reduced by Project:	1
Total Non-Motorized Fatal and Serious Injury Crashes Reduced by Project:	0
Total Crashes Reduced by Project:	47
Worksheet Attachment	1588962954605_Crash Analysis 252.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 proposed TH 252/Brookdale Drive interchange project will improve pedestrian and bicycle safety at the existing at-grade signalized intersection by removing a significant barrier of crossing TH 252. The interchange improvement includes a grade separated crossing which is one of the pedestrian/bicycle safety strategies identified in MnDOT?s Best Practices for Pedestrians/Bicycle Safety. The proposed interchange will include 10-foot trails on both sides of Brookdale Drive to eliminate potential conflicts with vehicular traffic traveling on TH 252.

Response:

The proposed pedestrian and bicycle improvements for the TH 252/Brookdale Drive interchange project also include the extension of the corridor trails east and west of TH 252. This improvement is consistent with FHWA?s Proven Safety Countermeasures document that indicates the importance for agencies to integrate pedestrian walkways into the transportation system to provide safer travel conditions for pedestrians. The proposed 10-foot trails will be constructed from Humboldt Avenue to West River Road, which will complement the interchange project to greatly improve the reliability of the local pedestrian system and safely connect neighborhoods east and west of TH 252.

(Limit 2,800 characters; approximately 400 words)

Measure A: Multimodal Elements and Existing Connections

The proposed TH 252/Brookdale Drive interchange project will greatly improve the safety of all transportation modes including pedestrians, bicyclists, and transit users.

Pedestrians/Bicyclists: The current at grade intersection of TH 252 and Brookdale Drive requires pedestrians and bicyclists to cross a high-speed, high-volume, six-lane divided Principal Arterial roadway with multiple conflict points, turn lanes and channelized turn islands. Crossing distances are excessive and exposure to the speed and volume of traffic makes crossing TH 252 extremely unsafe. Pedestrian facilities consist of narrow concrete sidewalks along both sides of Brookdale Drive that are insufficient in design to accommodate both pedestrians and bicyclists. In addition, not all intersections are ADA compliant. As a result, pedestrian, bicycle and transit connections are currently unsafe.

Response:

The proposed interchange improvement project will provide separated off-road trails along both sides of Brookdale Drive from Humboldt Avenue to West River Road. The trails will be wide enough to safely accommodate both pedestrian and bicycle users. The proposed trail improvements have a positive impact on corridors identified in the Regional Bicycle Transportation Network (RBTN). Brookdale Drive is designated as a RBTN Tier 1 Corridor. West River Road, the project?s eastern termini, is designated as a RBTN Tier 2 Corridor. Construction of the trails along both sides of Brookdale Drive will complete a critical trail network link for safe crossing of TH 252 and tie into a future Tier 2 trail along West River Road.

In addition, TH 252 is an ?expressway barrier? and the intersection of TH 252/Brookdale Drive is a Tier

2 barrier crossing as depicted on Figure 3 ? Barrier crossing prioritization results grouped in tiers of the 2040 TPP and May 20, 2019 Technical Addendum Update to the Regional Bicycle Barriers Study. The proposed project provides an improved crossing of this roadway barrier.

Transit: The project is in a Transit Market Area III. Currently there are eight Metro Transit routes with a direct connection to the project area. As part of the Environmental Review Process, transit route and stop modifications are being discussed and evaluated. Metro Transit continues to collaborate with project partners to determine mitigation measures for transit routes servicing this area that would maintain local and express bus service consistent with existing ridership needs. With the proposed trails, pedestrian and bicycle connections with transit will be improved for area users.

(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 (25 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 1588965122651_10200_gr0_Brookdale Dr_191009.pdf

Please upload attachment in PDF form.

Layout has not been started

0%

Anticipated date or date of completion 10/01/2021

2)Review of Section 106 Historic Resources (15 Percent of Points)

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

100%

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

100%

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

80%

Historic/archeological property impacted; determination of adverse effect anticipated

40%

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

0%

Project is located on an identified historic bridge

3)Right-of-Way (25 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

25%

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

0%

Anticipated date or date of acquisition

4)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%

Anticipated date or date of executed Agreement

5) 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. List Dates of most recent meetings and outreach specific to this project:

Meeting with general public: 08/01/2019

Meeting with partner agencies: 01/01/2020

Targeted online/mail outreach: 08/01/2019

Number of respondents: 1020

Meetings specific to this project with the general public and partner agencies have been used to help identify the project need. Yes

100%

Targeted outreach to this project with the general public and partner agencies have been used to help identify the project need.

75%

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

50%

At least one meeting specific to this project with key partner agencies has been used to help identify the project need.

50%

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

25%

No outreach has led to the selection of this project.

0%

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

For above input, multiple meetings occurred with general public and partner agencies.

The Public Participation Goals of the CEP were to:
- Provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities, and/or solutions.

- Obtain public feedback on analysis, alternatives and/or decision.
- Work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.

Commitments Made to the Public included:

- We will keep you informed.

- We will listen to and acknowledge your concerns and aspirations and provide feedback on how public input influenced the decision.
- We will seek your feedback on drafts and proposals.
- We will work to assure that your concerns are directly reflected in the alternatives developed and provide feedback on how the public input influenced the decision.

Public Engagement Techniques used:
- Three formal public engagement sessions between September 2018 and November 2019.
- Two community workshops; collected 603 comments
- Twenty-five pop-up events; approximately 300 engaged
- Six open houses; approximately 790 attendees
- Three public online survey; nearly 500 responses to January 2019 online survey, 170 online responses to two surveys in Fall 2019

- One listening session

- Online project updates; four e-blasts sent to over 4,100 subscribers
- Three door knocking outings at apartment buildings along Brookdale Drive.

- One door knocking and one Pop-Up event at Riverview apartments; over 90 participants
- Project website; over 6,400 hits
- Strategic and media communications focused on reaching diverse audiences and included paid community and multicultural media communications, social media (organic and advertising), and earned media (print, television, online coverage). Nearly 10,000 impressions.

The first three phases of the CEP have been completed. The outcome of these many public engagement opportunities has identified a preferred alternative for further environmental review.

Phase Four engagement themes are intended to address:

- Pedestrian and bicycle access and connections

- Transit routing, stops, park & ride facilities

- Noise walls

- Right-of-way acquisition

- West River Road reconstruction

There will be future opportunities to involve the neighborhood and community in place-making discussions and decisions during the NEPA EIS process.

Measure A: Cost Effectiveness

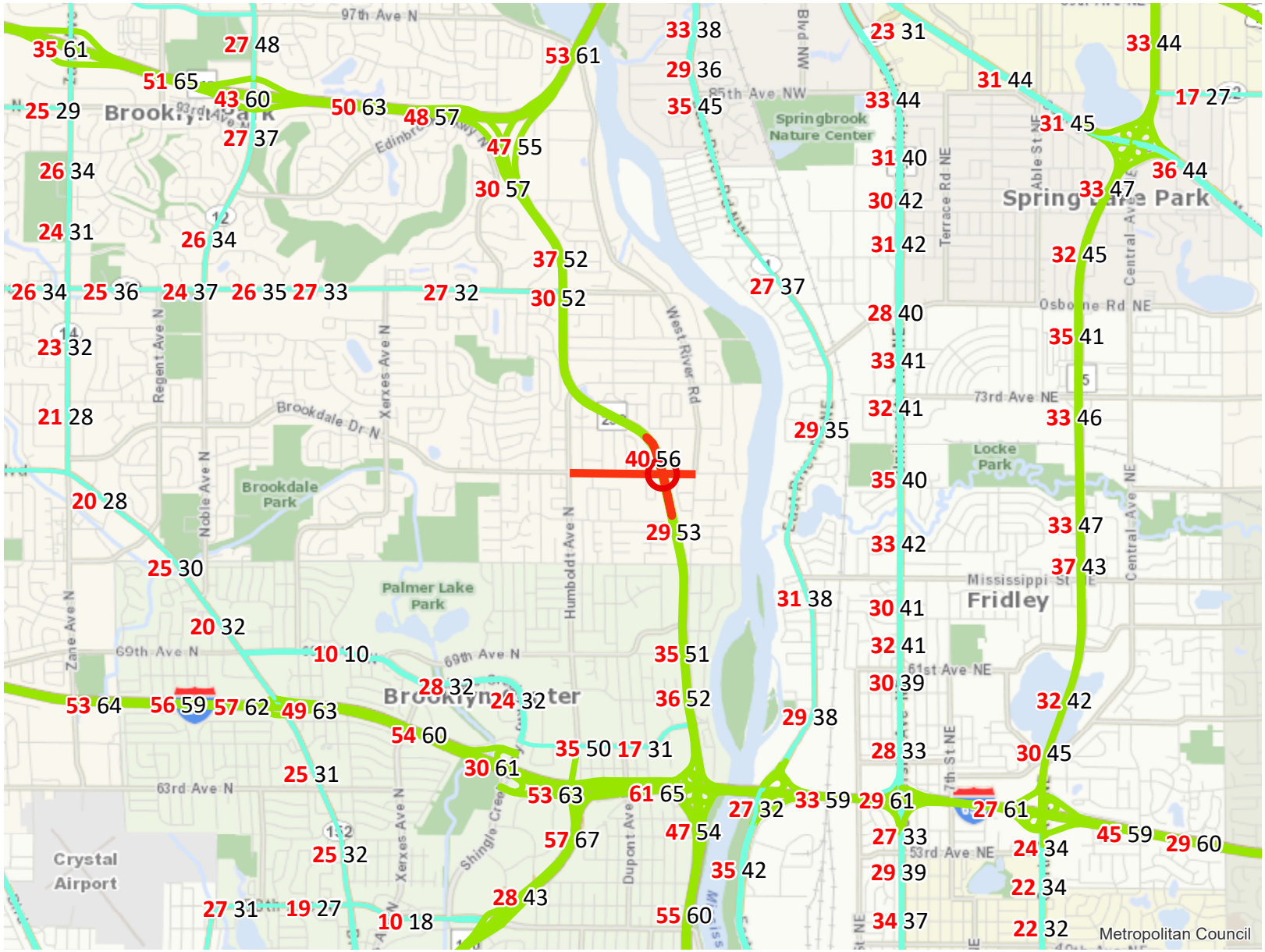
Total Project Cost (entered in Project Cost Form):	$33,215,150.00
Enter Amount of the Noise Walls:	$0.00
Total Project Cost subtract the amount of the noise walls:	$33,215,150.00
Enter amount of any outside, competitive funding:	$20,000,000.00
Attach documentation of award:	1588940121669_Corridors of Commerce Funding.pdf
Points Awarded in Previous Criteria	
Cost Effectiveness	$0.00

Other Attachments

File Name	Description	File Size
2020 Project Summary.pdf	One-Page Project Summary	250 KB
Before Photo.pdf	Before Photo	153 KB
Minority_Engage_North.pdf	Minority Engagement	863 KB
Poverty_Engage_North.pdf	Poverty Engagement	948 KB
RBTN Map.pdf	RBTN	307 KB
TH252 Brookdale Drive Interchange MnDOT.pdf	MnDOT Support Letter	439 KB

Level of Congestion

Roadway Expansion Project: TH 252 / Brookdale Drive Interchange | Map ID: 1584468926748



Project Points — Principal Arterials — Principal Arterials Planned

Project — A Minor Arterials — A Minor Arterials Planned

0 0.5 1 2 3 4 Miles

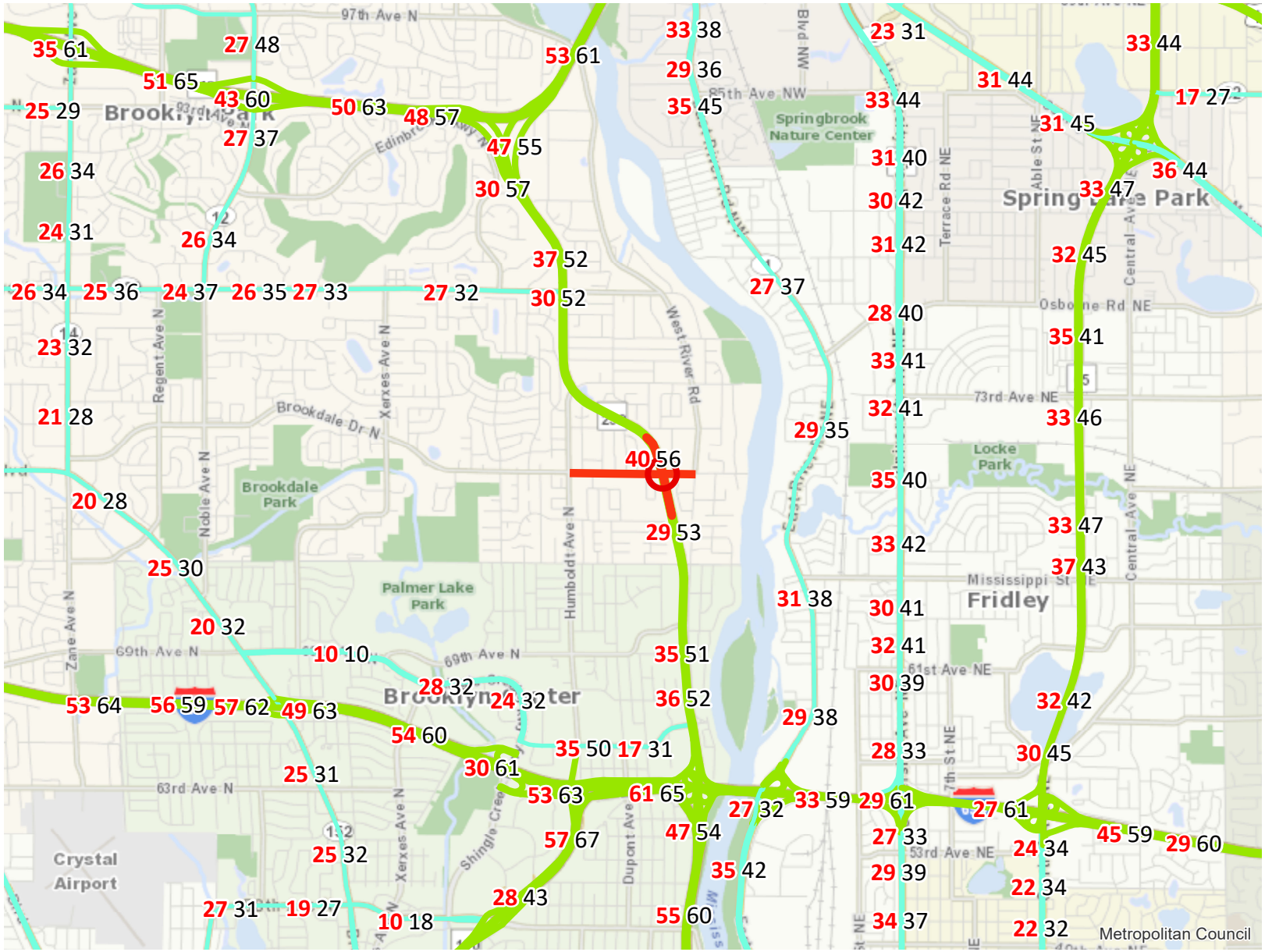
Created: 3/17/2020
LandscapeRSA1

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

METROPOLITAN COUNCIL

Level of Congestion

Roadway Expansion Project: TH 252 / Brookdale Drive Interchange | Map ID: 1584468926748



Project Points — Principal Arterials — Principal Arterials Planned

Project — A Minor Arterials — A Minor Arterials Planned

0 0.5 1 2 3 4 Miles

Created: 3/17/2020
LandscapeRSA1

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METROPOLITAN COUNCIL

Regional Economy

Roadway Expansion Project: TH 252 / Brookdale Drive Interchange | Map ID: 1584468926748

Results

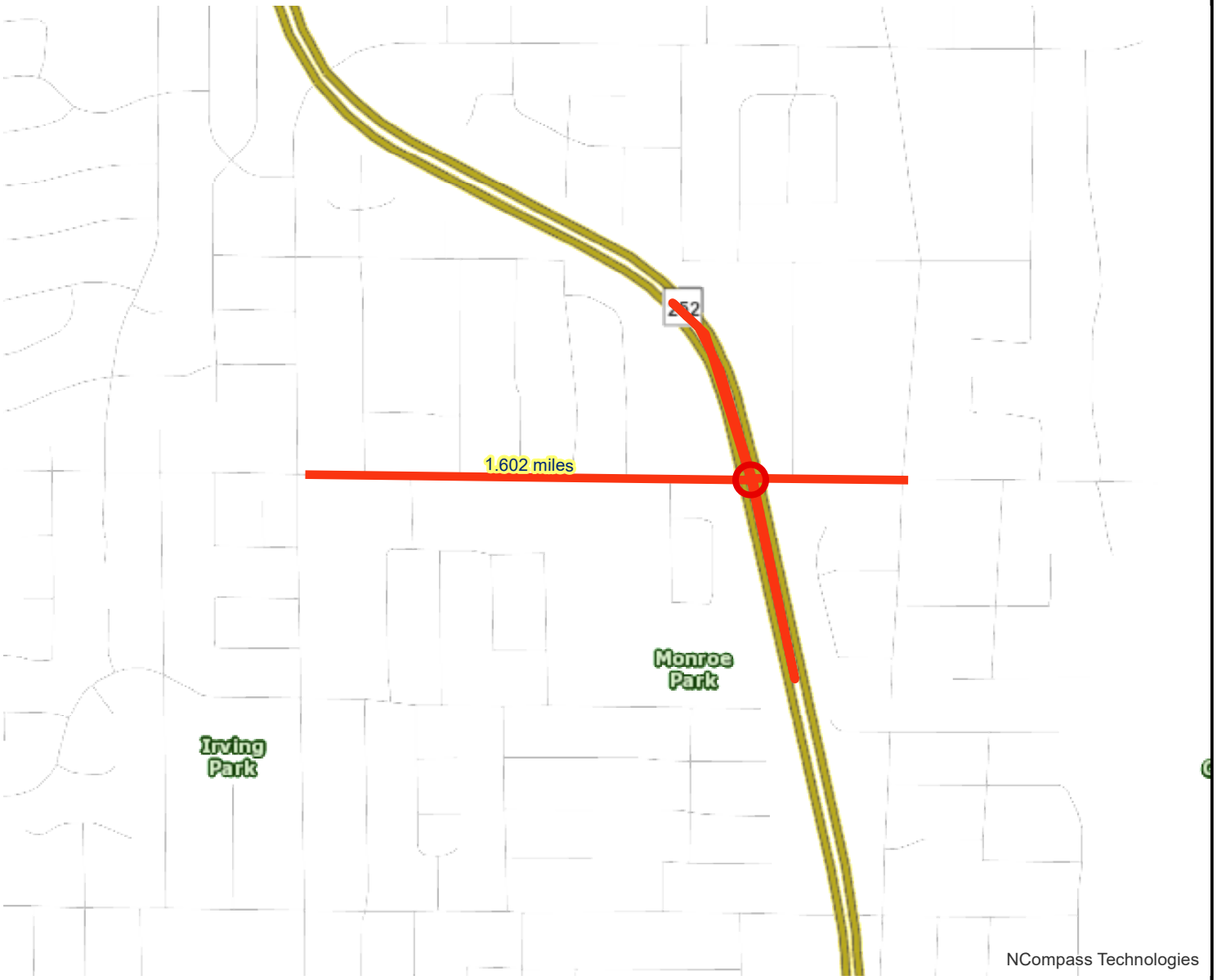
WITHIN ONE MI of project:
Postsecondary Students: 0

Totals by City:

Brooklyn Center
Population: 5674
Employment: 1590
Mfg and Dist Employment: 5

Brooklyn Park
Population: 12749
Employment: 487
Mfg and Dist Employment: 26

Fridley
Population: 6390
Employment: 2632
Mfg and Dist Employment: 1391



Project Points
Project
Manfacturing/Distribution Centers
Job Concentration Centers

0 0.1 0.2 0.4 0.6 0.8 Miles

Created: 3/17/2020
LandscapeRSA5

For complete disclaimer of accuracy, please visit
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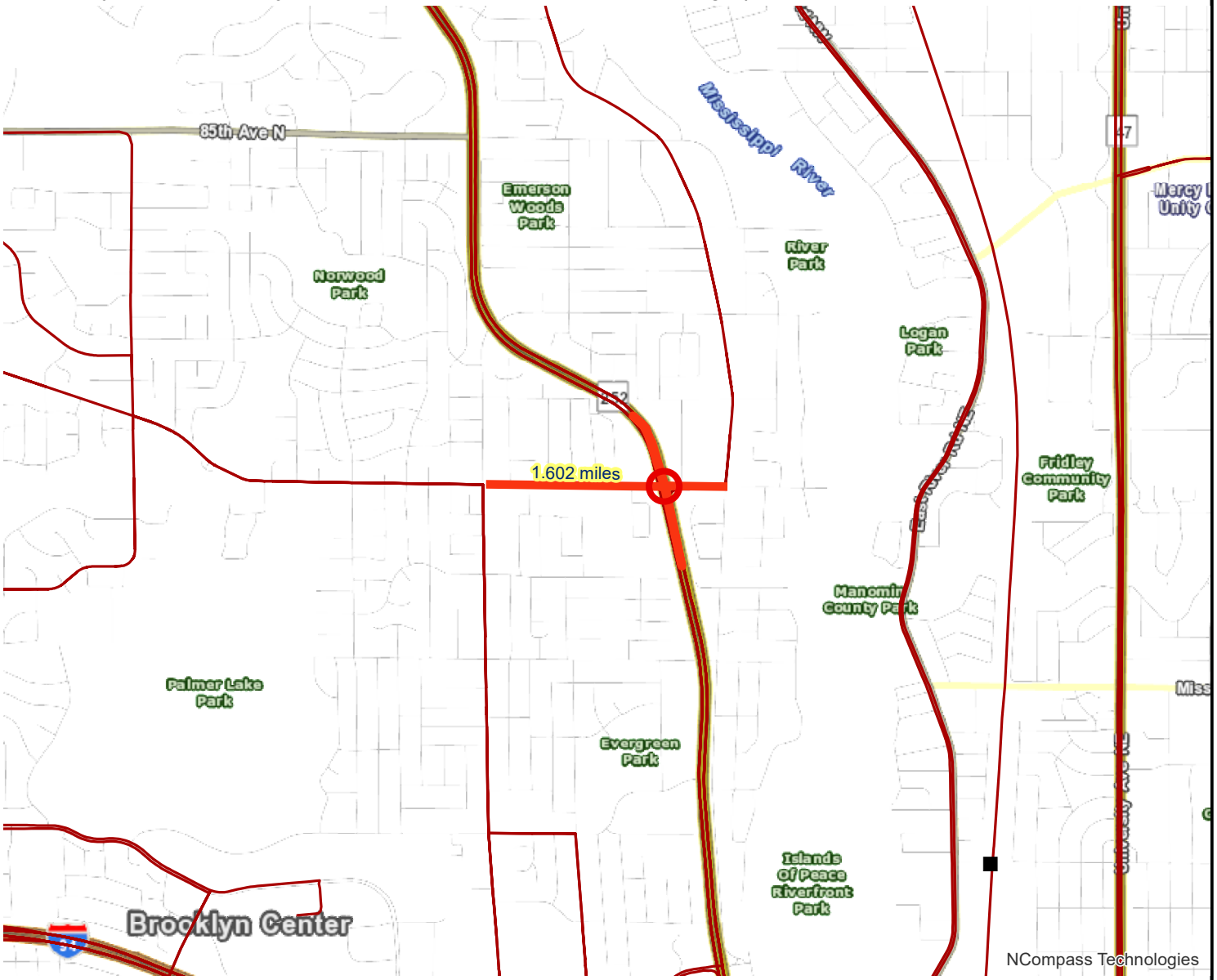
METROPOLITAN COUNCIL

Transit Connections

Roadway Expansion Project: TH 252 / Brookdale Drive Interchange | Map ID: 1584468926748



Results

Transit with a Direct Connection to project:
722 763 765 766 768 850 865 887

**indicates Planned Alignments*

Transit Market areas: 3

Project Points

Project

Project Area

Transitway Stations

Northstar Line

Transit Routes

0 0.275 0.55 1.1 1.65 2.2 Miles

Created: 3/17/2020
LandscapeRSA3

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METROPOLITAN COUNCIL

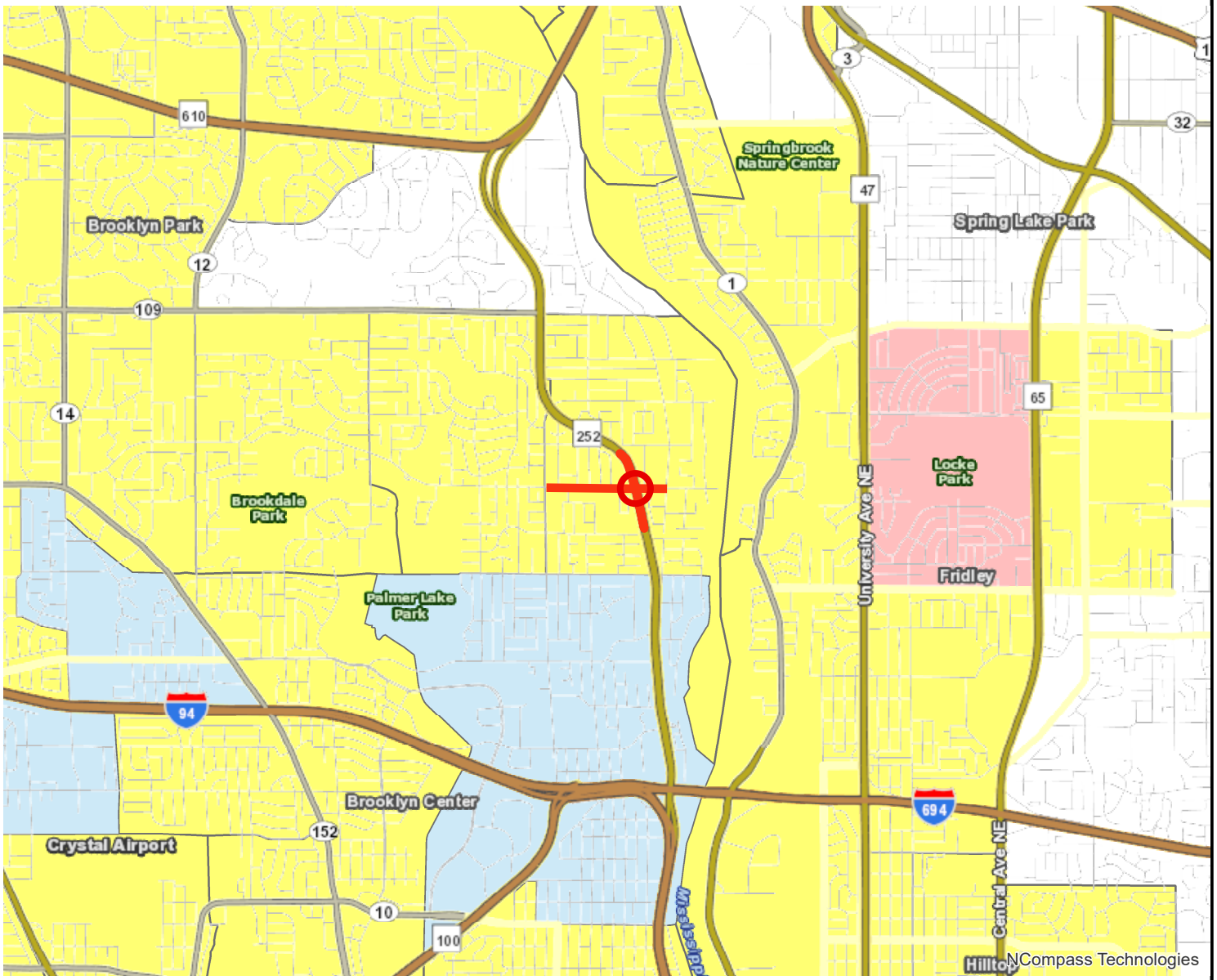
Socio-Economic Conditions

Roadway Expansion Project: TH 252 / Brookdale Drive Interchange | Map ID: 1584468926748

Results

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

Tracts within half-mile:
20200 26814 26815
51101 51201



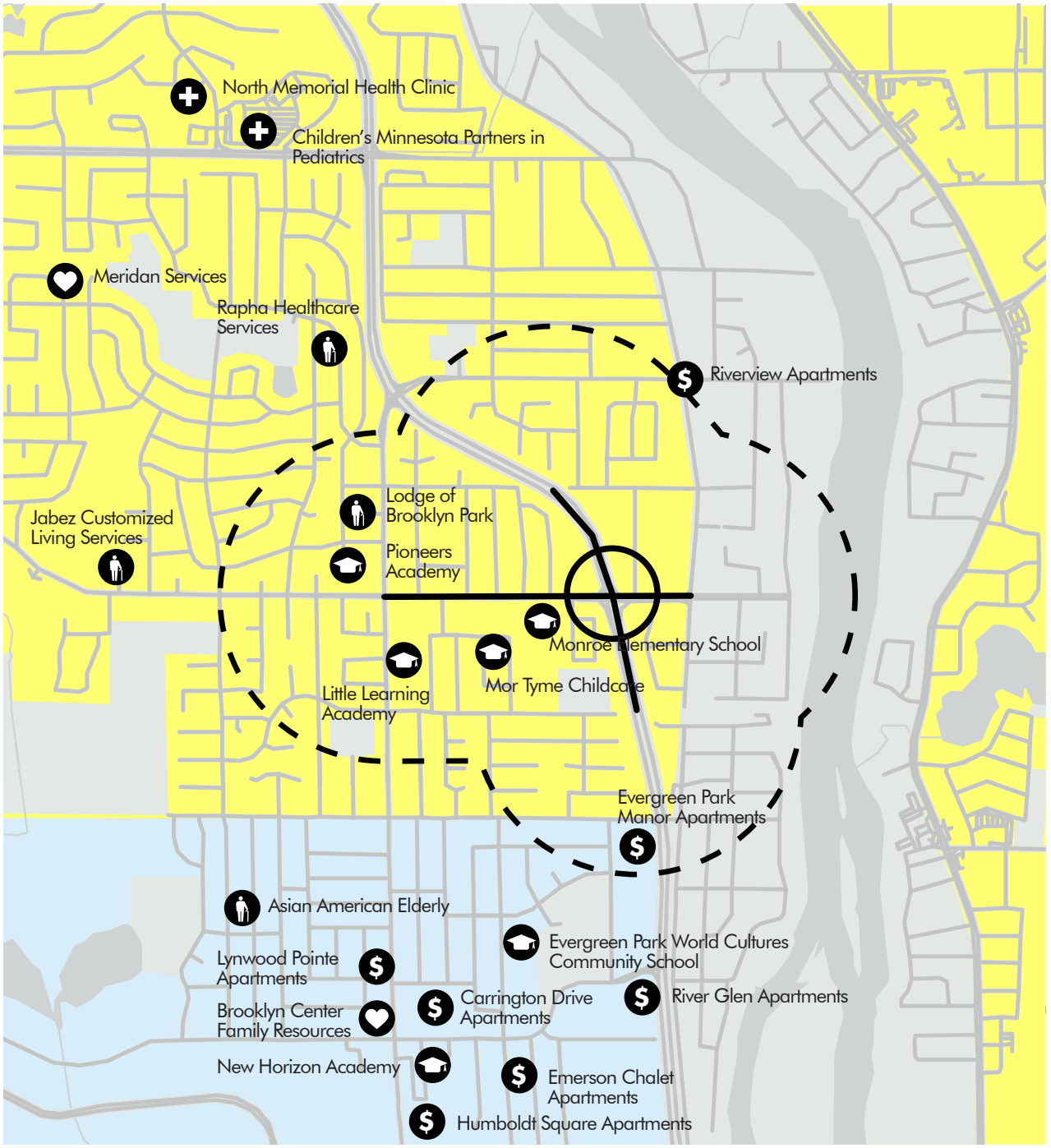
Points
Lines
Area of Concentrated Povertry > 50% residents of color
Area of Concentrated Poverty
Above reg'l avg conc of race/poverty

0 0.5 1 2 3 4 Miles

Created: 3/17/2020
LandscapeRSA2

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

METROPOLITAN COUNCIL



TH252 / Brookdale Drive Interchange

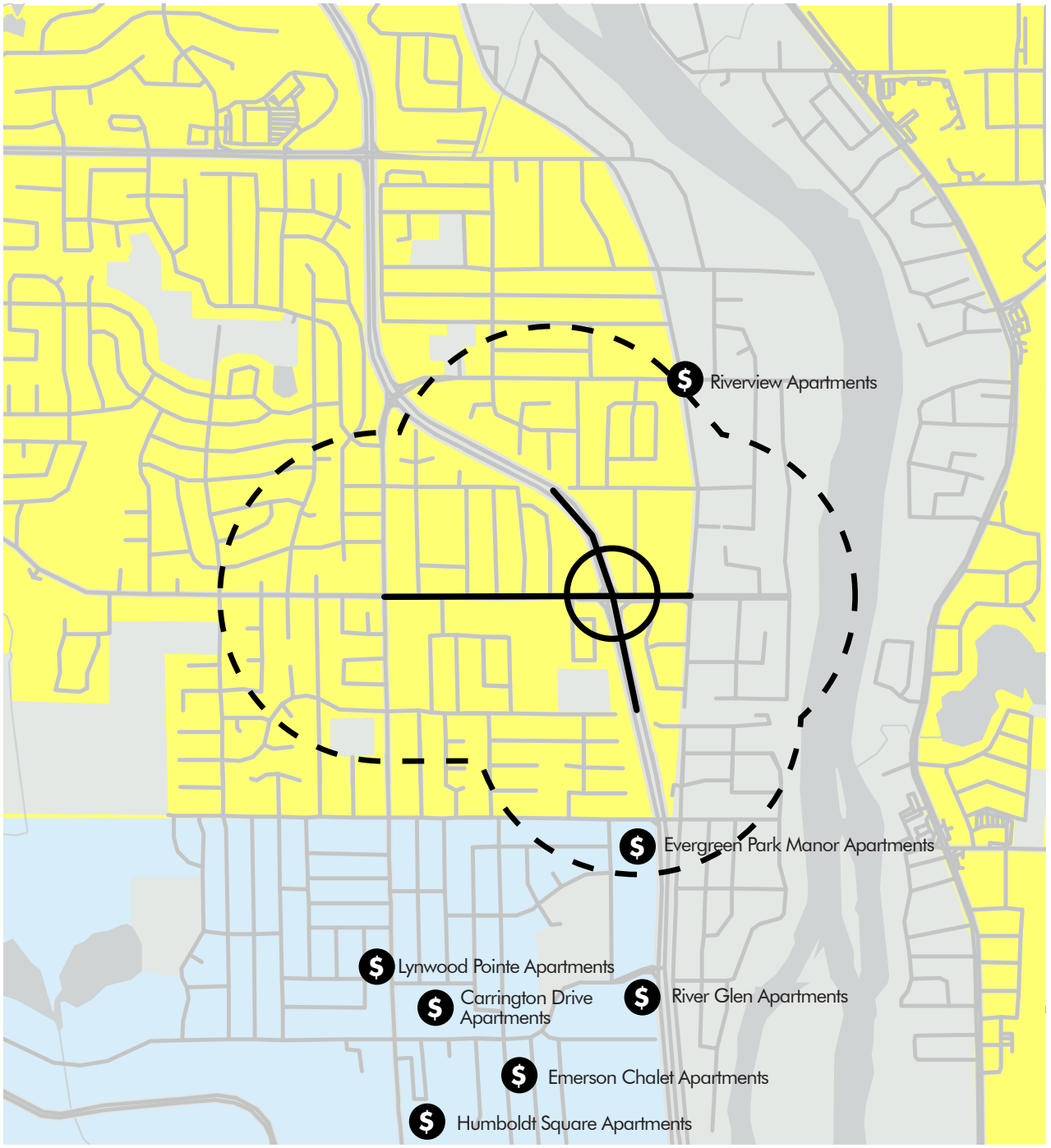
Equity Populations and Destinations

- Proposed project
- 1/2 mile project corridor
- Above regional average concentration of race / poverty
- Area of concentrated poverty > 50% residents of color
- School / daycare
- Senior / disabed housing
- Affordable housing
- Social services
- Medical clinic

0 1/4 1/2 1 MILE

2" = 1 MILE

N



TH252 / Brookdale Drive Interchange
Affordable Housing

- Proposed project
- 1/2 mile project corridor
- Above regional average concentration of race / poverty
- Area of concentrated poverty > 50% residents of color
- Affordable housing

0 1/4 1/2 1 MILE

2" = 1 MILE

N

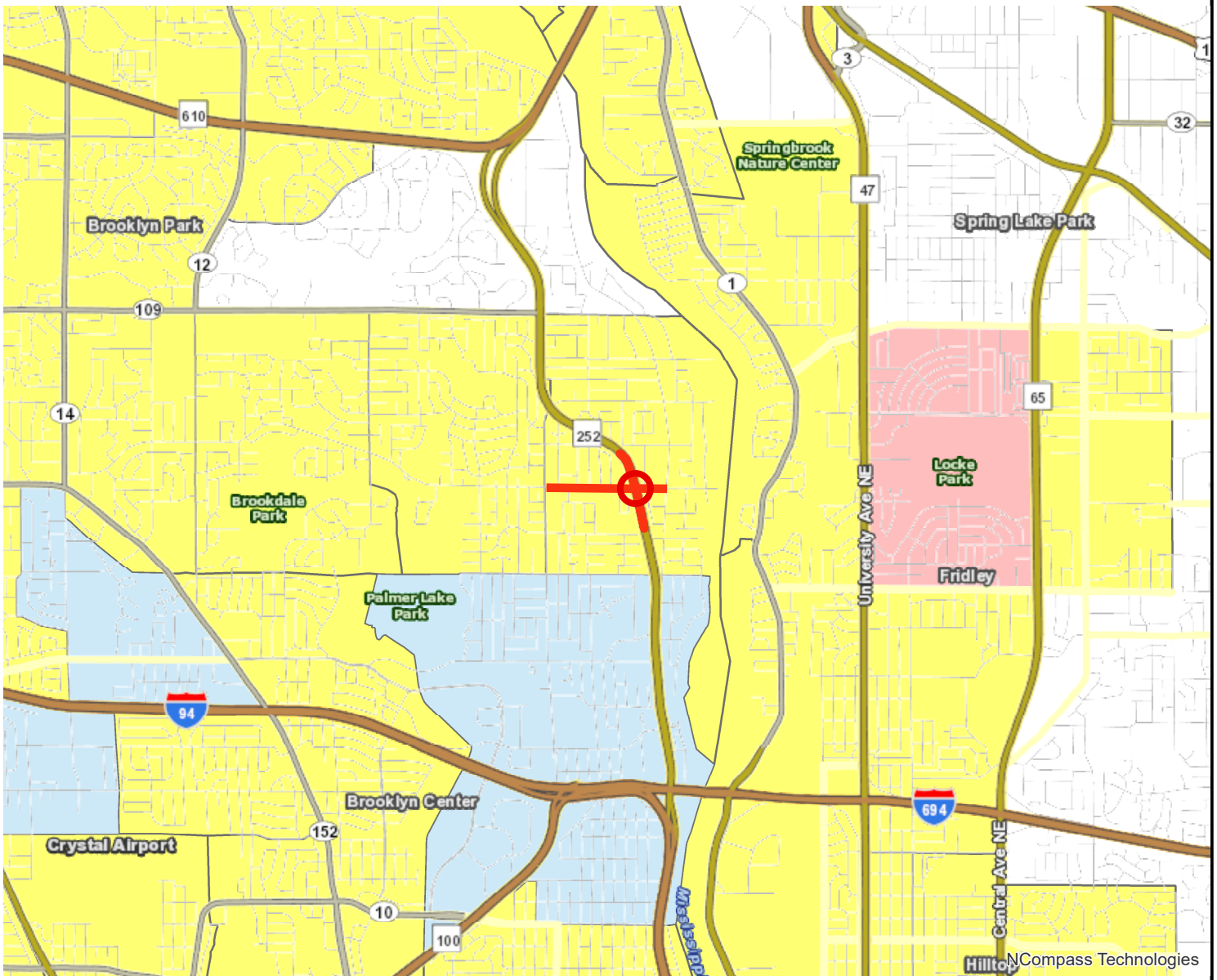
Socio-Economic Conditions

Roadway Expansion Project: TH 252 / Brookdale Drive Interchange | Map ID: 1584468926748

Results

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

Tracts within half-mile:
20200 26814 26815
51101 51201



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

0 0.5 1 2 3 4 Miles

Created: 3/17/2020
LandscapeRSA2

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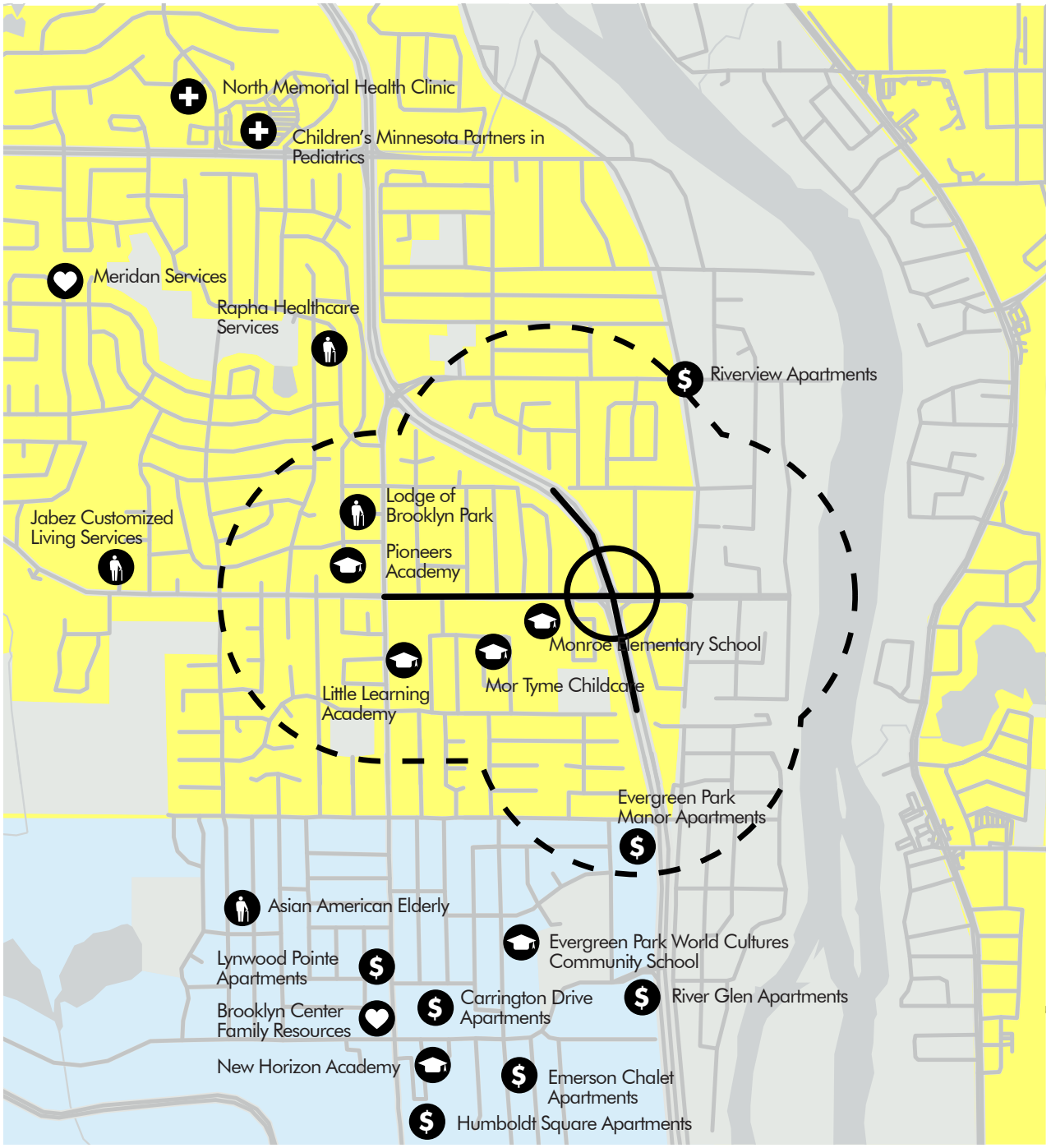
METROPOLITAN COUNCIL



TH252 / Brookdale Drive Interchange

Equity Populations and Destinations

- Proposed project
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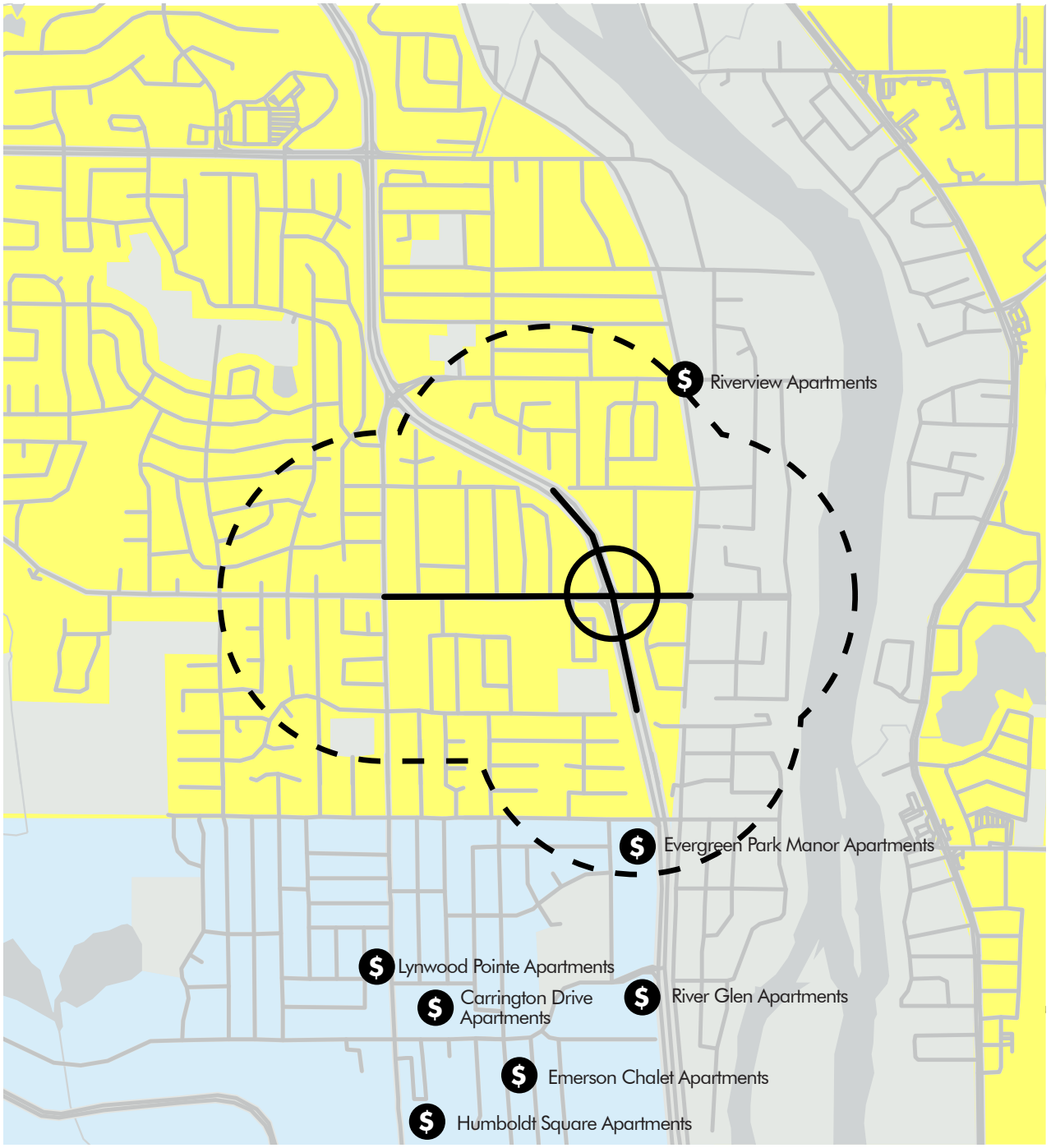
- Medical clinic

0 1/4 1/2 1 MILE

2" = 1 MILE

N



TH252 / Brookdale Drive Interchange
Affordable Housing

- Proposed project
- 1/2 mile project corridor
- Above regional average concentration of race / poverty
- Area of concentrated poverty > 50% residents of color
- Affordable housing

0 1/4 1/2 1 MILE

2" = 1 MILE

N

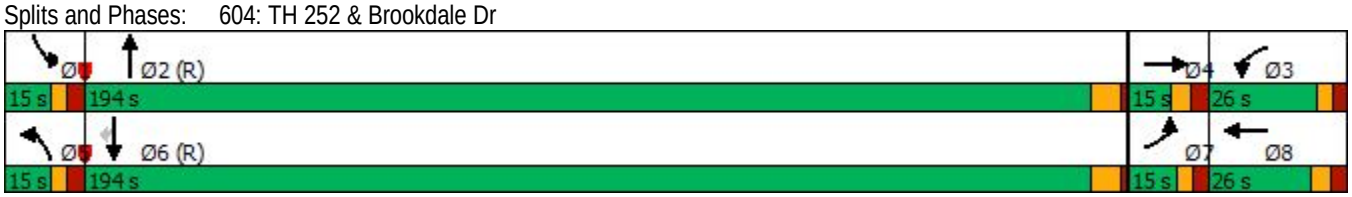
604: TH 252 & Brookdale Dr

Direction	All
Future Volume (vph)	6116
Total Delay / Veh (s/v)	125
CO Emissions (kg)	17.95
NOx Emissions (kg)	3.49
VOC Emissions (kg)	4.16

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	21	4	239	300	63	44	1415	39	115	3387	343
Future Volume (vph)	21	4	239	300	63	44	1415	39	115	3387	343
Turn Type	Prot	NA	Free	Prot	NA	Prot	NA	Free	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			Free					Free			6
Detector Phase	7	4		3	8	5	2		1	6	6
Switch Phase											
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	15.0		7.0	15.0	15.0
Minimum Split (s)	15.0	15.0		15.0	18.0	15.0	30.0		15.0	34.0	34.0
Total Split (s)	15.0	15.0		26.0	26.0	15.0	194.0		15.0	194.0	194.0
Total Split (%)	6.0%	6.0%		10.4%	10.4%	6.0%	77.6%		6.0%	77.6%	77.6%
Yellow Time (s)	3.0	3.5		3.0	3.5	3.0	5.5		3.0	5.5	5.5
All-Red Time (s)	3.0	3.5		3.0	3.5	3.5	1.5		3.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	7.0		6.0	7.0	6.5	7.0		6.5	7.0	7.0
Lead/Lag	Lead	Lead		Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None	None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	7.3	7.1	250.0	30.6	21.8	8.0	187.0	250.0	10.0	189.0	189.0
Actuated g/C Ratio	0.03	0.03	1.00	0.12	0.09	0.03	0.75	1.00	0.04	0.76	0.76
v/c Ratio	0.21	0.07	0.16	0.71	0.59	0.40	0.40	0.03	1.64	1.35	0.29
Control Delay	122.7	121.0	0.2	111.0	119.1	128.5	11.6	0.0	395.9	186.6	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	122.7	121.0	0.2	111.0	119.1	128.5	11.6	0.0	395.9	186.6	4.9
LOS	F	F	A	F	F	F	B	A	F	F	A
Approach Delay		11.5			112.9		14.8			176.7	
Approach LOS		B			F		B			F	

Intersection Summary	
Cycle Length: 250	
Actuated Cycle Length: 250	
Offset: 100 (40%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.64	
Intersection Signal Delay: 124.9	Intersection LOS: F
Intersection Capacity Utilization 119.2%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 604: TH 252 & Brookdale Dr



3: Aldrich Avenue & Brookdale Drive/Brookdale

Direction	All
Future Volume (vph)	1555
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.43
NOx Emissions (kg)	0.08
VOC Emissions (kg)	0.10

10: Brookdale & West Ramp

Direction	All
Future Volume (vph)	2115
Total Delay / Veh (s/v)	10
CO Emissions (kg)	0.99
NOx Emissions (kg)	0.19
VOC Emissions (kg)	0.23

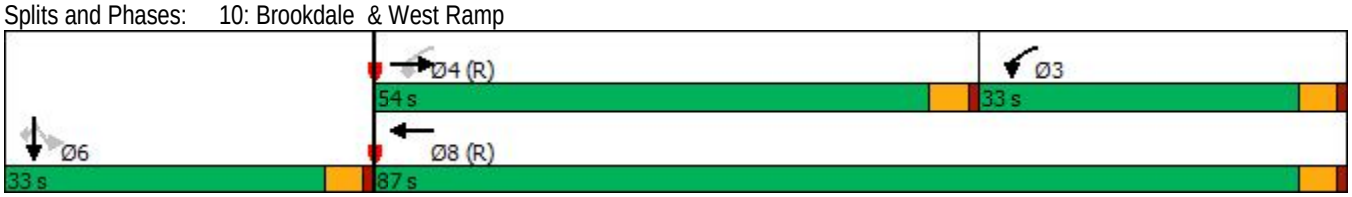
20: East Ramp & Brookdale

Direction	All
Future Volume (vph)	1595
Total Delay / Veh (s/v)	20
CO Emissions (kg)	1.61
NOx Emissions (kg)	0.31
VOC Emissions (kg)	0.37

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	175	630	445	465	0	285
Future Volume (vph)	175	630	445	465	0	285
Turn Type	NA	Perm	D.P+P	NA	NA	Perm
Protected Phases	4		3	8	6	
Permitted Phases		4	4			6
Detector Phase	4	4	3	8	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	54.0	54.0	33.0	87.0	33.0	33.0
Total Split (%)	45.0%	45.0%	27.5%	72.5%	27.5%	27.5%
Yellow Time (s)	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
Lost Time Adjust (s)	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
Lead/Lag	Lead	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	C-Max	C-Max	None	C-Max	Max	Max
Act Effct Green (s)	49.5	49.5	78.0	82.5	28.5	28.5
Actuated g/C Ratio	0.41	0.41	0.65	0.69	0.24	0.24
v/c Ratio	0.25	0.65	0.56	0.21	0.30	0.51
Control Delay	24.2	5.0	14.3	0.9	39.9	7.3
Queue Delay	0.0	0.0	0.4	0.4	0.0	0.0
Total Delay	24.2	5.0	14.7	1.3	39.9	7.3
LOS	C	A	B	A	D	A
Approach Delay	9.2			7.9	16.6	
Approach LOS	A			A	B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 4:EBWB and 8:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 10.0	Intersection LOS: B
Intersection Capacity Utilization 89.8%	ICU Level of Service E
Analysis Period (min) 15	

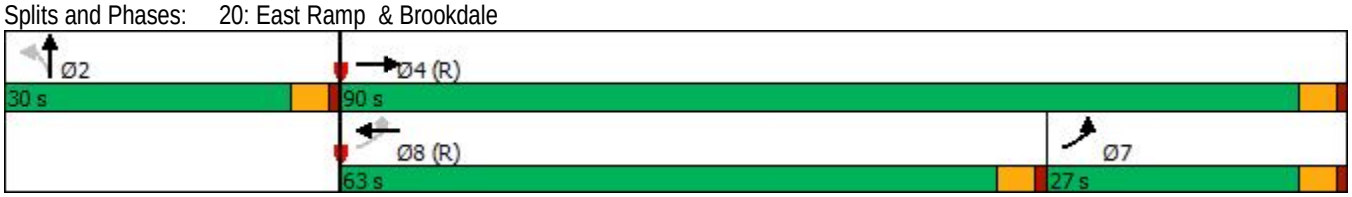
Splits and Phases: 10: Brookdale & West Ramp



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT
Lane Configurations						
Traffic Volume (vph)	160	130	565	190	345	0
Future Volume (vph)	160	130	565	190	345	0
Turn Type	D.P+P	NA	NA	Perm	Perm	NA
Protected Phases	7	4	8			2
Permitted Phases	8			8	2	
Detector Phase	7	4	8	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	27.0	90.0	63.0	63.0	30.0	30.0
Total Split (%)	22.5%	75.0%	52.5%	52.5%	25.0%	25.0%
Yellow Time (s)	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
Lost Time Adjust (s)	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
Lead/Lag	Lag		Lead	Lead		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max
Act Effct Green (s)	81.0	85.5	58.5	58.5	25.5	25.5
Actuated g/C Ratio	0.68	0.71	0.49	0.49	0.21	0.21
v/c Ratio	0.27	0.11	0.36	0.24	0.51	0.22
Control Delay	28.2	3.9	19.8	2.9	44.7	0.5
Queue Delay	0.6	0.6	0.0	0.0	0.0	0.0
Total Delay	28.8	4.5	19.9	2.9	44.7	0.5
LOS	C	A	B	A	D	A
Approach Delay		18.0	15.6			28.2
Approach LOS		B	B			C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 4:EBT and 8:EBWB, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 20.4	Intersection LOS: C
Intersection Capacity Utilization 91.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 20: East Ramp & Brookdale



252 Application

252/Brookdale		
Existing Volume	6116	vehicles
Existing Delay	125	sec/veh
Existing Total Delay	764500	seconds
Future Volume	0	vehicles
Future Delay	0	sec/veh
Future Total Delay	0	seconds
Total Delay Reduction	764500	seconds

West Ramp		
Existing Volume	0	vehicles
Existing Delay	0	sec/veh
Existing Total Delay	0	seconds
Future Volume	2115	vehicles
Future Delay	10	sec/veh
Future Total Delay	21150	seconds
Total Delay Reduction	-21150	seconds

East Ramp		
Existing Volume	0	vehicles
Existing Delay	0	sec/veh
Existing Total Delay	0	seconds
Future Volume	1595	vehicles
Future Delay	20	sec/veh
Future Total Delay	31900	seconds
Total Delay Reduction	-31900	seconds

Total Network Delay Reduction	**711450**	**seconds**

Emissions

Existing	CO	NO	VOC	Total
252/Brookdale	17.95	3.49	4.16	25.6

Future	CO	NO	VOC	Subtotal
West Ramp	0.99	0.19	0.23	1.41
East Ramp	1.61	0.31	0.37	2.29
			Total	3.7

Reduction	**21.9**	**kg**

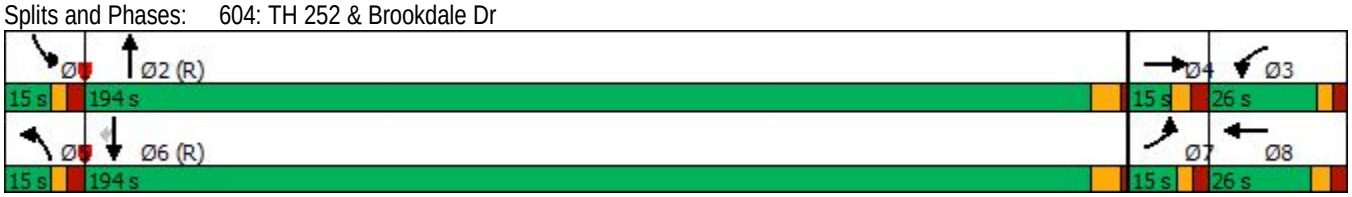
604: TH 252 & Brookdale Dr

Direction	All
Future Volume (vph)	6116
Total Delay / Veh (s/v)	125
CO Emissions (kg)	17.95
NOx Emissions (kg)	3.49
VOC Emissions (kg)	4.16

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	21	4	239	300	63	44	1415	39	115	3387	343
Future Volume (vph)	21	4	239	300	63	44	1415	39	115	3387	343
Turn Type	Prot	NA	Free	Prot	NA	Prot	NA	Free	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			Free					Free			6
Detector Phase	7	4		3	8	5	2		1	6	6
Switch Phase											
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	15.0		7.0	15.0	15.0
Minimum Split (s)	15.0	15.0		15.0	18.0	15.0	30.0		15.0	34.0	34.0
Total Split (s)	15.0	15.0		26.0	26.0	15.0	194.0		15.0	194.0	194.0
Total Split (%)	6.0%	6.0%		10.4%	10.4%	6.0%	77.6%		6.0%	77.6%	77.6%
Yellow Time (s)	3.0	3.5		3.0	3.5	3.0	5.5		3.0	5.5	5.5
All-Red Time (s)	3.0	3.5		3.0	3.5	3.5	1.5		3.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	7.0		6.0	7.0	6.5	7.0		6.5	7.0	7.0
Lead/Lag	Lead	Lead		Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None	None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	7.3	7.1	250.0	30.6	21.8	8.0	187.0	250.0	10.0	189.0	189.0
Actuated g/C Ratio	0.03	0.03	1.00	0.12	0.09	0.03	0.75	1.00	0.04	0.76	0.76
v/c Ratio	0.21	0.07	0.16	0.71	0.59	0.40	0.40	0.03	1.64	1.35	0.29
Control Delay	122.7	121.0	0.2	111.0	119.1	128.5	11.6	0.0	395.9	186.6	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	122.7	121.0	0.2	111.0	119.1	128.5	11.6	0.0	395.9	186.6	4.9
LOS	F	F	A	F	F	F	B	A	F	F	A
Approach Delay		11.5			112.9		14.8			176.7	
Approach LOS		B			F		B			F	

Intersection Summary	
Cycle Length: 250	
Actuated Cycle Length: 250	
Offset: 100 (40%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.64	
Intersection Signal Delay: 124.9	Intersection LOS: F
Intersection Capacity Utilization 119.2%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 604: TH 252 & Brookdale Dr



3: Aldrich Avenue & Brookdale Drive/Brookdale

Direction	All
Future Volume (vph)	1555
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.43
NOx Emissions (kg)	0.08
VOC Emissions (kg)	0.10

10: Brookdale & West Ramp

Direction	All
Future Volume (vph)	2115
Total Delay / Veh (s/v)	10
CO Emissions (kg)	0.99
NOx Emissions (kg)	0.19
VOC Emissions (kg)	0.23

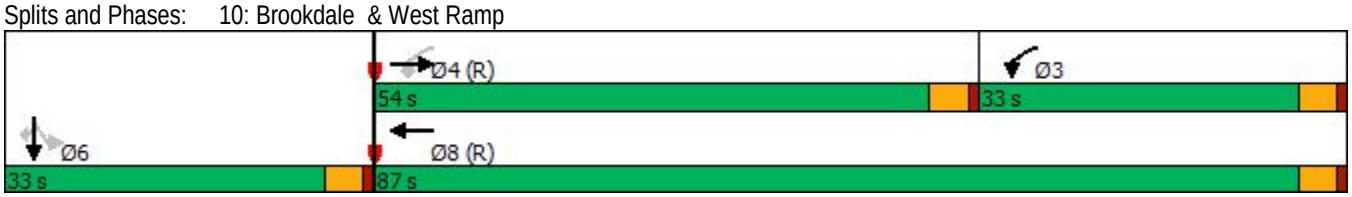
20: East Ramp & Brookdale

Direction	All
Future Volume (vph)	1595
Total Delay / Veh (s/v)	20
CO Emissions (kg)	1.61
NOx Emissions (kg)	0.31
VOC Emissions (kg)	0.37

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	175	630	445	465	0	285
Future Volume (vph)	175	630	445	465	0	285
Turn Type	NA	Perm	D.P+P	NA	NA	Perm
Protected Phases	4		3	8	6	
Permitted Phases		4	4			6
Detector Phase	4	4	3	8	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	54.0	54.0	33.0	87.0	33.0	33.0
Total Split (%)	45.0%	45.0%	27.5%	72.5%	27.5%	27.5%
Yellow Time (s)	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
Lost Time Adjust (s)	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
Lead/Lag	Lead	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	C-Max	C-Max	None	C-Max	Max	Max
Act Effct Green (s)	49.5	49.5	78.0	82.5	28.5	28.5
Actuated g/C Ratio	0.41	0.41	0.65	0.69	0.24	0.24
v/c Ratio	0.25	0.65	0.56	0.21	0.30	0.51
Control Delay	24.2	5.0	14.3	0.9	39.9	7.3
Queue Delay	0.0	0.0	0.4	0.4	0.0	0.0
Total Delay	24.2	5.0	14.7	1.3	39.9	7.3
LOS	C	A	B	A	D	A
Approach Delay	9.2			7.9	16.6	
Approach LOS	A			A	B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 4:EBWB and 8:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 10.0	Intersection LOS: B
Intersection Capacity Utilization 89.8%	ICU Level of Service E
Analysis Period (min) 15	

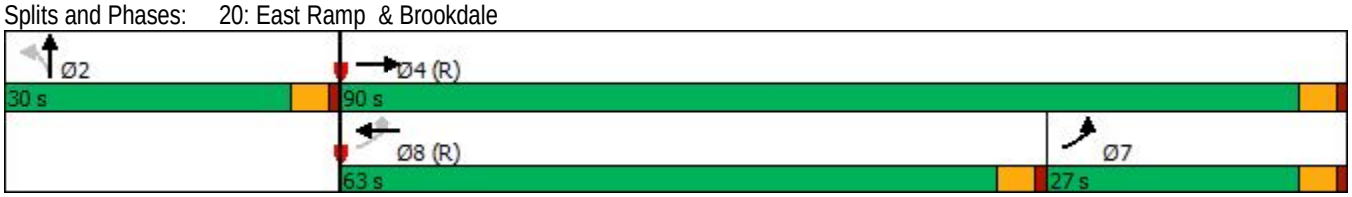
Splits and Phases: 10: Brookdale & West Ramp



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT
Lane Configurations						
Traffic Volume (vph)	160	130	565	190	345	0
Future Volume (vph)	160	130	565	190	345	0
Turn Type	D.P+P	NA	NA	Perm	Perm	NA
Protected Phases	7	4	8			2
Permitted Phases	8			8	2	
Detector Phase	7	4	8	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	27.0	90.0	63.0	63.0	30.0	30.0
Total Split (%)	22.5%	75.0%	52.5%	52.5%	25.0%	25.0%
Yellow Time (s)	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
Lost Time Adjust (s)	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
Lead/Lag	Lag		Lead	Lead		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max
Act Effct Green (s)	81.0	85.5	58.5	58.5	25.5	25.5
Actuated g/C Ratio	0.68	0.71	0.49	0.49	0.21	0.21
v/c Ratio	0.27	0.11	0.36	0.24	0.51	0.22
Control Delay	28.2	3.9	19.8	2.9	44.7	0.5
Queue Delay	0.6	0.6	0.0	0.0	0.0	0.0
Total Delay	28.8	4.5	19.9	2.9	44.7	0.5
LOS	C	A	B	A	D	A
Approach Delay		18.0	15.6			28.2
Approach LOS		B	B			C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 4:EBT and 8:EBWB, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 20.4	Intersection LOS: C
Intersection Capacity Utilization 91.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 20: East Ramp & Brookdale



252 Application

252/Brookdale		
Existing Volume	6116	vehicles
Existing Delay	125	sec/veh
Existing Total Delay	764500	seconds
Future Volume	0	vehicles
Future Delay	0	sec/veh
Future Total Delay	0	seconds
Total Delay Reduction	764500	seconds

West Ramp		
Existing Volume	0	vehicles
Existing Delay	0	sec/veh
Existing Total Delay	0	seconds
Future Volume	2115	vehicles
Future Delay	10	sec/veh
Future Total Delay	21150	seconds
Total Delay Reduction	-21150	seconds

East Ramp		
Existing Volume	0	vehicles
Existing Delay	0	sec/veh
Existing Total Delay	0	seconds
Future Volume	1595	vehicles
Future Delay	20	sec/veh
Future Total Delay	31900	seconds
Total Delay Reduction	-31900	seconds

Total Network Delay Reduction	**711450**	**seconds**

Emissions

Existing	CO	NO	VOC	Total
252/Brookdale	17.95	3.49	4.16	25.6

Future	CO	NO	VOC	Subtotal
West Ramp	0.99	0.19	0.23	1.41
East Ramp	1.61	0.31	0.37	2.29
			Total	3.7

Reduction	**21.9**	**kg**

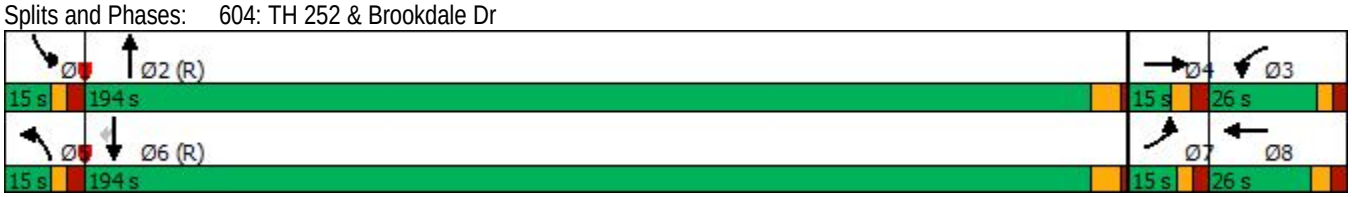
604: TH 252 & Brookdale Dr

Direction	All
Future Volume (vph)	6116
Total Delay / Veh (s/v)	125
CO Emissions (kg)	17.95
NOx Emissions (kg)	3.49
VOC Emissions (kg)	4.16

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	21	4	239	300	63	44	1415	39	115	3387	343
Future Volume (vph)	21	4	239	300	63	44	1415	39	115	3387	343
Turn Type	Prot	NA	Free	Prot	NA	Prot	NA	Free	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			Free					Free			6
Detector Phase	7	4		3	8	5	2		1	6	6
Switch Phase											
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	15.0		7.0	15.0	15.0
Minimum Split (s)	15.0	15.0		15.0	18.0	15.0	30.0		15.0	34.0	34.0
Total Split (s)	15.0	15.0		26.0	26.0	15.0	194.0		15.0	194.0	194.0
Total Split (%)	6.0%	6.0%		10.4%	10.4%	6.0%	77.6%		6.0%	77.6%	77.6%
Yellow Time (s)	3.0	3.5		3.0	3.5	3.0	5.5		3.0	5.5	5.5
All-Red Time (s)	3.0	3.5		3.0	3.5	3.5	1.5		3.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	7.0		6.0	7.0	6.5	7.0		6.5	7.0	7.0
Lead/Lag	Lead	Lead		Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None	None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	7.3	7.1	250.0	30.6	21.8	8.0	187.0	250.0	10.0	189.0	189.0
Actuated g/C Ratio	0.03	0.03	1.00	0.12	0.09	0.03	0.75	1.00	0.04	0.76	0.76
v/c Ratio	0.21	0.07	0.16	0.71	0.59	0.40	0.40	0.03	1.64	1.35	0.29
Control Delay	122.7	121.0	0.2	111.0	119.1	128.5	11.6	0.0	395.9	186.6	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	122.7	121.0	0.2	111.0	119.1	128.5	11.6	0.0	395.9	186.6	4.9
LOS	F	F	A	F	F	F	B	A	F	F	A
Approach Delay		11.5			112.9		14.8			176.7	
Approach LOS		B			F		B			F	

Intersection Summary	
Cycle Length: 250	
Actuated Cycle Length: 250	
Offset: 100 (40%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.64	
Intersection Signal Delay: 124.9	Intersection LOS: F
Intersection Capacity Utilization 119.2%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 604: TH 252 & Brookdale Dr



3: Aldrich Avenue & Brookdale Drive/Brookdale

Direction	All
Future Volume (vph)	1555
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.43
NOx Emissions (kg)	0.08
VOC Emissions (kg)	0.10

10: Brookdale & West Ramp

Direction	All
Future Volume (vph)	2115
Total Delay / Veh (s/v)	10
CO Emissions (kg)	0.99
NOx Emissions (kg)	0.19
VOC Emissions (kg)	0.23

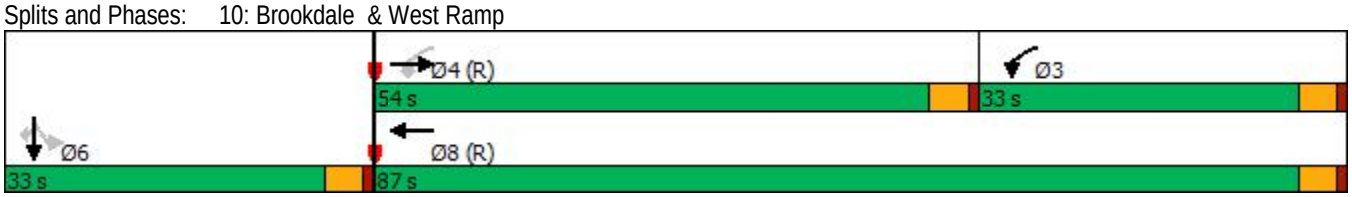
20: East Ramp & Brookdale

Direction	All
Future Volume (vph)	1595
Total Delay / Veh (s/v)	20
CO Emissions (kg)	1.61
NOx Emissions (kg)	0.31
VOC Emissions (kg)	0.37

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	175	630	445	465	0	285
Future Volume (vph)	175	630	445	465	0	285
Turn Type	NA	Perm	D.P+P	NA	NA	Perm
Protected Phases	4		3	8	6	
Permitted Phases		4	4			6
Detector Phase	4	4	3	8	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	54.0	54.0	33.0	87.0	33.0	33.0
Total Split (%)	45.0%	45.0%	27.5%	72.5%	27.5%	27.5%
Yellow Time (s)	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
Lost Time Adjust (s)	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
Lead/Lag	Lead	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	C-Max	C-Max	None	C-Max	Max	Max
Act Effct Green (s)	49.5	49.5	78.0	82.5	28.5	28.5
Actuated g/C Ratio	0.41	0.41	0.65	0.69	0.24	0.24
v/c Ratio	0.25	0.65	0.56	0.21	0.30	0.51
Control Delay	24.2	5.0	14.3	0.9	39.9	7.3
Queue Delay	0.0	0.0	0.4	0.4	0.0	0.0
Total Delay	24.2	5.0	14.7	1.3	39.9	7.3
LOS	C	A	B	A	D	A
Approach Delay	9.2			7.9	16.6	
Approach LOS	A			A	B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 4:EBWB and 8:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 10.0	Intersection LOS: B
Intersection Capacity Utilization 89.8%	ICU Level of Service E
Analysis Period (min) 15	

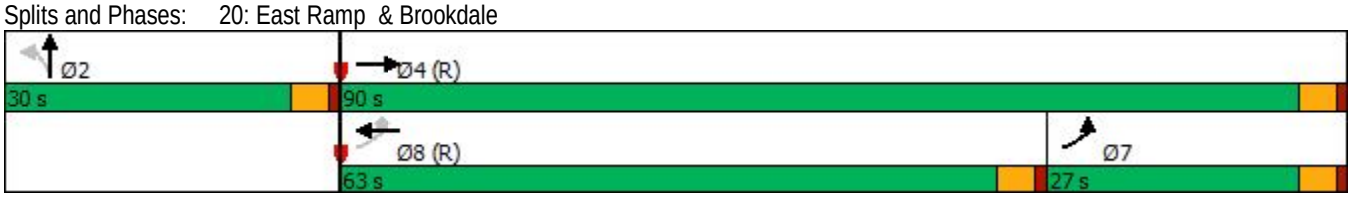
Splits and Phases: 10: Brookdale & West Ramp



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT
Lane Configurations						
Traffic Volume (vph)	160	130	565	190	345	0
Future Volume (vph)	160	130	565	190	345	0
Turn Type	D.P+P	NA	NA	Perm	Perm	NA
Protected Phases	7	4	8			2
Permitted Phases	8			8	2	
Detector Phase	7	4	8	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	27.0	90.0	63.0	63.0	30.0	30.0
Total Split (%)	22.5%	75.0%	52.5%	52.5%	25.0%	25.0%
Yellow Time (s)	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
Lost Time Adjust (s)	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
Lead/Lag	Lag		Lead	Lead		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max
Act Effct Green (s)	81.0	85.5	58.5	58.5	25.5	25.5
Actuated g/C Ratio	0.68	0.71	0.49	0.49	0.21	0.21
v/c Ratio	0.27	0.11	0.36	0.24	0.51	0.22
Control Delay	28.2	3.9	19.8	2.9	44.7	0.5
Queue Delay	0.6	0.6	0.0	0.0	0.0	0.0
Total Delay	28.8	4.5	19.9	2.9	44.7	0.5
LOS	C	A	B	A	D	A
Approach Delay		18.0	15.6			28.2
Approach LOS		B	B			C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 4:EBT and 8:EBWB, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 20.4	Intersection LOS: C
Intersection Capacity Utilization 91.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 20: East Ramp & Brookdale



252 Application

252/Brookdale		
Existing Volume	6116	vehicles
Existing Delay	125	sec/veh
Existing Total Delay	764500	seconds
Future Volume	0	vehicles
Future Delay	0	sec/veh
Future Total Delay	0	seconds
Total Delay Reduction	764500	seconds

West Ramp		
Existing Volume	0	vehicles
Existing Delay	0	sec/veh
Existing Total Delay	0	seconds
Future Volume	2115	vehicles
Future Delay	10	sec/veh
Future Total Delay	21150	seconds
Total Delay Reduction	-21150	seconds

East Ramp		
Existing Volume	0	vehicles
Existing Delay	0	sec/veh
Existing Total Delay	0	seconds
Future Volume	1595	vehicles
Future Delay	20	sec/veh
Future Total Delay	31900	seconds
Total Delay Reduction	-31900	seconds

Total Network Delay Reduction	**711450**	**seconds**

Emissions

Existing	CO	NO	VOC	Total
252/Brookdale	17.95	3.49	4.16	25.6

Future	CO	NO	VOC	Subtotal
West Ramp	0.99	0.19	0.23	1.41
East Ramp	1.61	0.31	0.37	2.29
			Total	3.7

Reduction	**21.9**	**kg**

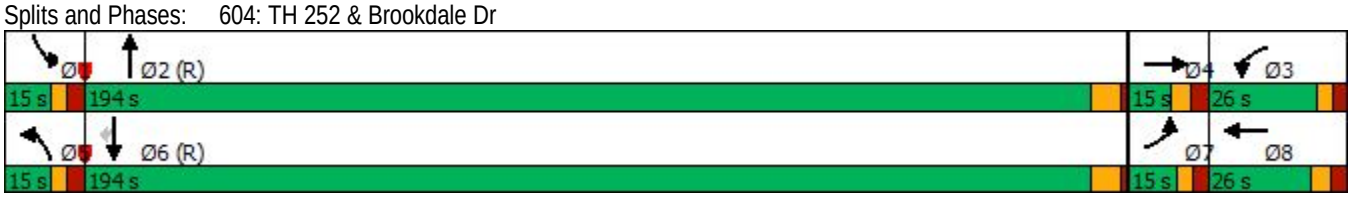
604: TH 252 & Brookdale Dr

Direction	All
Future Volume (vph)	6116
Total Delay / Veh (s/v)	125
CO Emissions (kg)	17.95
NOx Emissions (kg)	3.49
VOC Emissions (kg)	4.16

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	21	4	239	300	63	44	1415	39	115	3387	343
Future Volume (vph)	21	4	239	300	63	44	1415	39	115	3387	343
Turn Type	Prot	NA	Free	Prot	NA	Prot	NA	Free	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			Free					Free			6
Detector Phase	7	4		3	8	5	2		1	6	6
Switch Phase											
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	15.0		7.0	15.0	15.0
Minimum Split (s)	15.0	15.0		15.0	18.0	15.0	30.0		15.0	34.0	34.0
Total Split (s)	15.0	15.0		26.0	26.0	15.0	194.0		15.0	194.0	194.0
Total Split (%)	6.0%	6.0%		10.4%	10.4%	6.0%	77.6%		6.0%	77.6%	77.6%
Yellow Time (s)	3.0	3.5		3.0	3.5	3.0	5.5		3.0	5.5	5.5
All-Red Time (s)	3.0	3.5		3.0	3.5	3.5	1.5		3.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	7.0		6.0	7.0	6.5	7.0		6.5	7.0	7.0
Lead/Lag	Lead	Lead		Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None	None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	7.3	7.1	250.0	30.6	21.8	8.0	187.0	250.0	10.0	189.0	189.0
Actuated g/C Ratio	0.03	0.03	1.00	0.12	0.09	0.03	0.75	1.00	0.04	0.76	0.76
v/c Ratio	0.21	0.07	0.16	0.71	0.59	0.40	0.40	0.03	1.64	1.35	0.29
Control Delay	122.7	121.0	0.2	111.0	119.1	128.5	11.6	0.0	395.9	186.6	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	122.7	121.0	0.2	111.0	119.1	128.5	11.6	0.0	395.9	186.6	4.9
LOS	F	F	A	F	F	F	B	A	F	F	A
Approach Delay		11.5			112.9		14.8			176.7	
Approach LOS		B			F		B			F	

Intersection Summary	
Cycle Length: 250	
Actuated Cycle Length: 250	
Offset: 100 (40%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.64	
Intersection Signal Delay: 124.9	Intersection LOS: F
Intersection Capacity Utilization 119.2%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 604: TH 252 & Brookdale Dr



3: Aldrich Avenue & Brookdale Drive/Brookdale

Direction	All
Future Volume (vph)	1555
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.43
NOx Emissions (kg)	0.08
VOC Emissions (kg)	0.10

10: Brookdale & West Ramp

Direction	All
Future Volume (vph)	2115
Total Delay / Veh (s/v)	10
CO Emissions (kg)	0.99
NOx Emissions (kg)	0.19
VOC Emissions (kg)	0.23

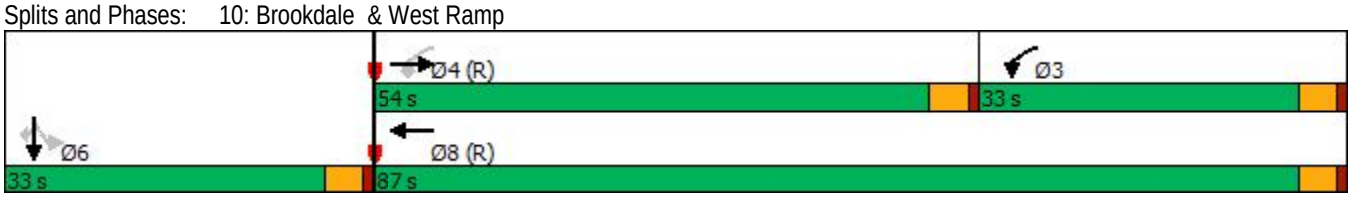
20: East Ramp & Brookdale

Direction	All
Future Volume (vph)	1595
Total Delay / Veh (s/v)	20
CO Emissions (kg)	1.61
NOx Emissions (kg)	0.31
VOC Emissions (kg)	0.37

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	175	630	445	465	0	285
Future Volume (vph)	175	630	445	465	0	285
Turn Type	NA	Perm	D.P+P	NA	NA	Perm
Protected Phases	4		3	8	6	
Permitted Phases		4	4			6
Detector Phase	4	4	3	8	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	54.0	54.0	33.0	87.0	33.0	33.0
Total Split (%)	45.0%	45.0%	27.5%	72.5%	27.5%	27.5%
Yellow Time (s)	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
Lost Time Adjust (s)	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
Lead/Lag	Lead	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	C-Max	C-Max	None	C-Max	Max	Max
Act Effct Green (s)	49.5	49.5	78.0	82.5	28.5	28.5
Actuated g/C Ratio	0.41	0.41	0.65	0.69	0.24	0.24
v/c Ratio	0.25	0.65	0.56	0.21	0.30	0.51
Control Delay	24.2	5.0	14.3	0.9	39.9	7.3
Queue Delay	0.0	0.0	0.4	0.4	0.0	0.0
Total Delay	24.2	5.0	14.7	1.3	39.9	7.3
LOS	C	A	B	A	D	A
Approach Delay	9.2			7.9	16.6	
Approach LOS	A			A	B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 4:EBWB and 8:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 10.0	Intersection LOS: B
Intersection Capacity Utilization 89.8%	ICU Level of Service E
Analysis Period (min) 15	

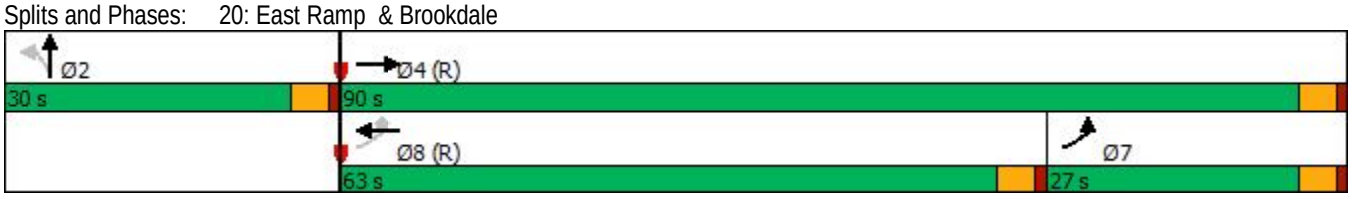
Splits and Phases: 10: Brookdale & West Ramp



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT
Lane Configurations						
Traffic Volume (vph)	160	130	565	190	345	0
Future Volume (vph)	160	130	565	190	345	0
Turn Type	D.P+P	NA	NA	Perm	Perm	NA
Protected Phases	7	4	8			2
Permitted Phases	8			8	2	
Detector Phase	7	4	8	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	27.0	90.0	63.0	63.0	30.0	30.0
Total Split (%)	22.5%	75.0%	52.5%	52.5%	25.0%	25.0%
Yellow Time (s)	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
Lost Time Adjust (s)	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
Lead/Lag	Lag		Lead	Lead		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max
Act Effct Green (s)	81.0	85.5	58.5	58.5	25.5	25.5
Actuated g/C Ratio	0.68	0.71	0.49	0.49	0.21	0.21
v/c Ratio	0.27	0.11	0.36	0.24	0.51	0.22
Control Delay	28.2	3.9	19.8	2.9	44.7	0.5
Queue Delay	0.6	0.6	0.0	0.0	0.0	0.0
Total Delay	28.8	4.5	19.9	2.9	44.7	0.5
LOS	C	A	B	A	D	A
Approach Delay		18.0	15.6			28.2
Approach LOS		B	B			C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 4:EBT and 8:EBWB, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 20.4	Intersection LOS: C
Intersection Capacity Utilization 91.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 20: East Ramp & Brookdale



252 Application

252/Brookdale		
Existing Volume	6116	vehicles
Existing Delay	125	sec/veh
Existing Total Delay	764500	seconds
Future Volume	0	vehicles
Future Delay	0	sec/veh
Future Total Delay	0	seconds
Total Delay Reduction	764500	seconds

West Ramp		
Existing Volume	0	vehicles
Existing Delay	0	sec/veh
Existing Total Delay	0	seconds
Future Volume	2115	vehicles
Future Delay	10	sec/veh
Future Total Delay	21150	seconds
Total Delay Reduction	-21150	seconds

East Ramp		
Existing Volume	0	vehicles
Existing Delay	0	sec/veh
Existing Total Delay	0	seconds
Future Volume	1595	vehicles
Future Delay	20	sec/veh
Future Total Delay	31900	seconds
Total Delay Reduction	-31900	seconds

Total Network Delay Reduction	**711450**	**seconds**

Emissions

Existing	CO	NO	VOC	Total
252/Brookdale	17.95	3.49	4.16	25.6

Future	CO	NO	VOC	Subtotal
West Ramp	0.99	0.19	0.23	1.41
East Ramp	1.61	0.31	0.37	2.29
			Total	3.7

Reduction	**21.9**	**kg**

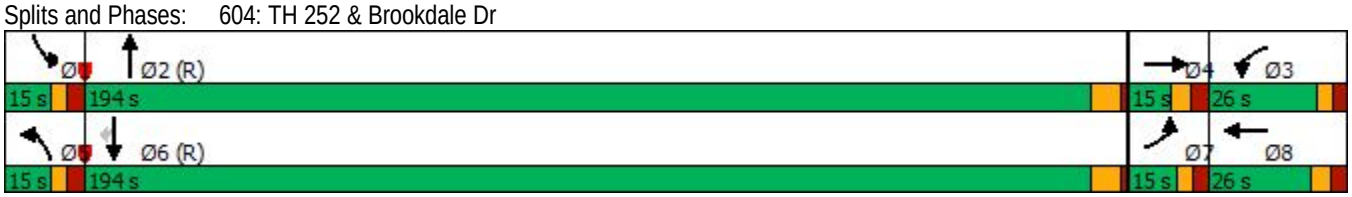
604: TH 252 & Brookdale Dr

Direction	All
Future Volume (vph)	6116
Total Delay / Veh (s/v)	125
CO Emissions (kg)	17.95
NOx Emissions (kg)	3.49
VOC Emissions (kg)	4.16

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	21	4	239	300	63	44	1415	39	115	3387	343
Future Volume (vph)	21	4	239	300	63	44	1415	39	115	3387	343
Turn Type	Prot	NA	Free	Prot	NA	Prot	NA	Free	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			Free					Free			6
Detector Phase	7	4		3	8	5	2		1	6	6
Switch Phase											
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	15.0		7.0	15.0	15.0
Minimum Split (s)	15.0	15.0		15.0	18.0	15.0	30.0		15.0	34.0	34.0
Total Split (s)	15.0	15.0		26.0	26.0	15.0	194.0		15.0	194.0	194.0
Total Split (%)	6.0%	6.0%		10.4%	10.4%	6.0%	77.6%		6.0%	77.6%	77.6%
Yellow Time (s)	3.0	3.5		3.0	3.5	3.0	5.5		3.0	5.5	5.5
All-Red Time (s)	3.0	3.5		3.0	3.5	3.5	1.5		3.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	7.0		6.0	7.0	6.5	7.0		6.5	7.0	7.0
Lead/Lag	Lead	Lead		Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None	None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	7.3	7.1	250.0	30.6	21.8	8.0	187.0	250.0	10.0	189.0	189.0
Actuated g/C Ratio	0.03	0.03	1.00	0.12	0.09	0.03	0.75	1.00	0.04	0.76	0.76
v/c Ratio	0.21	0.07	0.16	0.71	0.59	0.40	0.40	0.03	1.64	1.35	0.29
Control Delay	122.7	121.0	0.2	111.0	119.1	128.5	11.6	0.0	395.9	186.6	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	122.7	121.0	0.2	111.0	119.1	128.5	11.6	0.0	395.9	186.6	4.9
LOS	F	F	A	F	F	F	B	A	F	F	A
Approach Delay		11.5			112.9		14.8			176.7	
Approach LOS		B			F		B			F	

Intersection Summary	
Cycle Length: 250	
Actuated Cycle Length: 250	
Offset: 100 (40%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.64	
Intersection Signal Delay: 124.9	Intersection LOS: F
Intersection Capacity Utilization 119.2%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 604: TH 252 & Brookdale Dr



3: Aldrich Avenue & Brookdale Drive/Brookdale

Direction	All
Future Volume (vph)	1555
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.43
NOx Emissions (kg)	0.08
VOC Emissions (kg)	0.10

10: Brookdale & West Ramp

Direction	All
Future Volume (vph)	2115
Total Delay / Veh (s/v)	10
CO Emissions (kg)	0.99
NOx Emissions (kg)	0.19
VOC Emissions (kg)	0.23

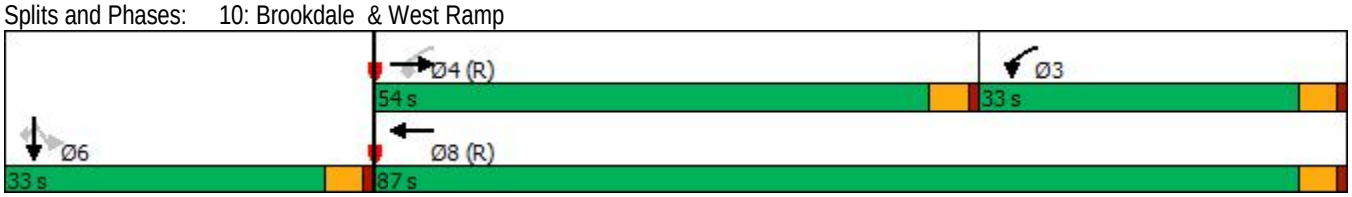
20: East Ramp & Brookdale

Direction	All
Future Volume (vph)	1595
Total Delay / Veh (s/v)	20
CO Emissions (kg)	1.61
NOx Emissions (kg)	0.31
VOC Emissions (kg)	0.37

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	175	630	445	465	0	285
Future Volume (vph)	175	630	445	465	0	285
Turn Type	NA	Perm	D.P+P	NA	NA	Perm
Protected Phases	4		3	8	6	
Permitted Phases		4	4			6
Detector Phase	4	4	3	8	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	54.0	54.0	33.0	87.0	33.0	33.0
Total Split (%)	45.0%	45.0%	27.5%	72.5%	27.5%	27.5%
Yellow Time (s)	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
Lost Time Adjust (s)	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
Lead/Lag	Lead	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	C-Max	C-Max	None	C-Max	Max	Max
Act Effct Green (s)	49.5	49.5	78.0	82.5	28.5	28.5
Actuated g/C Ratio	0.41	0.41	0.65	0.69	0.24	0.24
v/c Ratio	0.25	0.65	0.56	0.21	0.30	0.51
Control Delay	24.2	5.0	14.3	0.9	39.9	7.3
Queue Delay	0.0	0.0	0.4	0.4	0.0	0.0
Total Delay	24.2	5.0	14.7	1.3	39.9	7.3
LOS	C	A	B	A	D	A
Approach Delay	9.2			7.9	16.6	
Approach LOS	A			A	B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 4:EBWB and 8:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 10.0	Intersection LOS: B
Intersection Capacity Utilization 89.8%	ICU Level of Service E
Analysis Period (min) 15	

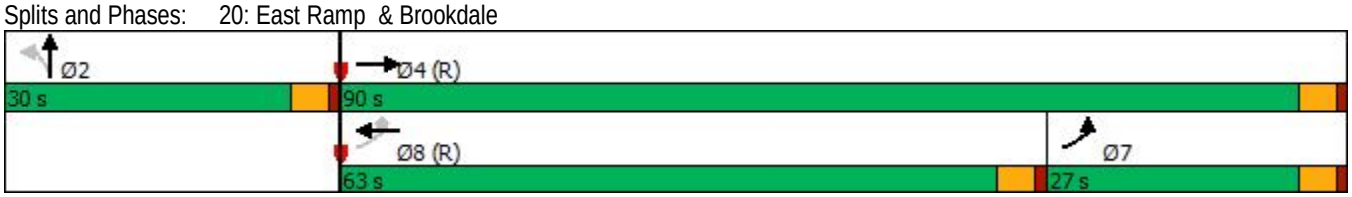
Splits and Phases: 10: Brookdale & West Ramp



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT
Lane Configurations						
Traffic Volume (vph)	160	130	565	190	345	0
Future Volume (vph)	160	130	565	190	345	0
Turn Type	D.P+P	NA	NA	Perm	Perm	NA
Protected Phases	7	4	8			2
Permitted Phases	8			8	2	
Detector Phase	7	4	8	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	27.0	90.0	63.0	63.0	30.0	30.0
Total Split (%)	22.5%	75.0%	52.5%	52.5%	25.0%	25.0%
Yellow Time (s)	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
Lost Time Adjust (s)	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
Lead/Lag	Lag		Lead	Lead		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max
Act Effct Green (s)	81.0	85.5	58.5	58.5	25.5	25.5
Actuated g/C Ratio	0.68	0.71	0.49	0.49	0.21	0.21
v/c Ratio	0.27	0.11	0.36	0.24	0.51	0.22
Control Delay	28.2	3.9	19.8	2.9	44.7	0.5
Queue Delay	0.6	0.6	0.0	0.0	0.0	0.0
Total Delay	28.8	4.5	19.9	2.9	44.7	0.5
LOS	C	A	B	A	D	A
Approach Delay		18.0	15.6			28.2
Approach LOS		B	B			C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 4:EBT and 8:EBWB, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 20.4	Intersection LOS: C
Intersection Capacity Utilization 91.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 20: East Ramp & Brookdale



252 Application

252/Brookdale		
Existing Volume	6116	vehicles
Existing Delay	125	sec/veh
Existing Total Delay	764500	seconds
Future Volume	0	vehicles
Future Delay	0	sec/veh
Future Total Delay	0	seconds
Total Delay Reduction	764500	seconds

West Ramp		
Existing Volume	0	vehicles
Existing Delay	0	sec/veh
Existing Total Delay	0	seconds
Future Volume	2115	vehicles
Future Delay	10	sec/veh
Future Total Delay	21150	seconds
Total Delay Reduction	-21150	seconds

East Ramp		
Existing Volume	0	vehicles
Existing Delay	0	sec/veh
Existing Total Delay	0	seconds
Future Volume	1595	vehicles
Future Delay	20	sec/veh
Future Total Delay	31900	seconds
Total Delay Reduction	-31900	seconds

Total Network Delay Reduction	**711450**	**seconds**

Emissions

Existing	CO	NO	VOC	Total
252/Brookdale	17.95	3.49	4.16	25.6

Future	CO	NO	VOC	Subtotal
West Ramp	0.99	0.19	0.23	1.41
East Ramp	1.61	0.31	0.37	2.29
			Total	3.7

Reduction	**21.9**	**kg**

Traffic Safety Benefit-Cost Calculation

Highway Safety Improvement Program (HSIP) Reactive Project

DEPARTMENT OF TRANSPORTATION

A. Roadway Description

Route	TH 252	**District**		**County**	Hennepin
Begin RP		**End RP**		**Miles**	
Location	TH 252 and Brookdale Avenue Intersection				

B. Project Description

Proposed Work	Convert At-Grade Intersection into Grade-Separated Interchange		
Project Cost*	$33,215,015	**Installation Year**	2024
Project Service Life	20 years	**Traffic Growth Factor**	1.0%

** exclude Right of Way from Project Cost*

C. Crash Modification Factor

0.58	**Fatal (K) Crashes**	**Reference**	CMF Clearinghouse
0.43	**Serious Injury (A) Crashes**		
0.43	**Moderate Injury (B) Crashes**	**Crash Type**	All Other
0.43	**Possible Injury (C) Crashes**		
0.58	**Property Damage Only Crashes**		www.CMFclearinghouse.org

D. Crash Modification Factor (optional second CMF)

0.00	**Fatal (K) Crashes**	**Reference**	Engineering Judgement
0.00	**Serious Injury (A) Crashes**		
0.00	**Moderate Injury (B) Crashes**	**Crash Type**	Mainline Rear Ends
0.00	**Possible Injury (C) Crashes**		
0.00	**Property Damage Only Crashes**		www.CMFclearinghouse.org

E. Crash Data

Begin Date	1/1/2016	**End Date**	12/31/2018	3 years
Data Source	MnDOT			

Crash Severity	All Other	Mainline Rear Ends
K crashes	0	0
A crashes	0	1
B crashes	1	4
C crashes	4	6
PDO crashes	18	26

F. Benefit-Cost Calculation

$19,322,841	**Benefit (present value)**	**B/C Ratio = 0.59**
$33,215,015	**Cost**	

Proposed project expected to reduce 16 crashes annually, 1 of which involving fatality or serious injury.

F. Analysis Assumptions

Crash Severity	Crash Cost
K crashes	$1,360,000
A crashes	$680,000
B crashes	$210,000
C crashes	$110,000
PDO crashes	$12,000

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

Real Discount Rate 1.2%

Traffic Growth Rate 1.0%

Project Service Life 20 years

G. Annual Benefit

Crash Severity	Crash Reduction	Annual Reduction	Annual Benefit
K crashes	0.00	0.00	$0
A crashes	1.00	0.33	$226,667
B crashes	4.57	1.52	$319,900
C crashes	8.28	2.76	$303,600
PDO crashes	33.56	11.19	$134,240
			$984,407

H. Amortized Benefit

Year	Crash Benefits	Present Value
2024	$984,407	$984,407
2025	$994,251	$982,461
2026	$1,004,193	$980,520
2027	$1,014,235	$978,582
2028	$1,024,378	$976,648
2029	$1,034,621	$974,718
2030	$1,044,968	$972,791
2031	$1,055,417	$970,869
2032	$1,065,971	$968,950
2033	$1,076,631	$967,035
2034	$1,087,397	$965,124
2035	$1,098,271	$963,217
2036	$1,109,254	$961,313
2037	$1,120,347	$959,413
2038	$1,131,550	$957,517
2039	$1,142,866	$955,625
2040	$1,154,294	$953,736
2041	$1,165,837	$951,851
2042	$1,177,496	$949,970
2043	$1,189,271	$948,093
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 = $19,322,841

CMFS ASSOCIATED WITH THIS STUDY

CATEGORY: INTERCHANGE DESIGN

Countermeasure: Convert at-grade intersection into grade-separated interchange

CMF	CRF(%)	Quality	Crash Type	Crash Severity	Roadway Type	Area Type
0.58 [B]	42	★★★★☆	All	All	Not Specified	Not Specified
0.43 [B]	57	★★★★★	All	A,B,C	Not Specified	Not Specified
0.64 [B]	36	★★★★☆	All	O	Not Specified	Not Specified
0.84 [I]	16	★★★☆☆	All	All	Not Specified	Not Specified
0.73 [B]	27	★★★★☆	All	All	Not Specified	Not Specified
0.72 [B]	28	★★★★☆	All	A,B,C	Not Specified	Not Specified

MNTH 252 and Brookdale Drive (2016-2018)

objectid	Incident ID	Date and Time	Year	Hour	Crash Severity	Number Killed	Number of	Officer Nar	Constructic
1881698	410661	12/31/2016, 3:14 AM	2016	3	Minor Injury Crash	0	2	SB MNTH	M
2050123	400828	12/6/2016, 5:41 PM	2016	17	Minor Injury Crash	0	2	VEH 1 WAS	M
2237585	337679	3/22/2016, 3:38 PM	2016	15	Minor Injury Crash	0	4	UNIT #1 W.	M
1946574	377770	9/8/2016, 11:15 AM	2016	11	Possible Injury Crash	0	2	This crash	M
2261143	404485	12/12/2016, 4:52 PM	2016	16	Possible Injury Crash	0	2	V1 WAS TR	M
1797053	391752	11/2/2016, 6:38 PM	2016	18	Property Damage Only Crash	0	2	NB MNTH	M
1809807	372164	8/5/2016, 8:05 AM	2016	8	Property Damage Only Crash	0	3	This crash h	M
1894460	365960	7/21/2016, 10:46 PM	2016	22	Property Damage Only Crash	0	2	BOTH VEHI	M
2209606	404024	12/13/2016, 6:40 AM	2016	6	Property Damage Only Crash	0	1	Brookdale	M
2240739	382872	9/29/2016, 10:13 PM	2016	22	Property Damage Only Crash	0	2	THE	M
2476467	338998	3/29/2016, 10:12 PM	2016	22	Property Damage Only Crash	0	2	V1 and V2	M
2505681	394927	11/8/2016, 6:06 PM	2016	18	Property Damage Only Crash	0	3	Upon	M
2576644	401656	12/8/2016, 5:30 PM	2016	17	Property Damage Only Crash	0	2	VEHICLE 1 '	M
2186777	363192	7/3/2016, 9:58 PM	2016	21	Serious Injury Crash	0	2	Officers	M
2607328	379550	9/8/2016, 7:49 AM	2016	7	Possible Injury Crash	0	2	THE	M
1881159	333286	2/9/2016, 7:39 AM	2016	7	Minor Injury Crash	0	2	THE	M
2266168	382975	9/30/2016, 8:52 AM	2016	8	Property Damage Only Crash	0	2	Vehicle #1	M
2427695	389488	10/26/2016, 8:08 AM	2016	8	Property Damage Only Crash	0	2	NB MNTH	M
2502404	331166	2/7/2016, 4:48 AM	2016	4	Property Damage Only Crash	0	2	THE	M
1842767	391189	10/31/2016, 11:27 PM	2016	23	Possible Injury Crash	0	0	VEH #1 WA	M
1887749	359175	6/25/2016, 7:00 AM	2016	7	Possible Injury Crash	0	2	SB MNTH	M
1797156	405111	12/17/2016, 7:30 AM	2016	7	Property Damage Only Crash	0	1	SB 252/BR(	M
2424931	337139	3/21/2016, 5:58 AM	2016	5	Property Damage Only Crash	0	1	V1 WAS NE	M
2502108	321930	1/20/2016, 5:17 PM	2016	17	Property Damage Only Crash	0	1	DRIVER UN	M
1933957	416131	1/13/2017, 3:25 PM	2017	15	Property Damage Only Crash	0	2	Vehicle #1	M
2287340	431510	3/24/2017, 11:55 AM	2017	11	Property Damage Only Crash	0	2	VEH 1	M
2386855	417830	1/15/2017, 1:06 PM	2017	13	Property Damage Only Crash	0	2	MNTH	M
2292994	518893	11/20/2017, 5:44 PM	2017	17	Minor Injury Crash	0	2	VEHICLE 1 '	M
1869415	520508	11/28/2017, 4:43 PM	2017	16	Property Damage Only Crash	0	4	VEH 1	M
2046213	509763	10/17/2017, 3:12 PM	2017	15	Property Damage Only Crash	0	2	SB MNTH	M
2185508	506936	10/7/2017, 1:40 PM	2017	13	Property Damage Only Crash	0	2	Upon	M
2287250	426756	2/27/2017, 6:53 PM	2017	18	Property Damage Only Crash	0	2	DRY	M
2454487	520147	11/22/2017, 5:12 PM	2017	17	Property Damage Only Crash	0	2	Southbou	M

1875360	457842	6/2/2017, 7:33 PM	2017	19	Possible Injury Crash	0	1	unit one w	M
2554899	525135	12/14/2017, 4:20 PM	2017	16	Property Damage Only Crash	0	2	On	M
2045785	446058	4/18/2017, 2:12 PM	2017	14	Property Damage Only Crash	0	3	MNTH	M
2335516	422012	2/9/2017, 7:38 PM	2017	19	Property Damage Only Crash	0	1	V1 SB	M
2474911	427217	3/5/2017, 1:56 PM	2017	13	Property Damage Only Crash	0	1	On 3/29/16	M
1778173	566415	2/16/2018, 12:36 PM	2018	12	Possible Injury Crash	0	2	NB	M
1831260	670536	12/19/2018, 6:51 AM	2018	6	Possible Injury Crash	0	3	ALL THREE	M
2187840	566506	2/16/2018, 12:36 PM	2018	12	Possible Injury Crash	0	2	VEHICLE 1	M
2532931	674380	12/21/2018, 6:04 PM	2018	18	Possible Injury Crash	0	2	V1 AT	M
1778080	535060	1/9/2018, 1:30 PM	2018	13	Property Damage Only Crash	0	2	On 06-25-	M
1849817	539942	1/25/2018, 6:24 AM	2018	6	Property Damage Only Crash	0	2	SB MNTH	M
1856461	532980	1/5/2018, 9:59 AM	2018	9	Property Damage Only Crash	0	2	The crash	M
1883025	672152	12/27/2018, 3:36 AM	2018	3	Property Damage Only Crash	0	2	V1 WAS	M
1893863	570138	2/28/2018, 6:19 PM	2018	18	Property Damage Only Crash	0	3	Vehicle 1 st	M
1941299	627477	8/2/2018, 4:07 PM	2018	16	Property Damage Only Crash	0	2	VEH 1	M
2023876	580606	3/2/2018, 4:58 PM	2018	16	Property Damage Only Crash	0	1	Vehicle #1	M
2074848	533615	1/5/2018, 5:54 PM	2018	17	Property Damage Only Crash	0	2	Southbou	M
2164412	606500	6/22/2018, 4:19 PM	2018	16	Property Damage Only Crash	0	1	The crash	M
2293428	622659	7/20/2018, 7:00 PM	2018	19	Property Damage Only Crash	0	2	V1 WAS	M
2429647	632750	9/5/2018, 3:14 PM	2018	15	Property Damage Only Crash	0	2	Driver of V	M
2452507	537555	1/12/2018, 5:40 AM	2018	5	Property Damage Only Crash	0	3	ALL VEHICL	M
2455510	608708	6/26/2018, 3:38 PM	2018	15	Property Damage Only Crash	0	2	BOTH VEHI	M
2608987	625288	8/2/2018, 4:14 PM	2018	16	Property Damage Only Crash	0	2	VEHICLE 1	M
2391305	535948	1/14/2018, 10:40 AM	2018	10	Property Damage Only Crash	0	2	The crash	M
1824275	636330	9/18/2018, 10:58 PM	2018	22	Property Damage Only Crash	0	1	SB MNTH	M
2161998	537600	1/17/2018, 8:05 AM	2018	8	Property Damage Only Crash	0	1	RIDER OF V	M
2341752	591292	4/14/2018, 1:15 AM	2018	1	Property Damage Only Crash	0	1	V1 WAS TR	M

County	City	Township	Route Type	Route ID	Route Mea	Roadway N	Divided Ro	Intersectio	Manner of	First Harmf	Relative Tr	Lighting Co
Hennepin	Brooklyn Park		State Trunk	030000000	2.028365	SB MNTH 2	South		Front to Re	Motor Veh	On Roadwa	Daylight
Hennepin	Brooklyn Park		State Trunk	030000000	1.89922	MNTH 252	North		Front to Re	Motor Veh	On Roadwa	Dark (Stree
HENNEPIN	Brooklyn Park		State Trunk	030000000	2.027398	MNTH 252	North		Front to Re	Motor Veh	On Roadwa	Daylight
Hennepin	Brooklyn Park		State Trunk	030000000	2.08184	MNTH 252	North		Front to Re	Motor Veh	On Roadwa	Daylight
Hennepin	Brooklyn Park		State Trunk	030000000	2.047815	MNTH 252	South		Front to Re	Motor Veh	On Roadwa	Sunrise
Hennepin	Brooklyn Park		State Trunk	030000000	2.041559	NB MNTH 2	North		Front to Re	Motor Veh	On Roadwa	Dark (No St
Hennepin	Brooklyn Park		State Trunk	030000000	2.073368	MNTH 252			Front to Re	Motor Veh	On Roadwa	Daylight
Hennepin	Brooklyn Park		State Trunk	030000000	2.022633	MNTH 252	South		Front to Re	Motor Veh	On Roadwa	Dark (Stree
Hennepin	Brooklyn Park		Ramp or Co	220000000	0.034657	RAMP39	South		Front to Re	Motor Veh	On Roadwa	Daylight
Hennepin	Brooklyn Park		State Trunk	030000000	2.041559	MNTH 252	East		Front to Re	Motor Veh	On Roadwa	Dark (Stree
Hennepin	Brooklyn Park		State Trunk	030000000	2.057619	MNTH 252	North		Front to Re	Motor Veh	On Roadwa	Dark (Stree
Hennepin	Brooklyn Park		State Trunk	030000000	2.012929	MNTH 252	North		Front to Re	Motor Veh	On Roadwa	Dark (Stree
Hennepin	Brooklyn Park		State Trunk	030000000	2.021853	MNTH 252	North		Front to Re	Motor Veh	On Roadwa	Dark (Stree
HENNEPIN	Brooklyn Park		State Trunk	030000000	1.954727	MNTH 252	North		Front to Re	Motor Veh	On Roadwa	Daylight
Hennepin	Brooklyn Park		Ramp or Co	220000659	0.000947	RAMP493	North		Other	Motor Veh	On Roadwa	Dark (Stree
Hennepin	Brooklyn Park		State Trunk	030000000	1.93618	MNTH 252	South		Sideswipe -	Motor Veh	On Roadwa	Daylight
HENNEPIN	Brooklyn Park		State Trunk	030000000	1.973377	MNTH 252	South		Sideswipe -	Motor Veh	On Roadwa	Daylight
Hennepin	Brooklyn Park		State Trunk	030000000	2.014812	MNTH 252	North		Sideswipe -	Motor Veh	On Roadwa	Daylight
Hennepin	Brooklyn Park		State Trunk	030000000	2.03953	MNTH 252	North		Sideswipe -	Motor Veh	On Roadwa	Daylight
Hennepin	Brooklyn Park		State Trunk	030000000	2.033839	MNTH 252	North			Parked Mo	On Roadwa	Dark (Stree
Hennepin	Brooklyn Park		State Trunk	030000000	1.876841	MNTH 252	South			Guardrail E	On Roadwa	Daylight
Hennepin	Brooklyn Park		State Trunk	030000000	1.965538	MNTH 252	South			Cable Medi	On Roadwa	Dark (Stree
Hennepin	Brooklyn Park		State Trunk	030000000	2.021853	MNTH 252	North			Roadway S	On Roadsic	Daylight
Hennepin	Brooklyn Park		State Trunk	030000000	2.002718	MNTH 252	North			Cable Medi	On Roadwa	Dark (No St
HENNEPIN	Brooklyn Park		State Trunk	030000000	2.002683	MNTH 252	South		Angle	Motor Veh	On Roadwa	Daylight
Hennepin	Brooklyn Park		Municipal S	050002393	3.426171	BROOKDAL	North		Angle	Motor Veh	On Roadwa	Daylight
Hennepin	Brooklyn Park		State Trunk	030000000	1.999664	MNTH 252	North		Angle	Motor Veh	On Roadwa	Daylight
Hennepin	Brooklyn Park		State Trunk	030000000	2.028147	MNTH 252	North		Front to Re	Motor Veh	On Roadwa	Daylight
Hennepin	Brooklyn Park		State Trunk	030000000	1.98274	MNTH 252	South		Front to Re	Motor Veh	On Roadwa	Daylight
Hennepin	Brooklyn Park		State Trunk	030000000	2.029334	SB MNTH 2	South		Front to Re	Motor Veh	On Roadwa	Daylight
Hennepin	Brooklyn Park		State Trunk	030000000	2.033295	MNTH 252	North		Front to Re	Motor Veh	On Roadwa	Dark (Stree
Hennepin	Brooklyn Park		State Trunk	030000000	1.983582	MNTH 252	North		Front to Re	Motor Veh	On Roadwa	Dark (Stree
Hennepin	Brooklyn Park		State Trunk	030000000	2.045885	MNTH 252	South		Front to Re	Motor Veh	On Roadwa	Daylight

HENNEPIN	Brooklyn Park	State Trunk	030000000	2.038387	MNTH 252	North		Sideswipe -	Motor Veh	On Roadwa	Sunrise
HENNEPIN	Brooklyn Park	State Trunk	030000000	2.098008	MNTH 252	North		Sideswipe -	Motor Veh	On Roadwa	Daylight
Hennepin	Brooklyn Park	State Trunk	030000000	2.088642	MNTH 252	South			Pedestrian	On Roadwa	Dark (Stree
Hennepin	Brooklyn Park	State Trunk	030000000	2.064084	MNTH 252	South			Cable Med	On Roadwa	Dark (Unkn
HENNEPIN	Brooklyn Park	Municipal S	050002393	3.4003	BROOKDAL	North	RAMP719		Roadway S	On Roadwa	Dark (Stree
Hennepin	Brooklyn Park	State Trunk	030000000	2.120111	MNTH 252	North		Front to Re	Motor Veh	On Roadwa	Dark (Stree
Hennepin	Brooklyn Park	State Trunk	030000000	1.986098	MNTH 252	South		Front to Re	Motor Veh	On Roadwa	Dark (Stree
Hennepin	Brooklyn Park	State Trunk	030000000	2.104777	MNTH 252	South		Front to Re	Motor Veh	On Roadwa	Daylight
Hennepin	Brooklyn Park	Municipal S	050002393	3.410709	BROOKDAL	North		Front to Re	Motor Veh	On Roadwa	Dark (Stree
HENNEPIN	Brooklyn Park	State Trunk	030000000	2.044325	MNTH 252		BROOKDAL	Front to Re	Motor Veh	On Roadwa	Daylight
Hennepin	Brooklyn Park	State Trunk	030000000	1.881952	MNTH 252	South		Front to Re	Motor Veh	On Roadwa	Daylight
Hennepin	Brooklyn Park	State Trunk	030000000	2.063459	MNTH 252	South		Front to Re	Motor Veh	On Roadwa	Daylight
Hennepin	Brooklyn Park	State Trunk	030000000	2.072062	MNTH 252	South		Front to Re	Motor Veh	On Roadwa	Daylight
HENNEPIN	Brooklyn Park	State Trunk	030000000	2.034706	MNTH 252	North		Front to Re	Motor Veh	On Roadwa	Dark (Stree
Hennepin	Brooklyn Park	State Trunk	030000000	1.991872	MNTH 252	North		Front to Re	Motor Veh	On Roadwa	Daylight
HENNEPIN	Brooklyn Park	State Trunk	030000000	2.057816	MNTH 252	Not Applicable		Front to Re	Motor Veh	On Roadwa	Daylight
Hennepin	Brooklyn Park	State Trunk	030000000	2.080352	MNTH 252	South		Front to Re	Motor Veh	On Roadwa	Dark (Stree
Hennepin	Brooklyn Park	State Trunk	030000000	1.97654	MNTH 252	North		Front to Re	Motor Veh	On Roadwa	Dark (Stree
Hennepin	Brooklyn Park	State Trunk	030000000	2.040074	MNTH 252	North		Front to Re	Motor Veh	On Roadwa	Dark (Stree
Hennepin	Brooklyn Park	Ramp or Co	220000000	0.024532	RAMP719	South		Front to Re	Motor Veh	On Roadwa	Daylight
Hennepin	Brooklyn Park	State Trunk	030000000	2.011632	MNTH 252	North		Front to Re	Motor Veh	On Roadwa	Dark (Stree
Hennepin	Brooklyn Park	State Trunk	030000000	1.90171	MNTH 252	South		Front to Re	Motor Veh	On Roadwa	Daylight
Hennepin	Brooklyn Park	State Trunk	030000000	2.005897	MNTH 252	North		Front to Re	Motor Veh	On Roadwa	Daylight
Hennepin	Brooklyn Park	State Trunk	030000000	1.938113	MNTH 252	South		Sideswipe -	Motor Veh	On Roadwa	Dark (Stree
Hennepin	Brooklyn Park	State Trunk	030000000	1.920845	SB MNTH 2	South			Guardrail E	On Shoulde	Daylight
Hennepin	Brooklyn Park	Municipal S	050002393	3.412082	BROOKDAL	East			Curb	On Roadwa	Daylight
Hennepin	Brooklyn Park	Ramp or Co	220000000	0.034657	RAMP39	East			Snowbank	On Roadwa	Daylight

Road Circu	road_circu	Road Circu	road_circu	Relative Int	Traffic Con	Weather P	Weather S	Surface Co	Work Zone	Work Zone	Work Zone	Workers Pr
None				Four-Way I	Traffic Con	Clear		Dry	2		NOT APPLICABLE	
None				Not at Inte	No Control	Clear		Dry	2		NOT APPLICABLE	
Road Surface Condition (wet, icy, snow, slush				Four-Way I	Traffic Con	Cloudy		Snow	2		NOT APPLICABLE	
Congestion Backup Due to Non-recurring Inci				Four-Way I	Traffic Con	Clear		Dry	2		NOT APPLICABLE	
None				Four-Way I	Traffic Con	Clear		Dry	2		NOT APPLICABLE	
None				Four-Way I	Traffic Con	Clear		Dry	2		NOT APPLICABLE	
None				Intersectio	Traffic Con	Cloudy		Dry	2		NOT APPLICABLE	
None				Four-Way I	Traffic Con	Clear		Dry	2		NOT APPLICABLE	
None				Entrance/E	Yield Sign	Cloudy		Dry	2		NOT APPLICABLE	
None				Not at Inte	Traffic Con	Clear		Dry	2		NOT APPLICABLE	
None				Four-Way I	Traffic Con	Cloudy		Wet	2		NOT APPLICABLE	
None				Four-Way I	Traffic Con	Cloudy		Dry	2		NOT APPLICABLE	
None				Four-Way I	Traffic Con	Cloudy		Dry	2		NOT APPLICABLE	
None				Four-Way I	No Control	Clear		Dry	2		NOT APPLICABLE	
Road Surface Conditio		None		Four-Way I	Traffic Con	Snow	Sleet, Hail (	Snow	2		NOT APPLICABLE	
None				Interchang	No Control	Clear		Dry	2		NOT APPLICABLE	
None				Entrance/E	Traffic Con	Clear		Dry	2		NOT APPLICABLE	
None				Not at Inte	No Control	Cloudy		Dry	2		NOT APPLICABLE	
None				Four-Way I	No Control	Clear		Dry	2		NOT APPLICABLE	
None				Four-Way I	Traffic Con	Clear		Dry	2		NOT APPLICABLE	
None				Not at Inte	No Control	Clear		Dry	2		NOT APPLICABLE	
None				Not at Inte	No Control	Clear		Dry	2		NOT APPLICABLE	
Road Surface Condition (wet, icy, snow, slush				Four-Way I	Traffic Con	Cloudy	Rain	Wet	2		NOT APPLICABLE	
None				Not at Inte	No Control	Clear		Dry	2		NOT APPLICABLE	
None				Four-Way I	Traffic Con	Clear		Dry	2		NOT APPLICABLE	
None				Not at Inte	Traffic Con	Clear		Dry	2		NOT APPLICABLE	
None				Four-Way I	Traffic Con	Snow		Slush	2		NOT APPLICABLE	
None				Four-Way I	Traffic Con	Clear		Dry	2		NOT APPLICABLE	
None				Not at Inte	No Control	Clear		Dry	2		NOT APPLICABLE	
None				Not at Inte	Traffic Con	Clear		Dry	2		NOT APPLICABLE	
Road Surface Condition (wet, icy, snow, slush				Four-Way I	Traffic Con	Blowing Sand/Soil/Dirt		Ice/Frost	2		NOT APPLICABLE	
None				Not at Inte	No Control	Clear		Dry	2		NOT APPLICABLE	
Congestion Backup Due to Non-recurring Inci				Not at Inte	Traffic Con	Cloudy		Dry	2		NOT APPLICABLE	

None	Four-Way I	Traffic Con	Clear	Dry	2	NOT APPLICABLE
None	Not at Inte	Not Applica	Cloudy	Wet	2	NOT APPLICABLE
None	Not at Inte	No Control	Cloudy	Dry	2	NOT APPLICABLE
Road Surface Condition (wet, icy, snow, slush	Not at Inte	No Control	Snow	Snow	2	NOT APPLICABLE
None	Intersectio	Traffic Con	Cloudy	Dry	2	NOT APPLICABLE
None	Not at Inte	No Control	Cloudy	Dry	2	NOT APPLICABLE
None	Not at Inte	Not Applica	Cloudy	Dry	2	NOT APPLICABLE
None	Intersectio	No Control	Clear	Dry	2	NOT APPLICABLE
None	Four-Way I	Traffic Con	Clear	Dry	2	NOT APPLICABLE
None	Intersectio	Traffic Con	Clear	Dry	2	NOT APPLICABLE
Congestion Backup Due to Non-recurring Inci	Interchang	No Control	Clear	Dry	2	NOT APPLICABLE
None	Four-Way I	Traffic Con	Cloudy	Dry	2	NOT APPLICABLE
None	Four-Way I	Traffic Con	Clear	Dry	2	NOT APPLICABLE
None	Four-Way I	Traffic Con	Cloudy	Dry	2	NOT APPLICABLE
None	Not at Inte	No Control	Clear	Dry	2	NOT APPLICABLE
None	Four-Way I	Traffic Con	Cloudy	Dry	2	NOT APPLICABLE
None	Not at Inte	No Control	Cloudy	Dry	2	NOT APPLICABLE
None	Four-Way I	Traffic Con	Clear	Dry	2	NOT APPLICABLE
None	Four-Way I	Traffic Con	Clear	Dry	2	NOT APPLICABLE
None	Four-Way I	Traffic Con	Clear	Ice/Frost	2	NOT APPLICABLE
None	Not at Inte	Traffic Con	Clear	Dry	2	NOT APPLICABLE
None	Not at Inte	Traffic Con	Clear	Dry	2	NOT APPLICABLE
None	Four-Way I	Traffic Con	Clear	Dry	2	NOT APPLICABLE
None	Four-Way I	Traffic Con	Cloudy	Dry	2	NOT APPLICABLE
Congestion Backup Other	Not at Inte	No Control	Clear	Dry	2	NOT APPLICABLE
None	Four-Way I	Traffic Con	Clear	Dry	2	NOT APPLICABLE
None	Four-Way I	Traffic Con	Clear	Dry	2	NOT APPLICABLE

Unit1 Type	Unit1 Vehi	Unit1 Direc	Unit1 Facto	Unit1 Facto	Unit1 Most	Unit1 Vehi	Unit1 Traff	Unit1 Poste	Unit1 Horiz	Unit1 Road	Unit1 Nonr	Unit1 Injur
Motor Veh	Passenger	Southboun	No Clear	Contributing	Motor Veh	Moving Fo	Two-Way,	55	Straight	Level		Possible Inj
Motor Veh	Other Light	Northboun	No Clear	Contributing	Motor Veh	Moving Fo	Two-Way,	55	Straight	Level		No Appare
Motor Veh	Passenger	Northboun	Swerved or	Avoided D	Motor Veh	Changing L	Two-Way,	55	Straight	Level		No Appare
Motor Veh	Cargo Van	Northboun	Following	Too Closely	Motor Veh	Moving Fo	Two-Way,	55	Straight	Level		No Appare
Motor Veh	Passenger	Southboun	Operated M	Driver Distracted		Leaving Tra	Two-Way,	55	Straight	Level		Possible Inj
Motor Veh	Sport Utilit	Northboun	Operated	Motor Vehic	Motor Veh	Slowing	Two-Way,	55	Straight	Level		No Appare
Motor Veh	Sport Utilit	Southboun	Following	Too Closely	Motor Veh	Moving Fo	Two-Way,	55	Straight	Level		No Appare
Motor Veh	Passenger	Southboun	No Clear	Contributing	Motor Veh	Vehicle Sto	Two-Way,	55	Curve Left	Level		No Appare
Motor Veh	School Bus	Southboun	No Clear	Contributing	Motor Veh	Vehicle Sto	Other	30	Curve Righ	Level		No Appare
Motor Veh	Passenger	Northboun	No Clear	Contributing	Motor Veh	Vehicle Sto	Two-Way,	55	Straight	Level		No Appare
Motor Veh	Passenger	Northboun	Driver Distracted			Moving Fo	Two-Way, Divided, Me		Straight	Level		No Appare
Motor Veh	School Bus	Northboun	No Clear	Contributing	Motor Veh	Vehicle Sto	Two-Way,	55	Straight	Level		No Appare
Motor Veh	Passenger	Northboun	No Clear	Contributing	Motor Veh	Vehicle Sto	Two-Way,	55	Straight	Level		No Appare
Motor Veh	Sport Utilit	Northboun	No Clear	Contributing	Action	Vehicle Sto	Two-Way,	55	Straight	Level		No Appare
Motor Veh	Passenger	Northboun	Operated	Motor Vehicle in Carele		Slowing	Two-Way,	55	Straight	Level		No Appare
Motor Veh	Pickup	Southboun	No Clear	Contributing	Motor Veh	Moving Fo	Two-Way,	55	Straight	Level		No Appare
Motor Veh	Medium / I	Southboun	No Clear	Contributing	Motor Veh	Moving Fo	Two-Way,	55	Straight	Level		No Appare
Motor Veh	Passenger	Northboun	No Clear	Contributing	Motor Veh	Moving Fo	One Way T	55	Straight	Level		No Appare
Motor Veh	Passenger	Northboun	Other	Contributing Act	Motor Veh	Changing L	Two-Way, Divided, Me		Straight	Level		No Appare
Parked/Sta	Passenger	Northbound			Motor Veh	Vehicle Sto	Two-Way,	55	Straight	Level		
Motor Veh	Passenger	Southboun	Failure to	Yield Right-c	Other Non-	Moving Fo	One Way T	55	Straight	Level		No Appare
Motor Veh	Passenger	Southboun	Driver Distracted		Cable Med	Moving Fo	Two-Way,	55	Curve Righ	Level		No Appare
Motor Veh	Passenger	Northboun	Driver Spe	Failed to K	Traffic Sign	Moving Fo	Two-Way,	55	Straight	Level		No Appare
Motor Veh	Sport Utilit	Northboun	Other	Contributing Act	Cable Med	Moving Fo	Two-Way,	55	Straight	Level		No Appare
Motor Veh	Passenger	Southboun	Driver Distı	Ran Red Lig	Motor Veh	Moving Fo	Two-Way,	55	Straight	Level		No Appare
Motor Veh	Passenger	Northboun	No Clear	Contributing	Motor Veh	Moving Fo	Two-Way,	55	Straight	Level		No Appare
Motor Veh	Passenger	Northboun	Failure to	Yield Right-c	Motor Veh	Turning Le	Two-Way,	55	Straight	Level		No Appare
Motor Veh	Passenger	Northboun	No Clear	Contributing	Motor Veh	Vehicle Sto	Two-Way,	55	Straight	Level		No Appare
Motor Veh	Passenger	Southboun	No Clear	Contributing	Motor Veh	Moving Fo	Two-Way,	55	Straight	Level		No Appare
Motor Veh	Passenger	Southboun	No Clear	Contributing	Motor Veh	Moving Fo	Two-Way,	55	Straight	Level		Possible Inj
Motor Veh	Other Light	Northboun	No Clear	Contributing	Motor Veh	Vehicle Sto	Two-Way,	55	Straight	Level		No Appare
Motor Veh	Passenger	Northboun	Operated	Motor Vehic	Motor Veh	Moving Fo	Two-Way,	55	Straight	Level		No Appare
Motor Veh	Pickup	Southboun	No Clear	Contributing	Motor Veh	Slowing	Two-Way,	55	Straight	Level		No Appare

Motor Veh Passenger	Northboun	No Clear	Contributing	Motor Veh	Changing L	Two-Way,		55	Straight	Level	No Appare
Motor Veh Pickup	Northboun	No Clear	Contributing	Motor Veh	Moving For	One Way T		55	Straight	Level	No Appare
Motor Veh Sport Utilit	Southboun	No Clear	Contributing	Pedestrian	Vehicle Sto	Two-Way,		55	Curve Righ	Level	No Appare
Motor Veh Sport Utilit	Southboun	Operated	Motor Vehicle in Carele		Moving For	Two-Way,		55	Straight	Level	No Appare
Motor Veh Passenger	Northboun	Operated	Motor Vehic	Roadway S	Turning Lef	Two-Way,		55	Straight	Level	No Appare
Motor Veh Sport Utilit	Northboun	No Clear	Contributing	Motor Veh	Slowing	Two-Way,		55	Straight	Level	No Appare
Motor Veh Passenger	Southboun	No Clear	Contributing	Motor Veh	Slowing	Two-Way,		55	Straight	Level	No Appare
Motor Veh Passenger	Southboun	No Clear	Contributing	Motor Veh	Moving For	Two-Way,		55	Straight	Level	Possible Inj
Motor Veh Passenger	Northboun	No Clear	Contributing	Motor Veh	Turning Lef	Two-Way,		55	Straight	Level	Possible Inj
Motor Veh Passenger	Northboun	No Clear	Contributing	Motor Veh	Vehicle Sto	Two-Way,		55	Straight	Level	Possible Inj
Motor Veh Sport Utilit	Southboun	No Clear	Contributing	Motor Veh	Slowing	Two-Way,		55	Straight	Level	No Appare
Motor Veh Passenger	Southboun	No Clear	Contributing	Motor Veh	Moving For	Two-Way,		55	Straight	Level	No Appare
Motor Veh Sport Utilit	Southboun	No Clear	Contributing	Motor Veh	Vehicle Sto	Two-Way,		55	Straight	Level	No Appare
Motor Veh Passenger	Northboun	No Clear	Contributing	Motor Veh	Vehicle Sto	Two-Way,		55	Straight	Level	No Appare
Motor Veh Passenger	Northboun	No Clear	Contributing	Motor Veh	Moving For	Two-Way,		55	Straight	Level	No Appare
Motor Veh Passenger	Westbound	No Clear	Contributing	Motor Veh	Vehicle Sto	Two-Way,		30	Straight	Level	No Appare
Motor Veh Passenger	Southboun	No Clear	Contributing	Motor Veh	Slowing	Two-Way,		55	Straight	Level	No Appare
Motor Veh Passenger	Northboun	No Clear	Contributing	Motor Veh	Moving For	Two-Way,		55	Straight	Level	No Appare
Motor Veh Passenger	Northboun	No Clear	Contributing	Motor Veh	Slowing	Two-Way,		55	Straight	Level	No Appare
Motor Veh Passenger	Southboun	No Clear	Contributing	Motor Veh	Vehicle Sto	Two-Way,		60	Straight	Level	No Appare
Motor Veh Passenger	Northboun	No Clear	Contributing	Motor Veh	Vehicle Sto	Two-Way,		55	Straight	Level	No Appare
Motor Veh Passenger	Southboun	No Clear	Contributing	Motor Veh	Vehicle Sto	Two-Way,		55	Straight	Level	No Appare
Motor Veh Sport Utilit	Northboun	No Clear	Contributing	Motor Veh	Vehicle Sto	Two-Way,	Divided, Me		Straight	Level	Possible Inj
Motor Veh Passenger	Southboun	No Clear	Contributing	Action	Moving For	Two-Way,		55	Straight	Level	No Appare
Motor Veh Sport Utilit	Southboun	Other Cont	Ran Off Ro	Guardrail (	Moving For	Two-Way,		55	Straight	Level	No Appare
Motor Veh Motorcycle	Eastbound	Improper	Turn/Merge	Curb	Negotiating	Two-Way,		55	Curve Righ	Level	Suspected
Motor Veh Passenger	Eastbound	Operated	Motor Vehic	Snowbank	Turning Rig	Two-Way,		35	Curve Righ	Level	No Appare

Unit1 Phys	Unit1 Age	Unit1 Sex	Unit2 Type	Unit2 Vehi	Unit2 Direc	Unit2 Factc	Unit2 Factc	Unit2 Most	Unit2 Vehi	Unit2 Nonr	Unit2 Injur	Unit2 Phys
Apparently	40	Female	Motor Veh	Passenger '	Southboun	Operated M	Following T	Motor Veh	Moving Forward		No Appare	Apparently
Apparently	45	Male	Motor Veh	Sport Utilit	Northboun	Following Too Closely		Motor Veh	Moving Forward		No Appare	Apparently
Apparently	18	Male	Motor Veh	Passenger (	Northboun	No Clear Contributing		Motor Veh	Moving Forward		No Appare	Apparently
Apparently	31	Male	Motor Veh	Passenger (	Northboun	No Clear Contributing		Motor Veh	Slowing		No Appare	Apparently
Apparently	58	Female	Motor Veh	Passenger (	Southboun	No Clear Contributing		Motor Veh	Vehicle Stopped or Sta		Suspected	Apparently
Apparently	49	Male	Motor Veh	Passenger (	Northboun	Operated M	Following T	Motor Veh	Slowing		No Appare	Apparently
Apparently	42	Female	Motor Veh	Passenger (	Southboun	No Clear Contributing		Motor Veh	Moving Forward		No Appare	Apparently
Apparently	42	Male	Motor Veh	Passenger (	Southboun	Operated Motor Vehic		Motor Veh	Slowing		No Appare	Apparently
Apparently	47	Female	Hit-And-Run	Vehicle o	Southbound				Unknown			
Apparently	44	Male	Motor Veh	Passenger '	Northboun	Following Too Closely		Motor Veh	Moving Forward		No Appare	Apparently
Apparently	26	Female	Motor Veh	Sport Utilit	Northboun	No Clear Contributing		Motor Veh	Moving Forward		No Appare	Apparently
Apparently	65	Female	Motor Veh	Sport Utilit	Northboun	No Clear Contributing		Motor Veh	Moving Forward		Possible Inj	Apparently
Apparently	27	Female	Motor Veh	Passenger (	Northboun	Operated Motor Vehic		Motor Veh	Moving Forward		No Appare	Apparently
Apparently	39	Female	Motor Veh	Passenger (	Northboun	Unknown			Moving Forward		No Appare	Apparently
Apparently	52	Male	Motor Veh	Passenger '	Northboun	Swerved or	No Clear C	Motor Veh	Moving Forward		No Appare	Apparently
Apparently	44	Female	Motor Veh	Passenger (	Southboun	Failed to Keep in Prop		Motor Veh	Swerved or Attempt to		No Appare	Apparently
Apparently	31	Male	Motor Veh	Passenger (	Southboun	Improper Turn/Merge		Motor Veh	Entering Traffic Lane		No Appare	Apparently
Apparently	45	Male	Motor Veh	Passenger (	Northboun	Failure to Yield Right-o		Motor Veh	Moving Forward		No Appare	Apparently
Apparently	41	Female	Motor Veh	Passenger '	Northboun	Other Contributing Act		Motor Veh	Changing Lanes		No Appare	Apparently
			Hit-And-Ru	Passenger (	Northboun	Operated Motor Vehic		Parked Mo	Moving Forward		Possible Injury (C)	
Apparently	40	Male	Motor Veh	Passenger (	Southboun	Swerved or Avoided D		Guardrail (	Moving Forward		No Appare	Apparently
Apparently	29	Female										
Unknown	17	Male										
Has Been D	42	Male										
Apparently	19	Male	Motor Veh	Passenger (	Eastbound	No Clear Contributing		Motor Veh	Turning Left		No Appare	Apparently
Apparently	27	Male	Motor Veh	Pickup	Northboun	Ran Red Lig	Driver Spee	Motor Veh	Moving Forward		No Appare	Unknown
Apparently	27	Female	Motor Veh	Passenger (	Westbound	No Clear Contributing		Motor Veh	Turning Left		No Appare	Apparently
Apparently	61	Female	Motor Veh	Pickup	Northboun	Operated Motor Vehic		Motor Veh	Moving Forward		No Appare	Apparently
Apparently	36	Female	Motor Veh	Passenger (	Southboun	No Clear Contributing		Motor Veh	Moving Forward		No Appare	Apparently
Apparently	40	Female	Motor Veh	Passenger '	Southboun	Operated M	Following T	Motor Veh	Moving Forward		No Appare	Apparently
Apparently	23	Male	Motor Veh	Sport Utilit	Northboun	Operated Motor Vehic		Motor Veh	Slowing		Possible Inj	Apparently
Apparently	49	Female	Motor Veh	Sport Utilit	Northboun	No Clear Contributing		Motor Veh	Vehicle Stopped or Sta		Suspected	Apparently
Apparently	32	Female	Motor Veh	Sport Utilit	Southboun	Following Too Closely		Motor Veh	Moving Forward		No Appare	Apparently

Apparently	45	Female	Hit-And-Ru	Pickup	Northbound			Changing Lanes		
Apparently	46	Male	Motor Veh	Passenger	Northboun	Other Contributing Act	Motor Veh	Overtaking/Passing	No Appare	Apparently
Apparently	58	Male	Motor Veh	Passenger	Southboun	Driver Distracted		Moving Forward	Suspected	Apparently
Apparently	43	Female								
Has Been D	30	Female								
Apparently	68	Female	Motor Veh	Passenger	Northboun	Following Too Closely	Motor Veh	Moving Forward	No Appare	Apparently
Apparently	29	Female	Motor Veh	Passenger	Southboun	Following Too Closely	Motor Veh	Swerved or Attempt to	Possible Inj	Apparently
Apparently	26	Male	Motor Veh	Passenger	Southboun	Operated Motor Vehic	Motor Veh	Moving Forward	No Appare	Apparently
Apparently	20	Female	Motor Veh	Passenger	Northboun	Operated M Other Cont	Motor Veh	Moving Forward	No Appare	Has Been D
Apparently	49	Female	Motor Veh	Passenger	Northboun	Unknown	Motor Veh	Moving Forward	No Appare	Apparently
Apparently	77	Male	Motor Veh	Passenger	Southboun	Following Too Closely	Motor Veh	Moving Forward	Possible Inj	Apparently
Apparently	33	Female	Motor Veh	Passenger	Southboun	Driver Distı Following T	Motor Veh	Moving Forward	No Appare	Apparently
Apparently	36	Male	Motor Veh	Passenger	Southboun	Operated Motor Vehic	Motor Veh	Moving Forward	No Appare	Apparently
Apparently	47	Female	Motor Veh	Passenger	Northboun	No Clear Contributing	Motor Veh	Vehicle Stopped or Sta	Suspected	Apparently
Apparently	59	Male	Motor Veh	Medium / I	Northboun	Following Too Closely	Motor Veh	Moving Forward	No Appare	Apparently
Apparently	24	Female	Hit-And-Run Vehicle or		Unknown Driver		Motor Veh	Backing		
Apparently	62	Female	Motor Veh	Passenger	Southboun	Following Too Closely	Motor Veh	Moving Forward	No Appare	Apparently
Apparently	49	Male	Hit-And-Ru	Pickup	Northbound		Motor Veh	Moving Forward		
Apparently	28	Male	Motor Veh	Passenger	Northboun	Operated Motor Vehic	Motor Veh	Moving Forward	No Appare	Apparently
Apparently	33	Male	Motor Veh	Passenger	Southboun	Swerved or Avoided Due to Wind,		Moving Forward	No Appare	Apparently
Apparently	57	Female	Motor Veh	Passenger	Northboun	Unknown	Motor Veh	Unknown	No Appare	Apparently
Apparently	31	Female	Motor Veh	Passenger	Southboun	Driver Distracted	Motor Veh	Moving Forward	No Appare	Apparently
Apparently	38	Female	Motor Veh	Sport Utilit	Northboun	Operated Motor Vehic	Motor Veh	Slowing	No Appare	Apparently
Apparently	51	Male	Motor Veh	Passenger	Southboun	Wrong Side or Wrong	Motor Veh	Wrong Way into Oppo	No Appare	Has Been D
Apparently	24	Female								
Apparently	67	Male								
Has Been D	41	Male								

Unit2 Age	Unit2 Sex	Unit3 Type	Unit3 Vehi	Unit3 Direc	Unit3 Facto	Unit3 Facto	Unit3 Most	Unit3 Vehi	Unit3 Nonr	Unit3 Injur	Unit3 Physi	Unit3 Age
22	Male											
50	Male											
46	Male	Motor Veh	Passenger	Northboun	No Clear	Contributing	Motor Veh	Other		No Appare	Apparently	30
33	Female											
35	Male											
32	Female											
31	Male	Motor Veh	Passenger	Southboun	No Clear	Contributing	Motor Veh	Moving Forward		No Appare	Apparently	28
32	Male											
24	Male											
42	Male											
57	Male	Motor Veh	Pickup	Northboun	Operated	Motor Vehic	Motor Veh	Moving Forward		Possible Inj	Has Been T	40
19	Female											
40	Male											
29	Male											
18	Female											
48	Female											
52	Male											
35	Female											
42	Female											
18	Male											
36	Female											
39	Male											
46	Female											
59	Male											
36	Female	Motor Veh	Passenger	Southboun	No Clear	Contributing	Motor Veh	Moving Forward		No Appare	Apparently	27
22	Male											
21	Female											
46	Female											
24	Female											

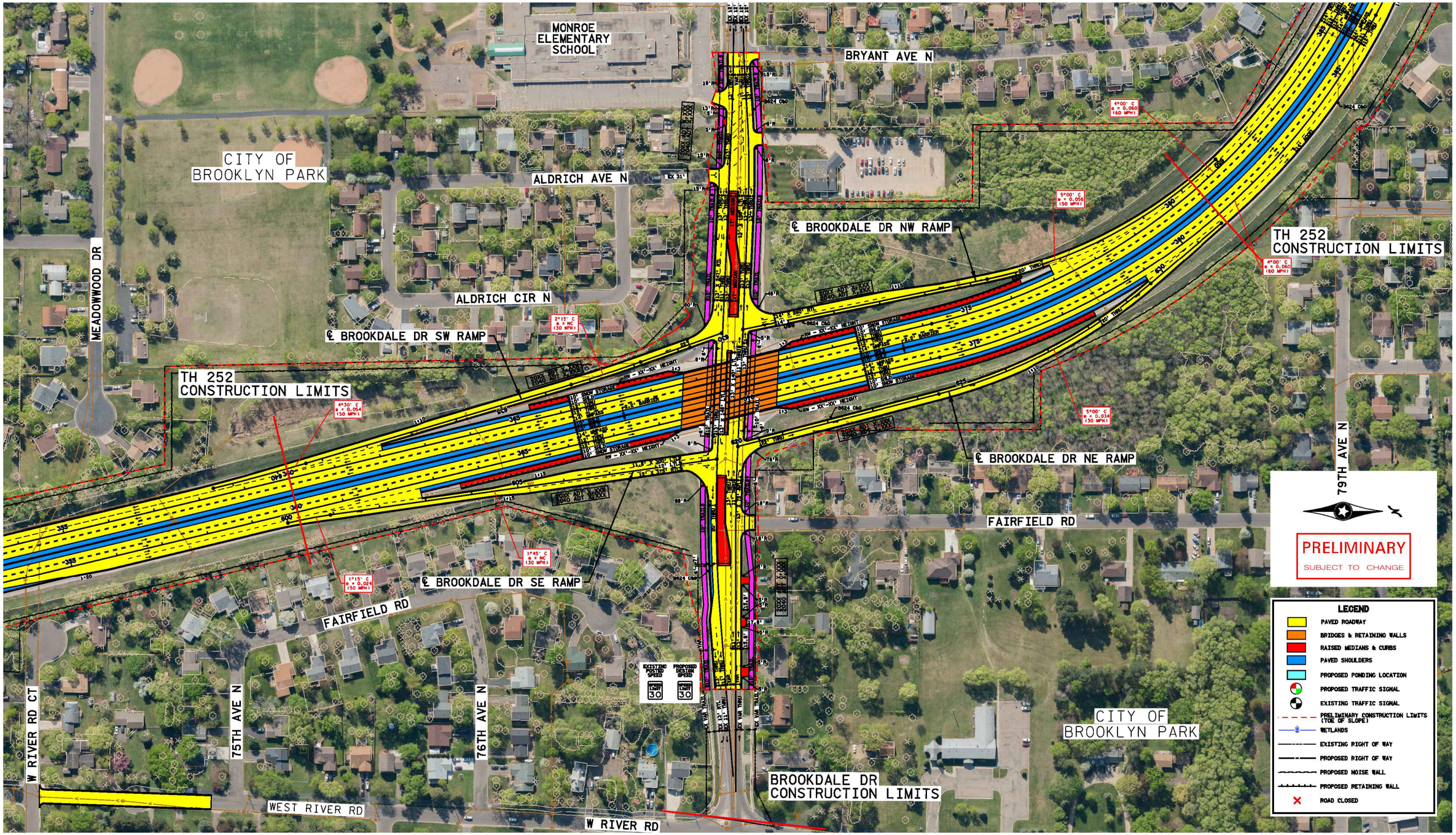
49	Female							
24	Female	Motor Veh Passenger	Southboun	Driver Distracted	Motor Veh Moving Forward	No Appare	Apparently	19
60	Male							
36	Female	Motor Veh Pickup	Southboun	Following Too Closely	Motor Veh Moving Forward	No Appare	Apparently	34
49	Male							
27	Male							
19	Female							
24	Female							
29	Male							
43	Male							
35	Female	Motor Veh Passenger	Northboun	Following Too Closely	Motor Veh Moving Forward	No Appare	Apparently	24
44	Male							
38	Male							
54	Male							
54	Male							
55	Female	Motor Veh Passenger	Northboun	Unknown	Motor Veh Slowing	No Appare	Unknown	36
19	Male							
52	Male							
23	Male							

Unit3 Sex	Unit4 Type	Unit4 Vehi	Unit4 Direc	Unit4 Facto	Unit4 Facto	Unit4 Most	Unit4 Vehi	Unit4 Nonr	Unit4 Injur	Unit4 Physi	Unit4 Age	Unit4 Sex
Female	Motor Veh Passenger		Northboun	No Clear Contributing		Motor Veh Other			No Appare	Apparently	50	Male
Female												
Male												
Male	Motor Veh Passenger		Southboun	Following Too Closely		Motor Veh Moving Forward			No Appare	Apparently	38	Male

Female	Pedestrian	No Improper Action	Standing/S	Suspected	Apparently	38	Female
Male							
Female							
Male							

interchang	otst_inters	city_sectio	utmx	utmy	x	y
	MNTH 252		477142.1	4993515	477142.1	4993515
			477203.5	4993316	477203.5	4993316
	MNTH 252	MN252 Frc	477187.8	4993425	477187.8	4993425
		MN252 Frc	477169.6	4993511	477169.6	4993511
	MNTH 252		477131.5	4993545	477131.5	4993545
	MNTH 252	MN252 Frc	477182.3	4993448	477182.3	4993448
			477131.5	4993587	477131.5	4993587
	MNTH 252	MN252 Frc	477146.3	4993507	477146.3	4993507
			477144.2	4993456	477144.2	4993456
	MNTH 252	MN252 Frc	477182.3	4993448	477182.3	4993448
	MNTH 252	MN252 Frc	477178.1	4993473	477178.1	4993473
	MNTH 252	MN252 Frc	477195	4993403	477195	4993403
	MNTH 252	MN252 Frc	477195	4993418	477195	4993418
		MN252 Frc	477214.3	4993311	477214.3	4993311
	MNTH 252		477192.9	4993422	477192.9	4993422
	MNTH 252		477178.1	4993371	477178.1	4993371
		MN252 Frc	477161.4	4993429	477161.4	4993429
	MNTH 252	MN252 Frc	477190.8	4993405	477190.8	4993405
		MN252 Frc	477178.1	4993443	477178.1	4993443
	MNTH 252	MN252 Frc	477182.3	4993435	477182.3	4993435
			477199.2	4993278	477199.2	4993278
			477169.6	4993418	477169.6	4993418
	MNTH 252	MN252 Frc	477195	4993418	477195	4993418
		MN252 Frc	477203.5	4993388	477203.5	4993388
	MNTH 252	MN252 Frc	477152.7	4993475	477152.7	4993475
	MNTH 252	AND BROO	477182.3	4993486	477182.3	4993486
	MNTH 252	MN252 Frc	477154.8	4993471	477154.8	4993471
	MNTH 252	MN252 Frc	477186.5	4993426	477186.5	4993426
		MN252 Frc	477156.9	4993443	477156.9	4993443
	MNTH 252	MN252 Frc	477144.2	4993517	477144.2	4993517
	MNTH 252	MN252 Frc	477186.5	4993435	477186.5	4993435
		MN252 Frc	477211.9	4993359	477211.9	4993359
	MNTH 252	MN252 Frc	477127.3	4993541	477127.3	4993541

	MN252 Frc	477183	4993442	477183	4993442
MNTH 252	MN252 Frc	477163.7	4993536	477163.7	4993536
	MN252 Frc	477114.6	4993608	477114.6	4993608
	MN252 Frc	477125.1	4993570	477125.1	4993570
MNTH 252	AND BROO	477141.2	4993497	477141.2	4993497
	MN252 Frc	477152.7	4993570	477152.7	4993570
	MN252 Frc	477195	4993359	477195	4993359
	MN252 Frc	477152.7	4993545	477152.7	4993545
MNTH 252	AND BROO	477156.9	4993486	477156.9	4993486
MNTH 252	MN252 Frc	477184	4993452	477184	4993452
		477199.2	4993287	477199.2	4993287
	MN252 Frc	477129.4	4993570	477129.4	4993570
	MN252 Frc	477123	4993583	477123	4993583
MNTH 252	MN252 Frc	477189.9	4993438	477189.9	4993438
	MN252 Frc	477207.7	4993371	477207.7	4993371
MNTH 252	MN252 Frc	477185.7	4993475	477185.7	4993475
	MN252 Frc	477118.8	4993596	477118.8	4993596
	MN252 Frc	477207.7	4993346	477207.7	4993346
MNTH 252	MN252 Frc	477173.8	4993443	477173.8	4993443
		477118.8	4993520	477118.8	4993520
MNTH 252	MN252 Frc	477195	4993401	477195	4993401
	MN252 Frc	477186.5	4993316	477186.5	4993316
	MN252 Frc	477199.2	4993393	477199.2	4993393
MNTH 252	MN252 Frc	477182.3	4993376	477182.3	4993376
		477178.1	4993346	477178.1	4993346
MNTH 252	AND BROO	477161.1	4993494	477161.1	4993494
		477144.2	4993456	477144.2	4993456



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Proposed Interchange Alternative - Brookdale Drive at TH 252

Proposed Interchange Access
Hennepin County

Figure 1

DEPARTMENT OF TRANSPORTATION

Corridors of Commerce

Fostering Economic Growth with Transportation Investments

Selected Projects

May 1st selection

Geographic Region	Trunk Highway	Project Description	Project Budget	Earliest Likely Contract Date
Greater Minnesota	T.H. 169 (pdf/2018/169 one pager.pdf)	In Elk River, from TH 101 to 197th Avenue, convert to a freeway.	$157 million	2022
Greater Minnesota	I-94* (pdf/2018/94 one pager.pdf)	From St. Michael (Trunk Highway 241) to Albertville (County Road 37), add an auxiliary lane.	$56 million	2020
Metro District	I-494 (pdf/2018/494 one pager.pdf)	From France Avenue to Trunk Highway 77 eastbound and from Trunk Highway 77 to I-35W westbound, add MnPASS lanes in both directions.	$134 million	2021

Metro District	I-494/I-35W (pdf/2018/494 Turbine one pager.pdf)	Complete Phase 1 of the I-494/I-35W turbine interchange, northbound to westbound directional ramp.	$70 million	2021
TOTAL			$417 million	51.1% G.M. 48.9% Metro

(Note: Project budgets, for May 1st selection, are 10 percent lower than project estimates, found in the complete list of submissions under Submitted Projects.)

* This is the lowest-priced alternative that was submitted. It does not include the interchanges or the Commercial Development road. Those could be added with a local contribution.

May 30th selection

Geographic Region	Trunk Highway	Project Description	Project Budget	Earliest Likely Contract Date
Greater Minnesota	T.H. 14	Owatonna to Dodge Center construct 2 to 4 lane conversion	$160 million	---
Greater Minnesota	T.H. 23	Willmar to St. Cloud - construct 2 to 4 lane conversion	$105 million	---
Metro District	T.H. 252 / I-94*	Convert to a freeway and add MnPASS lanes Dowling to TH 610.	$163 million**	---
TOTAL			$428 million	62% G.M. 38% Metro

(Note: Project budgets, for May 30th selection, will be set at 10% less than the estimate used for scoring anticipating efficiencies that will be found)

** $31 million of this project is being provided by local governments.

- View PDF maps showing all Corridors of Commerce projects from 2013 to 2018 (pdf/2018/corridorsOfCommerce_allYears.pdf)
- View a PDF map showing the Greater Minnesota projects (pdf/2018/2018_GreaterMN_Map.pdf)
- View a PDF map showing the Twin Cities Metro Area projects (pdf/2018/2018_Metro_Map.pdf)

Submitted Projects

- View the complete list of submissions (pdf/2018/corridors-of-commerce_2018_full-list.xlsx)
- View an interactive map showing all submissions (https://datalink.wsbeng.com/MnDot-ProjectMap/)

Scoring criteria

More information about the criteria (about.html#selection)

Criteria	Points Available
Return on investment	100
Economic impact	100
Freight efficiency	100
Safety improvements	100
Regional connections	100
Policy objectives	100
Community consensus	100
Maximum points	700

Tentative schedule

- Jan. 18 to Feb. 5, 2018 – Public recommendation period
- February to March, 2018 – Project evaluation and scoring
- April 2018 – Project award announcement and release of final scores

Contact

Patrick Weidemann
651-366-3758
pat.weidemann@state.mn.us (mailto:pat.weidemann@state.mn.us)

Overview

Transportation contributes to a growing economy by supporting commerce.

Transportation investments directly and indirectly foster economic growth through the provision of construction jobs and a commerce-friendly network of corridors to ship goods and provide mobility to citizens.

Frequently asked questions

Have a question, concern or comment about the Corridors of Commerce program? Just ask (/corridorsofcommerce/questions.html).

We'll be posting the most common questions and answers on this page.

Project Summary

TH 252/Brookdale Drive Interchange

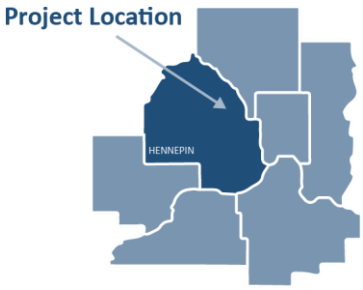
Applicant – City of Brooklyn Park

Project Location – TH 252 and Brookdale Drive in Brooklyn Park, Hennepin County

Total Project Cost – $33,215,015 **Requested Federal Dollars** - $10,000,000

Project Description:

The proposed TH 252 /Brookdale Drive interchange project will improve roadway safety and mobility along TH 252 through the Cities of Brooklyn Park and Brooklyn Center. The project will provide regional access to the area with the construction of a diamond interchange at TH 252. Furthermore, local traffic operations, mobility and safety for all modes of transportation at the project intersection will be improved while connecting the neighborhoods divided by TH 252.



TH 252 is a high-speed high-volume north-south connection between I-94/I-694 and TH 610. It is a MnDOT Trunk Highway that serves as an important Principal Arterial roadway linking communities in the northern area of the Twin Cities. It is currently an expressway design that varies between four and six lanes with at-grade signalized intersections approximately every ½ mile.

As part of the *TH 252 Corridor Study (2016)*, Mn/DOT, Hennepin County, Metropolitan Council, Metro Transit and the Cities of Brooklyn Park and Brooklyn Center worked together to establish the long-term vision "that a freeway was the best alternative to safely accommodate future traffic volumes and allow TH 252 to serve its function as a Principal Arterial". Building towards the ultimate vision of a freeway, the ongoing environmental review identified the construction of a diamond interchange at Brookdale Drive.

Project Benefits:

The conversion of the at-grade signalized intersection at TH 252 and Brookdale Drive to an interchange will provide the following benefits:

- Be consistent with the long-term vision and phasing of TH 252 to a freeway facility
- Improve vehicular safety with the reduction of intersection crashes; specifically rear-end crashes
- Reduce heavy delays and congestion during peak hour conditions at an intersection that currently operates with the second worst overall level of service along the study corridor
- Improve pedestrian and bicycle mobility and safety across TH 252; under current conditions, long green times allocated to TH 252 make it difficult to cross
- Improve community connectivity with removing the TH 252 barrier
- Improve transit operations with the elimination of an at-grade intersection to provide more reliable travel times for transit buses along TH 252
- Enhance pedestrian and bicycle travel along the Brookdale Drive corridor with additional trail improvements east and west of the newly constructed interchange
- Provide underserved residents with improved access to the area's jobs and transit as the project is located in a census tract that is above the regional average for population in poverty or population of color

Existing Conditions:

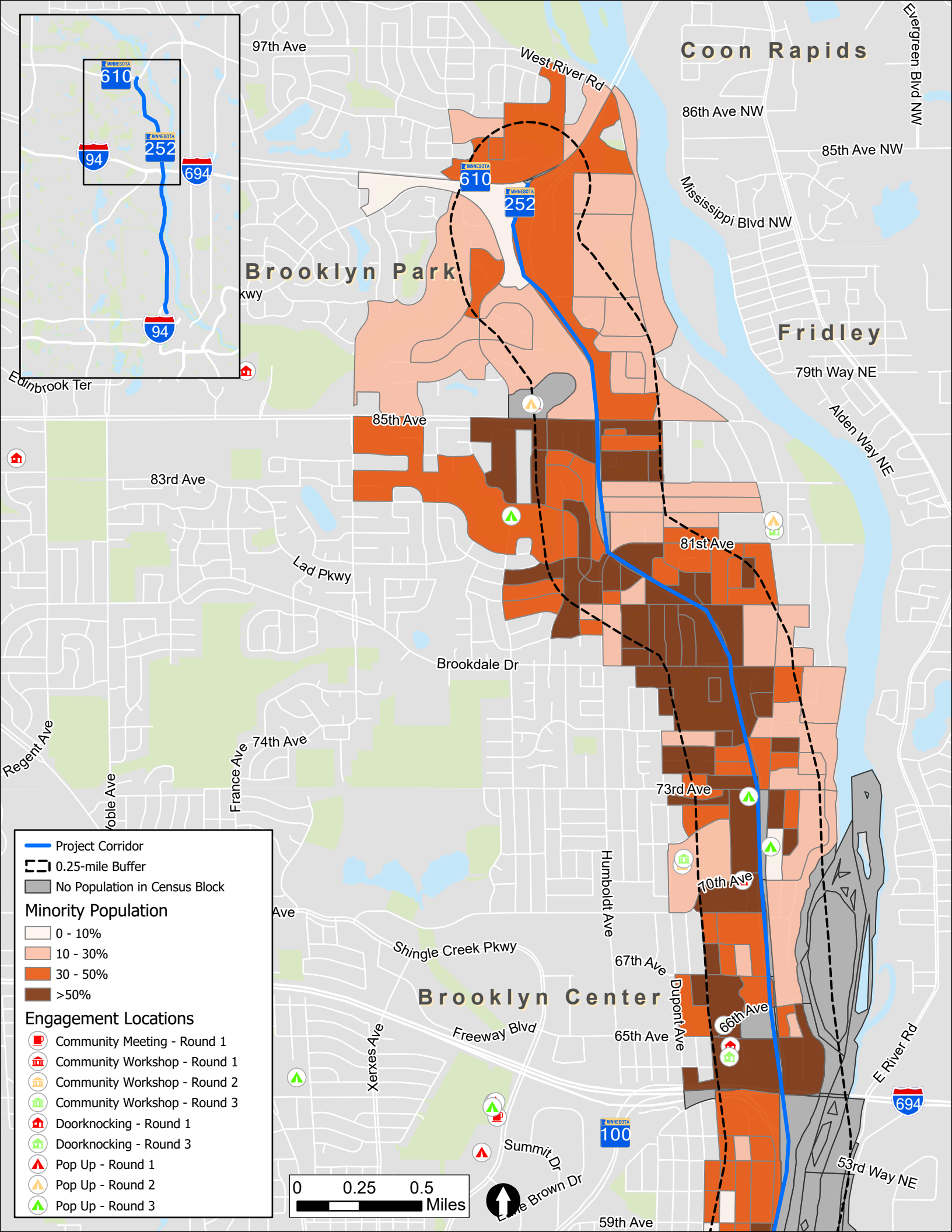
Traffic congestion along TH 252 at the Brookdale Drive intersection.

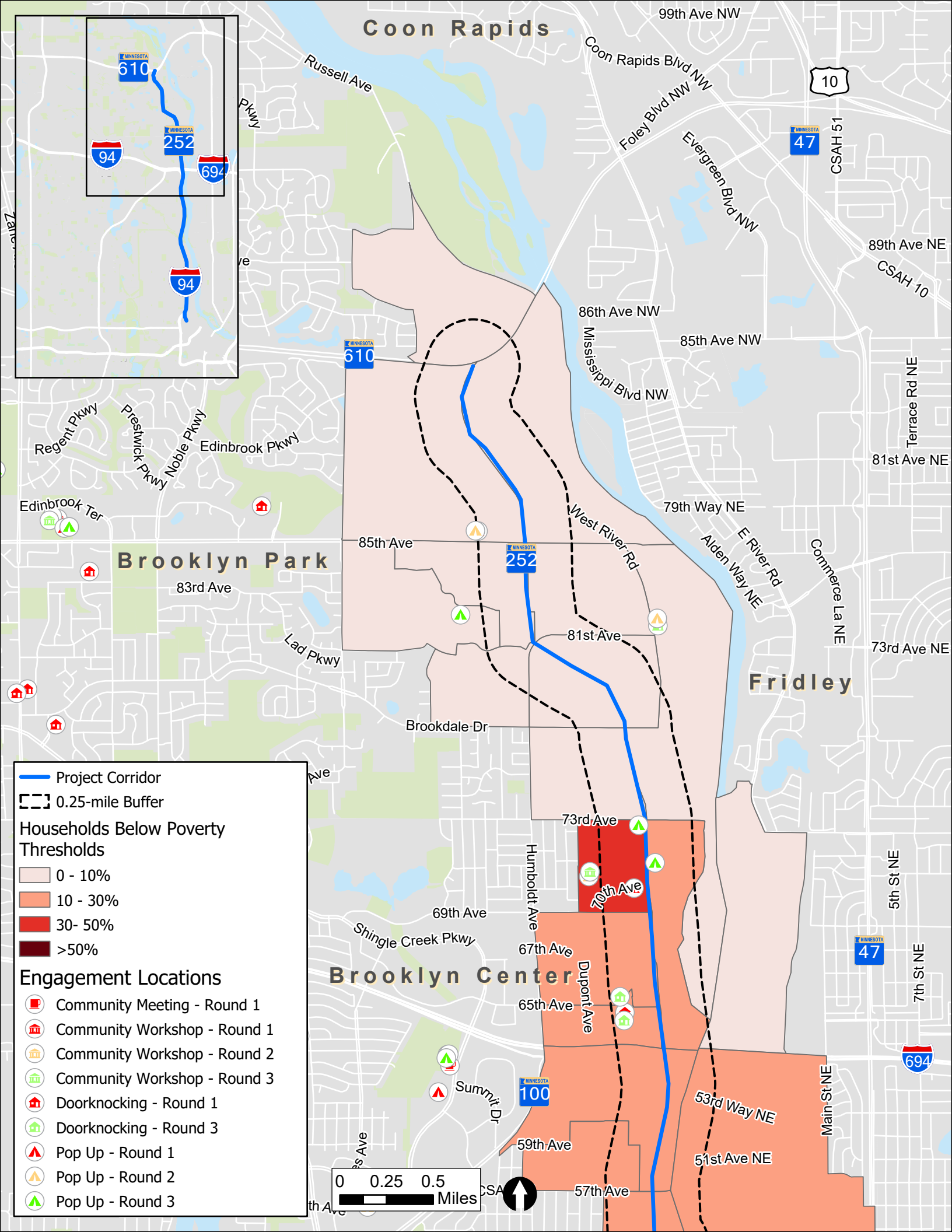
Before Photo

TH 252/Brookdale Drive Interchange

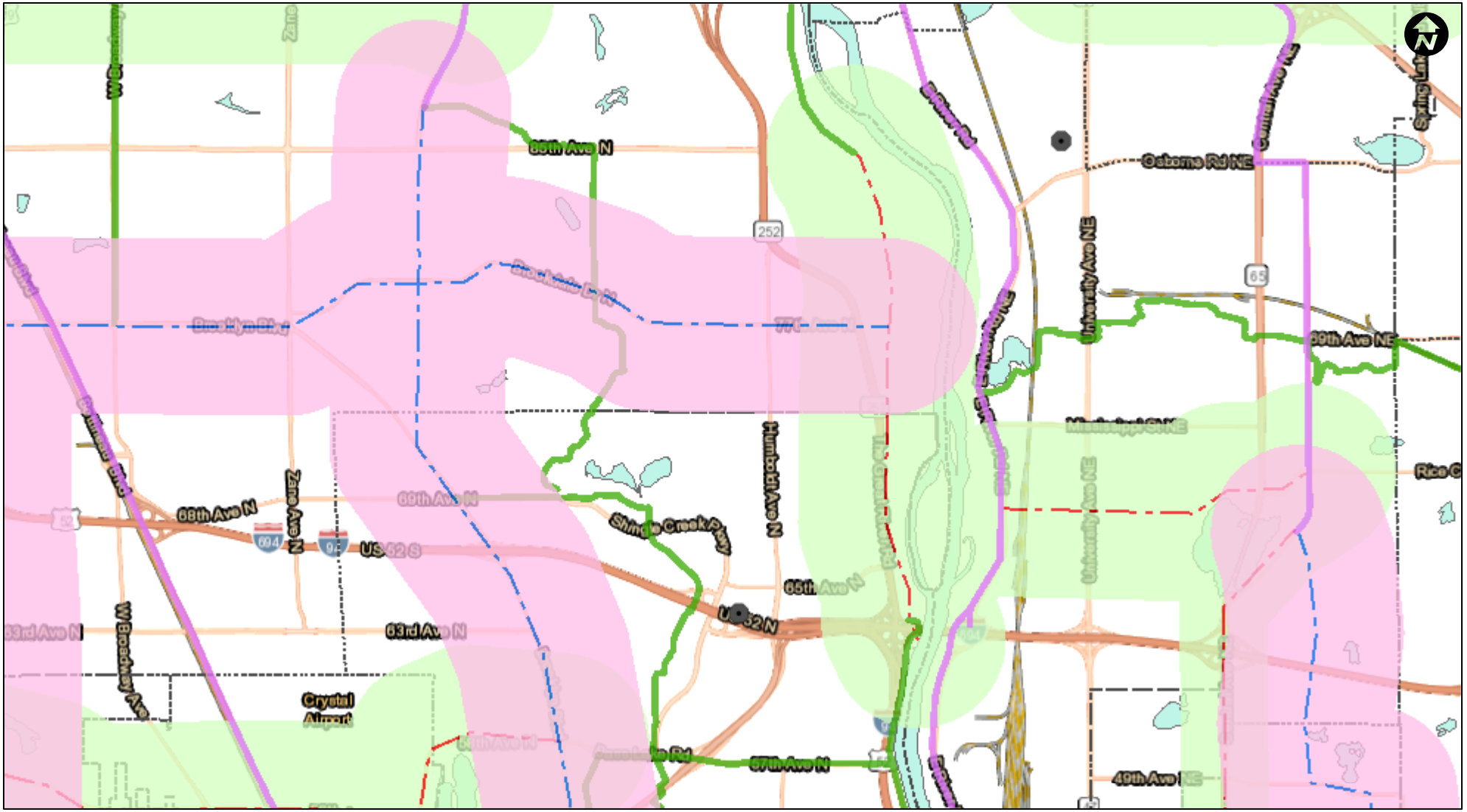
Applicant – City of Brooklyn Park

Project Location – TH 252 and Brookdale Drive in Brooklyn Park, Hennepin County


Coon Rapids
Brooklyn Park
Fridley
Brooklyn Center
97th Ave
West River Rd
86th Ave NW
85th Ave NW
Mississippi Blvd NW
Evergreen Blvd NW
79th Way NE
Alden Way NE
Edinbrook Ter
85th Ave
83rd Ave
81st Ave
Lad Pkwy
Brookdale Dr
Regent Ave
74th Ave
France Ave
73rd Ave
Humboldt Ave
70th Ave
Shingle Creek Pkwy
67th Ave
Dupont Ave
66th Ave
Freeway Blvd
65th Ave
Xerxes Ave
E River Rd
Summit Dr
53rd Way NE
59th Ave
Project Corridor
0.25-mile Buffer
No Population in Census Block
Minority Population
0 - 10%
10 - 30%
30 - 50%
>50%
Engagement Locations
Community Meeting - Round 1
Community Workshop - Round 1
Community Workshop - Round 2
Community Workshop - Round 3
Doorknocking - Round 1
Doorknocking - Round 3
Pop Up - Round 1
Pop Up - Round 2
Pop Up - Round 3
0
0.25
0.5
Miles


Coon Rapids
Brooklyn Park
Brooklyn Center
Fridley
99th Ave NW
Coon Rapids Blvd NW
Russell Ave
Foley Blvd NW
Evergreen Blvd NW
CSAH 51
89th Ave NE
CSAH 10
86th Ave NW
85th Ave NW
Mississippi Blvd NW
Terrace Rd NE
81st Ave NE
Regent Pkwy
Prestwick Pkwy
Noble Pkwy
Edinbrook Pkwy
Edinbrook Ter
79th Way NE
West River Rd
E River Rd
Alden Way NE
Commerce La NE
85th Ave
83rd Ave
Lad Pkwy
81st Ave
73rd Ave NE
Brookdale Dr
73rd Ave
70th Ave
Humboldt Ave
5th St NE
69th Ave
Shingle Creek Pkwy
67th Ave
Dupont Ave
7th St NE
65th Ave
Summit Dr
53rd Way NE
Main St NE
59th Ave
51st Ave NE
57th Ave
Project Corridor
0.25-mile Buffer
Households Below Poverty Thresholds
0 - 10%
10 - 30%
30- 50%
>50%
Engagement Locations
Community Meeting - Round 1
Community Workshop - Round 1
Community Workshop - Round 2
Community Workshop - Round 3
Doorknocking - Round 1
Doorknocking - Round 3
Pop Up - Round 1
Pop Up - Round 2
Pop Up - Round 3
0 0.25 0.5 Miles

Regn'l Bicycle Transportation Network



RBTN Tier 1 Alignments

RBTN Tier 1 Corridor Centerlines

RBTN Tier 1 Corridors

RBTN Tier 2 Alignments

RBTN Tier 2 Corridor Centerlines

RBTN Tier 2 Corridors

Destinations

Job Centers

Sports Ent Complex

Hi Visit Reg Parks

Higher Ed >2K

Major High Schools

Minnesota State Trails (DNR)

City and Township Boundaries

Lakes and Rivers

0 2.25 4.5 Miles

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

Created: 3/19/2020

METROPOLITAN COUNCIL

MnDOT Metro District
1500 West County Road B-2
Roseville, MN 55113

May 12, 2020

Jeff Holstein, P.O., P.T.O.E.
City of Brooklyn Park Transportation Engineer

Re: MnDOT Letter for City of Brooklyn Park
Metropolitan Council/Transportation Advisory Board 2020 Regional Solicitation Funding Request for TH252 Brookdale Drive Interchange

Dear Jeff Holstein,

This letter documents MnDOT Metro District's recognition for The City of Brooklyn Park to pursue funding for the Metropolitan Council/Transportation Advisory Board's (TAB) 2020 Regional Solicitation for the TH 252 Brookdale Drive Interchange Project.

As proposed, this project impacts MnDOT right-of-way on TH 252. As the agency with jurisdiction over TH 252, MnDOT will allow The City of Brooklyn Park to seek improvements proposed in the application for the interchange project. If funded, details of any future maintenance agreement with Brooklyn Park will need to be determined during project development to define how the improvements will be maintained for the project's useful life.

Metro District does have other roadway investments planned to occur nearby and on this roadway over the next 5-6 years. Please coordinate project development with MnDOT Area staff so that our agencies can work together to best leverage our respective efforts. Due to expected loss of future state and federal transportation revenues as a result of the COVID-19 pandemic, there is likely to be significant disruptions to the current MnDOT construction program that will surface in the next year.

MnDOT Metro District looks forward to continued cooperation with Brooklyn Park as this project moves forward and as we work together to improve safety and travel options within the Metro Area.

If you have questions or require additional information at this time, please reach out to your Area Manager at April.Crockett@state.mn.us or 651-234-7728.

Sincerely,

Michael Barnes

Digitally signed by Michael Barnes
Date: 2020.05.12 18:15:04 -05'00'

Micheal Barnes, PE
Metro District Engineer

CC: April Crockett, Metro District Area Manager
Molly McCartney, Metro Program Director
Dan Erickson, Metro State Aid Engineer